

# The Impact of Drought on Households in Four Provinces in Eastern Indonesia



February 2016

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# El Niño: in December 2015 WFP interviewed 2,400 households in 8 districts hit by drought





**3 in 5** households lost income due to drought

1 in 5 households cut spending on food due to drought

# **1.2 million** Indonesians require assistance



1. Government of Indonesia should **provide cash** to poor households dependent on food crop production



2. Ministry of Agriculture should work directly with farmers and **distribute seeds**, **fertilizer**, **irrigation**, **and information** 



3. Ministry of Health should provide supplementary feeding to pregnant and breastfeeding women plus children under 2 in any area with acute malnutrition rates above the critical WHO threshold of 15%

#### **Key findings**

- 1. Across the eight districts surveyed, 40% of primary rice growers lost more than 50% of their crop in the last harvest.
- 2. Two-thirds of agricultural households said that they had delayed or not yet planted crops in the past three months due to drought. This introduces two significant risks: 1) an extension of the 'lean' season; and 2) increased exposure of secondary rice to the peak dry season. The extended lean season means prices are likely to rise until the next crop is harvested.
- 3. Drought was reported to have decreased the income of three out of five households surveyed. In 31% of households, the impact was severe (more than 30% reduction in primary income). In Kupang and Timor Tengah Selatan districts, 48% and 40% of households reported a severe impact on income.
- 4. Almost half of all households engaged in food crop production and those reliant on agricultural wage labor reported a 30% or more reduction in income due to drought.
- 5. With less income, one in five households reduced expenditure on food to cope with reduced purchasing power. Others relied on a second income source (27%) or reduced non-food expenditure (24%).
- 6. The most severe and frequent coping strategies were found in Sumba Tengah and Kupang where 30% and 27% were classified as having reduced the number, frequency or quality of meals.
- 7. Households who experienced severe reductions in income and expressed high levels of negative coping behaviors were deemed the most negatively impacted by drought. In Kupang, 16% of households were highly impacted, followed by 9% in Sumba Tengah and 6% in Lombok Tengah<sup>1</sup>.
- 8. Food insecurity, measured as a combination of poor food consumption, limited coping capacity, and high economic vulnerability, is highest in the three districts in Nusa Tenggara Timur province. In Sumba Tengah, more than half (53%) of households are extremely or moderately food insecure. In Kupang, the figure is 41%, followed by 38% in Timor Tengah Selatan. These households should be prioritized for assistance to prevent irreversible coping behaviors and the consequences of extremely poor diets.
- 9. In Nusa Tenggara Timur, the extreme dry season has eroded already weak purchasing power and harvests of main crops in 2016 are likely to be impacted, further exacerbating the situation.
- 10. Outside of Nusa Tenggara Timur Maluku and Papua require additional focus to determine impact.

<sup>&</sup>lt;sup>1</sup> See page 28 for more details on this analysis

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#### 1 Background

Indonesia is strongly affected by El Nino and La Nina phenomenon. A rise in sea surface temperature in the equatorial Pacific Ocean is associated with decreased rainfall across much of Indonesia. Large parts of the country normally experience long and pronounced dry seasons, particularly in Nusa Tenggara Barat and Nusa Tenggara Timor. During El Nino events, these dry periods are often longer and hotter causing significant impacts on agriculture and livelihoods.

In August 2015, most climate models forecast a strong El Nino effect for the remainder of 2015 and potentially into 2016. By October, drought had been recorded across much of Indonesia, leading to massive fires, and drying of water sources. Delays in the rainy season continued until December or even January for parts of Indonesia. Those delays could have significant impact in the main growing season as planting was delayed in many non-irrigated areas.

Analysis of the situation continued through satellite data and reporting through Government of Indonesia's Disaster Management Agency (BNPB) and the Ministry of Agriculture (MoA). A depiction of the impact on vulnerable populations in drought affected areas was difficult to ascertain. To fill an information gap and to advocate for the needs of vulnerable populations, the World Food Programme in Indonesia sought to deploy a household survey in drought affected areas with high levels of economic vulnerability.

# 1.1 Survey objectives and methodology

The primary objectives of the survey are to:

- 1. Determine the level of impact of drought on household food security, drinking water access, livelihoods, and agricultural activities
- 2. Identify the most impacted populations in terms of geography and livelihoods
- 3. Provide recommendations to for Government of Indonesia on potential interventions and assistance in targeting

To achieve these objectives, WFP designed a household questionnaire which includes modules on

- 1. Demographics
- 2. Household assets
- 3. Drinking water
- 4. Sources of income
- 5. Agriculture
- 6. Food consumption
- 7. Coping behaviors
- 8. External assistance

While the survey has a significant level of scope, questions were kept as simple as possible to keep interviews under one hour. Questionnaire design was developed by WFP, using standard questions and modules as frequently as possible.

Execution of the survey in all drought-impacted areas in Indonesia was not feasible due to time and resource constraints. Budget available for the survey was sufficient to reach eight districts with

statistically representative data. To select the eight districts to be surveyed, analysis of drought exposure was combined with analysis of existing economic vulnerability. Drought exposure was measured through the length of time since the last rain (as of November 2015) while economic vulnerability was assessed through the prevalence of poverty within a district, specifically where more than 20% of the population lived below the poverty line.

Based on this analysis, high priority districts were identified. Practical considerations were then taken into account to determine where a household survey could be deployed with the time and resources available.

	Province	District
1	Jawa Timur	Probolinggo
2	Jawa Timur	Sampang
3	Nusa Tenggara Barat	Lombok Tengah
4	Nusa Tenggara Barat	Lombok Utara
5	Nusa Tenggara Timur	Kupang
6	Nusa Tenggara Timur	Sumba Tengah
7	Nusa Tenggara Timur	Timor Tengah Selatan
8	Рариа	Merauke

The following eight districts were then selected for the survey:

For each district, a required sample size of 300 households was calculated to provide statistically representative data for the district. Within a district, 30 villages were randomly selected using Probability Proportional to Size (PPS). Within a village, 10 households were then randomly selected to be interviewed. In total, the field work took approximately two weeks to complete with most work happening in parallel (though field work started slightly earlier in the two East Java districts and slightly later in Sumba Tengah and Merauke).

A limitation of this survey is the bias introduced by selecting districts that are logistically practical for fieldwork. While this does not mean the results are invalid, it does limit the potential to identify impact in very remote areas. In addition, in Merauke district, a number of villages which were randomly selected for fieldwork were not logistically feasible to reach due to time and cost constraints. Attempts to resample villages led to similar issues. Therefore in Merauke, less villages were visited (20 vs. 30 in other districts) and more households were visited per village (15 vs. 10). This also introduces bias by excluding remote villages and by increasing the effect of homogeneity within a village.

#### Figure 1 - Location of the eight districts surveyed



#### 2 Drought impact on households

The districts selected in this survey were chosen specifically for their exposure to drought and presumed limited coping capacity based upon poverty rates. To assess how drought exposure affected households, a series of questions on water access, changes in income, changes in agricultural practice, and responses to reduced food access were asked.

#### 2.1 Impact on household income and food access

One of the most telling and explicit questions was on the impact of drought on primary sources of income. While this question has potential respondent bias issues (self-reporting and attribution of drought as a causal factor), it has shown meaningful results, particularly when combined with questions on coping capacity, as noted later. Households were asked about the severity of any reduction in income (severe, moderate, slight, or no impact). Severe was defined as a greater than 30% reduction. Enumerators were trained to assist households in determining percent change by using the proportional piling method, where physical objects such as small rocks are used to illustrate parts of a sum - in this case, proportion of total income lost due to drought.





In total, 31% of households surveyed reported a severe negative change in their primary source of income in relation to drought. Another 18% of households reported a moderate reduction (10-30% decrease in primary income) while 10% noted a slight reduction (10% or less reduction in income). Four out of ten surveyed (41%) did not experience a negative impact on their main income source due to drought.

At district level, Kupang reported the highest level of impact of drought on household income with 48% of households stating their primary income was reduced by more than 30% as a result of the drought. Timor Tengah Selatan district was the second most affected with 40% reporting a severe change. The least impacted district is Probolinggo where more than half of households (56%) reported no impact on their main income source.

In addition to considering the geographic distribution of impact across districts, impacts on specific livelihoods were assessed. As expected, agricultural dependent households reported the highest rates of drought impact. Households engaged in food crop production and those reliant on agricultural wage labor had the highest rates of income reduction with nearly half (49% and 46%) reporting a 30% or more reduction in income due to drought.





In order to assess how households coped with reductions in income due to drought, they were asked about their responses to the reduction in income. Several options were given and households could select multiple responses which they engaged in, and then were asked to rank the main response. Relying on a second income source was the top ranking response (27%) followed closely by reducing non-food expenditures (24%), food expenditures (20%), and engaging in a new income activity (17%).



#### Figure 4 - Main response to reduced income (among those who reported a loss in income)

Reductions in expenditure due to income reductions denote high levels of vulnerability, where consumption patterns of a household have been disrupted due to a weather related shock. While the levels of reductions in expenditure are not captured here due to a light and rapid survey design, the prevalence of these responses is telling. Reductions in food expenditures was a common response with 20% of households who reported a change in income indicating this a primary option. About one in three households (32-35%) in each of the three districts surveyed in Nusa Tenggara Timur reduced food expenditure as a primary response to reductions in income.



#### Figure 5 - Reductions in food expenditure as the main response to income reduction by district

Poor households spend a larger share of their income on food than wealthier households. Any shocks affecting poor households can force a reduction in expenditure on food while wealthier households are more likely able to cope through other means. This is seen clearly when comparing wealth groups and the percent of households who reduced their expenditure on food as a primary response to income reduction. See page 41 in the Annex for a description of the construction of wealth groups.

While reductions in income disproportionally affect poor households' access to food, these same households are highly vulnerable to changes in food prices, particularly of rice. A marginal increase in rice prices in Indonesia may lead directly to increases in the poverty headcount<sup>3</sup>. The World Bank estimates that a sustained 12% increase in the price of rice in Indonesia can cause a 1.3% rise in the poverty rate. This estimation was recently observed practice in the latest poverty figures from Indonesia's Statistical Agency (BPS), which noted an increase in poverty in 2015, with 1.1 million Indonesians falling below the poverty line who previously were not. BPS has directly attributed these newly poor households to an increase in food prices, particularly rice. Rice expenditure elasticity is low - meaning that households are not likely to reduce expenditures on rice even when prices increase. Instead, consumption of other non-staple foods is reduced. These other foods typically include vegetables, fruit, and meat - important sources of micronutrients. See Figure 15 for a more detailed description of the food consumption patterns observed in each wealth group.





#### 2.2 Impact on drinking water

To assess the impact of drought on access to drinking water, a series of questions were asked on sources of drinking water, both currently and in a 'normal' period, in case of changes over time. Household were also specifically asked if the drinking water source had changed during the drought. In total, 39% of households reported a change in their source of drinking water. In three districts, half or more of households surveyed changed their water source during the drought - Timor Tengah Selatan (56%), Sumba Tengah (53%) and Lombok Utara (50%).

<sup>&</sup>lt;sup>3</sup> Indonesia Economic Quarterly, March 2015. The World Bank.



Figure 7 - Percent of households who changed their drinking water source due to drought by district

Drinking water sources utilized by households during drought and normal periods were classified into safe or unsafe using standard definitions by WHO/UNICEF.<sup>4</sup> The highest percent of households with a negative change in the quality of drinking water due to drought was in Timor Tengah Selatan district, where 13% of households switched to an unimproved water source.



Figure 8 - Households with a water source that became unsafe compared to normal during drought

<sup>&</sup>lt;sup>4</sup> One exception to standard classifications was made. JMP defined bottled water as unimproved but in the context of Indonesia this is known to be a normal, safe and continuous water source. <u>http://www.wssinfo.org/definitions-methods/watsan-categories/</u>

In addition to the change in water quality, households were asked about the distance to drinking water during drought and normal. In Timor Tengah Selatan, 39% of households had to travel a longer distance to obtain drinking water than during normal periods, followed by Sumba Tengah at 32%. The total distance and travel time were not obtained in this light survey but, distance to water is a known issue within many of the districts visited. According to the Indonesia Demographic and Health Survey of 2012, just 60% of rural Indonesian households have drinking water on premises. Increased travel time to water sources add additional burden to poor households. Women and young girls often carry the brunt of this burden, further contributing to lower attendance rates and higher dropout rates in girls compared to boys.<sup>56</sup>



Figure 9 - Households who traveled further than normal for drinking water due to drought

The cost of household water in general frequently rises in the dry season in Indonesia. While a light survey does not allow for specific monetary values in the cost of water, households were asked whether their drinking water source during drought cost more than usual, the same as usual or less than usual. For 29% of households, the price of water increased during the drought. The highest increases were reported in Kupang and Merauke, where 52% of households reported an increase on water expenditure during drought, followed by Timor Tengah Selatan with 38%.

<sup>&</sup>lt;sup>5</sup> http://www.ungei.org/resources/files/Final Poverty and Economic.pdf

<sup>&</sup>lt;sup>6</sup> http://www.unicef.org/indonesia/girls\_education\_fact\_sheet\_final\_ENG\_1\_.pdf



Figure 10 - Households who increased expenditure on water during drought

# 2.3 Impact on agriculture

Across the eight districts, 61% of households listed some form of agriculture, livestock, and fishing as their main income source. The majority of these households are food crop producers (46%), while a smaller proportion are agricultural wage laborers (8%), fishermen (3%), engaged in livestock (2%), or cash crop producers (3%). By district, the highest proportion of households with food crop production as their main income source were in Timor Tengah Selatan and Sumba Tengah at 81% each. The district with the lowest level of agricultural related livelihoods as a primary income source was in Merauke where just over one third (36%) of households were engaged in agriculture, fishing or livestock in some form, followed by Probolinggo with 47%.



#### Figure 11 - Main sources of primary income across all eight districts

Overall, the importance of agriculture in these districts highlights the potential impact of poor weather conditions on livelihoods. To assess how drought has affected agricultural households, a series of questions on crop and water management were asked. These questions were only administered to households who noted engagement in agriculture and specifically excluded agricultural wage laborers. This is due to the lack of decision making on crop and water management by daily wage laborers which may lead to uninformed responses.

Among agricultural households, the primary crops grown are predominantly rice (44%) and maize (40%). In some districts (Sampang, Lombok Utara, and Timor Tengah Selatan), cassava is also a common primary crop. Agricultural households were asked about the impact of drought on the harvest of their main crop. It must be noted that this survey was administered in December and harvests in the preceding months are usually significantly less than the main harvest in January to April. Across the eight districts, a total of 40% of primary rice growers noted a major loss with more than 50% of the crop failing in the last harvest. In Sampang, more than half of households (54%) listed rice as their main crop and of these, two-thirds (66%) said their last harvest suffered with a loss of 50% or more.

At the time of the interview, few crops were planted. Among farming households, 39% had not yet planted anything, while 34% had planted maize, 13% planted rice, and 3% planted cassava. Of those who had crops in the soil at the time of the interview, 72% stated that the current crop was planted later than usual.

Households were asked if in the past three months due to drought, they had planted a different crop than usual, planted a different variety than usual, delayed planting, or skipped planting altogether. Very few households reported planting a different crop or different variety with just 6% and 3% respectively among agricultural households. Among agricultural households, 39% said that they had delayed planting of some crops in the past three months due to drought, while 26% had not yet planted in the past three months due to drought.

Among farmers who delayed planting in the past three months, the most common crop delayed was maize (64%) followed by rice (25%). Farmers who didn't plant in the past three months due to drought had

mostly not planted rice (37%) and maize (35%). For Nusa Tenggara Timur and east, December is still not yet a critical period for planting and delays are not unexpected. However in Java, this is more delayed than usual. Delays in the planting of the main rice crop have a cascading effect. Two significant risks are introduced by shifting rice cycles in most of Indonesia: 1) an extension of the 'lean' season and 2) increased exposure of secondary rice to the peak dry season as highlighted above. The extended lean season will stretch resources among poorer households who spend a large share of their limited income on food, with prices likely to rise while the next harvest is postponed. In addition, without efforts to accelerate planting immediately daily agricultural wage laborers will continue to have reduced income opportunities.





# 3 Food security status in drought-affected districts

#### 3.1 Overall food security status

To gauge the overall food security status of households interviewed in this survey, two domains were examined: 1) the current status based on food consumption patterns of the household and 2) the coping capacity of a household based on measures of economic vulnerability and asset depletion. The details of the process for determining the food security status of the household can be found in the Annex, on page 46. Each household was assigned a value of 1-4 where 1 = food secure, 2 = marginally food secure, 3 = moderately food insecure, and 4 = severely food insecure. The household food security console below reports the prevalence of each component of the food security index and the overall classification.

Domain		Indicator	Food secure	Marginally food secure	Moderately food insecure	Severely food insecure
		Food				
	Food	consumption				
<b>Current Status</b>	consumption	score	73%		21%	6%
Coping	Economic					
capacity	vulnerability	Asset ownership	19%	31%	32%	17%
		Livelihood				
	Asset depletion	coping	62%	22%	12%	4%
Overall food sec	urity classification		33%	43%	22%	2%

Tahlo	1 -	Household	food	security	consolo
Idule	<b>T</b> - 1	поизенный	1000	security	console

Severe food insecurity was low, with just 2% of households surveyed in this most extreme category. However, at district, level Sumba Tengah and Timor Tengah Selatan each had rates of concern with 7% and 5% respectively in this category. Severely food insecure households are noted for having extreme food consumption gaps, or extreme loss of livelihood assets that will lead to food consumption gaps, or worse.

Moderately food insecure households can be described as having significant food consumption gaps, or being marginally able to meet minimum food needs only with irreversible coping strategies. When considering the moderately food insecure, there are significantly high numbers in the three Nusa Tenggara Timur districts surveyed, with the most concern in Sumba Tengah. In total, more than half of households in Sumba Tengah are food insecure (47% moderately food insecure, 7% severely food insecure).

District	Food secure	Marginally food secure	Moderately food insecure	Severely food insecure
Probolinggo	57%	37%	5%	1%
Sampang	50%	49%	1%	0%
Lombok Tengah	34%	37%	28%	1%
Lombok Utara	34%	45%	21%	0%
Kupang	18%	42%	39%	2%
Timor Tengah Selatan	6%	56%	33%	5%
Sumba Tengah	8%	39%	47%	7%
Merauke	60%	39%	1%	0%
Total	33%	43%	22%	2%

Table 2 - Overall food security classification by district

#### 3.2 Diet quality

A key component of the food security index is derived from a module on household food consumption. Households were asked to report the number of days over the past week that they consumed various food groups. The responses were multiplied by a weight factor based on the relative nutritional value of each food group and summed together to create the Food Consumption Score (FCS)<sup>7</sup> - a standard WFP indicator of household food insecurity. The FCS value is then used to categorize households into three groups: poor food consumption, borderline food consumption, and acceptable food consumption. Generally, households with poor food consumption using this definition consume just staples (i.e. rice, maize, and cassava), vegetables, oil, and sugar. This diet seriously lacks in micronutrients and is associated with high rates of poverty and malnutrition.

By district, poor diets were more common in Nusa Tenggara Timur with 17% of households in Timor Tengah Selatan, 14% in Kupang and 12% in Sumba Tengah having poor food consumption. Borderline diets were also common in Nusa Tenggara Timur as well as in the two districts in Lombok. A borderline diet,

<sup>&</sup>lt;sup>7</sup> See page 31 in the Annex for details on the calculation of the Food Consumption Score

on average, adds consumption of pulses such as tofu, lentils, and nuts to their diet. Diets were acceptable in the two districts in East Java and in Merauke, where consumption of mean, fish, seafood were common.



Figure 13 - Food consumption groups by district

While the FCS provides a measure of overall quality of diet based on frequency of consumption and the relative weight of consumption, a simpler measure of the frequency of consumption of individual food groups is illustrative of dietary diversity, or the lack thereof. Figure 14 below demonstrates the relatively poor diets in Sumba Tengah, Timor Tengah Selatan, and Kupang particularly when compared to Merauke and Probolinggo. In Sumba Tengah, even at aggregate level, pulses and dairy are nearly non-existent in the diet. In Timor Tengah Selatan, meat and dairy are also absent. In contrast, households in Merauke had high frequency of consumption of a variety of food groups with the exception of dairy which has low consumption across all eight districts.



Figure 14 - Average days of consumption of food groups by district

Food consumption patterns are most often directly driven by wealth and poverty. Poor households usually consume a diet with limited diversity - consisting of cereals, oil, and vegetables. This can be seen clearly when the prevalence of each food consumption group is compared against wealth quintiles. Nearly all households (98%) defined as the most wealthy had acceptable food consumption. In contrast, less than half (47%) of households in the poorest wealth quintile had an acceptable diet.



Figure 15 - Food consumption groups by wealth quintiles across all eight districts

#### 3.2.1 Micronutrient intake

The structure of the food consumption module in the questionnaire design was based upon recent research by WFP on the ability to describe intake of key nutrient groups from WFP's existing survey

instruments with slight modifications. The information gathered for calculation of the FCS provides a wealth of unexploited data that can be used to inform on nutrient rich groups consumed by the household and which are essential for nutritional health and well-being, specifically: protein, iron and vitamin A<sup>8</sup>.

Vitamin-A rich foods	Protein rich foods	Iron rich foods
Milk, yogurt, cheese, and other dairy products	Tofu, tempe, beans, cowpeas, peanuts, lentils, nuts, soy, pigeon peas, and other nuts	Meat including beef, pork, lamb, goat, rabbit, chicken, duck, other birds, insects
Liver, kidney, heart, and other organ meats	Milk, yogurt, cheese, and other dairy products	Liver, kidney, heart, and other organ meats
Eggs	Meat including beef, pork, lamb, goat, rabbit, chicken, duck, other birds, and insects	Fish / shellfish, including canned fish, and other seafood
Orange vegetables (vegetables rich in Vitamin A): carrot, red pepper, pumpkin, orange sweet potatoes	Fish / shellfish, including canned fish, and other seafood	
Dark green leafy vegetables: spinach, broccoli, cassava leaves, and other dark green leaves	Eggs	
Orange fruits (Fruits rich in Vitamin A): mango, papaya		

 Table 3 - Micronutrient rich food groups and related food items from the household questionnaire



Figure 16 - Frequency of consumption of micronutrient groups across all eight districts

Overall, consumption of vitamin-A rich foods was high across the eight districts with 86% of households consuming these foods on a daily basis. This is somewhat expected in Indonesia where vitamin-A rich tropical fruits, particularly mango and papaya are readily available throughout the country and are relatively affordable. Consumption of protein rich foods is common with 65% of households consuming on a daily basis and 30% consuming sometimes (1-6 days). The primary sources of frequently consumed protein rich foods are eggs and pulses - particularly tofu and tempe.

<sup>&</sup>lt;sup>8</sup> See page 33 in the Annex for more details on this new approach

However, when considering iron rich foods, there's a large drop in consumption with just 22% of households consuming these foods daily and 59% sometimes (1-6 days). Most troubling are the 19% with no consumption of iron rich foods. This is of concern given the substantial evidence showing strong linkages between prenatal iron deficiency, iron deficiency in infants, and poor child development<sup>9</sup>. Indonesia's national Scaling-Up Nutrition (SUN) movement aims to address anemia, and low birth weight - both outcomes highly associated with micronutrient deficiencies. This is also reflected in the World Health Assembly's long term goal of decreasing the proportion of anemic women of childbearing age by 50 percent globally by 2025.

District level analysis of iron consumption shows extremely poor consumption in Timor Tengah Selatan district where 50% of households do not consume iron rich foods at all. Whether or not this poor level of iron intake is a direct result of drought impact or a normal condition is unclear. However, given the high rates of malnutrition in Timor Tengah Selatan, it is likely not just a result of the drought.





# 3.3 Coping with reduced access to food

From a food security perspective, a key concern for populations affected by acute events - including drought - is reduced access to food. A deterioration in food access can be caused by multiple factors, chief among them are reduced economic means to purchase food due to lower income and/or an increase in the cost of food. Another major factor is reduced production among farming households.

The household survey employed two sections on coping responses. The first uses a 30-day recall period and asks if households engaged in a series of livelihood related coping behaviors due to reduced access to food. The second section is an implementation of the Reduced Coping Strategies Index (CSI) module.

<sup>&</sup>lt;sup>9</sup> Iron Deficiency and Child Development, Lozoff. Food and Nutrition Bulletin, December, 2007. <u>http://fnb.sagepub.com/content/28/4\_suppl4/S560.short</u>

The CSI is a standard module which uses a 7-day recall and asks households about dietary responses to reduced food access. While these two variants of responses to food access have similarities, they differ in that the livelihood coping module focuses on non-food consumption related responses while the CSI is specific to reductions in food consumption.

# 3.3.1 Livelihood coping

In the livelihood coping module, the most common response to reduced food access was purchasing food on credit or borrowing food, which was used by 24% of the households surveyed.



Figure 18 - Responses to reduced food access in the past 30 days

A primary usage of the livelihood coping module is to construct a portion of the coping capacity dimension of the household food security index.<sup>10</sup> Each of the potential responses above is classified in terms of its severity, ranging from stress, to crisis, and emergency levels. The table below lists the severity of each behavior. These severities are based upon a standard approach by WFP launched in 2013.

	0		•			0	0		
Category		Coping strategy							
Sold more animals (non-productive) than usual									
Stress	s Sold household assets/goods (radio, furniture, refrigera television, jewelry etc.)								
Stress		Spent savings							
Stress		Purchased food o	on credit						
Crisis		Reduced non-foo and education	d expenses or	n health (i	ncludir	ıg dru	gs)		
Crisis		Sold productive a machine, wheelb	issets or mear arrow, bicycle	ns of trans e, car, etc.	port (s )	ewing	5		
Crisis		Withdrew childre	en from schoo	I					
Emergency	/	Sold last female a	animals						

Table 4 - Categorization of severity of livelihood / asset depletion coping strategies

<sup>10</sup> See page 33 in the Annex for details on construction of the index

**Emergency** Sold house or land

Following categorization of each of the individual coping strategies, the most severe strategy was used to classify the households' livelihood coping severity. Across the eight districts, 4% of households engaged in emergency level coping behaviors<sup>11</sup>, 12% in crisis level behaviors and 22% in stress level behaviors.





The table below includes all coping behaviors by district. Sales of the last female animals - an emergency level coping behavior - was high in Lombok Tengah where 11% of households reported this behavior. It is possible that this question was not fully understood in the context of a response to reduced food access. The sales of these animals may in fact be a normal behavior. When this component is combined with other food security indicators into the overall index, a correction does seem to address this potential misinterpretation.

days									
District	Sold more animals (non-productive) than usual	Sold household assets/goods	Reduced non-food expenses	Sold productive assets	Spent savings	Purchased food on credit or borrowed food	Sold house or land	Withdrew children from school	Sold last female animals
Probolinggo	10%	3%	8%	0%	8%	35%	1%	3%	7%
Sampang	5%	1%	2%	0%	7%	28%	0%	0%	2%
Lombok Tengah	13%	4%	6%	1%	7%	37%	1%	2%	11%
Lombok Utara	4%	3%	14%	2%	3%	22%	2%	1%	2%

Table 5 - Percent of households engaged in livelihood	/ asset depletion coping strategies in the past 30
days	

<sup>11</sup> A question on begging was included in the survey but it was revealed that it was misinterpreted and an implausibly high proportion of households reported the activity. This was removed in the analysis.

Kupang	17%	0%	13%	0%	7%	17%	0%	0%	1%
Timor Tengah Selatan	9%	0%	13%	0%	1%	18%	0%	0%	2%
Sumba Tengah	3%	1%	23%	1%	18%	22%	0%	0%	1%
Merauke	2%	1%	19%	0%	9%	14%	0%	0%	1%
Total	8%	2%	12%	0%	8%	24%	0%	1%	3%

#### 3.3.2 Dietary responses

A standard module was used to compute the Coping Strategies Index (CSI), a measure of the severity of food relating coping strategies. The CSI asks what households did in terms of changes to diet in the past week due to reduced food access. Options include: relying on less preferred food, less expensive food; borrowing food or relying on help from friends / relatives; reducing the number of meals per day; reducing the portion size of meals; and restricting consumption by adults in order for small children to eat. The frequency of these responses is then multiplied by a severity weight to create the CSI<sup>12</sup>. The index was used to create groups across the population depicting the most severe among those surveyed. The most severe (highest CSI scores) were found in Sumba Tengah where 30% of households were placed in this category, followed closely by Kupang with 28%. The lowest levels of food related coping were in Sampang, where 85% did not engage in any of these behaviors, and in Merauke at 80%.





As expected, the most severe and concerning levels of negative food coping behaviors are amongst the poorest households. One in four households (26%) in the poorest wealth quintile had high levels of negative food coping behaviors. Households in this quintile on average reduced the number of meals consumed once per week, reduced portion sizes of meals twice per week, and restricted consumption by adults in order for children to eat once per week.

<sup>&</sup>lt;sup>12</sup> See page 33 in the Annex for more details on the calculation of the CSI



Figure 21 - Food coping categories and coping strategies index by wealth quintiles

Restriction of consumption by adults for children to eat is a severe and unsustainable response to reduced food access. This behavior was common in Sumba Tengah, where more than a quarter of households (26%) restricted food consumption among adults for children to eat, and also in Kupang were nearly one in five households (19%) used this severe strategy.

Table 6 - Percent of households engaging in food consumption related coping behaviors in the past week

District	Relied on less preferred, less expensive food	Borrowed food or relied on help from friends or relatives	Reduced the number of meals eaten per day	Reduced portion size of meals	Restricted consumption by adults in order for small children to eat
Probolinggo	25.9%	16.4%	11.4%	10.0%	7.5%
Sampang	6.7%	9.1%	3.2%	3.2%	2.9%
Lombok Tengah	34.3%	35.1%	10.6%	11.6%	8.8%
Lombok Utara	22.6%	19.8%	13.0%	13.3%	4.6%
Kupang	21.5%	10.0%	34.4%	38.8%	18.7%
Timor Tengah Selatan	18.0%	10.1%	15.4%	20.3%	11.3%
Sumba Tengah	41.9%	20.4%	34.9%	31.0%	26.1%
Merauke	15.0%	3.6%	8.3%	10.1%	4.8%
Total	23.2%	15.6%	16.4%	17.3%	10.6%

The livelihood groups exhibiting the highest levels of negative food consumption coping strategies are unemployed, agricultural wage laborers, and food crop producers. These are not surprising results given the specific impact of drought on agricultural households and the existing economic vulnerability of unemployed households. Agricultural wage laborers and food crop producers also reported the highest rates of severe impact on income due to drought with 49% and 46% respectively losing more than 30% of their primary income (see Figure 3 on page 12).





Households who faced income reductions and subsequently used severe coping strategies including reducing the number, frequency or quality of meals have low resilience to drought. These households, due to limited coping capacity, were forced to limit their food intake as a response to loss of income. A household-level analysis, which combines income reduction and the coping strategies index illustrates where the impact of drought was felt from a food security perspective. As shown in Figure 23 below, 16% of households in Kupang were highly impacted, followed by 9% in Sumba Tengah and 6% in Lombok Tengah<sup>13</sup>.

<sup>&</sup>lt;sup>13</sup> The coping strategies index captures a seven day period prior to the survey which limits the extent to which drought impact can be directly attributed to the CSI score



Figure 23 - Severe income loss and high CSI by district

# 4 External assistance

Households were asked if they received assistance for drought relief, who provided the assistance and the type of assistance received (i.e. food assistance, water distributions, agricultural inputs, cash, etc.). In addition, households were asked if they purchased Raskin rice in the past 30 days.

Just over half of household surveyed (55%) purchased Raskin rice within the 30 days prior to the survey. However, across districts, the percent of households purchasing Raskin varied significantly. For example, in Lombok Tengah, nearly all households (93%) purchased Raskin rice while in Sumba Tengah, merely 10% of households purchased Raskin rice in the past 30 days. The survey was conducted during an election period in the two districts in Lombok and in Merauke in Papua, which may have influenced the availability of Raskin rice.



Figure 24 - Percent of households that purchased Raskin rice in the past 30 days by district

Across the eight districts, about one in five households surveyed (18%) received assistance for drought relief. The most common form of assistance was food assistance, followed by cash, water, and agricultural inputs. Government was nearly the sole provider, accounting for 98% of households who received drought assistance with NGOs (international and local) providing assistance to a few households in Merauke and Kupang.



Figure 25 - Percent of households receiving assistance due to drought and type of assistance

Half of households in Sampang district (51%) had received drought assistance at the time of the survey. Of those households, 89% received food assistance. Lombok Tengah had the second highest proportion of households receiving assistance, with one quarter of those surveyed receiving some benefit. In Lombok Tengah, cash was the primary intervention for 30% of those receiving assistance. While only 10% of households in Lombok Utara received assistance, nearly half (47%) received cash.



Figure 26 - Percent of households who received drought assistance by district

Targeting of assistance is problematic. When considering the population in need from four perspectives: relative levels of poverty, food security status, drought impact on income, and drought impact on agriculture - many of the households in need did not receive assistance. Households in the poorest quintile were equally targeted as households in the wealthiest quintile at 13% each. It must be noted that the wealth quintile is based on a distribution across all eight districts surveyed. Poor districts, specifically Sumba Tengah and Timor Tengah Selatan, account three out of four households in the poorest quintile (74%). Therefore relatively low levels of assistance in these districts as shown in the figure above, accounts for overall low levels of assistance to the poorest quintile. This suggests geographic targeting and household targeting are not optimal based on findings from these eight districts.



Figure 27 - Percent of households who received drought assistance by wealth quintile

Severely food insecure households and food secure households equally received assistance (17% of these households each). In households who had a severe and moderate impact on income, 21% received assistance. However, among households whose income increased during drought, 27% received assistance. Targeting of farmers whose last harvest was impacted was more accurate. Among farmers who reported a crop failure in their last harvest, 24% received assistance while among those whose crop was not affected, 17% received assistance.

# 5 The impact of drought beyond the eight districts surveyed

Prior to the onset of the current drought in Indonesia, these eight districts had varying degrees of chronic food and nutrition insecurity. Existing vulnerability was most notable in Sumba Tengah and Timor Tengah Selatan. These two districts were identified as high priority districts in the 2015 FSVA, both labeled as priority 2. Poverty rates are high, as is stunting. In Sumba Tengah, 32% of the population lives below the poverty line and 64% of children under five are stunted. In Timor Tengah Selatan, 28% live below the poverty line and 70% of children under five are stunted - the highest rates of chronic malnutrition in all of Indonesia.

The vulnerability of these two districts as identified by the FSVA was corroborated by the survey results where rates of household food insecurity rates were high - 53% in Sumba Tengah and 38% in Timor Tengah Selatan. When the most severe rates of negative food coping behaviors were considered alongside income reduction and food insecurity rates, Sumba Tengah and Timor Tengah Selatan again were determined the most impacted confirming low resilience and high vulnerability in these districts.

In contrast, districts with levels of drought exposure and relatively high levels of economic vulnerability but less food insecure both as defined by the FSVA and by the food security index in this survey were less impacted. Merauke, Lombok Utara, Sampang, and Probolinggo had little impact on incomes, exhibited limited food related coping strategies and had low relatively low rates of food insecurity. Lombok Tengah and Kupang had somewhat mixed results across these criteria.

In terms of livelihoods, as expected, agricultural livelihoods - particularly crop producers and agricultural wage laborers - were most impacted according to the survey results. This can be seen in terms of loss of income, the use of negative food related coping and current food security status.

As previously noted in the methodology the following criteria were used to identify districts at risk:

- 1. High exposure to drought in the past three months
- 2. High economic vulnerability based on proportion of population living below the poverty line

Following data analysis from the household survey, a more refined approach was used to estimate the population that may require assistance. The findings of the survey were applied to data from the 2014 SUSENAS and rainfall data analysis using remote sensing techniques. Specifically, the number of people living below the poverty line in districts with high drought exposure and high economic vulnerability were deemed to be at risk. Second, the number of people living below the poverty line and dependent on agriculture as a primary source of income were estimated to be in need of assistance. The results from this analysis are seen in Table 7 below, with 38 districts identified and a total of 1.2 million people potentially in need of assistance.

Province	District	Total district population	Population at risk	Population requiring assistance
Aceh	Kota Subulussalam	73,860	23,623	1,530
DI Yogyakarta	Gunung Kidul	707,158	107,003	49,581
DI Yogyakarta	Kulon Progo	407,330	98,791	33,819
Gorontalo	Boalemo	146,391	34,381	18,979
Gorontalo	Gorontalo	367,951	90,901	41,237
Gorontalo	Pohuwato	143,030	21,254	5,089
Jawa Tengah	Brebes	1,772,737	223,610	52,853
Jawa Tengah	Kebumen	1,180,593	149,426	43,312
Jawa Tengah	Purbalingga	888,396	163,480	45,368
Jawa Tengah	Rembang	614,170	74,312	21,757
Jawa Tengah	Wonosobo	773,058	101,433	28,423
Jawa Timur	Bangkalan	945,285	211,933	107,433
Jawa Timur	Probolinggo	1,131,898	268,120	56,011
Jawa Timur	Sampang	932,163	209,177	69,651
Jawa Timur	Sumenep	1,066,703	196,951	75,335
Maluku	Maluku Tengah	368,278	51,717	6,688
Maluku	Seram Bagian Barat	168,773	64,812	17,553
Maluku	Seram Bagian Timur	106,775	15,455	1,398
Nusa Tenggara Timur	Ende	268,969	21,211	2,227
Nusa Tenggara Timur	Kupang	337,604	58,594	38,022
Nusa Tenggara Timur	Lembata	129,309	42,107	23,211
Nusa Tenggara Timur	Manggarai	314,083	53,585	25,810
Nusa Tenggara Timur	Manggarai Timur	268,131	116,567	63,274
Nusa Tenggara Timur	Rote Ndao	141,897	30,877	13,406
Nusa Tenggara Timur	Sabu Raijua	83,633	25,874	13,244
Nusa Tenggara Timur	Sumba Barat	120,027	33,781	26,667
Nusa Tenggara Timur	Sumba Barat Daya	312,597	121,626	103,660
Nusa Tenggara Timur	Sumba Tengah	67,302	24,229	20,316
Nusa Tenggara Timur	Sumba Timur	242,796	10,628	8,270
Nusa Tenggara Timur	Timor Tengah Selatan	458,225	124,795	107,640
Nusa Tenggara Timur	Timor Tengah Utara	241,867	61,892	44,495
Рариа	Jayawijaya	204,032	40,077	40,077
Рариа	Маррі	90,448	56,038	3,334
Рариа	Mimika	199,069	13,480	-
Papua Barat	Manokwari	204,415	32,078	13,478
Papua Barat	Raja Ampat	45,248	13,866	1,635
Papua Barat	Teluk Bintuni	58,439	5,403	357
Sulawesi Tengah	Tojo Una-Una	146,299	9,664	1,525
Total		15,728,936	3,002,751	1,226,665

#### Table 7 - Districts and population at risk and potentially needing assistance

Based on findings from this analysis, WFP recommends that the Government of Indonesia focus on Nusa Tenggara Timur where an extreme dry season has eroded already weak purchasing power and harvests of main crops in 2016 are likely to be impacted. With food insecurity and chronic malnutrition rates already high, particularly in Sumba Tengah and Timor Tengah Selatan, there is cause for serious concern. Results from the Food Security and Vulnerability Atlas for Nusa Tenggara Timur<sup>15</sup> province found a total of 14 sub-districts classified as priority 2. Of these 14 sub-districts, eight are in Timor Tengah Selatan district and one in Sumba Tengah. The forthcoming Nusa Tenggara Timur FSVA can be used to further target sub-districts within the province.

This survey was limited by time and resource constraints and did not cover all districts determined to be drought impacted. Indeed, all of Sumba island appears to highly vulnerable to drought impact, as does Sabu Raijua, and Manggarai Timur.

Outside of Nusa Tenggara Timur - Maluku and Papua require additional focus to determine impact. This study intended to include Maluku Tengah but was logistically not feasible. While Merauke district in Papua was included, households in Merauke were mostly deemed to have more coping capacity than households in the Nusa Tenggara Timur districts surveyed. However, other districts in Papua, particularly Jayawijaya, Mappi, and Mimika will likely have a greater impact.

# 6 Situation outlook and recommendations

#### 6.1 Situation outlook

Since the inception of the household survey data, the rainy season began in Indonesia. However, the rains came one to two months later than usual and at lower levels of precipitation than normal. In addition, rainfall which began in January, did not continue at expected levels in early February. This can be seen in the rainfall anomaly maps below. East Java, Bali and Lombok all have again returned to drier than normal conditions in the most recent observations.

<sup>&</sup>lt;sup>15</sup> The Nusa Tenggara Timur FSVA evaluates each sub-district in the province while the national FSVA uses districts as the unit of analysis


# Figure 28 - Rainfall anomaly in Java and Bali (10 day intervals from 1-January to 10-February)

And in Nusa Tenggara Timur, rainfall in the last 10 days of January appeared to have fallen at normal levels compared to historical averages. However, by the first 10 days of February, there was a return to below average precipitation for the entire province. A concerning outcome of this phenomenon is the high likelihood that most farmers would have begun planting by January, after having already waited to plant later than usual, and in February insufficient rain may lead to damaged crops.



Figure 29 - Rainfall anomaly in Nusa Tenggara Timur (10 day intervals from 1-January to 10-February)

Using specialized time-series analysis software to process satellite imagery, the current state of crops was assessed. Estimates are made per each pixel photographed of whether planting has begun based upon the color spectrum observed. All of Indonesia was analyzed using this approach and then compared to the same period over a historical reference point, specifically the 'normal' agricultural year of 2013. At aggregate levels nationally, planting of rice appears on target or better with a total of 3.9 million hectares classified as planted compared to 3.4 million hectares for the same period in 2013.



#### Figure 30 - Delays in rice planting in East and Central Java as of December 2015



However, sub-nationally, delays in planting can be observed, importantly in key rice producing provinces in Java. At this stage of the current season in 2013, 51% of rice fields were planted in East Java and 61% in Central Java. By comparison, to date in 2015, only 39% of fields have started planting in East Java and 53% in Central Java. Central Java appeared further behind in November, but a significant increase in planting in late November and early December has closed gaps. East Java however remains well behind in planting, with a total of nearly 110,000 hectares delayed for this point in time. Though Nusa Tenggara Timor is not a major rice production area, 15,000 hectares are estimated to be delayed, representing a 33% of rice fields compared to normal.

While the delays in planting may not have an impact on overall production of rice nationally, vulnerable populations will be disproportionately affected. In particular, agricultural wage laborers and crop producers will see their incomes reduced. It is also likely that some farmers who would normally grow rice during the main growing season will switch the more drought tolerant maize, with reduced levels of profit. These scenarios will unfold in March-April 2016 and require monitoring.

The price of rice also requires close monitoring in the coming months as the impact of El Nino on main season harvests unfolds and while imports to provide a buffer to national stocks are still being negotiated and have created significant speculation on rice stocks in Indonesia.





#### Source: Ministry of Trade

According to data from the Ministry of Trade, between August 2015 and February 2016<sup>16</sup>, rice prices have risen by 7.5% while year-on-year, the price of rice rose by 12.0% from January 2015 to January 2016<sup>17</sup>. In addition to the rising trend, current rice prices are high, even after adjusting for inflation. With looming issues in the upcoming main harvest and potential negative impacts of drought on rural livelihoods, price monitoring across Indonesia is critical. Urban poor and rainfall dependent farmers are likely to face challenges in procuring food staples, negatively impacting other expenditures.

#### 6.2 Recommendations

To help vulnerable households cope with the effect of reduced income coupled with rising food prices, Government of Indonesia should provide cash assistance to poor households dependent on food crop production. Across 38 vulnerable districts, an estimated 1.2 million Indonesians require assistance. Coordination between multiple government agencies, including Ministry of Agriculture, Ministry of Social Affairs and the National Team for the Acceleration of Poverty Reduction is required to refine targeting and identify target households.

The probability of spikes in acute malnutrition rates are high, particularly in districts where wasting rates increase every year during the lean season. With an extended lean season due to drought and already poor nutrition outcomes, there is justification for immediate interventions in any area with wasting rates crossing above the critical WHO threshold of 15%. Interventions include supplementary feeding to pregnant and lactating women.

Drought has had significant effects at household level, impacting production and reducing farmers' income.. Improved implementation of the existing Special Program for Acceleration of Rice, Maize, and Soybean Self-Sufficiency (UPSUS) so that farmers can access appropriate seeds, fertilizer, irrigation, and information in time is one means to accelerate planting. The Ministry should monitor current crop

<sup>&</sup>lt;sup>16</sup> As of 22 February, 2016

<sup>&</sup>lt;sup>17</sup> In February and March of 2015, an extreme anomaly in rice prices occurred, largely attributed to speculation on rice markets.

conditions and prepare for a delayed harvest. Plans for delayed second season planting should be made to prevent exposing crops to the peak dry season.

The main harvest and subsequent price monitoring, sub-nationally, are critical in the coming months. The historical impact of staple food price inflation on poverty in Indonesia is a poignant reminder of the strong influence of rice prices on household budgets. Government should monitor prices and also consider triggers which will elicit a response that will soften the potential increase in poverty as rice prices rise.

## 7 Annex

## 7.1 Computation of key indicators

#### 7.1.1 Wealth index

The wealth index is a composite score used to identify relative levels of wealth and poverty at household level within a population of interest. The index is constructed from a series of variables describing asset ownership and housing characteristics.

The wealth index was created using the following steps:

- Variables from the household asset module and household amenities were recoded to 0 or 1 where 0 = not owning and 1 = owning
- 2. Assets owned by nearly all households or very few households, having either a prevalence of greater than 95% or less than 5%, were excluded.
- 3. Livelihood-specific assets such as agricultural land, livestock, ploughs, etc., were excluded as they tend to identify the livelihoods rather than the levels of asset wealth
- 4. Household characteristics such as the source of drinking water and type of sanitation were recoded to 0 or 1 with 1 signifying an improved source
- 5. Principal Component Analysis (PCA) was run on the full dataset using the identified variables. The first component of the PCA is used as the wealth index, and quintiles are created (using weighted data) to create 5 equal-size wealth groups, each consisting of 20% of total households in the eight districts. An iterative process was used to improve the analysis
- 6. A final wealth index and quintiles are determined once the analysis team determines the best iteration to use as the wealth index

The following assets and housing characteristics were used in the final calculation of the wealth index:

- Car ownership
- Motorcycle ownership
- Bicycle ownership
- Refrigerator ownership
- Phone ownerships
- Television ownership
- Improved drinking water classification
- Improved floor
- Improved roof
- Improved source of lighting
- Improved source of cooking fuel
- Improved toilet
- Crowing index based on number of members per size of house

The table below demonstrates the classification of improved vs unimproved for the variables used in the wealth index.

Household Characteristic	Unimproved	Improved
	Dirt	Cement
Floor type	Bamboo/wood (except for teak) Other natural material	Tile, stones, bricks or other hard material
	Thatch/large leaves/palm	Metal (corrugated)
Roof type	Bamboo/wood (except for teak)	Tile/ceramic/cement or other hard material (include teak)
	Other natural material	
	Kerosene lantern, oil lamp, candle	Electricity (PLN)
Main source of	Torch (battery powered)	Electricity (non-PLN)
lighting	Firewood	Generator
		Solar panel
	Firewood	LPG (Gas Cylinder 3 kg)
Main source of	Charcoal	LPG (Gas Cylinder 12 kg)
cooking		Electricity
		Kerosene
	Bucket	Toilet connected to septic-tank
Toilet type	Hanging toilet	Toilet no septic-tank
ronet type	Shared facility	Pit latrine with slab
	No facilities (river, bush, beach)	Pit latrine no slab (open pit)
	Unprotected well	Piped water (PDAM)
	Unprotected spring	Public tap
Water source	Water tank / Drum	Tube well/borehole
water source	Water tanker truck	Protected spring
	Stream, river, lake, etc.	Rain water collection
		Bottled water

#### Table 8 - Unimproved and improved housing characteristics

## 7.1.2 Food consumption score

The food consumption score (FCS) is a composite score based on the dietary diversity, food frequency, and relative nutritional importance of various food groups consumed by a household.

Households were asked how many days in the week preceding the survey they had eaten a food item from a list of various food items eaten commonly in Indonesia. Those items are divided into eight standard food groups: main staples (such as rice, maize, and cassava); pulses (including tofu, tempe, beans and nuts); meat, fish, poultry and eggs; vegetables (including green leafy vegetables); fruits; oils and fats; milk and other dairy products; and sugar.

Once the items are categorized into the appropriate food groups, the relative nutritional value of each group (Table 9) and the frequency of consumption (with a maximum of seven days per group) are used to calculate the FCS. This is done by multiplying each food group frequency by each food group weight, and then summing these scores into one composite score.

## FCS = ∑x<sub>i</sub> \* a<sub>i</sub>

FCS = Food consumption score

 $x_i$  = Frequencies of food consumption (number of days each food group was consumed during the past 7 days)

 $a_i$  = Weight of each food group (see table below)

		-
Food item	Food group	Weight
Rice, maize, cassava, bread, roots and tubers, plantain	Cereals, tubers and crops	2
Pulses, tofu, tempe, beans and nuts	Pulses	3
Vegetables	Vegetables	1
Fruits	Fruits	1
Fish, seafood, poultry, and meat	Meat and fish	4
Milk and milk products	Milk	4
Sugar, honey and sweets	Sugar	0.5
Oil and butter	Oil	0.5

#### Table 9: Food groups and weights used to calculate the food consumption score

The FCS is a continuous variable with a range from 0 to 112. To provide more meaningful descriptive analysis of food consumption than reporting average scores, households are categorized into food consumption groups based on their FCS. The standard food consumption groups are poor, borderline, and acceptable food consumption. A score below 21 is considered poor food consumption and a score below 35 is defined as borderline food consumption (Table 2).

A score of 21 is a bare minimum. Scoring below 21 means that a household does NOT eat at least a staple and vegetables on a daily basis and therefore is considered to have a very poor diet. The value 21 is derived from:

- (daily frequency \* weight of vegetables) + (daily frequency \* weight of staples)
- (7 \* 1) + (7 \* 2) = 21

Households with a FCS between 21 and 35 are considered to have borderline food consumption. 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.

- (daily frequency \* weight of vegetables) + (daily frequency \* weight of staples) + (4 \* weight of oil) + (4 \* weight of pulses)
- (7 \* 1) + (7 \* 2) + (4 \* 0.5) + (4 \* 3) = 35

In many Asian and Latin American countries, the standard FCS threshold has been adjusted to account for high consumption of oil and sugar. In these contexts, poor households often consume oil and sugar on a nearly daily basis (6-7 days per week). The effect is that a household with a score of 28 may in fact consume just oil, sugar, staples, and vegetables - a very poor diet. Therefore, a higher threshold better captures what constitutes a poor or borderline diet. The thresholds are raised by a score of seven to account for daily consumption of oil (weight of 0.5) and daily consumption of sugar (weight of 0.5). The raised threshold was applied in the analysis in this survey as noted below.

# Food consumption groupStandard<br/>thresholdsRaised thresholdsPoor0 - 210 - 28Borderline21.5 - 3528.5 - 42Acceptable> 35> 42

#### Table 10 - Thresholds for food consumption groups

#### 7.1.3 Micronutrient intake

In most food security assessments carried out by WFP, the FCS is an important indicator for identifying the most food insecure households. However, the FCS is a household level indicator and does not make the link between household access to food, individual dietary intake and nutritional outcomes - stunting, wasting and micronutrient deficiencies. In 2015, WFP developed an analytical method to exploit data captured in the standard food consumption module used to calculate the FCS to provide information on specific nutrients. While it does not allow for calculation of individual nutrient intake, this new method fills a micronutrient analysis gap at the household level and attempts to improve the link between household food access/consumption and nutritional outcomes<sup>18</sup>.

Studies from 5 different countries (Uganda, Nepal, Guatemala, El Salvador and Honduras,) showed a positive significant correlation between the number of times nutrient rich food groups are consumed in a one week period and how adequate the intake of that nutrient is for the household. This correlation between number of times and adequacy in intake held for all nutrients and all countries analyzed. A distinction between never (0 times) sometimes (1-6 times) and at least daily (7 times or more) consumption in a week, seems to be useful to assess the likelihood of adequacy. The analysis shows that is it important to discriminate foods that were eaten in a small quantity (less than 15g per capita per day).

To implement this approach, sub-groups of micronutrient rich foods were added to the food consumption module of the household survey. Then, each food group and sub-group was classified into the nutrient group which it provides, some providing multiple nutrients. Then, the frequency of consumption form each nutrient group was categorized into three groups: never consumed (0); some consumption (1 to 6 days a week); and frequent consumption (7 days a week).

Vitamin-A rich foods	Protein rich foods	Iron rich foods		
Milk, yogurt, cheese, and other dairy products	Tofu, tempe, beans, cowpeas, peanuts, lentils, nuts, soy, pigeon peas, and other nuts	Meat including beef, pork, lamb, goat, rabbit, chicken, duck, other birds, insects		
Liver, kidney, heart, and other organ meats	Milk, yogurt, cheese, and other dairy products	Liver, kidney, heart, and other organ meats		
Eggs	Meat including beef, pork, lamb, goat, rabbit, chicken, duck, other birds, and insects	Fish / shellfish, including canned fish, and other seafood		
Orange vegetables (vegetables rich in Vitamin A): carrot, red pepper, pumpkin, orange sweet potatoes	Fish / shellfish, including canned fish, and other seafood			
Dark green leafy vegetables: spinach, broccoli, cassava leaves, and other dark green leaves	Eggs			
Orange fruits (Fruits rich in Vitamin A): mango, papaya				

#### Table 11 - Nutrient rich food groups and related food items from the household questionnaire

<sup>&</sup>lt;sup>18</sup> Full documentation on this approach is available here: <u>https://resources.vam.wfp.org/node/87</u>

#### 7.1.4 Livelihood coping strategies

The Livelihood Coping Strategies indicator is derived from a series of questions regarding the household's experience with livelihood stress and asset depletion during the 30 days prior to survey. Responses were used to understand the stress and insecurity faced by households and describes their capacity to regarding future productivity.

All strategies were classified into three broad groups, including stress, crisis and emergency strategies:

- Stress strategies, such as borrowing money or spending savings, are those which indicate a reduced ability to deal with future shocks due to a current reduction in resources or increase in debts.
- Crisis strategies, such as selling productive assets, directly reduce future productivity, including human capital formation.
- Emergency strategies, such as selling one's land, affect future productivity, but are more difficult to reverse or more dramatic in nature.

Households engaging in routine economic activities that did not involve any of these strategies were considered equivalent to food secure on this indicator. Each household was assigned a value from 1-4 to describe the most severe strategy they employed. The following questions and severity were applied during the analysis:

#### Table 12 - Livelihood coping strategies and severity

Strategy	Category
Sold household assets/goods (radio, furniture, television, jewelry etc.)	Stress
Sold more animals (non-productive) than usual	Stress
Spent savings	Stress
Purchased food on credit or borrowed food	Stress
Reduced expenses on health (including drugs) and education	Crisis
Sold productive assets or means of transport (sewing machine, wheelbarrow,	Crisis
bicycle, car, etc.)	
Withdrew children from school	Crisis
Sold house or land	Emergency
Sold last female animals	Emergency
Begged <sup>19</sup>	Emergency

#### 7.1.5 Coping strategies index

In addition to the livelihood coping module described above, a standard module for capturing the Coping Strategies Index was included in the survey. The Coping Strategies Index (CSI) is a simple indicator of household stress due to a lack of food or money to buy food and their capacity (or lack thereof) to respond.

The CSI is based on a series of responses (strategies) to a single question: "What do you do when you don't have adequate food, and don't have the money to buy food?" It combines the frequency of each

<sup>&</sup>lt;sup>19</sup> Early in the data cleaning and analysis phase, it became clear that the question on begging was not understood and interpreted as an extreme form of dealing with lack of access to food. A number of households with assets and decent food consumption stated that they had begged in the past 30 days. It is likely that enumerators were not sufficiently trained on this response and were not able to explain the severity. This response was therefore not included in the analysis.

strategy (how many days in the past week was each strategy adopted?) and the severity of each strategy. The severity weights are described below.

Table 13 - Food coping strategies and their severity

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

The CSI is calculated by multiplying the frequency of each strategy (days per week) by the weight and summing the total. The resulting score is on a scale of 0 to 56. The CSI does not have a standard set of thresholds like the FCS to describe groups. However, reporting the CSI score itself is not always clearly understood. A common practices is to split a dataset into four groups: those with a CSI of 0 (meaning no use of negative coping behaviors); low coping, medium coping, and high coping. To create low, medium, high groups, even groups were generated across the eight districts. This allows for comparison of relatively high to relatively low coping in the absence of a standard threshold.

# 7.1.6 Food security index

A relatively new approach used by WFP to classify household food security includes consolidation of multiple indicators into a single index. This new approach, referred to as the Consolidated Approach to Reporting Indicators of Food Security (CARI)<sup>20</sup>.

The CARI approach is a classification of households into four descriptive groups: food secure, marginally food secure, moderately food insecure, and severely food insecure. The classification provides a representative estimate of food insecurity within the districts surveyed.

The final CARI output is constructed from three variables across two key dimensions of food insecurity. The current status domain employs food security indicators which measure the adequacy of households' current food consumption, based on the FCS in this survey. The coping capacity domain employs indicators which measure households' economic vulnerability and asset depletion. Specifically, in this survey, this domain is based upon a combination of the livelihood coping strategy indicator as a measure of coping capacity and asset ownership as a measure of economic vulnerability.

Each of three underlying variables is converted to a 4 point scale. At the household level, a value is assigned from 1 to 4 for the three variables. For the FCS, an acceptable food consumption is given a value of 1, borderline a value of 3 and poor a value of 4. For the coping indicator, households with no coping are given a value of 1, those with stress a value of 2, crisis a value of 3 and emergency a value of 4.

<sup>&</sup>lt;sup>20</sup> For full documentation on the CARI, please visit: <u>https://www.wfp.org/content/consolidated-approach-reporting-indicators-food-security-cari-guidelines</u>



#### Figure 32 - CARI domains and indicators

The CARI was designed to use one of two indicators for economic vulnerability: poverty status or share of expenditure on food. Both of these indicators require an extensive module on household consumption and expenditure. This survey was designed to be relatively light and did not include such a module. However, forthcoming research from WFP has further investigated the use of a more simple count of assets as a means of measuring economic vulnerability. This research has demonstrated that the share of expenditure on food is a measure which is less influenced by economic flows and more indicative of economic stock or wealth.

To explore further the relationship between asset ownership and the share of expenditure on food, analysis was conducted on the Indonesia National Socio-Economic Survey (SUSENAS). The SUSENAS includes a comprehensive consumption module along with modules on asset ownership and housing characteristics. A common set of assets which exist in the WFP drought impact survey and the SUSENAS was used in a separate analysis to determine if a set of thresholds could be used to determine the number of assets owned and how well they related to a four point classification of the share of expenditure on food. Using this approach, it was found that households that own 0 to 3 assets had, on average, a very high share of expenditure on food (>75%); those with 4 to 5 assets had a high share of expenditure on food (65 - 75%); those with 6 to 7 had a moderate share of expenditure on food (< 50%).

The findings from this analysis on the SUSENAS was then applied to the drought survey, using the same assets and housing characteristics to create a four point classification of economic vulnerability in lieu of the share of expenditure on food. The assets and housing characteristics used are:

- Improved roof
- Improved floor
- Improved drinking water
- Improved toilet
- Improved source of lighting
- Improved source of cooking fuel
- Ownership of a bicycle
- Ownership of a motorcycle

- Ownership of a refrigerator
- Ownership a motor boat

After assigning households a value of 1-4 on the ownership of assets as a measure of economic vulnerability, the standard CARI computation was followed. First the unrounded average of the two coping capacity indicators is calculated for each household. Then, a second average is calculated from the average of the coping domain and the current consumption domain. The final score is then rounded up to provide the overall household food security classification. The table below describes the four groups.

Food security group	Description
1 = Food secure	Able to meet essential food and non-food needs without engaging in atypical coping strategies
2 = Mildly food insecure	Has minimally adequate food consumption without engaging in irreversible coping strategies; unable to afford some essential non-food expenditures
3 = Moderately food insecure	Has significant food consumption gaps, OR marginally able to meet minimum food needs only with irreversible coping strategies
4 = Severely food insecure	Has extreme food consumption gaps, OR has extreme loss of livelihood assets will lead to food consumption gaps, or worse

#### Table 14 - Description of food security index groups

# 7.2 District profiles

The following pages contain a brief summary of the eight districts visited during the household survey. Some of this information is from secondary sources and some from the survey itself. The table below lists and describes each of the indicators used in the district profiles.

Indicator	Description	Source
District vulnerability classification	An overall classification given to the district based on composite analysis of nine chronic food security indicators. Districts classified as priority 1 are the most vulnerable to chronic food and nutrition security while those classified as priority 6 are the least vulnerable to food and nutrition security	This indicator is from the 2015 Food Security and Vulnerability Atlas, produced by WFP and the Indonesia Food Security Agency. <u>http://fsva.wfp.or.id</u>
Poverty	Percent of the district population living below the poverty line	Estimates by WFP based on the National Socio-Economic Survey (SUSENAS), 2014.
Stunting	Percent of children under five years of age who are too short for their age. Stunted growth is an outcome of chronic malnutrition and is highly prevalent in	Ministry of Health. National Report on Basic Health Research (RISKESDAS), 2013.

Table 15 - District profile description

	Indonesia, with 37% of children nationally classified as stunted in 2013.	
Household food security classification	A summary of household food insecurity derived from indicators of current diet and coping capacity. More details on the overall classification and its components are available in the Annex of this document.	WFP Household Survey on Drought Impact, 2015.
Drought impact on income, food expenditure, drinking water quality, and costs	Severe impact on income is classified as a 30% or more reduction as reported by households. In response to income reduction, households were asked if they reduced expenditure on food. Drinking water classification is based on a standard WHO/UNICEF definition: http://www.wssinfo.org/definitions- methods/watsan-categories/. Households were asked if the costs of water increased during drought.	WFP Household Survey on Drought Impact, 2015.
Food consumption coping strategies	The household survey includes the standard Coping Strategies Index (CSI) module. All 2400 households who used food coping behaviors were split into three groups (low, medium, high) based on the severity and frequency of their responses. See the Annex of this document for more details.	WFP Household Survey on Drought Impact, 2015.

# Province: Nusa Tenggara Timur District: **Sumba Tengah**

District vulnerability classification (FSVA 2015):

# NUR MAMBOR HAHARU TANA JMBU RATU WEWEWA UTARA SUMBA BARAT DAYA WEWEWA SUMBA BARAT SUMBA TENGAH UMBU RATU LOLI KATIKUTANA Waibak KOTA WAIKABUBAK LEWA Waikabubak SUMBA TIMUR LAMBOYA NGGAHA ORI ANGU WANOKAKA LEWATIDAHU **Road network** KATALA HAMU Primary road Secondary road Other road

## Population and administration

Total population: **67,303** Number of sub-districts: **5** Number of villages: **65**  Poverty and chronic malnutrition

Children under five

who are stunted



Population below the poverty line Overall household food security classification and indicators

Domain		Indicator	Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	46%		42%	12%
Coping capacity	Economic vulnerability	Asset ownership	2%	13%	37%	48%
	Asset depletion	Livelihood coping	54%	22%	23%	1%
Overall food security classification		8%	39%	47%	7%	

## Impact of drought

17%	experienced a severe impact on their main source of income due to drought
32%	reduced food expenditure as a result of income impact
53%	changed their source of drinking water during the drought
20%	spent more on water than normal due to drought

#### Sources of drinking water during drought and normally



Percent of households using food consumption coping strategies

29%	21%	20%	30%

# Province: Nusa Tenggara Timur District: **Timor Tengah Selatan**

District vulnerability classification (FSVA 2015):



## Population and administration

Total population: 458,225

Number of sub-districts: 32

Number of villages: 266

Poverty and chronic malnutrition

Children under five

who are stunted



Population below the poverty line

Overall household food security classification and indicators

Domain		Indicator	Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	62%		21%	17%
Coping capacity	Economic vulnerability	Asset ownership	1%	10%	38%	51%
	Asset depletion	Livelihood coping	73%	13%	12%	2%
Overall food security classification		6%	56%	33%	5%	

# Impact of drought

40%	experienced a severe impact on their main source of income due to drought
32%	reduced food expenditure as a result of income impact
56%	changed their source of drinking water during the drought
38%	spent more on water than normal due to drought

#### Sources of drinking water during drought and normally



#### Percent of households using food consumption coping strategies

65%	12%	11%	12%

# Province: Nusa Tenggara Timur District: **Kupang**

District vulnerability classification (FSVA 2015):

5

3



#### Population and administration

Total population: 337,604

Number of sub-districts: 24

Number of villages: 160

Poverty and chronic malnutrition

46%

Children under five

who are stunted



Overall household food security classification and indicators

Domain		Indicator	Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	52%		34%	14%
Coping	Economic vulnerability	Asset ownership	4%	32%	45%	20%
capacity	Asset depletion	Livelihood coping	64%	22%	13%	1%
Overall f	ood security o	lassification	18%	42%	39%	2%

## Impact of drought

48%	experienced a severe impact on their main source of income due to drought
35%	reduced food expenditure as a result of income impact
33%	changed their source of drinking water during the drought
52%	spent more on water than normal due to drought

#### Sources of drinking water during drought and normally



Improved Unimproved

#### Percent of households using food consumption coping strategies

46%	10%	16%	27%

# Province: East Java District: **Sampang**

District vulnerability classification (FSVA 2015):

2 3 4 5 6



Total population: 932,171

Number of sub-districts: 14

Number of villages: 180



41%

Children under five

who are stunted

Population below the poverty line Overall household food security classification and indicators

Domain		Indicator	Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	98%		2%	0%
Coping capacity	Economic vulnerability	Asset ownership	29%	36%	33%	2%
	Asset depletion	Livelihood coping	64%	31%	2%	2%
Overall food security classification		50%	49%	1%	0%	

# Impact of drought

37%	experienced a severe impact on their main source of income due to drought
10%	reduced food expenditure as a result of income impact
33%	changed their source of drinking water during the drought
21%	spent more on water than normal due to drought

## Sources of drinking water during drought and normally



Improved Unimproved

#### Percent of households using food consumption coping strategies

86%	9%	3%	2%

# **Province: East Java** District: Probolinggo



#### Population and administration

Total population: 1,131,902

Number of sub-districts: 24

Number of villages: 325

#### District vulnerability classification (FSVA 2015):



# Overall household food security classification and indicators

Domain		Indicator	Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	94%		5%	1%
Coping capacity	Economic vulnerability	Asset ownership	42%	34%	21%	3%
	Asset depletion	Livelihood coping	56%	28%	8%	8%
Overall food security classification		57%	37%	5%	1%	

#### Impact of drought

20%	experienced a severe impact on their main source of income due to drought
7%	reduced food expenditure as a result of income impact
11%	changed their source of drinking water during the drought
11%	spent more on water than normal due to drought

#### Sources of drinking water during drought and normally



Improved Unimproved

#### Percent of households using food consumption coping strategies

63% 18% 9% 10%				
	63%	18%	9%	10%

No coping Low coping Medium coping High coping

**Population below** the poverty line

74%

Poverty and chronic malnutrition

49%

Children under five

who are stunted

# Province: Nusa Tenggara Barat District: Lombok Utara



District vulnerability classification (FSVA 2015):



## Population and administration

MATARAM

Total population: 209,997

Number of sub-districts: 5

Number of villages: 33

# Poverty and chronic malnutrition

TERARA



**Population below** the poverty line

BATUKLIANG

Children under five who are stunted

SURALAGA

# Overall household food security classification and indicators

Domain		Indicator	Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	74%		24%	2%
Coping capacity	Economic vulnerability	Asset ownership	16%	40%	37%	7%
	Asset depletion	Livelihood coping	68%	15%	14%	3%
Overall food security classification		34%	45%	21%	0%	

# Impact of drought

32%	experienced a severe impact on their main source of income due to drought
7%	reduced food expenditure as a result of income impact
50%	changed their source of drinking water during the drought
23%	spent more on water than normal due to drought

#### Sources of drinking water during drought and normally



Improved Unimproved

#### Percent of households using food consumption coping strategies

63%	17%	14%	6%

# Province: Nusa Tenggara Barat District: Lombok Tengah

District vulnerability classification (FSVA 2015):

5

6

3



#### Population and administration

Total population: 903,390

Number of sub-districts: 12

Number of villages: 139

Poverty and chronic malnutrition

Children under five

who are stunted



Overall household food security classification and indicators

Domain	Domain		Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	62%		34%	3%
Coping	Economic vulnerability	Asset ownership	21%	48%	29%	2%
сарасіту	Asset depletion	Livelihood coping	50%	34%	5%	12%
Overall food security classification			34%	37%	28%	1%

# Impact of drought

experienced a severe impact on their main source of income due to drought
reduced food expenditure as a result of income impact
changed their source of drinking water during the drought
spent more on water than normal due to drought

#### Sources of drinking water during drought and normally



Improved Unimproved

#### Percent of households using food consumption coping strategies

46%	24%	19%	12%

# Province: Papua District: Merauke

Number of sub-districts: 20

Number of villages: 168

District vulnerability classification (FSVA 2015):

4

3



Overall household food security classification and indicators

Domain		Indicator	Food secure	Marginally food secure	Moderatel y food insecure	Severely food insecure
Current Status	Food consumption	Food consumptio n score	97%	97% 3		0%
Coping	Economic vulnerability	Asset ownership	40%	40%	16%	4%
сарасіту	Asset depletion	Livelihood coping	66%	14%	19%	1%
Overall food security classification			60%	39%	1%	0%

Impact of drought

10%

Children under five

who are stunted

18%	experienced a severe impact on their main source of income due to drought
14%	reduced food expenditure as a result of income impact
29%	changed their source of drinking water during the drought
52%	spent more on water than normal due to drought

# Sources of drinking water during drought and normally



Improved Unimproved

#### Percent of households using food consumption coping strategies

80%	8%	3%	8%

**Population below** the poverty line

# 7.3 Tabulation report

# Table 16 - Food consumption score by strata

			food concurrentian course	Food Consumption Groups (raised threshold)		
			tood consumption score	Poor	Borderline	Acceptable
			Mean	Row N %	Row N %	Row N %
	Prob	blinggo	71.44	1.1%	4.6%	94.3%
district	Samp	ang	67.75	0.0%	2.0%	98.0%
	Lombok Tengah		50.87	3.3%	34.2%	62.5%
	Lombok Utara		56.82	1.6%	24.4%	74.0%
	Kupang		46.11	13.8%	34.1%	52.1%
	Timo	<sup>,</sup> Tengah Selatan	45.53	17.2%	20.7%	62.0%
	Sumb	a Tengah	43.54	12.0%	41.8%	46.2%
	Mera	ıke	74.48	0.0%	3.2%	96.8%
	Total		57.05	6.1%	20.7%	73.2%
	Food	crops ag.	50.18	11.2%	26.1%	62.8%
	Othe	ag.	58.64	0.0%	19.0%	81.0%
육	Ag. w	age labor	51.86	3.1%	31.3%	65.5%
lo	Non a	ig. wage labor	58.87	2.2%	24.0%	73.8%
D	Merc	nant	68.42	1.8%	7.5%	90.6%
Main income	Skilled labor		63.14	1.3%	16.6%	82.2%
	Employee		73.46	73.46 0.0%		95.1%
	Remittance		63.94	3.6%	8.9%	87.6%
	Entre	preneur	66.76 0.0%		2.5%	97.5%
	Tech	nician	66.84	4.2%	18.8%	76.9%
	Other		59.75 0.0%		25.7%	74.3%
	Curre	ntly not working	37.69	27.3%	44.8%	27.9%
		No formal education	53.95	7.3%	24.6%	68.1%
	<u>o</u>	Primary school	53.54	8.0%	23.5%	68.6%
	١al	Secondary school	62.74	3.4%	16.1%	80.6%
ех	~	Higher education	N/A	0.0%	0.0%	0.0%
a s		Total	57.31	6.0%	20.6%	73.4%
ea		No formal education	50.65	14.4%	19.7%	66.0%
Í	ale	Primary school	51.49	5.5%	27.9%	66.6%
	E	Secondary school	67.18	1.0%	10.7%	88.3%
	щ	Higher education	N/A	0.0%	0.0%	0.0%
		Total	55.32	6.9%	21.0%	72.1%
ى ە	1 = p	porest	41.86	17.2%	35.8%	47.0%
ex ex	2		48.39	8.3%	31.9%	59.8%
nd lea	3 = m	Iddle	55.81	3.0%	22.0%	/5.0%
we: inc quin	4		63.20	2.1%	11.3%	86.5%
	5 = W	ealthiest	/6.00	0.0%	2.3%	97.7%
ڻ ن	Poor		24.04	100.0%	0.0%	0.0%
L L L	Bord	erine	35.81	0.0%	100.0%	0.0%
Ľ.	Acce	otable	65.81	0.0%	0.0%	100.0%

# Table 17 - Wealth index classification by strata

					wealth index classificatio	n	
			1 = poorest	2	3 = middle	4	5 = wealthiest
			Row N %	Row N %	Row N %	Row N %	Row N %
	Pro	bolinggo	2.4%	9.0%	15.5%	27.2%	45.9%
district	Sam	npang	1.6%	17.4%	27.2%	25.2%	28.6%
	Lombok Tengah		1.5%	23.2%	29.3%	25.0%	21.0%
	Lombok Utara		9.1%	23.3%	28.1%	24.3%	15.2%
	Kupang		23.2%	29.5%	23.7%	19.3%	4.3%
	Timor Tengah Selatan		57.5%	25.0%	9.9%	5.7%	1.9%
	Sun	nba Tengah	61.6%	22.2%	10.3%	4.7%	1.3%
	Mer	auke	3.2%	10.5%	15.9%	28.3%	42.1%
	Tota	al	20.0%	20.0%	20.0%	20.0%	20.0%
	Foo	d crops ag.	36.0%	21.8%	16.7%	15.3%	10.2%
	Oth	er ag.	15.1%	28.0%	19.9%	22.6%	14.4%
đ	Ag.	wage labor	6.1%	34.7%	37.8%	17.9%	3.5%
õ	Non	ag. wage labor	7.8%	20.7%	29.7%	23.0%	18.7%
5	Mer	chant	4.4%	9.0%	15.6%	28.6%	42.3%
Ĕ	Skilled labor		4.7%	16.2%	27.7%	18.1%	33.3%
S	Employee		1.9%	7.9%	13.4%	27.1%	49.8%
Main inc	Ren	nittance	4.8%	13.4%	26.8%	37.9%	17.2%
	Entrepreneur		1.3%	6.0%	6.2%	18.0%	68.4%
	Technician		0.0%	8.6%	26.0%	24.5%	40.9%
	Other		5.6%	54.2%	5.8%	15.1%	19.3%
	Cur	rently not working	38.2%	38.5%	9.1%	5.0%	9.2%
		No formal education	25.3%	29.7%	19.7%	17.9%	7.4%
	Ð	Primary school	24.9%	21.3%	21.3%	17.3%	15.2%
	<b>Jal</b>	Secondary school	9.4%	14.9%	18.5%	25.6%	31.5%
ex	~	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%
s S		Total	18.7%	19.7%	20.0%	20.8%	20.9%
eac		No formal education	37.0%	28.6%	22.5%	5.3%	6.6%
Ĩ	ale	Primary school	32.3%	22.8%	17.7%	15.6%	11.5%
	E	Secondary school	12.4%	13.0%	21.7%	24.0%	28.9%
	щ	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%
		Total	28.5%	22.0%	20.2%	14.7%	14.6%
S	1 =	poorest	100.0%	0.0%	0.0%	0.0%	0.0%
ile X Ith	2		0.0%	100.0%	0.0%	0.0%	0.0%
/ea int	3 = 1	middle	0.0%	0.0%	100.0%	0.0%	0.0%
du≕s	4		0.0%	0.0%	0.0%	100.0%	0.0%
	5 = 1	wealthiest	0.0%	0.0%	0.0%	0.0%	100.0%
U	100	r Handler	56.3%	27.1%	9.7%	6.9%	0.0%
ы Б	Bor	derline	34.7%	30.8%	21.3%	11.0%	2.2%
L.	Acceptable		12.9%	16.3%	20.5%	23.7%	26.7%

# Table 18 - Roof and floor type by strata

		Roof type					Floor type				
		Thatch/ leaves	Bamboo/ wood	Other natural material	Corrugated metal	Tile, ceramics, etc.	Dirt	Bamboo/ wood	Other natural material	Cement	Tile, stones, etc.
		Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
	Probolinggo	0.4%	0.7%	0.3%	5.7%	92.8%	13.0%	0.0%	0.0%	13.7%	73.4%
	Sampang	0.0%	0.4%	0.0%	0.8%	98.8%	27.9%	0.0%	0.0%	25.5%	46.6%
	Lombok Tengah	0.4%	0.0%	0.0%	20.8%	78.7%	2.1%	0.0%	0.6%	78.3%	19.0%
ict	Lombok Utara	6.1%	0.4%	0.8%	61.5%	31.2%	6.3%	2.3%	0.0%	67.4%	23.9%
sti	Kupang	11.7%	0.3%	8.6%	77.9%	1.4%	35.5%	0.0%	0.0%	53.2%	11.3%
di	Timor Tengah Selatan	29.8%	0.0%	5.9%	64.3%	0.0%	56.5%	0.3%	0.4%	39.7%	3.1%
	Sumba Tengah	15.3%	1.9%	2.2%	80.6%	0.0%	15.1%	57.5%	0.4%	25.3%	1.6%
	Merauke	0.0%	1.2%	0.0%	98.7%	0.0%	3.7%	31.5%	0.3%	48.8%	15.8%
	Total	8.0%	0.6%	2.2%	51.3%	37.9%	20.0%	11.4%	0.2%	44.0%	24.3%
	Food crops ag.	14.5%	0.6%	3.3%	52.1%	29.4%	31.3%	15.5%	0.4%	36.4%	16.4%
	Other ag.	5.1%	2.2%	1.8%	52.3%	38.7%	14.9%	17.6%	0.0%	45.1%	22.4%
dn	Ag. wage labor	3.7%	0.0%	0.0%	40.7%	55.6%	15.0%	0.2%	0.6%	60.1%	24.1%
gro	Non ag. wage labor	1.5%	0.0%	3.1%	48.6%	46.8%	10.9%	14.2%	0.0%	47.8%	27.1%
e	Merchant Chilled Johan	0.8%	0.6%	1.7%	49.5%	47.3%	8.7%	4.3%	0.0%	49.9%	37.1%
μο	Skilled labor	2.7%	0.0%	1.4%	52.6%	43.3%	9.6%	9.0%	0.0%	53.5%	27.9%
ŭ	Employee	0.8%	0.9%	1.3%	54.7%	42.3%	3.0%	4.9%	0.0%	51.2%	40.9%
- L	Entrence	0.8%	0.8%	0.0%	61.6%	30.8%	10.1%	9.6%	0.0%	55.5%	18.7%
<b>/</b> ai	Technician	0.0%	0.0%	0.0%	41.0%	59.0%	2.2%	1.3%	0.0%	32.0%	03.7% EC 19/
<	Other	0.0%	0.0%	0.0%	57.0%	42.2%	3.9%	4.4%	0.0%	30.0%	30.1% 17.6%
	Currently not working	4.3%	0.4%	0.0%	09.4%	50.7%	21.7%	12.5%	0.0%	40.3%	F 69/
	No formal education	21.3%	0.0%	0.0%	22.0%	<u> </u>	17.0%	9.0%	0.0%	07.1%	17 7%
	Primary school	10.4%	0.2%	2.3%	18.8%	49.27	25.7%	13.9%	0.2%	43.7 /0	22.6%
	B Secondary school	3.5%	0.3%	2.4%	40.0%	31.0%	23.7 %	0.8%	0.1%	51.0%	22.0%
×	E Higher education	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.270
Se	Total	7.8%	0.0%	2.3%	51 4%	38.0%	19.9%	11 3%	0.0%	<b>44 1%</b>	<b>24 6%</b>
ad	No formal education	16.5%	1 1%	1 4%	40.5%	40.5%	31.1%	7.5%	3.9%	40.1%	17.5%
ΗĞ		10.0%	0.9%	1.8%	56.8%	30.5%	23.7%	15.4%	0.0%	46.2%	14.8%
_	E Secondary school	0.0%	1.2%	2.4%	51.6%	44.8%	4.2%	13.6%	0.0%	41.5%	40.7%
	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total	9.3%	1.0%	1.8%	50.6%	37.2%	20.9%	12.6%	1.2%	43.1%	22.3%
	1 = poorest	36.6%	1.5%	9.0%	49.9%	2.9%	55.1%	32.7%	0.8%	10.5%	0.9%
les les	2	2.4%	0.2%	1.3%	68.3%	27.8%	25.4%	9.3%	0.1%	56.8%	8.3%
de	3 = middle	0.8%	0.1%	0.6%	52.2%	46.3%	15.1%	6.2%	0.2%	60.2%	18.4%
lui ve	4	0.0%	0.9%	0.2%	49.6%	49.3%	4.1%	4.9%	0.0%	57.2%	33.9%
3	5 = wealthiest	0.0%	0.3%	0.0%	36.6%	63.1%	0.3%	4.1%	0.0%	35.4%	60.1%
(5	Poor	30.7%	0.0%	3.4%	58.6%	7.2%	39.9%	17.3%	0.9%	38.9%	3.0%
្តី	Borderline	14.7%	0.8%	3.4%	59.1%	22.0%	24.4%	16.4%	0.3%	47.9%	11.0%
Ľ.	Acceptable	4.2%	0.6%	1.8%	48.6%	44.8%	17.1%	9.6%	0.1%	43.4%	29.8%

# Table 19 - Main lighting source by strata

			Lighting source							
			Electricity (PLN)	Electricity (Non-PLN)	Generator	Solar panel	Kerosene lantern, etc.	Torch (Battery)	Firewood	
			Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	
district	Prob	olinggo	99.6%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	
	Sampang		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Lom	bok Tengah	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Lom	bok Utara	93.6%	2.6%	0.0%	3.6%	0.2%	0.0%	0.0%	
	Kupa	ang	75.9%	0.5%	1.0%	8.4%	14.2%	0.0%	0.0%	
	Timo	or Tengah Selatan	38.9%	3.3%	0.9%	14.0%	42.4%	0.1%	0.4%	
	Sum	ba Tengah	38.1%	2.6%	0.5%	21.8%	36.3%	0.6%	0.0%	
	Mera	luke	98.3%	0.9%	0.2%	0.0%	0.6%	0.0%	0.0%	
	Tota		80.5%	1.2%	0.3%	6.0%	11.8%	0.1%	0.1%	
	Food	l crops ag.	64.0%	1.7%	0.5%	10.0%	23.5%	0.2%	0.1%	
	Othe	r ag.	91.5%	0.3%	0.0%	4.1%	4.1%	0.0%	0.1%	
dr	Ag. v	vage labor	94.2%	2.0%	0.0%	3.5%	0.2%	0.0%	0.0%	
õ	Non	ag. wage labor	98.7%	0.7%	0.0%	0.0%	0.6%	0.0%	0.0%	
b e	Merchant		96.7%	0.0%	0.0%	3.0%	0.3%	0.0%	0.0%	
Ĕ	Skill	ed labor	90.0%	0.4%	1.4%	3.5%	4.7%	0.0%	0.0%	
2	Employee		94.4%	1.3%	0.0%	3.5%	0.8%	0.0%	0.0%	
in	Remittance		97.0%	0.0%	0.0%	0.9%	2.1%	0.0%	0.0%	
ain	Entrepreneur		98.7%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	
Σ	Technician		100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Other		94.3%	5.3%	0.4%	0.0%	0.0%	0.0%	0.0%	
	Currently not working		82.5%	0.0%	0.0%	6.6%	10.8%	0.0%	0.0%	
	No formal education		79.9%	0.8%	0.1%	4.6%	14.5%	0.1%	0.0%	
	Ð	Primary school	74.5%	1.9%	0.6%	7.5%	15.3%	0.2%	0.0%	
	lal	Secondary school	88.3%	0.9%	0.2%	4.4%	6.3%	0.0%	0.0%	
хә	~	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
d s		Total	80.7%	1.3%	0.4%	5.9%	11.5%	0.1%	0.0%	
ea		No formal education	76.3%	0.2%	0.0%	4.8%	17.4%	0.0%	1.4%	
Ĭ	ale	Primary school	75.7%	0.2%	0.0%	7.5%	16.6%	0.0%	0.0%	
	Ĕ	Secondary school	89.3%	1.4%	0.0%	6.7%	2.7%	0.0%	0.0%	
	щ	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
		Total	79.4%	0.5%	0.0%	6.5%	13.2%	0.0%	0.4%	
s	1 = p	oorest	25.2%	2.4%	0.2%	15.4%	56.0%	0.4%	0.3%	
Ith ex ile	2		83.0%	2.8%	0.5%	11.1%	2.6%	0.0%	0.0%	
int int	3 = n	niddle	95.5%	0.9%	0.6%	2.7%	0.2%	0.0%	0.0%	
a i v	4		98.9%	0.0%	0.3%	0.7%	0.0%	0.0%	0.0%	
	5 = W	vealthiest	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
U	Poor		45.3%	0.7%	0.5%	15.7%	36.8%	0.0%	0.9%	
Ũ	Bord	lerline	70.0%	1.6%	0.7%	8.3%	19.0%	0.4%	0.0%	
ш	Acceptable		86.4%	1.2%	0.2%	4.5%	7.7%	0.0%	0.0%	

# Table 20 - Main cooking source by strata

					Cooking	g source		
			LPG (3kg)	LPG (12kg)	Electricity	Kerosene	Wood	Charcoal
			Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
	Prol	polinggo	46.7%	1.1%	0.0%	0.3%	51.5%	0.4%
	Sam	ipang	36.7%	1.8%	0.0%	0.0%	61.5%	0.0%
	Lorr	ibok Tengah	55.6%	0.3%	0.5%	1.2%	42.4%	0.0%
ct	Lorr	ibok Utara	44.2%	0.4%	0.0%	3.1%	52.3%	0.0%
stri	Kup	ang	0.0%	0.0%	0.0%	8.7%	91.3%	0.0%
di	Tim	or Tengah Selatan	0.0%	0.0%	0.5%	2.6%	97.0%	0.0%
	Sum	ıba Tengah	0.0%	0.0%	0.0%	1.9%	98.1%	0.0%
	Mera	auke	0.0%	0.0%	0.3%	78.6%	21.2%	0.0%
	Tota	d in the second s	22.9%	0.4%	0.1%	12.0%	64.4%	0.1%
	Foo	d crops ag.	12.0%	0.1%	0.1%	3.9%	83.9%	0.0%
	Othe	er ag.	16.4%	0.6%	0.8%	18.4%	63.8%	0.0%
e d	Ag.	wage labor	23.4%	0.0%	0.0%	0.3%	75.6%	0.7%
ē	Non	ag. wage labor	30.2%	0.4%	0.0%	17.0%	52.4%	0.0%
5	Mer	chant	41.0%	2.3%	0.0%	28.1%	28.5%	0.0%
Ĕ	Skil	led labor	32.8%	0.0%	0.0%	15.8%	51.5%	0.0%
Main incor	Emp	bloyee	43.7%	0.3%	0.6%	27.1%	28.4%	0.0%
	Rem	nittance	29.5%	0.0%	0.0%	25.2%	45.3%	0.0%
	Entr	repreneur	58.6%	5.5%	0.0%	14.1%	21.8%	0.0%
Σ	Tecl	nnician	34.5%	0.0%	0.0%	31.1%	34.4%	0.0%
	Other		15.1%	0.0%	0.0%	28.0%	56.9%	0.0%
	Currently not working		19.8%	0.0%	0.0%	8.1%	72.1%	0.0%
		No formal education	12.8%	0.2%	0.0%	5.0%	81.5%	0.5%
	<u>e</u>	Primary school	19.3%	0.2%	0.2%	8.5%	71.8%	0.0%
	Иа	Secondary school	30.9%	0.6%	0.2%	19.1%	49.3%	0.0%
Э́с	-	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
d d		Total	23.2%	0.4%	0.2%	12.4%	63.8%	0.1%
ea	æ	No formal education	15.0%	2.3%	0.0%	4.6%	78.1%	0.0%
т	ale	Primary school	13.0%	0.0%	0.0%	10.5%	76.5%	0.0%
	Б	Secondary school	41.5%	0.9%	0.0%	15.2%	42.4%	0.0%
	Ш.	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		lotal	21.0%	0.9%	0.0%	10.0%	68.2%	0.0%
	1=1	boorest	0.3%	0.0%	0.0%	1.2%	98.2%	0.3%
ex tile	2	مالمام	5.2%	0.0%	0.0%	4.3%	90.5%	0.0%
vea nd	3 = 1	πιααιe	18.5%	0.2%	0.3%	9.3%	/1.8%	0.0%
dr - x	4	we alth is at	32.1%	0.4%	0.0%	17.4%	50.1%	0.0%
	5 = \		58.5%	1.6%	0.4%	28.0%	11.5%	0.0%
ហ្ល	P00	[ deuline	3.5%	0.0%	0.0%	2.4%	94.0%	0.0%
С Ц	Bor		13.2%	0.0%	0.0%	3.3%	83.6%	0.0%
	ACC	eptable	27.3%	0.6%	0.2%	15.4%	56.5%	0.1%

# Table 21 - Toilet type by strata

			Toilet type									
			Flush/pour connected to septic-tank	Flush/pour flush without septic-tank	Pit latrine with slab	Pit latrine without slab	Bucket	Hanging toilet	Shared toilet facility	No facilities		
			Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %		
	Prob	olinggo	50.7%	4.6%	10.0%	3.4%	0.0%	0.0%	4.3%	27.1%		
	Sam	pang	63.3%	4.0%	10.0%	12.9%	0.0%	0.5%	0.7%	8.6%		
	Lom	bok Tengah	71.5%	2.7%	1.5%	0.6%	0.0%	3.0%	3.9%	16.7%		
<u>ic</u>	Lom	bok Utara	61.8%	3.1%	2.4%	2.4%	0.0%	0.8%	6.9%	22.7%		
str	Kupa	ang	71.4%	1.3%	12.0%	11.6%	0.0%	0.0%	0.5%	3.2%		
di	Timo	or Tengah Selatan	37.0%	8.0%	17.4%	35.5%	0.0%	0.3%	0.5%	1.5%		
	Sum	ba Tengah	16.0%	4.5%	5.1%	57.8%	0.0%	0.3%	0.0%	16.4%		
	Mera	luke	66.0%	17.5%	1.4%	2.2%	0.0%	0.3%	11.8%	0.7%		
	Tota	1	54.7%	5.7%	7.5%	15.8%	0.0%	0.6%	3.6%	12.1%		
	Food	l crops ag.	41.4%	6.8%	10.8%	28.5%	0.0%	0.5%	1.2%	10.7%		
	Othe	er ag.	48.9%	8.4%	10.0%	5.2%	0.0%	0.0%	13.0%	14.6%		
dn	Ag. v	wage labor	42.5%	2.4%	5.7%	3.9%	0.0%	3.8%	7.7%	34.0%		
<u>2</u>	Non	ag. wage labor	57.0%	5.0%	5.2%	9.1%	0.0%	0.8%	6.8%	16.1%		
0) 0	Merc	chant	74.1%	5.6%	3.6%	2.9%	0.0%	0.0%	4.5%	9.4%		
Ē	Skille	ed labor	73.8%	9.3%	3.2%	4.2%	0.0%	0.4%	0.8%	8.4%		
ğ	Emp	loyee	81.1%	2.3%	3.3%	4.5%	0.0%	0.0%	4.2%	4.6%		
i.	Rem	ittance	91.1%	1.1%	0.0%	4.8%	0.0%	0.0%	0.9%	2.1%		
lair	Entre	epreneur	79.7%	8.0%	1.3%	0.0%	0.0%	0.0%	0.0%	10.9%		
≥	Tech	inician	73.6%	2.8%	5.8%	0.0%	0.0%	0.0%	5.6%	12.3%		
	Othe	r	50.1%	0.0%	0.0%	14.4%	0.0%	0.0%	12.1%	23.4%		
	Curr	ently not working	33.7%	0.0%	11.1%	9.1%	0.0%	11.9%	12.9%	21.3%		
		No formal education	36.7%	3.2%	14.3%	20.7%	0.0%	0.8%	4.5%	19.6%		
	e	Primary school	49.5%	5.5%	9.0%	19.0%	0.0%	0.4%	3.7%	12.8%		
	Ма	Secondary school	68.1%	7.1%	4.0%	9.8%	0.0%	0.4%	3.6%	7.0%		
Sex .	_	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
ő		lotal	55.5%	5.9%	7.6%	15.5%	0.0%	0.5%	3.8%	11.3%		
lea	æ	No formal education	38.2%	2.7%	0.4%	26.3%	0.0%	2.9%	3.4%	20.1%		
т.	lal	Primary school	46.7%	6.2%	5.9%	16.3%	0.0%	1.9%	1.5%	21.4%		
	eπ	Secondary school	0.00	4.7%	7.6%	11.0%	0.0%	0.0%	1.8%	8.2%		
	ш	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
	4 -	lotal	49.4%	4.8%	0.5%	17.9%	0.0%	1.7%	2.1%	17.0%		
_ s	1 = p	loorest	14.2%	5.3%	13.7%	47.9%	0.0%	0.2%	1.8%	16.9%		
alth lex tile	2 _ ~	aiddlo	43.4%	5.0%	9.5%	9.5%	0.0%	1.0%	7.0% 5.2%	10.4%		
več ind	3 = n	illule	76 69/	5.0%	0.4%	0.0%	0.0%	1.0%	0.∠% 1.2%	6 70/		
2 <u> </u>	4 5	voalthiost	70.0% 92.90/	5.0%	0.9%	3.1%	0.0%	0.2%	1.3%	0.7%		
	J = W		02.0%	2.6%	1.0%	36.6%	0.0%	0.2%	2.0%	4.770		
ğ	Bord	lorlino	33.0% 40.0%	3.0% 2.0%	0.40/	30.0% 25.2%	0.0%	0.0%	U.0% 5 7%	15.9%		
л Б	Acco		40.2%	Z.9%	9.1%	20.3%	0.0%	1.3%	0.1% 2.0%	10.4%		
	ACCE	plane	60.6%	0.1%	0.0%	11.4%	0.0%	0.5%	J.2%	11.0%		

# Table 22 - Drinking water source during drought by strata

Drinking w							king water sour	ce during droug	jht					
			Piped water (PDAM)	Public tap	Protected tube well	Protected spring	Rainwater collection	Unprotected tube well	Unprotected spring	Water tank	Water tanker truck	Bottled water/ refill	Stream, river, etc.	Other
			Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
	Prob	oolinggo	22.4%	3.8%	41.3%	10.5%	0.5%	0.4%	3.9%	2.1%	0.0%	12.7%	2.5%	0.0%
ict	Sam	ipang	15.7%	0.0%	59.1%	3.6%	0.0%	2.2%	0.9%	2.3%	7.1%	7.5%	0.9%	0.7%
	Lombok Tengah		13.3%	1.8%	58.3%	6.3%	0.0%	0.7%	1.6%	2.4%	0.0%	15.8%	0.0%	0.0%
	Lombok Utara		32.2%	1.3%	37.9%	11.8%	0.0%	0.7%	1.1%	0.8%	1.7%	7.1%	5.1%	0.2%
stri	Kup	ang	7.1%	4.8%	55.3%	8.3%	0.1%	6.3%	4.9%	2.8%	6.4%	0.9%	3.2%	0.0%
di	Time	or Tengah Selatan	5.0%	6.8%	14.8%	23.8%	0.5%	5.5%	19.8%	6.6%	5.1%	0.0%	12.1%	0.0%
	Sum	iba Tengah	0.4%	1.6%	27.4%	28.3%	1.8%	6.3%	17.3%	3.4%	1.0%	0.0%	12.5%	0.0%
	Mera	auke	4.1%	0.0%	15.2%	0.1%	1.2%	2.0%	0.2%	9.7%	6.4%	59.9%	1.3%	0.0%
	Tota	1	12.5%	2.5%	38.7%	11.6%	0.5%	3.0%	6.2%	3.8%	3.5%	13.0%	4.7%	0.1%
	Foo	d crops ag.	7.5%	2.9%	39.1%	16.3%	0.9%	4.6%	9.9%	2.7%	2.9%	5.7%	7.3%	0.2%
	Othe	er ag.	19.1%	2.3%	30.2%	12.1%	0.2%	1.4%	5.8%	10.2%	5.4%	10.1%	3.2%	0.0%
d	Ag.	wage labor	17.8%	4.5%	58.4%	5.9%	0.0%	0.7%	2.3%	2.4%	2.1%	2.8%	2.9%	0.0%
ē	Non	ag. wage labor	13.7%	2.1%	45.2%	7.1%	0.0%	2.1%	2.0%	2.3%	4.6%	20.0%	0.5%	0.3%
ain income gr	Mere	chant	16.4%	1.4%	36.3%	3.5%	0.1%	0.0%	2.6%	0.9%	6.3%	30.4%	2.1%	0.0%
	Skill	ed labor	17.8%	2.9%	31.2%	7.8%	0.0%	0.4%	7.1%	11.3%	0.8%	16.0%	4.5%	0.0%
	Employee		17.1%	1.2%	28.6%	8.8%	0.6%	2.1%	1.9%	4.6%	3.8%	29.8%	1.5%	0.0%
	Remittance		15.1%	1.5%	42.7%	6.2%	0.0%	6.0%	0.0%	0.8%	5.1%	21.5%	1.1%	0.0%
	Entr	epreneur	16.5%	0.0%	27.8%	9.0%	0.0%	1.2%	1.3%	3.6%	6.8%	33.8%	0.0%	0.0%
Σ	Technician		12.1%	3.7%	35.3%	9.0%	0.0%	0.0%	0.0%	8.7%	0.8%	21.4%	9.0%	0.0%
	Other		45.7%	0.0%	36.9%	1.6%	0.0%	6.4%	9.1%	0.0%	0.0%	0.0%	0.4%	0.0%
	Curr	ently not working	0.0%	0.0%	58.1%	6.6%	0.0%	0.0%	0.0%	9.2%	0.0%	11.9%	14.1%	0.0%
		No formal education	13.8%	1.9%	45.6%	10.2%	0.0%	3.9%	5.5%	2.9%	2.2%	7.9%	6.3%	0.0%
	<u>e</u>	Primary school	10.8%	2.7%	38.4%	14.8%	0.7%	4.0%	7.6%	4.1%	4.5%	7.3%	5.0%	0.0%
	Иa	Secondary school	13.8%	2.5%	34.7%	8.8%	0.4%	1.9%	4.0%	4.3%	3.5%	21.4%	4.6%	0.1%
KeX.	-	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
d S		Total	12.4%	2.5%	37.8%	11.8%	0.5%	3.1%	5.9%	4.1%	3.8%	13.1%	5.0%	0.0%
ea	a)	No formal education	11.3%	0.8%	51.2%	8.4%	0.0%	2.9%	9.1%	2.9%	0.0%	9.5%	3.8%	0.0%
I	ale	Primary school	13.9%	2.9%	39.8%	12.7%	0.0%	2.9%	10.7%	1.1%	1.8%	9.9%	2.8%	1.6%
	E	Secondary school	14.8%	3.5%	44.3%	6.8%	1.9%	0.0%	3.2%	2.1%	2.0%	19.4%	1.9%	0.0%
	Ľ	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		lotal	13.4%	2.4%	44.4%	9.9%	0.5%	2.1%	8.3%	1.9%	1.3%	12.2%	2.9%	0.7%
s fex	1=	boorest	5.3%	3.1%	21.4%	23.1%	1.4%	6.6%	20.7%	3.8%	1.9%	0.2%	12.6%	0.0%
ile	2		8.5%	4.2%	48.4%	12.8%	0.1%	4.0%	6.1%	4.0%	4.0%	1.9%	5.8%	0.1%
탈릴	3 = r	niddle	13.5%	3.2%	47.1%	9.8%	0.3%	2.6%	2.8%	4.8%	3.3%	9.7%	2.9%	0.0%
qu	4		16.4%	1.4%	45.0%	6.8%	0.1%	1.5%	0.8%	3.5%	3.9%	18.4%	1.7%	0.5%
5	5 = \	wealthiest	18.9%	0.7%	31.3%	5.4%	0.6%	0.3%	0.6%	2.7%	4.2%	34.7%	0.5%	0.0%
ġ	POO	larling	4.9%	2.1%	33.1%	24.1%	0.0%	7.0%	11.5%	2.0%	5.5%	1.2%	7.9%	0.0%
С Ц	Bord		11.8%	3.9%	39.3%	14.6%	0.5%	4.6%	12.4%	2.4%	1.1%	3.0%	6.2%	0.1%
	ACC	eptable	13.3%	2.1%	39.0%	9.7%	0.5%	2.2%	4.1%	4.3%	4.0%	16.7%	4.0%	0.1%

# Table 23 - Normal drinking water source by strata

Normal drinking							water source							
			Piped water (PDAM)	Public tap	Protected tube well	Protected spring	Rainwater collection	Unprotected tube well	Unprotected spring	Water tank	Water tanker truck	Bottled water/ refill	Stream, river, etc.	Other
			Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
	Prob	olinggo	23.2%	2.9%	42.7%	8.0%	0.7%	1.1%	3.9%	2.7%	0.0%	12.0%	2.8%	0.0%
	Sam	pang	15.6%	0.2%	60.5%	3.9%	5.8%	5.8%	0.5%	0.4%	1.0%	6.2%	0.0%	0.0%
	Loml	bok Tengah	11.7%	0.9%	62.5%	5.4%	0.0%	5.6%	0.3%	1.5%	0.0%	12.0%	0.0%	0.0%
ict	Loml	bok Utara	31.9%	1.3%	38.8%	12.8%	0.0%	2.0%	1.5%	0.0%	0.2%	5.8%	5.6%	0.0%
str	Kupa	ang	9.2%	4.6%	56.9%	8.4%	0.0%	3.6%	3.8%	4.5%	3.9%	0.9%	4.2%	0.0%
di	Timo	r Tengah Selatan	9.5%	7.7%	23.1%	18.9%	0.5%	7.5%	20.0%	3.6%	0.7%	0.3%	8.1%	0.0%
	Sum	ba Tengah	0.2%	0.9%	31.7%	23.6%	8.5%	5.8%	17.9%	0.7%	1.0%	0.3%	9.5%	0.0%
	Mera	uke	4.1%	0.0%	16.5%	0.1%	12.9%	4.3%	0.1%	5.6%	3.6%	52.5%	0.4%	0.0%
	Total		13.2%	2.3%	41.6%	10.2%	3.5%	4.5%	6.0%	2.4%	1.3%	11.3%	3.8%	0.0%
	Food	l crops ag.	8.7%	2.9%	41.2%	14.1%	4.4%	6.0%	10.2%	2.2%	0.7%	3.7%	5.9%	0.0%
	Othe	r ag.	18.8%	1.0%	30.9%	13.0%	6.7%	5.6%	4.0%	5.5%	1.7%	10.1%	2.5%	0.0%
역	Ag. v	vage labor	16.5%	3.9%	61.5%	5.2%	0.2%	3.0%	2.6%	1.8%	0.5%	2.1%	2.7%	0.0%
D D	Non	ag. wage labor	12.6%	1.3%	50.6%	5.9%	2.2%	4.4%	2.0%	1.4%	3.9%	15.4%	0.5%	0.0%
р С	Merc	hant	16.2%	0.9%	36.4%	3.4%	3.9%	2.5%	1.8%	0.9%	2.1%	29.7%	2.1%	0.0%
Ĕ	Skille	ed labor	19.7%	3.6%	36.7%	10.3%	3.6%	1.5%	4.4%	2.3%	0.0%	14.8%	3.0%	0.0%
2	Employee		18.3%	1.2%	32.9%	5.6%	1.9%	1.8%	1.7%	3.3%	2.6%	28.9%	1.8%	0.0%
in	Remittance		16.3%	1.2%	49.8%	4.3%	4.0%	3.1%	0.0%	0.0%	1.2%	20.2%	0.0%	0.0%
air	Entrepreneur		17.7%	0.0%	29.2%	9.0%	1.3%	2.4%	0.0%	4.3%	3.6%	32.5%	0.0%	0.0%
Σ	Technician		12.1%	3.7%	41.3%	5.8%	0.0%	2.7%	2.1%	8.7%	0.0%	17.5%	6.2%	0.0%
	Other		45.7%	0.0%	33.5%	1.1%	0.0%	12.5%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%
	Curre	ently not working	0.0%	0.0%	84.3%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%
		No formal education	13.6%	0.9%	47.4%	10.2%	1.8%	5.7%	6.1%	1.9%	0.4%	8.0%	4.0%	0.0%
	<u>e</u>	Primary school	12.1%	2.6%	41.5%	11.7%	4.9%	5.2%	8.0%	2.7%	0.9%	6.2%	4.1%	0.0%
	la	Secondary school	13.9%	2.3%	38.9%	8.2%	3.3%	3.0%	3.3%	2.7%	2.3%	18.2%	4.0%	0.0%
ě	-	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
q		Total	13.0%	2.3%	41.1%	10.1%	3.9%	4.4%	5.9%	2.6%	1.4%	11.3%	4.0%	0.0%
ea		No formal education	12.0%	0.8%	46.0%	10.4%	0.0%	11.3%	6.8%	1.8%	0.6%	8.0%	2.4%	0.0%
Т	ale	Primary school	15.9%	3.4%	42.2%	11.3%	2.4%	3.6%	9.3%	0.5%	0.0%	8.7%	2.5%	0.0%
	E	Secondary school	14.8%	2.5%	46.5%	8.6%	0.0%	0.0%	3.2%	1.4%	2.0%	19.1%	1.9%	0.0%
	щ	Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	-	Total	14.5%	2.4%	44.5%	10.4%	1.1%	5.0%	7.0%	1.1%	0.7%	11.2%	2.3%	0.0%
s lex	1 = p	oorest	6.6%	3.2%	24.6%	18.0%	5.6%	8.3%	20.3%	2.0%	0.7%	0.0%	10.8%	0.0%
ind	2		10.3%	3.6%	49.2%	13.5%	2.5%	5.7%	5.4%	3.6%	0.7%	1.8%	3.7%	0.0%
t t	3 = middle		13.5%	2.8%	51.5%	8.2%	1.5%	4.7%	3.1%	3.0%	1.2%	8.5%	1.9%	0.0%
qı	4		17.2%	1.5%	45.8%	6.4%	4.4%	3.5%	0.7%	1.4%	2.8%	14.7%	1.6%	0.0%
5	5 = W	realthiest	18.3%	0.4%	36.8%	4.7%	3.7%	0.2%	0.5%	2.0%	1.1%	31.3%	1.0%	0.0%
ŋ	Poor	- ultra -	10.4%	2.2%	34.6%	22.6%	4.3%	5.4%	11.8%	2.4%	1.1%	0.0%	5.2%	0.0%
ပို	Bord	eriine	12.8%	2.9%	41.3%	13.5%	1.8%	5.8%	11.3%	1.9%	0.6%	2.4%	5.5%	0.0%
_	Acce	ptable	13.5%	2.1%	42.2%	8.2%	4.0%	4.0%	4.0%	2.6%	1.5%	14.6%	3.2%	0.0%

# Table 24 - Micronutrient consumption by strata

rich Never Sometimes Daily rich Never Consume Daily rich Never d	Consume Daily
Mean   Row N %   Row N % Row N %   Mean   Row N %   Row N %   Row N %   Mean   Row N %   I	Row N % Row N %
Probolinggo         12.86         0.0%         9.1%         90.9%         14.19         0.8%         7.1%         92.0%         4.89         9.6%	47.7% 42.7%
Sampang         9.15         2.0%         25.6%         72.4%         12.58         0.0%         1.4%         98.6%         5.28         4.5%	44.0% 51.5%
Lombok Tengah         11.98         0.0%         6.7%         93.3%         7.26         2.4%         53.4%         44.2%         2.05         27.2%	66.3% 6.5%
<b><u>5</u></b> Lombok Utara 12.22 0.0% 6.3% 93.7% 9.14 2.1% 37.5% 60.4% 3.72 10.7%	63.1% 26.2%
½         Kupang         9.45         1.0%         15.7%         83.3%         5.90         12.9%         48.2%         38.9%         2.70         26.0%	60.3% 13.7%
Timor Tengah Selatan         7.81         4.4%         22.4%         73.2%         6.44         15.4%         23.4%         61.1%         1.43         50.4%	42.8% 6.8%
Sumba Tengah         10.51         0.8%         12.6%         86.6%         4.87         13.0%         56.5%         30.5%         3.01         16.6%	71.8% 11.6%
Merauke         16.40         0.0%         5.0%         95.0%         12.50         0.0%         9.5%         90.5%         4.35         5.6%	75.3% 19.1%
Total         11.30         1.0%         12.9%         86.1%         9.11         5.8%         29.6%         64.6%         3.43         18.8%	58.9% 22.3%
Food crops ag.         9.89         2.0%         15.5%         82.5%         7.16         10.7%         36.2%         53.1%         2.76         27.2%	56.5% 16.3%
Other ag.         10.63         0.0%         20.2%         79.8%         9.54         0.5%         32.1%         67.4%         4.20         9.2%	58.7% 32.1%
<b><u><b><u><u></u></u></b></u></b> Ag. wage labor 10.22 0.3% 11.4% 88.3% 7.44 1.6% 42.3% 56.1% 2.52 21.7%	61.1% 17.2%
<b><u><u>o</u></u></b> Non ag. wage labor 11.60 0.0% 10.4% 89.6% 9.40 2.3% 30.7% 67.0% 3.30 13.6%	67.3% 19.1%
Merchant         12.90         0.8%         10.2%         89.0%         12.20         1.1%         14.9%         84.0%         4.76         6.9%	55.6% 37.6%
<b>É</b> Skilled labor 12.67 0.0% 10.5% 89.5% 10.86 0.7% 22.8% 76.5% 3.89 12.1%	57.6% 30.3%
g         Employee         15.99         0.0%         4.6%         95.4%         14.37         0.4%         11.0%         88.6%         4.95         6.2%	59.7% 34.1%
Remittance         11.99         0.0%         12.1%         87.9%         10.51         4.2%         17.3%         78.5%         4.17         10.0%	71.2% 18.8%
Entrepreneur         14.04         0.0%         2.5%         97.5%         13.21         0.0%         12.8%         87.2%         5.71         2.5%	56.4% 41.1%
<b>≥</b> Technician 14.19 0.0% 11.9% 88.1% 11.40 4.2% 10.2% 85.6% 3.55 15.8%	63.3% 20.9%
Other         11.27         0.0%         6.5%         93.5%         8.96         0.0%         40.4%         59.6%         3.27         10.9%	85.4% 3.7%
Currently not working         7.27         6.6%         19.9%         73.4%         4.15         27.3%         50.3%         22.3%         1.43         68.6%	17.2% 14.2%
No formal education 9.49 3.1% 16.9% 80.0% 8.34 4.9% 30.4% 64.7% 2.84 24.3%	56.4% 19.2%
Primary school 10.27 0.9% 14.9% 84.3% 8.03 7.7% 33.3% 59.0% 3.18 21.6%	56.6% 21.8%
<b>Secondary school</b> 13.27 0.4% 8.5% 91.1% 10.78 3.0% 25.1% 71.9% 3.95 12.6%	63.9% 23.5%
Inight education         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%	0.0% 0.0%
g         Iotal         11.39         1.0%         12.3%         80.3%         9.18         5.4%         29.7%         64.9%         3.45         18.3%           No formal education         0.24         2.6%         47.4%         0.0%         7.22         44.9%         7.9%         57.4%         0.20         0.0%         7.3%	<b>59.5% 22.2%</b>
<b>T P P P P P P P P P P</b>	44.3% 20.4% 61.6% 11.5%
<b>T</b> $\frac{1}{100}$ <b>Finally School</b> 3.73 1.376 10.676 13.57 7.577 7.577 7.577 3.077 34.270 30.676 2.05 20.576	5/ 9% 37 9%
<b>2 Vicinary School</b> 15.69 0.0% 0.1% 91.5% 12.41 0.0% 23.4% 7.0% 4.76 7.5%	0.0%
Total 10.68 1.4% 15.6% 83.0% 8.63 8.4% 20.5% 62.1% 3.28 22.5%	54 7% 22 8%
<b>x</b> 1 = notest 8 43 2 3% 21 0% 76 8% 4 93 16 9% 45 4% 37 6% 2 03 37 7%	53.7% 8.6%
<b>3 8 2</b> 9.33 1.6% 13.1% 85.4% 6.48 8.0% 42.9% 49.0% 2.55 26.1%	59.0% 14.9%
$\vec{z} = \vec{z}$ $\vec{z}$ = middle 10.90 0.5% 14.9% 84.6% 8.41 3.0% 33.3% 63.7% 3.00 16.2%	66.0% 17.8%
<b>T E A</b> 12.23 0.8% 10.5% 88.7% 10.80 1.3% 20.3% 78.5% 4.17 9.4%	60.5% 30.2%
5 =  wealthiest 15.59 0.0% 5.2% 94.8% 14.92 0.0% 6.3% 93.7% 5.39 4.7%	55.4% 39.9%
Poor 5.52 7.2% 33.3% 59.5% 0.37 74.3% 25.7% 0.0% 0.23 83.4%	16.6% 0.0%
<b>Borderline</b> 8.39 1.1% 20.5% 78.4% 2.93 6.3% 87.1% 6.7% 1.24 33.5%	66.5% 0.0%
<sup>L</sup> Acceptable 12.62 0.5% 8.9% 90.6% 11.58 0.0% 13.8% 86.2% 4.31 9.3%	60.3% 30.3%

# Table 25 - Agriculture engagement and livestock ownership by strata

Engage			Engage in A	Agriculture	Livestock	ownership				Animal O	wnership			
			Yes	No	Yes	No	Cattle	Buffalo	Horses	Goats	Pigs	Dogs	Chicken	Ducks
			Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
	Prob	oolinggo	41.1%	58.9%	57.3%	42.7%	36.3%	0.0%	0.5%	24.0%	0.0%	0.2%	79.2%	8.9%
	Sampang Lombok Tengah Lombok Utara Kupang Timor Tengah Selatan		64.6%	35.4%	65.4%	34.6%	46.3%	0.1%	0.0%	18.3%	0.0%	0.0%	84.8%	9.5%
			43.1%	56.9%	50.4%	49.6%	23.3%	0.8%	0.0%	8.1%	0.0%	0.0%	85.7%	24.4%
district			34.4%	65.6%	28.3%	71.7%	55.4%	0.0%	2.3%	13.7%	3.6%	4.0%	63.2%	1.0%
			89.8%	10.2%	72.0%	28.0%	33.8%	0.0%	2.0%	11.0%	66.0%	31.3%	59.2%	3.1%
			96.2%	3.8%	78.5%	21.5%	40.4%	0.0%	0.0%	8.9%	75.2%	56.2%	85.0%	0.6%
	Sum	iba Tengah	94.7%	5.3%	78.6%	21.4%	9.0%	10.7%	19.2%	17.7%	71.7%	82.8%	81.0%	14.9%
	Mera	auke	26.4%	73.6%	36.8%	63.2%	22.7%	0.0%	4.6%	14.9%	14.2%	25.9%	79.0%	30.9%
	Tota	1	61.3%	38.7%	58.4%	41.6%	32.1%	1.9%	4.1%	14.6%	36.2%	30.5%	77.9%	10.6%
	Food	d crops ag.	99.0%	1.0%	71.7%	28.3%	39.0%	2.2%	5.6%	14.4%	46.0%	40.7%	80.1%	9.0%
	Othe	er ag.	47.0%	53.0%	55.6%	44.4%	43.0%	0.0%	0.3%	16.0%	21.7%	15.7%	67.6%	10.8%
dn	Ag. ۱	wage labor	23.0%	77.0%	47.5%	52.5%	40.8%	0.0%	0.0%	15.6%	9.9%	1.0%	73.8%	14.3%
ē	Non	ag. wage labor	20.4%	79.6%	39.6%	60.4%	16.5%	0.0%	0.0%	12.2%	15.3%	11.9%	72.9%	14.2%
0	Merc	chant	19.3%	80.7%	31.7%	68.3%	10.5%	0.0%	0.0%	10.2%	20.3%	2.8%	78.5%	14.5%
1ain income	Skill	ed labor	34.0%	66.0%	61.1%	38.9%	13.5%	0.0%	3.9%	17.2%	21.3%	20.4%	83.3%	11.3%
	Emp	loyee	33.6%	66.4%	54.0%	46.0%	17.4%	6.4%	7.1%	14.9%	35.1%	26.2%	80.2%	13.8%
	Rem	littance	35.0%	65.0%	50.7%	49.3%	15.1%	2.1%	0.0%	11.7%	38.4%	42.8%	57.9%	11.3%
	Entr	epreneur	29.9%	70.1%	39.3%	60.7%	19.6%	0.0%	3.4%	28.9%	31.7%	16.8%	84.1%	9.1%
≥	Othor		6.0%	94.0%	28.8%	71.2%	11.3%	0.0%	0.0%	12.6%	0.0%	0.0%	78.8%	11.8%
	Other		9.2%	90.8%	20.1%	79.9%	11.9%	0.0%	0.0%	8.2%	2.0%	0.0%	98.2%	29.9%
	Curr	ently not working	0.0%	100.0%	25.2%	/4.8%	0.0%	0.0%	0.0%	0.0%	35.9%	35.9%	64.1%	0.0%
		No formal education	68.0%	32.0%	63.3%	36.7%	38.9%	0.0%	0.7%	18.6%	18.0%	18.4%	81.7%	12.9%
	e	Primary school	68.1%	31.9%	63.1%	36.9%	38.5%	1.5%	3.2%	14.1%	36.2%	30.5%	75.9%	1.1%
2	Ba	Secondary school	54.1%	45.9%	55.7%	44.3%	24.7%	3.1%	6.4%	13.9%	42.5%	34.7%	80.2%	13.5%
ŝ		Higher education	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ğ		I Otal	<b>62.4%</b>	37.0%	00.1%	39.9%	<b>33.3%</b>	1.9%	4.1%	14.0%	30.3%	<b>30.0%</b>	<b>10.2%</b>	10.3% 6.2%
lea	a	Primary school	50.2%	44.0%	29.3%	10.1%	23.1%	0.0%	2.1%	10.0%	23.3%	10.0%	92.0%	0.3%
-	Jal	Socondary school	30.1% 45.1%	41.9% 54.0%	50.9%	43.1%	27.1%	1.1%	5.2%	10.9%	30.0%	20.4%	74 29/	7 0%
	e	Higher education	45.1%	0.0%	0.0%	49.0%	0.0%	4.0%	0.9%	21.0%	42.7 %	42.4 /0	0.0%	7.9%
	ш	Total	53 <b>0%</b>	46 1%	<b>47 2%</b>	52.8%	21 7%	0.0%	0.0% 4 1%	14 3%	35 5%	30.0%	75 2%	11 3%
×	1 = r	poorest	90.9%	9.1%	65.3%	34.7%	22.9%	1.3%	8.2%	13.2%	65.4%	65.5%	81.8%	4 5%
es es			65.2%	34.8%	60.0%	40.0%	35.0%	2.8%	3.1%	13.1%	48.3%	35.3%	73.7%	8.7%
ri i	3 = r	niddle	57.6%	42.4%	59.7%	40.3%	35.7%	1.7%	2.3%	12.2%	29.5%	21.5%	75.5%	11.3%
altl quir	4		54.7%	45.3%	60.3%	39.7%	36.8%	2.1%	4.2%	16.7%	20.6%	16.6%	77.5%	14.2%
e ve	5 = v	vealthiest	38.1%	61.9%	46.8%	53.2%	30.7%	1.5%	2.0%	18.6%	8.6%	4.8%	81.5%	16.1%
	Poo	r	88.2%	11.8%	64.3%	35.7%	28.7%	1.0%	3.4%	15.8%	61.9%	48.0%	75.0%	7.5%
ö	Bord	derline	72.2%	27.8%	60.6%	39.4%	29.8%	2.5%	7.2%	11.2%	52.8%	45.0%	75.2%	9.2%
Ľ	Acce	eptable	56.1%	43.9%	57.2%	42.8%	33.2%	1.8%	3.3%	15.5%	28.9%	24.7%	79.0%	11.2%

# Table 26 - Average days of consumption of food groups by strata

						Days co	onsumed			
			Staples	Pulses	Dairy	Meat	Vegetables	Fruits	Sugar	Oils and fat
			Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
	Pro	bolinggo	7.00	5.77	1.08	5.03	6.51	2.57	6.26	6.76
	San	npang	7.00	5.36	0.52	5.45	5.15	2.39	5.62	6.80
	Lon	bok Tengah	7.00	2.52	0.66	2.85	6.56	2.97	5.71	5.79
ರ	Lon	nbok Utara	6.99	3.11	0.64	3.92	6.70	3.53	4.55	5.53
stri	Kupang		7.00	1.80	0.53	2.82	5.93	2.43	5.06	4.94
dis	Tim	or Tengah Selatan	6.96	4.23	0.26	1.43	5.88	1.56	4.84	4.59
	Sun	ıba Tengah	6.95	0.56	0.62	2.83	6.51	3.04	6.28	2.88
	Mer	auke	6.99	4.02	2.29	5.19	6.18	5.88	6.50	6.41
	Tota	al	6.99	3.42	0.83	3.69	6.18	3.05	5.60	5.46
	Foo	d crops ag.	6.98	2.99	0.46	2.89	6.11	2.62	5.63	4.71
	Oth	er ag.	6.98	3.17	0.71	4.42	5.49	3.32	6.08	5.68
역	Ag.	wage labor	7.00	3.62	0.20	2.92	6.53	2.57	5.31	5.63
D D	Non	ag. wage labor	7.00	3.79	0.66	3.95	6.39	3.00	5.09	6.21
5	Mer	chant	7.00	4.25	1.46	5.03	6.21	3.60	5.53	6.26
Ĕ	Skil	led labor	6.98	4.02	0.98	4.30	6.36	3.72	5.69	6.16
lain incol	Emp	bloyee	7.00	4.20	2.27	5.22	6.34	4.36	5.80	6.55
	Remittance		7.00	3.41	1.44	4.72	6.19	3.22	5.19	6.17
	Entrepreneur		7.00	3.91	1.04	5.21	6.44	3.37	5.64	6.81
Σ	Technician		7.00	3.42	2.01	4.58	6.47	3.47	6.12	6.47
	Other		7.00	4.09	0.43	4.00	6.68	3.24	6.42	5.31
	Currently not working		7.00	1.82	0.00	1.83	4.72	1.39	5.54	4.03
		No formal education	6.94	4.01	0.40	3.20	5.97	2.21	5.62	5.26
	<u>e</u>	Primary school	6.99	3.22	0.47	3.43	6.16	2.73	5.62	5.24
	Ma	Secondary school	6.99	3.57	1.37	4.18	6.34	3.75	5.73	5.83
eX	-	Higher education								
a a		Total	6.99	3.45	0.82	3.71	6.21	3.08	5.66	5.48
ea		No formal education	7.00	3.21	0.42	3.14	5.97	2.18	4.85	4.85
Т	ale	Primary school	6.96	2.97	0.49	3.23	5.77	2.64	5.48	5.30
	E E	Secondary school	7.00	3.61	1.87	4.76	6.31	3.92	5.22	6.01
	шĽ	Higher education								
		Total	6.98	3.21	0.83	3.60	5.97	2.84	5.22	5.35
S	1 =	poorest	6.97	2.17	0.24	1.99	5.94	2.22	5.16	3.50
ex ex	2		6.97	2.85	0.38	2.69	6.13	2.34	5.59	4.90
ind /ea	3 =	midale	7.00	3.32	0.79	3.48	6.18	2.87	5.59	5.85
d = 5	4		6.99	3.88	0.90	4.60	6.27	3.27	5.66	6.39
	5 = 1	wealthiest	7.00	4.87	1.82	5.70	6.38	4.54	6.02	6.67
U	P00	r daella a	6.89	0.10	0.01	0.24	5.07	0.61	3.92	2./1
С Ц	Bor	derline	6.99	1.18	0.03	1.35	6.13	2.05	5.15	3.99
	ACC	eptable	6.99	4.33	1.12	4.64	6.29	3.53	5.87	6.10

# 7.4 Household questionnaire

# Household questionnaire

INTERVIEWER ID AND LOCATION IN	FORMATION							
Interviewer								
Team Leader								
Supervisor								
GPS Coordinate DD MM' SS.SS" BB / DD MM' SS.SS" LU								
Intervew date		Interview begin:		Interview end:				
Province		ID Province						
District		ID District						
Sub-district		ID Sub-district						
Village		ID Village						
Sub-village		RW/RT (if any)						
Household ID								
Is this replacement Household?	1. Yes 2. No							
Why the original household replaced?	<ol> <li>Nobody at home</li> <li>Breadwinner/spouse not at hom</li> </ol>	3. Refu 4. Oth	used to be interviewed er, specify					
Interviewer:		Respond	ent:					

# SECTION 1 – Household Module

		ls this the responden t	Sex	Relationship with the breadwinner		Literac y	Education	Marital status
N o	Full Name	1. Yes 2. No	1. Male 2. Female	<ol> <li>Breadwinner</li> <li>Spouse</li> <li>Child / Child in-law</li> <li>Parents / Parents in law</li> <li>Grandchild</li> <li>Siblings (Brother/Sister, Uncle/Aunt, Nephew)</li> <li>Other relatives (Friends)</li> </ol>	Age	1. Yes 2. No	<ol> <li>No formal education</li> <li>Elementary school (not finished)</li> <li>Elementary school (graduated)</li> <li>Junior high school (not finished)</li> <li>Junior high school (graduated)</li> <li>Senior high school (not finished)</li> <li>Senior high school (graduated)</li> <li>Higher education (Diploma/University)</li> </ol>	<ol> <li>Single</li> <li>Married</li> <li>Widower</li> <li>Divorce</li> </ol>
1	2	3	4	5	6	7	8	9
1.		L]	LJ		LLJJ	L		
2.								
3.								
4.					LL	LJ		
5.					LL	L]	L]	
6.					LL	LJ	L]	
7.			L]		LLJ	LJ		L]
8.					LL	LJ	L]	
9.						L]		
10.					LL	LJ	L]	
11.					LLJ	L]		
12.					LLJ	LJ		
13.					LL			
14.					LLJ	L]		
15.								

# SECTION 2 – Asset Ownership Module

1. Dird       2. Bambodwood (except for teak)	2.01. Floor type (observe):		2.08. Do you own any of the following assets?
4. Cement       a. Car         5. Tile, stones, bricks or other hard material	<ol> <li>Dirt</li> <li>Bamboo/wood (except for teak)</li> <li>Other natural material</li> </ol>		Asset type 1. Yes 2. No
5. The, stones, or other hard material         2.02. Roof type (observe);         1. Thatchlarge leaves/palm         2.02. Roof type (observe);         1. Thatchlarge leaves/palm         2. Bamboo/wood (except to teak)         3. Other natural material         4. Motal (corrugated)         5. The teamic commot or other hard material (include teak)         2.03. How many square meters is the home (do not include kitchen and bathroom);         1. Less than 25 m <sup>2</sup> 5. 151 - 200 m <sup>2</sup> 2.04. Ownership status of the house:          1. Owned          2.04. Ownership status of the house:          1. Nere rent          2.05. Main source of lighting:          1. Electricity (non-PLV)       6. Kerosene lantern, oil lamp, candle         2.06. Main source of lighting:          1. Lest of the fast gal       4. Kerosene         2.06. Main source of lighting:          1. LeG (Gas Cylinder 12 kg)       6. Kerosene         2.07. Toilet type:       1. Toilet connected to septic-tank         3. Electricity       6. Charceal         2.07. Toilet type:       1. Toilet connected to septic-tank         1. Toilet tonnected to septic-tank       5. Bucket <th>4. Cement</th> <th></th> <th>a. Car</th>	4. Cement		a. Car
2.02. Koor type (observe):	5. Tile, stones, bricks or other hard material		b. Motor bike
1.       Industry body body (secopt for leak)	2.02. ROOT type (ODSerVe):		
3. Other natural material	2. Bamboo/wood (except for teak)		d Defrigerator
4. Metal (corrugated)       interpretion (nandphone with data/internet)       interpretion (nandphone with data/internet)         5. Tile/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramic/ceramiceramic/ceramic/ceramicaramic/ceramic/ceramic/ceramic/ceramicaramic	3. Other natural material		a. Smorthbana (Handabana with data/internet)
3. Indeclaration of the interview interview of the section 3         2.03. How many square meters is the home (do not include kitchen and bathroom):         1. Less than 25 m²       5. 151 - 200 m²         2.25. 50 m²       6. 201 - 300 m²         3. 51 - 100 m²       7. More than 300 m²         4. 101 - 150 m²       1. Irrigation pump         2.04. Ownership status of the house:       1. Irrigation pump         1. Owned       1. Irrigation pump         2.05. Main source of lighting:       1. Electricity (non-PLN)         1. Electricity (non-PLN)       6. Torch (battery powered)         3. Electricity       6. Charcoal         2.06. Main source of cooking:       1. Vero (Gas Cylinder 3 kg)         1. LPG (Gas Cylinder 12 kg)       5. Firewood         2. Chrone titte the section 13       2.10. How many livestock do you have? *Do not include pets         a. Cattle       1. Toilet connected to septic-tank	4. Metal (corrugated)		e. Smarphone (Handphone with data/internet)
2.00. How many square is its the infinite for normation with the infinite for normalized without methods. <ul> <li>i. Less than 25 m²</li> <li>5. 151 - 200 m²</li> <li>2.25 - 50 m²</li> <li>6. 201 - 300 m²</li> <li>i. Tractor</li> <li>i. Tractor</li> <li>j. Hand-tractor (Two wheels tractor)</li> <li>k. Plough</li> <li>I. Irrigation pump</li> <li>I. Irrigation pump</li> <li>I. Electricity (no-PLN)</li> <li>S. Kerosene lantern, oil lamp, candle</li> <li>2. Electricity (no-PLN)</li> <li>S. Tree rent</li> <li>S. Generator</li> <li>Firewood</li> <li>S. Electricity</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. Kerosene</li> <li>S. Kerosene</li> <li>S. Kerosene</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. Kerosene</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. LPG (Gas Cylinder 3 kg)</li> <li>K. Kerosene</li> <li>S. Electricity</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. Friewood</li> <li>S. Kerosene</li> <li>S. Kerosene</li></ul>	2 03 How many square meters is the home (do not include kitchen		
1. Less than 25 m²       5. 151 - 200 m²          2. 25 - 50 m²       6. 201 - 300 m²          3. 51 - 100 m²       7. More than 300 m²          4. 101 - 150 m²           2.04. Ownership status of the house:           1. Owned           2. Rent           3. Free rent           2.05. Main source of lighting:           1. Electricity (PLN)       5. Kerosene lantern, oil lamp, candle          2. Electricity (non-PLN)       6. Torch (battery powered)          3. Generator       7. Firewood          4. Solar panel           2.06. Main source of cooking:           1. LPG (Gas Cylinder 3 kg)       4. Kerosene          2. IPG (Gas Cylinder 12 kg)       5. Firewood          3. Electricity       6. Charcoal          2.07. Toilet type:           1. Toilet connected to septic-tank       5. Bucket          2. Toilet connected to septic-tank       5. Bucket <th>and bathroom).</th> <th></th> <th>g. Television</th>	and bathroom).		g. Television
2       29-50 m²       6       201 - 300 m²       i.       Tractor         3.       51 - 100 m²       7.       More than 300 m²       i.       Iractor         4.       101 - 150 m²       i.       Iractor       i.       Iractor         2.04.       Convership status of the house:       i.       i.       Iractor       i.         1.       Owned       i.       Irrigation pump       i.       i.         2.04.       Convership status of the house:       i.       Irrigation pump       i.         1.       Owned       i.       Irrigation pump       i.         2.05.       Main source of lighting:       i.       Fishing pole, nets or trap       i.         2.       Electricity (PLN)       5.       Kerosene lantem, oil lamp, candle       p.       Boat (without motor)       i.         2.       Electricity (non-PLN)       6.       Torch (battery powered)       i.       r.       No Rotor boat       i.         3.       Generator       7.       Firewood       i.       r.       None of above       i.         2.06.       Main source of cooking:       i.       LPG (Gas Cylinder 3 kg)       4.       Kerosene       i.       Yes       2. <td< th=""><th>1. Less than <math>25 m^2</math> 5. <math>151 - 200 m^2</math></th><th>1 1</th><th>h. Sewing machine</th></td<>	1. Less than $25 m^2$ 5. $151 - 200 m^2$	1 1	h. Sewing machine
3. 51 - 100 m²       7. More than 300 m²         4. 101 - 150 m²       7. More than 300 m²         4. 101 - 150 m²       1. Irrigation pump         2.04. Ownership status of the house:       1. Irrigation pump         1. Owned       1. Irrigation pump         2. Rent       1. Irrigation pump         3. Free rent       1. Irrigation pump         2.05. Main source of lighting:       0. Motor boat         2. Electricity (PLN)       5. Kerosene lantem, oil lamp, candle         2. Electricity (non-PLN)       6. Torch (battery powered)         3. Generator       7. Firewood         4. Solar panel       1.         2. LPG (Gas Cylinder 3 kg)       4. Kerosene         2. LPG (Gas Cylinder 12 kg)       5. Firewood         3. Electricity       6. Charcoal         2.07. Toilet type:       2. Toilet connected to septic-tank         1. Toilet connected to septic-tank       5. Bucket	2. $25 - 50 m^2$ 6. $201 - 300 m^2$		i. Tractor
4. 101 - 100 m²       k. Plough	3. 51 - 100 m <sup>2</sup> 7. More than 300 m <sup>2</sup>		j. Hand-tractor (Two wheels tractor)
2.04. Owned	$\frac{4.101 - 150 m^2}{2.04}$		─ k. Plough └──┘
1. Send	1 Owned		I. Irrigation pump
3. Free rent       n. Fishing pole, nets or trap	2. Rent	L	m. Small rice milling machine
2.05. Main source of lighting:       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       .       <	3. Free rent		n. Fishing pole, nets or trap
1. Electricity (PLN)       5. Kerosene lantern, oil lamp, candle         2. Electricity (non-PLN)       6. Torch (battery powered)          3. Generator       7. Firewood          4. Solar panel        Aquaculture pond          2. LPG (Gas Cylinder 3 kg)       4. Kerosene        1. Yes          2. LPG (Gas Cylinder 12 kg)       5. Firewood        1. Yes          2. Or. Toilet type:       6. Charcoal       2.10. How many livestock do you have? *Do not include pets          1. Toilet connected to septic-tank       5. Bucket        a. Cattle	2.05. Main source of lighting:		o Motor boat
2. Electricity (non-r-LN)       6. Force (ballety powered)	1. Electricity (PLN) 5. Kerosene lantern, oil lamp, candle		n Bost (without motor)
4. Solar panel       1. LPG (Gas Cylinder 3 kg)       4. Kerosene       1.         2. LPG (Gas Cylinder 3 kg)       4. Kerosene       1.         2. LPG (Gas Cylinder 12 kg)       5. Firewood       2.         3. Electricity       6. Charcoal         2.07. Toilet type:       2.10. How many livestock do you have? *Do not include pets         1. Toilet connected to septic-tank       5. Bucket         2. Toilet connected to septic-tank       5. Bucket	3 Generator 7 Firewood	L	p. Boat (without motor)
2.06. Main source of cooking:       1. LPG (Gas Cylinder 3 kg)       4. Kerosene       2.09. Do you own livestock?         1. LPG (Gas Cylinder 12 kg)       5. Firewood       2. No (Skip to section 3)         2.07. Toilet type:       1. Toilet connected to septic-tank       5. Bucket         1. Toilet connected to septic-tank       5. Bucket	4. Solar panel		q. Aquaculture pond
2.06. Main source of cooking:         1. LPG (Gas Cylinder 3 kg)       4. Kerosene         2. LPG (Gas Cylinder 12 kg)       5. Firewood         3. Electricity       6. Charcoal         2.07. Toilet type:       1. Toilet connected to septic-tank         1. Toilet connected to septic-tank       5. Bucket         2. Toilet connected to septic-tank       5. Bucket			r. None of above
1. LPG (Gas Cylinder 3 kg)       4. Kerosene         2. LPG (Gas Cylinder 12 kg)       5. Firewood         3. Electricity       6. Charcoal         2.07. Toilet type:       1. Toilet connected to septic-tank         1. Toilet connected to septic-tank       5. Bucket         2. Toilet connected to septic-tank       5. Bucket         3. Toilet connected to septic-tank       5. Bucket         4. Toilet connected to septic-tank       5. Bucket         5. Bucket       6. Utersing trility	2.06. Main source of cooking:		2.09. Do you own livestock?
3. Electricity       6. Charcoal         2. No (Skip to section 3)         2. Toilet type:         1. Toilet connected to septic-tank       5. Bucket         2. Toilet connected to septic-tank         5. Bucket         a. Cattle         L         J. Toilet connected to septic-tank         5. Bucket         a. Cattle	2. LPG (Gas Cylinder 5 kg) 4. Kerosene 2. LPG (Gas Cylinder 12 kg) 5. Firewood	L	1. Yes
2.07. Toilet type:       2.10. How many livestock do you have? *Do not include pets         1. Toilet connected to septic-tank       5. Bucket         2. Toilet connected to septic-tank       5. Bucket         3. Toilet connected to septic-tank       5. Bucket         4. Toilet connected to septic-tank       5. Bucket         5. Bucket       6. User/instrict	3. Electricity 6. Charcoal		2. No (Skip to section 3)
1. Toilet connected to septic-tank 5. Bucket a. Cattle LL b. Buffalo LL	2.07. Toilet type:		2.10. How many livestock do you have? *Do not include pets
	1. Toilet connected to sentic-tank 5. Bucket		a. Cattle
2. Tollet no septic-tank 6. Hanging tollet – – – – – C. Horse – – – – d. Goat/Sheep – – – – –	2. Toilet no septic-tank 6. Hanging toilet		c. Horse L_L_L d. Goat/Sheep L_L_L
3. Pit latrine with slab 7. Shared facility 4. Pit latrine ne slab (area nit) 9. No facility f. Dog LLL	3. Pit latrine with slab 7. Shared facility		e. Pig
4. Pri laurine no siab (open pil) o. No facilities (river, busn, beach) o. r.g n. bog	4. Pit latrine rio siad (open pit) 8. INO facilities (river, bush, beach)		a Chicken
#### **SECTION 3 – Water Source And Sanitation** 3.01. Has your main drinking source changed because of the 3.06. Is the normal (normal season) drinking water source below ground drought? \*This may refer to the past if the rains have started AND more than 10 meters away from the septic tank? 2. No (Skip to 3.03) 1. Yes 1. Yes 2. No, the drinking water source is below ground 3.02. Has the source of drinking water returned to normal? 3. No, the water source less than 10 meter away 4. There is no septic-tank 2. No 1. Yes 5. Do not know 3.07. Is your current (drought season) drinking water source farther away 3.03. What is your current (drought season) main drinking water source? \*if still in drought season, this is the current water source from your normal drinking water source? 1. Yes 2. No 01. Piped water (PDAM) 07. Unprotected spring 3.08. How much do you CURRENTLY spend on drinking water during the drought? 02. Public tap 08. Water tank / Drum (Rupiah/month)? 03. Tubewell/borehole 09. Water tanker truck 1 1 04. Protected spring 10. Bottled water Rp. L | | | | | | | | | month 05. Rain water collection 11. Stream, river, lake, etc. 06. Unprotected well 12. Other. specify 3.04. Is the current (drought season) drinking water source below 3.09. Is that more, less or same as usual? ground AND more than 10 meters away from the septic tank? 1. More than usual 1. Yes 4. There is no septic-tank 2. Same as usual 2. No, the water source above the ground 5. Do not know 3. Less than usual 3. No, the water source less than 10 meter away Have you noticed members of the household having diarrhea or 3.05. What is your normal drinking water source? \*Normal 3.10. vomiting more with the current (drought season) water source? situation 01. Piped water (PDAM) 07. Unprotected spring Yes, much more than usual 1. 08. Water tank / Drum 02. Public tap Yes, little more than usual 2. 03. Tubewell/borehole 09. Water tanker truck 04. Protected spring 10. Bottled water 3. No, there is no change from usual 05. Rain water collection 11. Stream, river, lake, etc. No, there is less diarrheal or vomiting than usual 4. 06. Unprotected well 12. Other. specify 5. There is no household member having diarrhea/vomiting (skip to 3.12)

### **SECTION 3 – Water Source And Sanitation** 3.11. Which household member had diarrhea/vomiting? HH member ID Name of household member (see section 1) 1 1 1. \_\_\_\_\_ 1 1 2. \_\_\_\_\_ 1 1 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_ 1 1 7. In the past two weeks, have any children in the household had diarrhea? 3.12. 1. Yes 2. No 3. Don't know 3.13. Which children member had diarrhea/vomiting HH member ID Name of the child (see section 1) 1. \_\_\_\_\_ 1 I 2. \_\_\_\_\_ 3. \_\_\_\_\_ I I 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_ 7. \_\_\_\_\_

## SECTION 4 – Income Module

4.01. Wh	nat is your main source of income?			
01. 02. 03. 04. 05. 06.	Food crops agriculture Cash crops agriculture (Wood/Palm oil/Rubber/Coffee/Cocoa/etc.) Raising/sell livestock/animal products Fishery/Fisherman Salt production Agriculture labor	<ul> <li>07. Non-ag. Labor (construction, factory worker, etc.)</li> <li>08. Skilled worker (Carpenter, masonry, etc.)</li> <li>09. Transportation (driver/ ojek/ becak (three wheel bike</li> <li>10. Handcraft/artisan</li> <li>11. Petty trade</li> <li>12. Trader/seller</li> </ul>	<ul> <li>13. Remittance</li> <li>14. Salaried employee (private sector)</li> <li>15. Government officer</li> <li>16. Mining</li> <li>17. Pensioner</li> <li>18. Other, specify</li> </ul>	
4.02.	Has the drought affected the main incon	ne activity?		
1. 2. 3.	Yes, reduce more than 30% Yes, reduce between 10-30% Yes, reduce up to 10%	4. 5.	Yes, it increase (Skip to 4.04) No, there is no change (Skip to 4.04)	
4.03a. W	/hat did you do in response the change o	f main income?		
F	Response			1. Yes 2. No
	1. Rely on second income			
	2. Engage in new income activity			
	3. Sent member away to work			
	4. Spent savings or sold assets			
	5. Reduce expenses (for non-food expe	enditure)		
	6. Reduce food expenditure (for food e	xpenditure)		
	7. Other, specify:			
4.03b. F	rom your responses in 4.03a, which are t	he main response?		

## SECTION 4 – Income Module

<ol> <li>Food crops agriculture</li> <li>Cash crops agriculture (Wood/Palm oil/Rubber/Coffee/Cocoa/etc.)</li> <li>Raising/sell livestock/animal products</li> <li>Fishery/Fisherman</li> <li>Salt production</li> <li>Agriculture labor</li> </ol>	<ul> <li>07. Non-ag. Labor (construction, factory worker, etc.)</li> <li>08. Skilled worker (Carpenter, masonry, etc.)</li> <li>09. Transportation (driver/ ojek/ becak (three wheel bike)</li> <li>10. Handcraft/artisan</li> <li>11. Petty trade</li> <li>12. Trader/seller</li> </ul>	<ol> <li>Remittance</li> <li>Salaried employee (private sector)</li> <li>Government officer</li> <li>Mining</li> <li>Pensioner</li> <li>Other, specify</li> <li>No second income activity (Skip to section 5)</li> </ol>	L
Has the drought affected the second ir	come activity?		
<ol> <li>Yes, reduce more than 30%</li> <li>Yes, reduce between 10-30%</li> </ol>	4. Yes, i 5. No, th	t increase (Skip to section 5) nere is no change (Skip to section 5)	
3. Yes, reduce up to 10%			
a. Yes, reduce up to 10%	age of second income?		
a. What did you do in response the char Response	ige of second income?		1. Yes 2. No
<ul> <li>Yes, reduce up to 10%</li> <li>What did you do in response the char Response</li> <li>1. Rely on first income</li> </ul>	nge of second income?		1. Yes 2. No
<ul> <li>a. Yes, reduce up to 10%</li> <li>b. What did you do in response the char Response</li> <li>1. Rely on first income</li> <li>2. Engage in new income activity</li> </ul>	nge of second income?		1. Yes 2. No
<ul> <li>a. Yes, reduce up to 10%</li> <li>b. What did you do in response the char Response</li> <li>1. Rely on first income</li> <li>2. Engage in new income activity</li> <li>3. Sent member away to work</li> </ul>	ige of second income?		1. Yes 2. No L L
<ul> <li>a. Yes, reduce up to 10%</li> <li>b. What did you do in response the char Response</li> <li>1. Rely on first income</li> <li>2. Engage in new income activity</li> <li>3. Sent member away to work</li> <li>4. Spent savings or sold assets</li> </ul>	nge of second income?		1. Yes 2. No L L L
<ul> <li>a. Yes, reduce up to 10%</li> <li>b. What did you do in response the chain Response</li> <li>1. Rely on first income</li> <li>2. Engage in new income activity</li> <li>3. Sent member away to work</li> <li>4. Spent savings or sold assets</li> <li>5. Reduce expenses (for non-food</li> </ul>	expenditure)		1. Yes 2. No   
<ul> <li>a. Yes, reduce up to 10%</li> <li>b. What did you do in response the char Response</li> <li>1. Rely on first income</li> <li>2. Engage in new income activity</li> <li>3. Sent member away to work</li> <li>4. Spent savings or sold assets</li> <li>5. Reduce expenses (for non-food</li> <li>6. Reduce food expenditure (for feteral context of the context of the</li></ul>	expenditure) od expenditure)		1. Yes 2. No 

# SECTION 5 – Agriculture Module

5.01.	<ul> <li>Is this household engaging in agriculture? *this s but not making decisions in planting, irrigation ar</li> <li>1. Yes</li> <li>2. No *Check response in 4.01 or 4.04 (skip to section 5B)</li> </ul>	hould refer to farming activities specifically – households who are performing occasional daily labor on a farm d harvesting should not respond to this Module	
5.02.	What is your main crop?		
	01.Rice06.Beans (except peanut)02.Maize07.Peanut03.Cassava08.Cashew04.Yam09.Tomato05.Potato10.Chilli	11.Onion16.Other crops (sago/wheat)20.Rubber12.Mushroom17.Tobacco21.Coconut13.Water Spinach18.Coffee22.Spices (nutmeg/ clove)14.Other vegetables19.Cocoa23.Other, specify:15.FruitsFruitsFruitsFruitsFruitsFruits	
5.03.	Has drought affected the main crop?		
	<ol> <li>Yes, harvest reduce (50% or more plant damaged)</li> <li>Yes, harvest reduce 26-50%</li> </ol>	<ol> <li>Yes, harvest reduce 10-25%</li> <li>No, harvest didn't change</li> <li>Yes, harvest reduce less than 10%</li> </ol>	
5.04.	What is your second crop?		
	01.Rice06.Beans (except peanut)02.Maize07.Peanut03.Cassava08.Cashew04.Yam09.Tomato05.Potato10.Chilli	11.Onion16.Other crops (sago/wheat)21.Coconut12.Mushroom17.Tobacco22.Spices (nutmeg/ clove)13.Water spinach18.Coffee23.Other, specify:14.Other vegetables19.Cocoa24.There is no second crop (skip to 5.06)15.Fruits20.Rubber	
5.05.	Has drought affected the second crop?		
	<ol> <li>Yes, harvest reduce (50% or more plant damaged)</li> <li>Yes, harvest reduce 26-50%</li> </ol>	<ol> <li>Yes, harvest reduce 10-25%</li> <li>No, harvest didn't change</li> <li>Yes, harvest reduce less than 10%</li> </ol>	
5.06.	What is your current crop?		
	01.Rice06.Beans (except peanut)02.Maize07.Peanut03.Cassava08.Cashew04.Yam09.Tomato05.Potato10.Chilli	11.Onion16.Other crops (sago/wheat)21.Coconut12.Mushroom17.Tobacco22.Spices (nutmeg/ clove)13.Water spinach18.Coffee23.Other, specify:14.Other vegetables19.Cocoa24.Currently no plant (skip to 5.06)15.Fruits20.RubberCocoaCurrently no plant (skip to 5.06)	
5.07.	Did you plant your current crop in the same perio	d as usual?	
	<ol> <li>Yes</li> <li>No, It was planted earlier</li> <li>No, it was planted late</li> </ol>		

5.08.       In the past 3 months, due to lack of water, did you do any of the following?         Activity       1. Yes         Activity       2. No         1.       Plant different crops         2.       Plant different variety         3.       Delayed planting         4.       Did not plant at all         5.09a.       What is the normal crop that was not planted?         01.       Rice       06.         Beans (except peanut)       11.         01.       Rice       06.         Beans (except peanut)       11.         03.       Cassava       08.         Cashew       13.       Water spinach         13.       Water spinach       17.         14.       Operative spinach       17.         15.       Operative spinach       17.         13.       Water spinach       17.         14.       Operative spinach       17.         15.       Operative spinach       17.         13.       Operative spinach       17.         14.       Operative spinach       17.         15.       Operative spinach       17.         16.       Operative spinach       17.									SECT	TION 5 – Ag	ricultu	ire Mo	odul	е					
3.00.       In the past 3 months, due to fack of water, did you do any of the following:         Activity       1. Yes         Activity       2. No         1.       Plant different crops         2.       Plant different variety         3.       Delayed planting         4.       Did not plant at all         5.       None of above         5.       None of above         01.       Rice         06.       Beans (except peanut)         11.       Onion         16.       Other food crops         20.       Rubber         02.       Maize         07.       Peanut         12.       Mushroom         03.       Cassava         08.       Cashew         13.       Water spinach         17.       Tobacco       22.         Spices (nutmeg/ clove)       11.	5.09	ln t	ho nact 2 mo	nthe	due to lack of water .	did you	do an	w of the	followin	a?									
Activity       1.       res         1.       Plant different crops       II       > If Yes, ask 5.09a, 5.09b, 5.09c         2.       Plant different variety       II       > If Yes, ask 5.10         3.       Delayed planting       II       > If Yes, ask 5.11         4.       Did not plant at all       II       > If Yes, ask 5.12         5.       None of above       II       > If Yes, skip to 5.13         5.09a. What is the normal crop that was not planted?       11.       Onion       16.       Other food crops       20.       Rubber         02.       Maize       07.       Peanut       12.       Mushroom       17.       Tobacco       22.       Spices (nutmeg/ clove)         03.       Cassava       08.       Cashew       13.       Water spinach       17.       Tobacco       22.       Spices (nutmeg/ clove)	5.00.	<u> </u>	ine past 5 mo	nuns,	due to lack of water, t	ulu you	uo an	ly of the	IOIIOWIII	1 Voo									
1. Plant different crops       Image: Sign of the system of		Act	tivity							2. No									
2. Plant different variety $\Box$ $\rightarrow$ If Yes, ask 5.103. Delayed planting $\Box$ $\rightarrow$ If Yes, ask 5.114. Did not plant at all $\Box$ $\rightarrow$ If Yes, ask 5.125. None of above $\Box$ $\rightarrow$ If Yes, skip to 5.135.09a. What is the normal crop that was not planted? $11.$ Onion $16.$ Other food crops $20.$ Rubber01. Rice06. Beans (except peanut) $11.$ Onion $16.$ Other food crops $20.$ Rubber02. Maize07. Peanut $12.$ Mushroom $(sago/wheat)$ $21.$ Coconut $\Box$ 03. Cassava08. Cashew $13.$ Water spinach $17.$ Tobacco $22.$ Spices (nutmeg/ clove)		1.	Plant differe	ent cro	ops						$\rightarrow$	lf Yes.	ask	5.09	a, 5.09b	o, 5.09c			
3. Delayed planting $\square$ $\rightarrow$ If Yes, ask 5.114. Did not plant at all $\square$ $\rightarrow$ If Yes, ask 5.125. None of above $\square$ $\rightarrow$ If Yes, skip to 5.135.09a. What is the normal crop that was not planted?11. Onion16. Other food crops20. Rubber01. Rice06. Beans (except peanut)11. Onion16. Other food crops20. Rubber02. Maize07. Peanut12. Mushroom(sago/wheat)21. Coconut $\square$ 03. Cassava08. Cashew13. Water spinach17. Tobacco22. Spices (nutmeg/ clove)		2	Plant differe	ent va	rietv						$\rightarrow$	lf Yes.	ask	5.10					
4. Did not plant at all       → If Yes, ask 5.12         5. None of above       → If Yes, skip to 5.13         5.09a. What is the normal crop that was not planted?       01. Rice       06. Beans (except peanut)       11. Onion       16. Other food crops       20. Rubber         02. Maize       07. Peanut       12. Mushroom       (sago/wheat)       21. Coconut       ⊥         03. Cassava       08. Cashew       13. Water spinach       17. Tobacco       22. Spices (nutmeg/ clove)		3	Delayed nla	ntina							$\rightarrow$	lf Yes	ask	5 11					
4. Did not plant at all		J.	Did not pla	at at a							Á	lf Yos	ack	5 12					
5. None of above       11. Onion       16. Other food crops       20. Rubber         01. Rice       06. Beans (except peanut)       11. Onion       16. Other food crops       20. Rubber         02. Maize       07. Peanut       12. Mushroom       (sago/wheat)       21. Coconut       11.         03. Cassava       08. Cashew       13. Water spinach       17. Tobacco       22. Spices (nutmeg/ clove)		4. 5	Nono of abr		1						<u></u>	lf Voe	ekir	10.12	5 1 2				
01. Rice       06. Beans (except peanut)       11. Onion       16. Other food crops       20. Rubber         02. Maize       07. Peanut       12. Mushroom       (sago/wheat)       21. Coconut       11.         03. Cassava       08. Cashew       13. Water spinach       17. Tobacco       22. Spices (nutmeg/ clove)	5 09a	U. Wh	at is the norm	nal cro	on that was not plante	-yd2						11 1 6 5,	SKI	105	.15				
01. Nice       00. Deans (except peanal)       11. Onion       10. Other lood clops       20. Nabler         02. Maize       07. Peanut       12. Mushroom       (sago/wheat)       21. Coconut       11.         03. Cassava       08. Cashew       13. Water spinach       17. Tobacco       22. Spices (nutmeg/ clove)	0.000	01	Rico	06	Boans (ovcont poanut)			11	Onion			16	∩ŧh	or foo	nd crone	20 5	Pubbor		
03. Cassava 08. Cashew 13. Water spinach 17. Tobacco 22. Spices (nutmeg/ clove)		02.	Maize	00. 07.	Peanut			12.	Mushroo	m		70.	(sad	qo/wh	neat)	20. P	Coconut		
		03.	Cassava	08.	Cashew			13.	Water sp	oinach		17.	Tob	acco		22. S	Spices (nutm	eg/ clove)	
04. Yam 09. Tomato 14. Other vegetables 18. Corree 23. Other, Specify:		04.	Yam	09.	Tomato			14.	Other ve	getables		18.	Cof	fee		23. C	Other, Specif	fy:	
00. Potato 10. Chilli 15. Fruits 19. Cocoa	5 09b	05. Wh	Potato	10. Lvou r	Unini Mant instead? 1 Vos	2 No		15.	Fruits			19.	00	coa		_			5.09c Which is the main
01 Pice	5.050	01	Pico	i you p		2.110	00	Tomate				ı.	ı	17	Tobacc	<b>`</b>		· 1	replacement crop?
		01.	Maiza				40	Chilli	,			-	 	17.	Coffee	.0		J	i opisoonioni olop i
		02.					10.	Onion						10.	Conne			J 	
		03.	Cassava				11.	Onion						19.	Dubba	_		J	
04. ram		04.	ram				12.	Mushro	oom			L	 	20.	Rubbel	r ,		J	
US. Potato		05.	Potato				13.	water s	pinach			L	] 	21.	Cocon	ut	. I	J	
06. Beans (except peanut)		06.	Beans (excep	ot pean	ut)		14.	Other v	egetables	5		L		22.	Spices	(nutmeg/ clov	/e) l		
07. Peanut L 15. Fruits L 23. Other, Specify:		07.	Peanut				15.	Fruits						23.	Other,	Specify:	I		
08. Cashew L 16. Other food crops (sago/wheat)		08.	Cashew				16.	Other fe	ood crops	s (sago/wheat	)								
5.10. Which crop did you plant a different variety of?	5.10.	Wh	iich crop did y	you pl	ant a different variety	of?	<u> </u>				,	, ,			00	D //			
01. Rice Ub. Beans (except peanut) 11. Union 16. Uther food crops (sago/wheat) 20. Rubber		01.	Rice Maizo	06. 07	Beans (except peanut)	11. 12	Onion	room		16. Uther too	a crops	(sago/v	vneat	)	20. 21	Rubber			
03 Cassava 08 Cashew 13 Water spinach 18 Coffee 22 Spices (nutmed/ clove)		02.	Cassava	07.	Cashew	12.	Water	r sninach		17. Tobacco 18. Coffee					21.	Spices (nutm	ea/ clove)		
04. Yam 09. Tomato 14. Other vegetables 19. Cocoa 23. Other, specify:		04.	Yam	09.	Tomato	14.	Other	vegetable	es	19. Cocoa					23	Other, specif	v:		
05. Potato 10. Chilli 15. Fruits		05.	Potato	10.	Chilli	15.	Fruits	0							_0.				
5.11. Which crop did you delay planting?	5.11.	Wh	ich crop did y	you de	elay planting?														
01. Rice 06. Beans (except peanut) 11. Onion 16. Other food crops (sago/wheat) 20. Rubber		01.	Rice	06.	Beans (except peanut)	11.	Onion	1		16. Other foo	d crops	(sago/v	vheat	)	20.	Rubber			
02. Maize 07. Peanut 12. Mushroom 17. Tobacco 21. Coconut		02.	Maize	07.	Peanut	12.	Mushi	room		17. Tobacco					21.	Coconut			
U3. Cassava U8. Cashew 13. Water spinach 18. Coffee 22. Spices (nutmeg/ clove)		03.	Cassava	08.	Cashew	13.	Water	spinach		18. Cottee					22.	Spices (nutm	eg/ clove)		
04. Yam 09. Tomato 14. Other vegetables 19. Cocoa 23. Other, specify:		04.	Yam	09. 10	l omato	14. 15	Other	vegetable	es a	19. Cocoa					23.	Other, specif	y:		
5.12 Which cron did you not plant at all?	5 1 2	05. Wh		10.	onilli of plant at all?	10.	FIUILS												
0.1 Pice 06 Peope (except peoput) 11 Opion 16 Other feed crops 20 Public	J.12.			<b>you iii</b>	Poons (avaant naarut)			11	Onion			16	Oth	or foo	nd arona	20	Pubbor		
01. Nice vo. Beans (except peanut) 11. Onion 10. Other 1000 crops 20. Rubber 02 Maize 07 Peanut 12 Mushroom (sego/wheat) 21 Coconut		01.	Maize	00. 07	Peanut			11. 12	Mushroo	m		10.	(001	-100 20/wh	na crops neat)	20. 21	Coconut		
03 Cassava 08 Cashew 13 Water spinach 17 Tobacco 22 Spices (nutmer/ clove)		02.	Cassava	07.	Cashew			13	Water on	hinach		17	Toh	acco	iouij	21.	Snices (n	utmea/ clove)	
04. Yam 09. Tomato 14. Other vegetables 18. Coffee 23. Other, specify:		03. 04.	Yam	00. 09.	Tomato			14.	Other ve	getables		18.	Cof	fee		23.	Other, spe	ecify:	

## SECTION 5 – Agriculture Module

5.13.	Land ownership			
	1. Owned			
	2. Rent (include profit sharing)			
	3. Neither owned/rent			
5.14.	How many square meter is your land?			L m²
5.15.	Do you irrigate your land?			
	1. Yes			
	2. No (Skip to section 5B)			
5.16.	Has your irrigation source change because of the drough	t?		
	1. Yes			
	2. No (Skip to 5.18)			
5.17.	Has your irrigation source returned to normal?			1 1
	1. Yes			
5.40	2. NO			
5.18.	what is your current (drought season) water source for in	rigation ?	7 December 11 (Marce there 20 contain there)	
	1. RIVer / Lake 4. Natural spring 2. Dam 5. Pun water (inclu	ido rain wator)	7. Deep well (More than 20 meter deep)	
	3. Reservoir 6. Shallow well (N	lot more than 20 meter deep)	9 Other specify:	
5 19	How often is the land currently (during the drought) irriga	ted	5. Other, specify.	_
5.15.	1 Every day 4 Once a week		6 Once every 2 weeks	
	2. 4 – 6 times a week 5. Less than once	a week	7. Between 1 – 2 times a month	
	3. 2 – 3 times a week (more than once	e every 2 weeks)	8. Other, specify	
5.20.	What is your normal (normal season) water source for irri	igation?		
	1. River / Lake 4. Natural spring	0	7. Deep well (More than 20 meter deep)	1 1
	2. Dam 5. Run water (inclu	ıde rain water)	8. Government-run water canal	
	3. Reservoir   6. Shallow well (N	lot more than 20 meter deep)	9. Other, specify:	_
5.21.	How often is the land normally (normal season) irrigated			
	1. Every day4. Once a week		6. Once every 2 weeks	
	2. 4 – 6 times a week 5. Less than once	a week	7. Between 1 – 2 times a month	
	3. 2 – 3 times a week (more than once	every 2 weeks)	8. Other, specify	
5 00	Here much did over enoughing the last manyth an imigation O	(Durnich /m cuth)	Rp. L	
5.22.	How much did you spend in the last month on irrigation?	(Ruplan/month)		month
				montin
5.23.	Is that more, less or same as usual?			
	1. More than usual			
	2. Same as usual			
	3. Less than usual			

SECTION	5B –	Migration	Module
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5B.01.	Did any members of the household migrate away in the past three months? *This refers to a household member who used to live and eat here on a daily basis but is now living elsewhere 7 days a week 1. Yes 2. No (Skip to section 6)	
5B.02.	Was this migration a normal activity (i.e. do they normally go away for work)?	
	1. Yes 2. No	L
5B.03.	Did they migrate away due to lack of income relating to drought?	 
	1. Yes 2. No	L
5B.04.	Where did they migrate?	
	1.       To the district capital       4.       To another city in Indonesia       7.       Abroad (inside SE Asia)	L]
	2. To the provincial capita 5. To a rural area in Indonesia 8. To a Gulf state 3. To Jakarta 6. To Malaysia 9. Abroad (other)	
50.05		
2B.03	). Has the nousehold income reduced/ stayed the same / increased due to this migration away?	
	2. Staved the same	L
	3. Increased	
5B.06.	Which members of the household migrated away?	
	Name of household member	
	1.	
	2	
	3	
	Λ	
	7	
	5	
	07	
	1	

SECTION 6 – Consumption Module	
6.01. For each of the following food groups, how many days in the past seven days was the food group consumed?	?
a. Rice, maize, noodles, cassava, taro, yam, sweet potato, sago, potato cassava root (processed), plantain, other tubers	L days
b. Beans, tofu, tempe, pigeon pea, other pulses	L days
c. Milk , yogurt, cheese, other dairy (Exclude margarine/butter or small amounts of milk for tea / coffee)	Ll days
d. Beef, goat, poultry, pork, eggs and fish	Ll days
d1. Flesh meat: beef, pork, lamb, goat, chicken, duck, other birds, insects	Ll days
d2. Liver, kidney, heart and / or other organ meats	L days
d3. Fresh fish, canned fish, shrimp, squid, dried fish, crab, other shellfish	L days
d4. Eggs	L days
e. All vegetables and leaves	L days
e1. Orange vegetables (vegetables rich in Vitamin A) carrot, red pepper, pumpkin, orange sweet potatoes	L days
e2. Dark green leafy vegetables Spinach, water spinach, broccoli, cassava leaves, or other dark green leaves including Daun Katuk, daun pepaya, daun turi, saw, etc.)	LI days
f. All fruits	L days
f1. Orange fruits (Fruits rich in Vitamin A) mango, papaya	L days
g. Sugar, honey, jam, cakes, candy, cookies, pastries, cakes and other sweet (sugary drinks)	L days
h. Coconut oil, olive oil, other oil (margarine, etc.)	L days
<ul> <li>6.02. Has the price of rice changed in the last month? <ol> <li>Reduced</li> <li>Stayed the same</li> <li>Increased</li> <li>Do not know</li> </ol> </li> <li>6.03. For each of the following food groups, how many days in the past seven days was the food group consumed?</li> </ul>	

a. Rice, maize, noodles, cassava, taro, yam, sweet potato, sago, potato cassava root (processed), plantain, other tubers	r ∟ days
b. Beans, tofu, tempe, pigeon pea, other pulses	L days
c. Milk , yogurt, cheese, other dairy (Exclude margarine/butter or small amounts of milk for tea / coffee)	LI days
d. Beef, goat, poultry, pork, eggs and fish	LI days
d1. Flesh meat: beef, pork, lamb, goat, chicken, duck, other birds, insects	LI days
d2. Liver, kidney, heart and / or other organ meats	L days
d3. Fresh fish, canned fish, shrimp, squid, dried fish, crab, other shellfish	LI days
d4. Eggs	L days
e. All vegetables and leaves	L days
e1. Orange vegetables (vegetables rich in Vitamin A) carrot, red pepper, pumpkin, orange sweet potatoes	∟ days
e2. Dark green leafy vegetables Spinach, water spinach, broccoli, cassava leaves, or other dark green lea including Daun Katuk, daun pepaya, daun turi, saw, etc.)	ves
f. All fruits	L days
f1. Orange fruits (Fruits rich in Vitamin A) mango, papaya	L days
g. Sugar, honey, jam, cakes, candy, cookies, pastries, cakes and other sweet (sugary drinks)	L days
h. Coconut oil, olive oil, other oil (margarine, etc.)	L days
Has the price of rice changed in the last month?         1. Reduced       .         2. Stayed the same       .         3. Increased       .         4. Do not know       .	

## SECTION 7 – Coping and Reponses Module

#### During the past 30 days, did anyone in your household have to engage in any following behaviours due to a lack of food or a lack of money to buy food? 7.01. Please answer with:

- 1. Yes
- No, because I did not face a shortage of food or money to buy food
   No, because I already sold those assets or have engaged in this activity within the last 12 months and cannot continue to do it
- 4. Not applicable

a. Sold more animals (non-productive) than usual	
b. Sold household assets/goods (radio, furniture, refrigerator, television, jewellery etc.)	
c. Reduced non-food expenses on health (including drugs) and education	
d. Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.)	
e. Spent savings	
f. Purchased food on credit or borrowed food	
g. Sold house or land	
h. Withdrew children from school	
i. Sold last female animals	
j. Begged	
a. Sold more animals (non-productive) than usual	L]
b. Sold household assets/goods (radio, furniture, refrigerator, television, jewellery etc.)	L
c. Reduced non-food expenses on health (including drugs) and education	L
d. Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.)	L]
e. Spent savings	L]
f. Purchased food on credit or borrowed food	L
g. Sold house or land	L
h. Withdrew children from school	L

i. Sold last female animals	L]
j. Begged	

7.02. During the last 7 days, were there days (and, if so, how many) when your household had to employ one of the following strategies to cope with a lack of food or money to buy it?

a. Rely on less preferred food, less expensive food	∟ days
b. Borrowed food or relied on help from friends / relatives	L days
c. Reduced the number of meals per day	L days
d. Reduced portion size of meals	L days
e. Restrict consumption by adults in order for small children to eat	L days
- Debug has sufficient has supervise fixed	
a. Rely on less preferred food, less expensive food	LI days
a. Rely on less preferred food, less expensive food b. Borrowed food or relied on help from friends / relatives	L days
a. Rely on less preferred food, less expensive food         b. Borrowed food or relied on help from friends / relatives         c. Reduced the number of meals per day	L days L days L days
a. Rely on less preferred food, less expensive food         b. Borrowed food or relied on help from friends / relatives         c. Reduced the number of meals per day         d. Reduced portion size of meals	L days days days days days

## SECTION 8 – Assistance Module

0.04					
8.01.	Did you receive Raskin in the last 30 days?				
	1. Yes				
	2. No				
	3. Never				
8.02.	Due to drought, have you receive any assistance (included additional assistance) from government, NGOs, or community members?				
	1 Yes				
	2 No (Skin to Module 9)				
8.03	Who provided the assistance?				
0.05.		1 1			
	1. Government 3. Locar NGO 5. Locar community member				
	2. International NGO 4. Mosque, Church. 6. Other, specify				
8.04.	What kind of assistance?				
	1. Food (example: Raskin, dll.)				
	2. Drinking, cooking water (clean water).	1 1			
	3. Cash	L			
	4. Crops, irrigation water, hand tractor, other agriculture assistance				
	5. Other, specify				
	SECTION 0 Follow Up Survoy				
9.01.	Are you willing to participate in a follow up survey by phone? *Note that the follow up will take less         time, be scheduled based on their availability and will be rewarded with pulsa         1. Yes         2. No				
9.02.	Main phone number.				
9.03.	Alternative phone number.				
0.04	On what days do your me for to be early d0	1			
9.04.	Un what day do you prefer to be called?				
	1. Monday - Wednesday				
	2. Friday				
	3. Saturday				
	4. Sunday				
0.07		1			
9.05.	what time of day do you prefer to be called?				
	1. Morning (7:00 - 12:00)				
	2. Noon – afternoon (12:00 - 17:00)				
	3. Afternoon – Night (17:00 - 21:00)				
0.01	Are you willing to participate in a follow up survey by phone? *Note that the follow up will take loss time, he scheduled based on				
5.01.	Are you winning to participate in a follow up survey by phone? Note that the follow up will take less tille, be scheduled based off				
	their availability and will be rewarded with pulsa				
	1. Yes				
	2. No				

9.02.	.02. Main phone number.		
9.03.	Alternative phone number.		
9.04.	On what day do you prefer to be called? <ol> <li>Monday - Wednesday</li> <li>Friday</li> <li>Saturday</li> <li>Sunday</li> </ol>		
9.05.	What time of day do you prefer to be called?           1. Morning (7:00 - 12:00)           2. Noon – afternoon (12:00 - 17:00)           3. Afternoon – Night (17:00 - 21:00)		

---- THANK YOU ----





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