

# **Emergency Market Mapping and Analysis (EMMA) Final Report**



<http://findmeacure.com/>

**RICE MARKET SYSTEM  
Calamba City, Laguna, Philippines**

## Calamba City Rice Market in Post-Typhoon Ketsana Disaster

### EMMA Final Report Sections

1. Executive summary or brief
2. EMMA methodology
3. The target population
4. Critical market systems
5. Market-system maps
6. Key findings – results of the gap and market analyses
7. Main recommendations and conclusions

### Executive summary or brief

Calamba City is a rapidly urbanizing city located just outside of the National Capital Region. The city is a mix of industrial parks, commercial centers and different types of businesses providing livelihood to the majority of the working force in the city. Calamba City rice supply came mostly from two (2) major sources, locally produced rice accounted for around 20 % of the rice supply while around 80% were supplied by outsiders such as traders, importers and National Food Authority (NFA).

The local farmers, both lowland and upland farmers, were producing a total amount of about 9 MT/month. The rice supplied by the farmers are purchased by local traders while the rest are sold to the local cooperative. In addition, there are 7 big rice wholesalers in Calamba City who in turn sell rice to around 2000 small rice retailers located mainly in local communities and villages.

Market prices of rice were seen to be stable even during the aftermath of Typhoon Ketsana with little price fluctuations observed by different assessments and price monitoring activities. There were no observed shortage of rice during the disaster with stores located in local markets and wholesalers readily back in business to those who need the supplies. On the other hand, suppliers and local traders felt the drop in sales and demand during the disaster brought about by the influx of rice coming from relief organizations and different aid agencies.

At the community level, small retailers felt the brunt of the disaster with a large number of them stopping operations due to flooded and washed out stores, lack of customers due to the evacuation of residents and the continued distribution of food aid to affected communities during the first two months after the typhoon.

Affected communities account for about 20% of the total population of Calamba who are mostly those living in the 10 lakeshore and riverside barangays of the city. The affected communities totalling to about 14000 households included those who stayed in evacuation centers and those that opted to stay in their flooded houses. While food aid was available during the first few weeks of the disaster, assessments showed that people were coping negatively with the limited food distributions. Some opted for reduced meal sizes, eating different types of food and others chose to skip meals to get by or to stretch the little resources they have during the time.

On the other hand, local farmers were also affected by the disaster as most of the farmer's ready to be harvested ricefields were totally destroyed or washed out by the heavy rains and the floods. Also, some of the farmers located on the lowland areas saw their fields deep under water for almost 3 months.

Target Group	Supply	HH Needs	HH short fall on consumption	Other Aid	Total Gap	Likely Gap Duration
<b>Calamba 72,056</b>	111,800 sacks of rice per month  NFA= 3000  Traders = 99460  Middle= 7780  Coop = 1520  Trader to small retailer = 40	108,000 sacks of rice per month				
<b>10 Affected Barangays 14,000 HH</b>		21,600 sacks of rice per month	8,400 sacks of rice per month	2,000 – WFP 1,000 – LGU	22400 cavans of rice per month  1 <sup>st</sup> 20 days – 5600 cavans  2 <sup>nd</sup> mo – 8400 cavans  3 <sup>rd</sup> mo – 8400 cavans	2.5 months  1 <sup>st</sup> 20 days – 5600 cavans  2 <sup>nd</sup> mo – 8400 cavans  3 <sup>rd</sup> mo – 8400 cavans

While the impact of the disaster did not greatly affect the big traders and wholesalers, the potential for the recovery of the rice market chain is also dependent on the recovery of the smaller actors along the middle of the chain: the small wholesalers, retailers and the local farmers.

And while traders felt the impact of the rice distributions and food aids on their bottomlines, they have greater resilience as they are fairly large actors with easy access to credit and capital compared to the other smaller actors in the chain. Nonetheless, there are certain risks related to food

assistance interventions that could adversely impact the full recovery of the rice market chain, particularly in relation to the resumption of business among local cooperatives and local retailers.

In fact, given the seeming strength of the market to recover immediately after the shock, it would be a major advocacy point to consider tapping the local market in supplying food needs especially rice instead of bringing in supplies from the outside.

At the initial phases of the response, it is important to ensure that further interventions strive to enhance market recovery, and at the same time ensure that the affected population are able to eat sufficient quantities of food as they restart their lives and invest in livelihoods recovery. The recovery time, especially for local retailers and farmers, is as of yet unsure given the extensive longer term flooding, and the relative disappearance of liquidity of the smaller actors in the chain and among consumers. In fact, as recovery takes off it will be important to enhance current market price monitoring activities, already underway and well-developed within the country, to include market functioning indicators to track the major recovery of the major bottlenecks in the chain and inform food assistance interventions over the next 3-6 months.

The following are the major points that would provide a framework to ensure minimum impact on markets while investing in the best interest of the affected population:

- *Advocate for closer coordination and communication between market actors, local government agencies and the humanitarian community:* While food aid at the immediate response is welcome relief for the affected communities, it would be more productive in the longer term to look at the capability of the local traders and suppliers to supply the much needed commodities such as rice. Currently, the practice has been for aid organizations to bring in aid into the affected communities instead of possibly looking at the capacity of the local markets, which risks doing more harm than good especially at the local players.
- *Advocate for humanitarian community and government agencies to strengthen assessment activities including getting information on community preferences on the type of support.* In certain cultures, disaster affected communities would deem it ungrateful to demand the type of support that they would prefer, whether in cash or in kind. However, including preference questions in the assessment phase would contribute to a better match with the actual needs during disasters.
- *Consider EMMA in determining the type of response and as part of preparedness.* EMMA is an effective tool in looking at the markets right after a disaster. However, it can also be a useful tool in the preparedness phase providing valuable information and identifying potential action points.
- *Targeted, and diversified responses:* As the initial target of ensuring that the food gap is addressed, it will nonetheless be necessary to continue with targeted activities such as cash for work and support to farmers and small retailers.
- *Monitor market recovery and potential bottlenecks* where actors are particularly affected (small wholesalers and retailers)
- *Cash-for-Work:* The greatest impact has been on the income and livelihoods of households. In an effort to support livelihood recovery, it is important that CFW activities are started up, and should continue even as food distributions are phased out. The decision between CFW

should be based on market recovery assessment, CFW being more appropriate in well functioning markets.

- *Cash grants/Cash transfers*: The unconditional transfers of cash to households and most affected market chain actors (particularly small wholesalers) are important in ensuring the start-up of livelihoods activities and market chain recovery while avoiding further indebtedness. Furthermore, there are likely to be households who are unable to take part in CFW activities, and are among the most vulnerable.

## **Section 1. Emergency context**

On 26<sup>th</sup> September at 11am, tropical storm ‘Ondoy’ made landfall near Baler, Quezon province. In 24 hours, 455 mm of rain fell, which is what would normally be expected to fall over the whole month. This was the fourth severe weather related incident in September, which normally has only two or three. Three previous typhoons had already made the surface extremely saturated before this recent heavy rainfall. The current weather system is expected to exacerbate the Southwest Monsoon.

On Monday, 28 September, the Government of the Republic of the Philippines (GoRP) declared a state of calamity in several regions and requested international humanitarian assistance to deal with the affects of Tropical Storm Ketsana, locally known as “Ondoy”.

The following regions have been declared as Calamity areas by the GoRP:

- CAR: Mt Province, Ifugao and Benguet
- Region I: Pangasinan, La Union and Ilocos Sur
- Region II: Isabela, Quirino and Nueva Viscaya
- Region III: Aurora, Nueva Ecija, Zambalez, Pampanga, Balacan, Tarlac and Bataan
- Region IV A: Cavite, Laguna, Batangas, Rizal, Quezon
- Region IV B: Mindoro (Occidental and Oriental) and Marinduque
- Region V: Catanduanes, Camarines Norte and Camarines Sur

The national response was focusing on hardest hit municipalities of Metro Manila and prevention of the capital region being further paralyzed. Electricity outages, inaccessible roads and lack of communications hampered the rescue and relief efforts. It is believed thousands of people were still stranded in the initial phase, and some areas of central Manila were witnessing a small exodus of people leaving their flooded homes with little or no supplies / personal belongings.

As at 19<sup>th</sup> October, the latest figures from the National Disaster Coordinating Council (NDCC) are as follows:

<b>Deaths</b>	<b>Missing</b>	<b>Injured</b>	<b>Affected population</b>	<b>Number of People in Evacuation Centres</b>	<b>Number of Evacuation Centres</b>
420	37	540	886,257 families (4,348,884 people)	40,109 families (189,098 people)	399

The total number of damaged houses were 39,167 (16,299 totally and 22,868 partially).

In the Province of Laguna, one of the most affected area was the City of Calamba located in Region IV-A wherein total cumulative number of affected families was 12,256 or 63,448 individuals. These were distributed among the 30 barangays out of the total 54 barangays of Calamba City.

### **EMMA methodology**

The EMMA is a rapid market analysis designed to be used in the first 2-3 weeks of a sudden onset crisis. Its rationale is that a better understanding of the most critical markets in an emergency situation enables decision makers (i.e. donors, NGOs, government, other humanitarian actors) to consider a broader range of responses. It is not intended to replace existing emergency assessments, or more thorough household and economic analyses such as the HEA, but instead should add to the body of knowledge after a crisis.

In Calamba City the EMMA team was made up of 8 members from 6 organizations including: Oxfam GB Indonesia, Oxfam GB Philippines, KFI, CONCERN, COM and RDISK. While EMMA is designed to be used by those without economic training, this team had a mix of those with significant market experience and those with none. Three days of training were provided, with additional training throughout the course of the assessment on various aspects of the tool.

Field work primarily took place in Calamba City, with secondary sources and desk-based research used to maximize use of available information. Interviews were held with key players in the market system, as well as other support players.

### **Section 2. The target population**

The target population for the market chains studied through the EMMA process was typhoon-affected population within the lakeshore and riverside barangays of Calamba City. Market chains were selected based on their applicability to the widest number of affected people.

More than 14,000 people were affected in Calamba City by the typhoon. The highest concentration of the affected population were located at the 8 lakeshore barangays and 2 barangays located in the big rivers of the City.

Damage were significant for mostly urban poor communities living along the lakeshore and riverbanks with houses being damaged, loss of assets and destruction of properties and livelihood activities. There were also middle income families affected but better built homes and more regular income opportunities provided them the chance to recover faster compared to the others. As a strategy of the EMMA team, the target population will be disaggregated due to varied needs and coping capacities among the affected communities. Focus of the EMMA will be the most vulnerable sector who have less coping capacities and will need more support and more time to recover from the shock.

***The priority of the organization is to focus its intervention on communities that have received little support from other agencies, which have experienced very high levels of displacement due to the floods, considered the most vulnerable (women headed households, persons with disability, children, senior citizens, families with no regular income, living below the poverty line) and areas where partners has experience of working in these communities.***

The seasonal calendar below shows the timing of various activities that relate to food security, shelter, or income needs and opportunities for the target population.

Seasonal Calendar for Basic Needs and Livelihoods												
FACTOR	MONTH											
	N	D	J	F	M	A	M	J	J	A	S	O
Prices of Item	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↑
Trade Volumes							↑				↑	↑
Employment Level	↑	↑	↓	↓	↓	↓	↓	↓	↑	↑	↑	↑
Input Purchases			↑			↑						
Main Harvest Sale	↑	↑	↑	↑	↓	↓	↓	↓	↓	↑	↑	↑
Repayments Due	↑	↑								↑		↑
School Expenses	↑	↑		↑	↑		↑	↑		↑		↑
Flooding Season	[Blue shaded area]								[Blue shaded area]			

### Section 3. Critical market systems

The market systems selected were chosen because they affect large sections of the target population. Participants were asked prior to the start of the EMMA to identify markets that they felt would be important to consider. On the second day of the EMMA training, a brainstorming session was kicked off with these initial suggestions, followed by additional suggestions from the participants. The group looked at market systems that fell into three categories: emergency needs, income potential, and longer term livelihood support. Six market systems were shortlisted: beans, rice, water vendors, construction labor, shelter materials, and cooking fuel.

After much discussion, the team considered the market systems that would be of greatest interest to the group. Two food markets were selected focusing on the rice and the fishing nets market. This report refers to the Rice market with emphasis on the supply side.

#### Rice market system before the typhoon

##### Background :

In Calamba City, local rice production before the typhoon covered only about 20% of the population's needs; imports and outside traders covered 80%. In the last couple of years, key informants (Department of Agriculture, Farmers) shared that there has been a continuing decline of local farmers due to higher costs of production, land conversion to industries and residential areas, and lack of incentives/support to continue rice production. There has been observed increase in sourcing rice coming from outside farmers and traders mostly coming from nearby localities and provinces including Nueva Ecija, Bulacan and Mindoro. Rice importation has also been a continuing practice by the government supplying the big traders to augment rice supplies sourcing the supply from Thailand and Vietnam.

Rice is the staple food of Calamba City. Rapid decline in production were attributed to:

- Continuing conversion to industrial parks and residential lands
- Rice importation by NFA to supply traders and wholesalers
- Increased cost of production due to increase in prices of pesticides, agricultural inputs, fuel and others
- Low return of investments due to higher production costs and low buying price as dictated by traders

### **Market chain actors**

The map (**Annex 2**) synthesizes three levels:

1. The institutional environment that influences the actors in the rice market system, e.g. the government policies, market prices, local market environment, and the seasonal calendar
2. The relationships between the principal actors in the supply chain: importers, wholesalers, local retailers, farmers and household-level consumers who are often the same as the farmers especially in rural areas.
3. The impact of key infrastructure and services on the system, e.g. storage, millers, farm workers, transport and formal and informal credit.

### **Market chain actors for rice**

#### ***Outside Traders/Millers***

80% of the rice supply of Calamba City is supplied by traders and big millers coming from outside the city. These traders come from the big rice producing provinces of Bulacan, Nueva Ecija and Mindoro. These outside traders sell rice to local traders and also to some big wholesalers in the city.

#### ***Wholesalers***

Around seven main wholesalers (dealing with up to 20000 cavans per month) can be found in Calamba City. They are selling the rice to big retailers and big commercial centers who in turn supply to local rice retailers. They are also the actors who are holding a larger amount of stock that serves the market directly, thus with an ability to impact on the supply and prices.

#### ***Retailers***

120 retailers (dealing with up to 20000 cavans of rice per month) purchase the rice from the big wholesalers. These retailers can be found mostly in the city proper and sell it to a network of local retailers and direct consumers.

#### ***Local retailers***

There are an estimated 500 local retailers mostly located in the communities and villages delivering 21600 cavans of rice per month to the target population. According to local interviews, local retailers rely on the consumption of customers who are mostly in the immediate vicinity such as neighbours, relatives and regular customers. They usually sell rice by the kilos to these household consumers.

#### ***Local upland/lowland farmers***

Available data show that there are about 635 local farmers composed of 44 upland farmers and 591 lowland farmers producing a combined volume of 9300 cavans of rice per month. The local farmers' produce are usually sold to local middlemen and the local farmers cooperative. Due to the changing context of the city moving toward rapid urbanization, there has been observed decrease



in the number of local farmers in the last couple of years. These could be attributed to higher production costs and low selling price of palay which results to low return of investments and even frequent losses. There has also been decreased interest in the younger generation to engage in local farming as they are more enticed by other jobs available locally and outside.

### ***Households***

Rice has always been the staple food of the large majority of households in Calamba City, making rice one of the most important rice market systems to study. Typically, households purchase rice on the market by kilos – 2.2 lb measurements – while better off households buy 50kg bags at a time directly from wholesalers and big retailers. Furthermore, it is typically the women within the household who are responsible for the purchasing of food items from the markets.

It has been calculated that a 5 person household normally eat approximately 3 kilos of rice per day. Households did not receive food aid prior to the typhoon, and would buy food with their own revenues (own business benefits, wages, remittances).

## **Infrastructure and services**

### ***Local farm workers***

Local farmers rely heavily on local farm workers for labor related activities during production. These are mostly landless farmers and local community members but have no other skill for employment. They are paid on a daily basis and are usually engaged on short term work. Additionally, local farm workers are also part of the most vulnerable sector as they are considered some of the poorer members of the community.

### ***Rural banks and other credit providers***

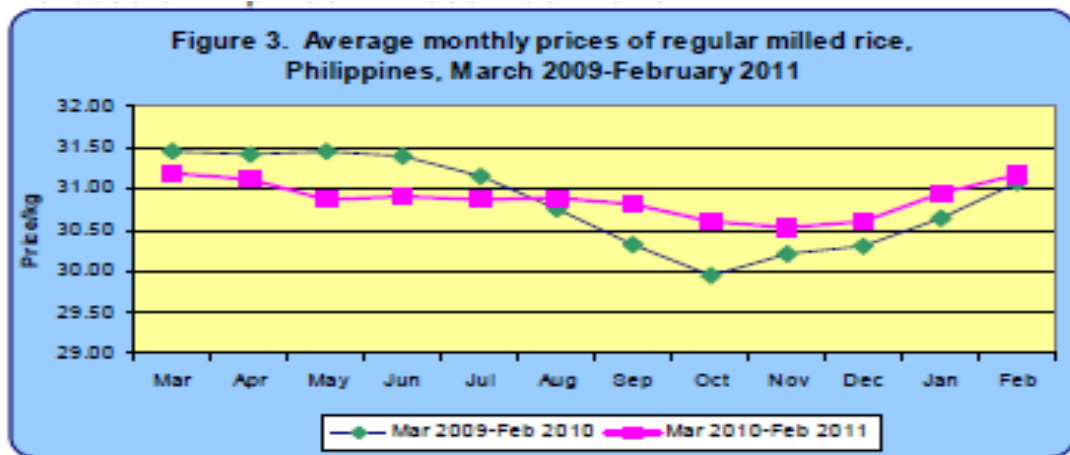
Access to credit has been really difficult for local rice market actors. Banks mostly considered the agricultural sector too risky and very informal, and thus would not be willing to invest in it. In turn, farmers are hesitant to access banks due to formal and legal requirements that they could not meet. For the farmers, it is easier to access financing and credit through the local traders who require less documentation and provide easier access albeit higher interest rates and exclusivity clause in buying rice and setting the price. Others access credit through the local farmers cooperative that provide lower interest rates and rebates although with limited financial capability.

## **Competition and integration**

In local rice market chain, the financial services provided by the traders to the producers create a dependency relationship that can lead to the procurement of rice at an unfair low price.

Further investigation is required to identify if there are any points in the supply chain where one or two market actors are able to dominate or control the supply and thus set the price of goods.

## Seasonality of the rice market system



The table above shows the pattern of prices of rice within a two year period. Rice prices fluctuations can be observed with reduction of prices during the months of October to November before increasing in December to April or June due to higher demand and lower supplies.

Data Source: WFP 2011

## Gender and the rice market system

Specialised gender roles were observed in the rice market system: men dominated in the production, transport and handling of rice while women exercised the primary responsibility in distribution, buying and selling.

Rice production is mainly carried out by men who own the land and women are involved in activities such as planting, weeding and harvesting.

The local community retailers, mostly women managing small stores, are key intermediaries in the market system. They buy in quantity from the wholesalers and traders, transporting the commodity to local communities for easy access of the consumers.

## Section 4. Rice market system after the typhoon (annex 3)

### Market chain actors for rice

#### *Outside Traders/Millers*

Traders and big millers coming from outside the city were not severely affected by the typhoon as they are still able to source from the rice producing provinces of Bulacan, Nueva Ecija and Mindoro. There was no observed change in the volume that they are able to transport. They are also capable of sourcing rice from other sources if needed.

#### *Wholesalers*

Around seven main wholesalers (dealing with up to 20000 cavans per month) can be found in Calamba City. They are selling the rice to big retailers and big commercial centers who in turn supply to local rice retailers. They are also the actors who are holding a larger amount of stock that serves the market directly, thus with an ability to impact on the supply and prices.

Based on interviews, the wholesalers were not also affected by the typhoon and flooding in terms of capacity to supply the demand of the population. They have available stocks ready to distribute to retailers days after the disaster.

### ***Retailers***

120 retailers (dealing with up to 20000 cavans of rice per month) purchase the rice from the big wholesalers. These retailers can be found mostly in the city proper and sell it to a network of local retailers and direct consumers.

Markets were operating a few days after the typhoon which showed their ability to bounce back after a typhoon. However, the local retailers felt the impact of the food distribution on their sales as there were observed decrease in purchase of rice during the first month wherein food distribution came in from the government and various humanitarian agencies.

### ***Local retailers***

There are an estimated 500 local retailers mostly located in the communities and villages delivering 21600 cavans of rice per month to the target population. According to local interviews, local retailers rely on the consumption of customers who are mostly in the immediate vicinity such as neighbours, relatives and regular customers (suki). They usually sell rice by the kilos to these household consumers.

After the typhoon, most local retailers were affected and had to stop their business operations. Many of them were located in flooded areas and had to stay in evacuation centers from a few weeks to as long as three months. Others also felt the impact of the rice distributions during the relief operations and thus had to cut back on supplies purchased from retailers and wholesalers.

### ***Local upland/lowland farmers***

Local farmers felt the full brunt of the typhoon as upland farmers saw their ready to harvest rice washed away by the flashfloods. Lowland farmers not only lost their harvest but could not also re-start farming activities as their lands stayed flooded for almost three months.

Local farmers had difficulty re-starting as they have limited options on accessing credit and financing relying mostly on traders offering usurious rates which would compound their indebtedness even more. For local labor, some farmers had to offer higher wages just to entice farm workers to go back to work as most of them were not interested due to the food aid they were still receiving.

### ***Households***

It has been calculated that a 5 person household normally eat approximately 3 kilos of rice per day. Households did not receive food aid prior to the typhoon, and would buy food with their own revenues (own business benefits, wages, remittances).

Immediately following the typhoon physical access to markets was most affected by the lack of transport and steep increases in transport costs. The disaster has led to a huge loss of earnings amongst the population: many people lost their houses, their job and/or their own small business, entailing a critical decrease of household income in particular, and of livelihoods more generally. This has affected men and women, rich and poor without discrimination. However, many women who ran small businesses lost their stocks and stores, leading to a serious loss in purchasing power.

The major loss of earnings for people who survived has led to a significant reduction not only in rice but all food consumption. While food aid was available during the first few weeks of the disaster,

assessments showed that people were coping negatively with the limited food distributions. Some opted for reduced meal sizes, eating different types of food and others chose to skip meals to get by or to stretch the little resources they have during the time.

Affected communities account for about 20% of the total population of Calamba who are mostly those living in the 10 lakeshore barangays of the city. The affected communities totalling to about 14000 Households were composed of those who stayed in evacuation centers and those that opted to stay in their flooded houses.

### **Infrastructure and services**

Impact of the disaster stretched the already limited access to formal and informal financial institutions for the different livelihood activities. Farmers, small businessmen, fisherfolks and other informal businesses needed the much needed capital to re-start income generating livelihoods while ensuring that they not go deeper into debt. Government agencies provided some relief in terms of some financial assistance but these were severely limited due to budget constraints and the magnitude of the disaster.

### **Aid in the markets**

Humanitarian agencies and government agencies resorted to food distribution during the duration of the disaster. Most often, food pack is composed of 5 kilos of rice, noodles and sardines estimated to provide for a family of 5 for 2-3 days. Distribution of relief is not the same for all those affected as interviews showed that those in the evacuation centers received a more regular supply compared to those who opted to stay in flooded areas.

In terms of rice distribution, community members most remembered the World Food Program rice distribution of 2000 cavans as one-off support to affected households. LGU officials shared that rice from WFP came in from abroad as these were transported to Calamba City straight from the port in Manila.

## Section 5. Key findings – results of the gap and market analyses

At the time of the assessment, no household economy analysis of affected people in Calamba City was available. It was not possible to estimate confidently how much purchasing power has been affected. A quick case study was undertaken to have some indication as to the evolution of household expenditures since the typhoon and the prolonged flooding.

Several household interviews have led to the conclusion that the impact of the typhoon on their normal consumption has been fairly significant. They have not had the access to basic needs, on the one hand, and on the other, they are attempting to economize on their expenses in order to take care of their family. Currently, these families have identified that there is a large gap in their consumption.

For example, one family of 5 that was interviewed had typically consumed 3 kilos of rice per day for their family consumption. However, following the typhoon they have only been consuming 2 kilos of rice per day, excluding aid.

The impact of the typhoon on their consumption, in particular for rice, is due to the fact that there has been a decrease in availability of rice on the community retailers, decreased purchasing power and the relative costs of buying rice outside the communities.

The Emergency Food Security and Assessment Report conducted by different humanitarian organizations revealed the following:

*“In terms of household food consumption scores, almost all the households in region IVA reported acceptable level of scores. These scores were recorded despite the previously detailed high levels of poverty and asset loss. However, it was found that most of the households in region IVA and NCR were adopting several negative coping strategies in order to attain a ‘good’ food consumption pattern.*

*The common coping strategies adopted across the flood affected households were: to eat less food; to eat cheaper foods; to eat borrowed food; and to buy food on credit. These strategies are common within such times and generally do not deplete household resources in the longer term. However, in regions IVA and NCR the data revealed that ‘negative’ non-consumption coping strategies were widespread. Adoption of non-consumption coping strategies such as out-migration, selling labour in advance, taking children out of school, selling household and productive assets etc. were mainly recorded in NCR and Region IVA.*

*In the short term the households in the NCR and Region IVA are more likely to be food insecure than other flood affected households, considering their starting point of a pre-flood ‘poor’ asset base, loss of assets post flood and the adoption of negative coping strategies. That said it is true for both groups that in the longer term, the impact of the typhoons has been to increase indebtedness, increase ill health, increase employment uncertainly and increase homelessness.”*

<b>Coping strategies</b>	<b>Northern regions (I, CAR, II)</b>	<b>Region III</b>	<b>NCR</b>	<b>Region IVA</b>	<b>Overall</b>
<b>Consumption Coping Strategies</b>					
Eating less preferred food	42	95	94	82	<b>79</b>
Borrowing food from neighbours/friends	44	33	55	34	<b>37</b>
Buying food on credit	53	46	50	54	<b>51</b>
Eating wild/gathered food	45	39	10	21	<b>33</b>
Reducing meal portions	31	34	32	50	<b>39</b>
Reducing number of meals by children	4	10	33	16	<b>12</b>
Reducing number of meals by adults	13	45	46	35	<b>34</b>
Skipping meals for the whole day	7	20	26	13	<b>15</b>
Sending family members outside for food	3	2	15	9	<b>5</b>
<b>Non Consumption Coping Strategies</b>					
Out-migration	5.2	4.3	18.2	15.3	<b>9.1</b>
Selling Labour in Advance	18.5	2.4	26.3	23.4	<b>15.1</b>
Taking Children out of School	2.2	0.5	20.6	10.7	<b>5.7</b>
Selling of household assets for food		1.0	13.3	12.8	<b>5.2</b>
Selling Agricultural Assets for food	10.4	5.3		2.5	<b>5.2</b>

Market prices of rice were seen to be stable even during the aftermath of Typhoon Ketsana with little price fluctuations observed by different assessments and price monitoring activities. There were no observed shortage of rice during the disaster with stores located in local markets and wholesalers readily back in business to those who need the supplies. On the other hand, suppliers and local traders felt the drop in sales and demand during the disaster brought about by the influx of rice coming from relief organizations and different aid agencies.

At the community level, small retailers felt the brunt of the disaster with a large number of them stopping operations due to flooded and washed out stores, lack of customers due to the evacuation of residents and the continued distribution of food aid to affected communities during the first two months after the typhoon.

Affected communities account for about 20% of the total population of Calamba who are mostly those living in the 10 lakeshore barangays of the city. The affected communities totalling to about 14000 Households were composed of those who stayed in evacuation centers and those that opted to stay in their flooded houses. While food aid was available during the first few weeks of the disaster, assessments showed that people were coping negatively with the limited food distributions. Some opted for reduced meal sizes, eating different types of food and others chose to skip meals to get by or to stretch the little resources they have during the time.

On the other hand, local farmers were also affected by the disaster as most of the farmer's ready to be harvested ricefields were totally destroyed or washed out by the heavy rains and the floods. Also, some of the farmers located on the lowland areas saw their fields deep under water for almost 3 months.

Target Group	Supply	HH Needs	HH short fall on consumption	Other Aid	Total Gap	Likely Gap Duration
<b>Calamba 72,056</b>	111,800 sacks of rice per month  NFA= 3000  Traders = 99460  Middle= 7780  Coop = 1520  Trader to small retailer = 40	108,000 sacks of rice per month				
<b>10 Affected Barangays 14,000 HH</b>		21,600 sacks of rice per month	8,400 sacks of rice per month	2,000 – WFP 1,000 – LGU	22400 cavans of rice per month  1 <sup>st</sup> 20 days – 5600 cavans  2 <sup>nd</sup> mo – 8400 cavans  3 <sup>rd</sup> mo – 8400 cavans	2.5 months  1 <sup>st</sup> 20 days – 5600 cavans  2 <sup>nd</sup> mo – 8400 cavans  3 <sup>rd</sup> mo – 8400 cavans

While the impact of the disaster did not greatly affect the big traders and wholesalers, the potential for the recovery of the rice market chain is also dependent on the recovery of the smaller actors along the middle of the chain: the small wholesalers, retailers and the local farmers.

And while traders felt the impact of the rice distributions and food aids on their bottomlines, they have greater resilience as they are fairly large actors with easy access to credit and capital compared to the other smaller actors in the chain. Nonetheless, there are certain risks related to food

assistance interventions that could adversely impact the full recovery of the rice market chain, particularly in relation to the resumption of business among local cooperatives and local retailers.

In fact, given the seeming strength of the market to recover immediately after the shock, it would be a major advocacy point to consider tapping the local market in supplying food needs especially rice instead of bringing in supplies from the outside.

At the initial phases of the response, it is important to ensure that further interventions strive to enhance market recovery, and at the same time ensure that the affected population are able to eat sufficient quantities of food as they restart their lives and invest in livelihoods recovery. The recovery time, especially for local retailers and farmers, is as of yet unsure given the extensive longer term flooding, and the relative disappearance of liquidity of the smaller actors in the chain and among consumers. In fact, as recovery takes off it will be important to enhance current market price monitoring activities, already underway and well-developed within the country, to include market functioning indicators to track the major recovery of the major bottlenecks in the chain and inform food assistance interventions over the next 3-6 months.

## **Section 6. Main recommendations and conclusions**

### ***Response logic***

The potential for the recovery of the rice market chain is highly dependent on the recovery of the smaller actors along the middle of the chain: the small wholesalers, retailers and local farmers. Even though the damage of the typhoon also had its impact on the traders and big wholesalers, they have greater resilience as they are fairly large actors with easy access to credit and can rebuild their warehousing and ensure security easier than the smaller actors along the chain.

As the initial phases of the response come to an end, it is important to ensure that further interventions strive to enhance market recovery, and at the same time ensure that the affected populations are able to eat sufficient quantities of food as they continue to invest in livelihoods recovery. As recovery takes off it will be important to enhance current market price monitoring activities, already underway and well-developed within the country, to include market functioning indicators to track the major recovery of the major bottlenecks in the chain and inform food assistance interventions over the next 3-6 months.

*Some key analysis points:*

### **Supply**

- 20% come from local production and 80% come from outside (Bulacan, Nueva Ecija and Mindoro) traders including NFA and imported rice
- Traders were not severely affected by the typhoon in terms of supply but encountered limitations in transportation
- Prices were stable after the typhoon as shown by the market monitoring conducted
- Markets were functioning days after the typhoon and goods were available
- Production of local farmers were totally damaged
- Production Loans of farmers doubled to be able to resume livelihood activities
- Cooperative restructured the loans with the bank- used for relending to coop members



## Access

- Rice retailing by small retailers decreased by 50%
- Number of retailers decreased by 90% at the barangay level due to floods that lasted for 4 months
- Supply was available at the big retailers but problem was access and transportation costs incurred by affected consumers
- Recovery period for small retailers took 9 months
- Affected communities reduced food consumption either through skipping meals or reducing amount of consumption
- Most vulnerable also lost source of income i.e. farmers, farm workers, fishers, petty trading
- Farm workers do not want to work anymore because of the relief goods and farmers had to increase fees for farm workers by P20. (P210 – P230)
- Farmers felt they were more vulnerable compared to others because of the lead time to recover which is 5 months
- Reduced purchasing power especially of the most vulnerable because of destroyed and damaged livelihoods and assets

### **Response recommendations**

Given the complexity of the impact of the typhoon it is essential to make sure that a multi-pronged response is undertaken by the various stakeholders including NGOs, International organizations, private actors and government. As such the key response recommendations that should be focused on in the coming months are as follows:

### **Response options**

<i>Response Options</i>	<i>Risk &amp; Assumptions</i>	<i>Timing issues</i>	<i>Effect on Market and Population</i>	<i>Indicators</i>
<i>Direct Response</i>				
<i>Cash Grants for basic needs</i>	<i>No secondary hazard Government and community supports CTP Prices are stable Markets are working</i>	<i>2 weeks</i>	<i>Increase purchasing power of target population Meet/address the food gap Support local economy</i>	<i>Target population/beneficiaries received the cash grant Able to meet the meal requirements per day (3 meals)</i>
<i>Cash for Work for clean up of drainage and roads</i>	<i>No secondary hazard Government and community supports project</i>	<i>2-3 months</i>	<i>Increase purchasing power of target population Meet/address the food gap Support local economy Improved living conditions/environment</i>	<i>Target population/beneficiaries received the cash grant Able to meet the meal requirements per day (3 meals)</i>
<i>Assist farmers to recover livelihood through the cooperative (commodity and cash)</i>	<i>Most vulnerable farmers are identified Cooperative has capacity to implement project</i>	<i>Early recovery for the next planting season (May)</i>	<i>Farmers resume livelihood activities protected from incurring big credit or selling off assets Farm workers have access to work</i>	<i>Farm activities re-starting</i>
<i>Conditional Cash Grant for small retailers to re-start LLH</i>	<i>Target most vulnerable retailers</i>	<i>2<sup>nd</sup>-3<sup>rd</sup> month as part of early recovery</i>	<i>Vulnerable retailers resume livelihoods Community members have access to rice and</i>	

<i>activities</i>			<i>other goods</i>	
<i>Indirect Responses</i>				
<i>Advocate to humanitarian community to ask target population preference of assistance during assessments</i>		<i>Early recovery Preparedness period</i>	<i>Identify more appropriate response</i>	<i>Enhanced assessment tools</i>
<i>Advocacy on utilizing the local market</i>		<i>Preparedness period</i>	<i>Support the local economy</i>	
<i>Advocacy on the use of EMMA to inform response options</i>		<i>Preparedness period</i>	<i>More response options Do no harm</i>	
<i>Support and advocate for enhanced DRR for LGUs especially on preparedness and contingency planning</i>		<i>Preparedness period</i>		
<i>Advocate for stronger cluster approach and coordination among different actors</i>		<i>Preparedness period</i>		

The following are the major points that would provide a framework to ensure minimum impact on markets while investing in the best interest of the affected population:

- *Advocate for closer coordination and communication between market actors, local government agencies and the humanitarian community:* While food aid at the immediate response is welcome relief for the affected communities, it would be more productive in the longer term to look at the capability of the local traders and suppliers to supply the much needed commodities such as rice. Currently, the practice has been for aid organizations to bring in aid into the affected communities instead of possibly looking at the capacity of the local markets, which risks doing more harm than good especially at the local players.
- *Advocate for humanitarian community and government agencies strengthen assessment activities including getting information on community preferences on the type of support.* In certain cultures, disaster affected communities would deem it ungrateful to demand the type of support that they would prefer, whether in cash or in kind.
- *Consider EMMA in determining the type of response and as part of preparedness.*
- *Targeted, and diversified responses:* As the initial target of ensuring that the food gap is addressed, it will nonetheless be necessary to continue with targeted activities such as cash for work and support to farmers and small retailers.
- *Monitor market recovery and potential bottlenecks* where actors are particularly affected (small wholesalers and retailers)
- *Cash-for-Work:* The greatest impact has been on the income and livelihoods of households. In an effort to support livelihood recovery, it is important that CFW activities are started up, and should continue even as food distributions are phased out. The decision between CFW should be based on market recovery assessment, CFW being more appropriate in well functioning markets.
- *Cash grants/Cash transfers:* The unconditional transfers of cash to households and most affected market chain actors (particularly small wholesalers) are important in ensuring the start-up of livelihoods activities and market chain recovery while avoiding further indebtedness. Furthermore, there are likely to be households who are unable to take part in CFW activities, and are among the most vulnerable.

#### **Rice Market EMMA Team:**

Team Leader: Jermaine Baltazar G. Bayas

#### Members:

Rey Magbanua

Eugene Orejas

Daisy Bacero-Hapay

Lilik Tramaya

Khamz Macacua

Mhos Abbas

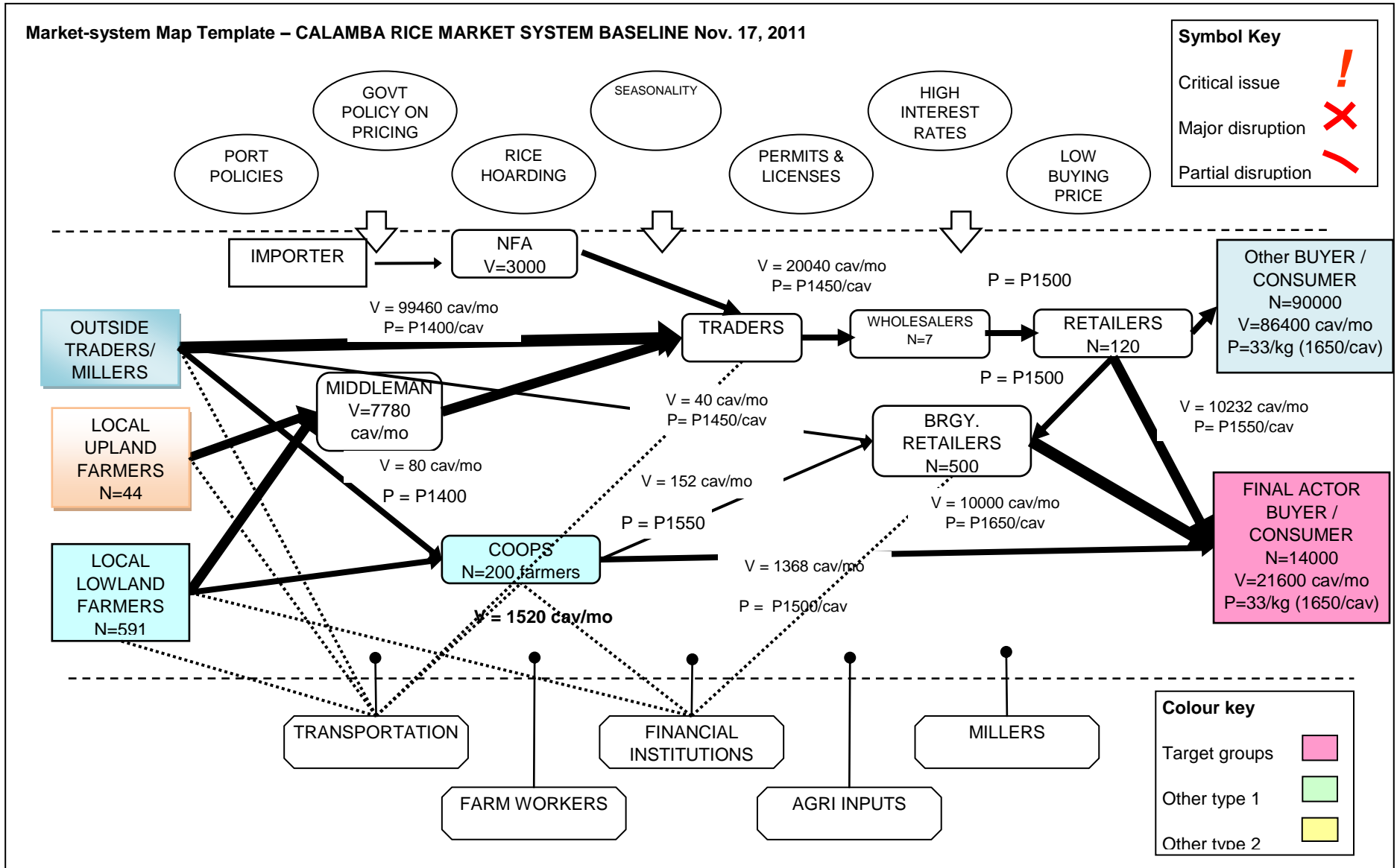
Anefel Granada

Paul del Rosario

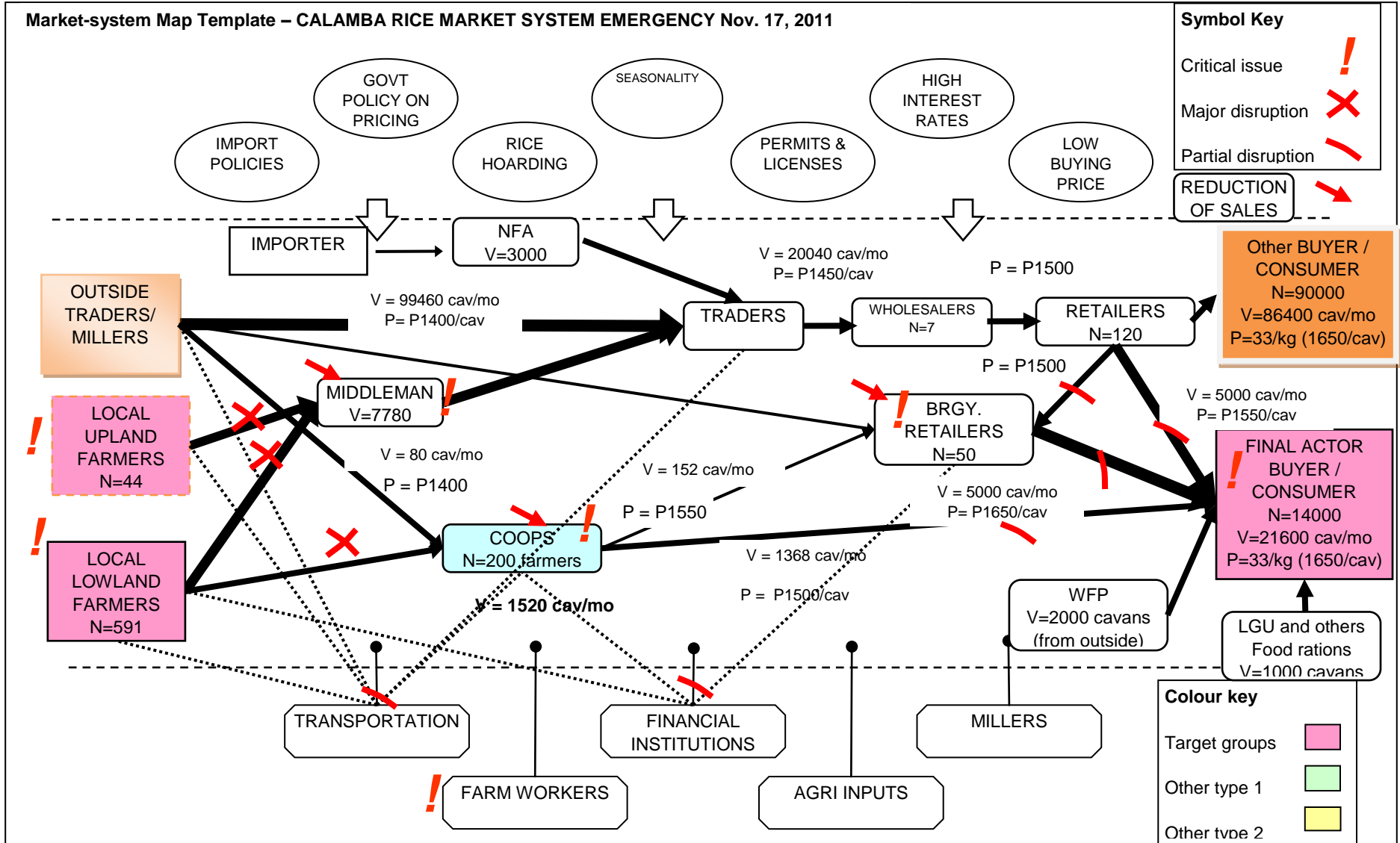
### Annex 1: Seasonal Calendar: Rice Market System

CALAMBA - SEASONAL CALENDAR												
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT
Rains												
Road Conditions	OK			OK		OK		OK			OK	
Cyclones												
Hungry Period												
Food Prices												
Education					Education costs		Holidays		Education costs			Education costs
Remittances increase												
Planting rice	lowlands						Highlands/Lowlands					
Harvest Rice												
Holidays		Christmas/ Marriage Season			Graduation		Village Feasts					

## Annex 2: Rice market system before the typhoon



### Annex 3: Rice market system after the emergency



**Annex 4: Consumption and Non-consumption Negative Coping Strategies adopted by Flood Affected Households (% of households)**

<b>Coping strategies</b>	<b>Northern regions (I, CAR, II)</b>	<b>Region III</b>	<b>NCR</b>	<b>Region IVA</b>	<b>Overall</b>
<b>Consumption Coping Strategies</b>					
Eating less preferred food	42	95	94	82	<b>79</b>
Borrowing food from neighbours/friends	44	33	55	34	<b>37</b>
Buying food on credit	53	46	50	54	<b>51</b>
Eating wild/gathered food	45	39	10	21	<b>33</b>
Reducing meal portions	31	34	32	50	<b>39</b>
Reducing number of meals by children	4	10	33	16	<b>12</b>
Reducing number of meals by adults	13	45	46	35	<b>34</b>
Skipping meals for the whole day	7	20	26	13	<b>15</b>
Sending family members outside for food	3	2	15	9	<b>5</b>
<b>Non Consumption Coping Strategies</b>					
Out-migration	5.2	4.3	18.2	15.3	<b>9.1</b>
Selling Labour in Advance	18.5	2.4	26.3	23.4	<b>15.1</b>
Taking Children out of School	2.2	0.5	20.6	10.7	<b>5.7</b>
Selling of household assets for food		1.0	13.3	12.8	<b>5.2</b>
Selling Agricultural Assets for food	10.4	5.3		2.5	<b>5.2</b>



## Annex 5: Gap Analysis

Target Group	Supply	HH Needs	HH short fall on consumption	Other Aid	Total Gap	Likely Gap Duration	Possible response	Preference for Help
<b>Calamba 72,056</b>	111,800 sacks of rice per month  NFA= 3000 Traders = 99460 Middle= 7780 Coop = 1520 Trader to small retailer = 40	108,000 sacks of rice per month						
<b>10 Affected Barangays 14,000 HH</b>		21,600 sacks of rice per month	8,400 sacks of rice per month	2,000 – WFP 1,000 – LGU	22400 cavans of rice per month  1 <sup>st</sup> 20 days – 5600 cavans  2 <sup>nd</sup> mo – 8400 cavans	2.5 months  1 <sup>st</sup> 20 days – 5600 cavans  2 <sup>nd</sup> mo – 8400 cavans  3 <sup>rd</sup> mo –	1-2 weeks-gap is filled by WFP and LGU	Budget: Php 33,600,000 money needed for 3-months USD = 781,395 for the 14,000 HH USD = 56.00 per HH  Cash Grant Cash for Work Cash Voucher

					3 <sup>rd</sup> mo – 8400 cavans	8400 cavans		
--	--	--	--	--	--	-------------	--	--