# **PHilMech**

# Brown Rice Processing Enterprise

**Manual of Operation** 



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# Brown Rice Processing Enterprise Manual of Operation



## **Department of Agriculture**

PHILIPPINE CENTER FOR POSTHARVEST DEVELOPMENT AND MECHANIZATION CLSU Compound, Science City of Muñoz, Nueva Ecija 2021

### **PREFACE**

This manual of operation is a product of the project, "Brown Rice Processing Enterprise Showcasing the PHilMech Impeller Rice Mill Technology" of the Enterprise Development Division. The manual will serve as business portfolio for potential investors interested to engage in processing and marketing of brown rice using the impeller rice mill technology developed by PHilMech.

The information contained in this manual was formulated based on the actual operations of project collaborators to provide future investors understanding on how the Brown Rice Processing Enterprise (BRPE) is operated which includes strategies, processes, procedures, operational forms and technical aspects. Effort has been made to make this BRPE manual of operation simple, easy to understand and follow.

BALDWIN G. JALLORINA, Ph.D.

Director IV

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# **TECHNICAL DESCRIPTION**

PARTICULARS	SPECIFICATIONS/CAPACITY			
*PHilMech IMF	PELLER RICEMILL			
Input capacity	350 kg/h (minimum)			
Milling capacity	293 kg/h			
Hulling efficiency	80% (minimum)			
Brown rice recovery	72 - 74 %			
Head rice recovery	79.6 – 91%			
Coefficient of hulling	0.9998			
Hulling mechanism	2 units impeller hullers with individual cyclone			
Other Features	-With paddy pre-cleaner, de-stoner and winnower -With bucket type elevator -With grader			
Prime movers • Engine-driven Model	- 1 unit 20 hp, water cooled, diesel engine with starter & battery (for rice mill) - 1 unit 6.5 hp, air cooled, gasoline engine (for pre-cleaner)			
Electric-driven Model	- 2 units of 5 hp, single phase electric motor (for rice mill) - 1unit 5 hp, single phase electric motor (for pre-cleaner)			
Dimensions (L x W x H (mm))	1658 x 1706 x 1500 (rice mill)			
Labor Requirement	2 persons			

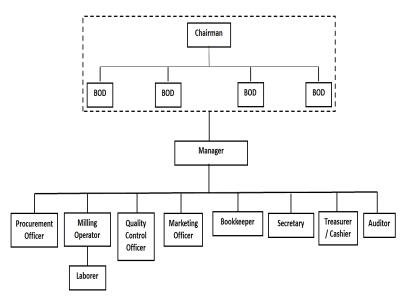
*BRPE PLANT (Rice Mill Shed/Ware	chouse, Packaging and Storing Area)
Space Requirements	<ul> <li>Rice Mill Shed/ Warehouse: 24</li> <li>square meters</li> <li>Packaging and Storing Area: 12</li> <li>square meters</li> </ul>
Location	-The site shall be located far from any building used for human habitation (at least 100 meters) The land should be with proper elevation. Low lying areas should be avoided The site shall be accessible to service roads, water supply and electric lines.
Structural Requirements	Floor     The floor should be adequately strong and capable of withstanding heavy loads and vibrations.     The floor should have 100 mm thick concrete slab with 10mm diameter reinforcing bars.     The floor shall be elevated or constructed higher than the existing ground 0.30m above the ground.     Walls     The building shall be enclosed with solid walls or wire netting.     Roofing     Roofing materials shall be made of steel truss, G.I. sheets and other steel sheeting with corrosion resistant coatings.     The minimum height from floor to truss shall be at least 2.5 m to ensure comfort to the workers.

*Equipment	*Equipment and Facilities					
Equipment	<ul> <li>Moisture meter</li> <li>Vacuum Sealer</li> <li>Impulse Sealer</li> <li>Bag closer sewing machine</li> <li>Weighing Scale</li> <li>For Palay</li> <li>With capacity of 50kg-120kg.</li> <li>For Brown Rice</li> <li>Digital weighing scale or low capacity mechanical weighing scale with a capacity of 1 kg to 10 kg.</li> </ul>					
Facilities	• Inspection and Quality Control Area - An area shall be provided where the basic inspection and tests required in establishing the quality of a given raw material or a given process can be performed.					
	Storage Areas for paddy and brown rice product     Each product shall provide designated areas in order to prevent the mix-ups and contamination, and allow piles of paddy, and brown rice products to be arranged according to its classification.     Storage areas shall be able to protect against moisture.     The bags should directly stack on top of the pallets for aeration and minimize grain quality deterioration.					
	• Lighting Facilities - A 120-volt or 240-volt outlet shall be installed every 3m along walls at sufficient height above the floor atleast 1m depending on the equipment to be used Good quality artificial lighting such as LED lights or Fluorescent lights shall be provided at all places where natural light is unavailable or insufficient.					

### **BRPE MANAGEMENT**

### A. Organizational Structure

The proposed organizational structure of an ideal Brown Rice Processing Enterprise is shown in figure below. In general, the Manager shall oversee the day-to-day operation of the BRPE while the Board of Directors shall have a strategic function of providing the vision, mission and goals of the BRPE and establish a policy-based governance system. As a start, the different activities or functions can be handled by one person taking into full considerations the accounting and auditing system.



# **B.** Duties and Responsibilities

The operation of the BRPE shall be manned by the following personnel, namely:

### 1. Manager

- Supervises the overall operation of the business;
- Programs and coordinates the activities of BRPE;
- Prepares work and financial plan;
- Assigns staff that will work on the different activities of the business; and,
- Signs documents that pertain to the operation of the BRPE

### 2. Procurement Officer

- Responsible in sourcing and purchasing palay, and other goods and services needed by the BRPE;
- Provides quality assurance on palay procured; and,
- Determines the quality of palay procured, classify them according to variety and conduct moisture content testing.

### 3. Milling Operator

- Operates the rice mill and pre-cleaner;
- Ensures the effective implementation of Preventive Maintenance Plan of the machines prior to and after milling;
- Reports to the Manager any repair works for the rice mill system; and,
- Ensure that the stock received is appropriate for milling by double checking the moisture content and variety of the palay.

### 4. Laborers (on-call)

- Ensures all palay are weighed and recorded before milling;
- Assists in operating the milling and pre-cleaning machines;
- Assists in the weighing and packaging of brown rice; and,
- Responsible in the cleanliness of the rice mill and pre-cleaning machines.

### 5. Quality Control Officer

- Conducts quality control on brown rice products and,
- Ensures that the brown rice produced is in high quality, marketable conditions and free from any impurities.

### 6. Marketing Officer

- Responsible in the monitoring the inventory of milled brown rice;
- Summarizes the sold quantity of stocks per pack and its corresponding amount;
- Responsible in developing, implementing, and overseeing all marketing and advertising strategies, as well as promotional activities; and,
- Responsible in creating strategy to market the product.

### 7. Bookkeeper

- Record the day-to-day financial transactions of the BRPE;
- Make initial evaluation on the financial performance of the BRPE;
- Prepare financial report;
- Conduct periodic inventory of properties, equipment and supplies; and,
- Present the financial statement during the Board or General Assembly meetings.

### 8. Admin Staff/Secretary

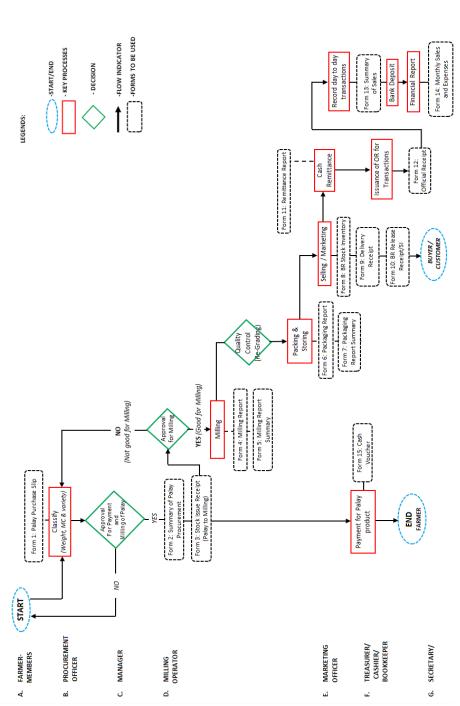
- Maintain files and keep all records of the BRPE;
- Record all incoming and outgoing communications;
- Prepare the minutes of the board meeting and other meetings of BRPE;
- Check the attendance of the BRPE personnel and laborers; and,
- Assist the Manager in coordinating with clients.

### 9. Treasurer/Cashier

- Handle all the financial transactions of the BRPE such as cash payments, credit memos, and other monetary concerns;
- Collect payments from the sale of brown rice products;
- Prepare payroll for the salaries, wages and other benefits of employees and laborers;
- Ensures that all cash collection is deposited in accordance with the policies of the BOD;
- Handles all funds, securities, and documentations relating to assets, liabilities, income and expenditures;
- Responsible in the payment and remittance of salary and release/payment of check disbursement voucher; and,
- Prepares/certifies and keeps into account all accountable forms received and issued.

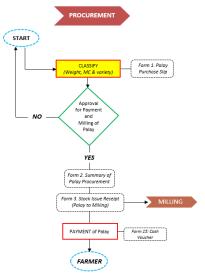
### 10. Auditor

- Audits all financial transactions of the BRPE; and
- Prepare audit reports.



**OPERATIONAL PROCESSES** 

### **PROCUREMENT**



 Sourcing and purchasing palay and other goods and services of the BRPE.

### **Persons Involved**

- Manager as approving authority on the transaction.
- Procurement Officer for the sourcing and classification of palay.
- Secretary for the maintenance of record of the transaction.
- Treasurer/Cashier for the payment of the transaction.

# **Classification and Inspection of Palay**

- 1. The flow of commodity starts with the procurement of palay from the farmers followed by the delivery of palay in the rice mill/warehouse.
- 2. Procurement Officer shall inspect the prospect palay to be procured, classify and establish the following:
  - Moisture Content (MC) Paddy shall be at 13-16% moisture content wet weight basis.



PHilMech Grain Moisture Meter

- Type of Grain/Variety (Different mixtures of varieties result difficulties at milling and results in reduced capacity, excessive breakage, lower milling recovery and reduced head rice recovery)
- Preferred varieties for brown rice are as follows: NSIC Rc 160, NSIC Rc 218, Red Rice, Black Rice and LongPing rice varieties for better milling recovery and palatability.
- Purity and Maturity of the Grain (Immature paddy grains affect the head rice yield and the presence of unhulled rice in the brown rice product.
- Color of the grain/Discoloration (Discoloration is caused by over-exposure of paddy to wet environmental conditions before it is dried)
- Weight (Paddy shall be weighed using a mechanical or ordinary weighing scale with capacity of 50kg to 120 kg. Sample weighing scale is shown below.



Mechanical Weighing Scale

### **Approval for Payment and Milling of Palay**

- Procurement Officer shall concur with the Manager for the final approval of the procurement of examined palay from the Farmer-member.
- 2. Procurement Officer shall prepare a Palay Purchase Slip (PPS) upon the approval of the Manager. Procurement Officer shall fill-out all the necessary information on the PPS, as shown below:



-For Farmer-member, the unit price per kilogram of palay shall be P4.00 higher than the existing farm gate price. This will serve as the 'patronage incentive' to a Farmer-member.
- NEVER Round off or round down any weight

Procurement Officer shall prepare three (3) copies of the PPS. One copy of the PPS for:

 Farmer-member (serve as claim slip for the payment)

measurements

- Secretary (for recording purposes)
- Procurement Officer (as source document)

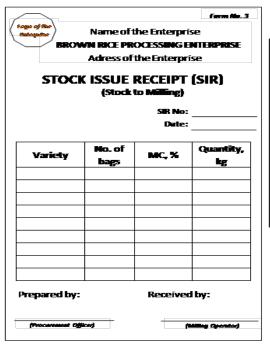
3. Procurement Officer shall then prepare a Summary of Palay Procurement (SPP) every month using the PPS as source document for the entries. This form is useful in determining the beginning inventory of the BRPE in a given time and every instance of procurement of palay as shown below:

		SUMMAF For the	Address o		TERPRESE SE UREMENT (			
Date	Name of Farmer	PPS#	MC, %	Unit Price, Php/kg	Total Amount, Php	Purchased (in)	Quantity, kg	Balance
							. ,	

Procurement Officer shall prepare and distribute three (3) copies of the SPP. One copy of the SPP for:

- Manager (as source document for checks and balances)
- Secretary/Bookkeeper (for recording purposes)
- Procurement Officer (as source document)

4. Right after the procurement, the Procurement Officer shall prepare a Stock Issue Receipt (SIR)-Stock to Milling in order to record the transfer of the custody of palay from the Procurement officer to Warehouseman/Milling Operator. The sample of SIR form is shown below:

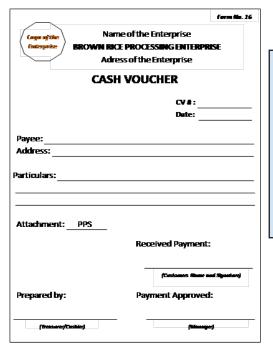


Procurement Officer shall prepare three (3) copies of the SIR and distributed to:

- Warehouseman/Milling Operator (proof of transfer of custody)
- Secretary (for recording purposes)
- Procurement Officer (as source document)

# **Payment of Procured Palay**

1. Treasurer shall prepare the Cash Voucher (CV) indicating the Name and Address of the PAYEE, the item of expenditure and the total amount of payment. An example of CV is shown below.



Any cash outflows should always be accompanied with cash vouchers (CV).

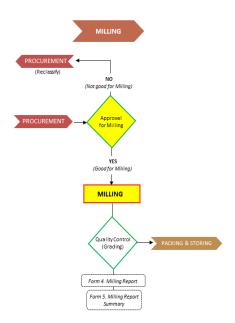
Treasurer shall prepare duplicate (2) copies of the CV. One copy of the CV for:

- Farmer-member (original copy)
- Treasurer (duplicate copy)

2. The CV shall be forwarded to the Manager for approval before releasing the payment. The CV shall then be returned to the Treasurer for safe keeping.

### **MILLING**

- refers to the process of removing the husk and/the bran layers to produce an edible, brown rice or white rice kernel that is free of impurities.



### Persons Involved

- Manager that supervises the overall operation of the BRPE.
- Milling Operator/ Quality Control officer operates the rice mill system including the conduct of repairs and maintenance.
- Laborer that assist in operating the rice milling machine, weighing and packaging of brown rice including the maintenance and cleanliness of whole rice mill facility.

The Milling Operator can also be the Quality Control Officer. This strategy is helpful in reducing labor cost.

### **Milling Operation**

- The milling operator will inspect again the sample if it meets the quality standard of palay for milling such as moisture content, weight, variety and among others.
- When the paddy passed the standards, it will directly go to milling. The samples which failed to meet the standards will be returned to the warehouse for reconditioning or drying.
- 3. It is necessary to clean the grain before milling for the following two reasons: (i) to prevent contamination of the finished product; and (ii) to protect the rice mill or dehuller from excessive wear or damage by stones and other foreign materials.
- 4. With the approval of the Manager, the Milling operator will then start the milling operation.

5. After the palay milling and quality control check, the Milling Operator shall prepare a Milling Report (MR) for proper recording of the milling output. MR also serves as the transfer record of custody of brown rice product from Milling Operator/Quality Control Officer to Packaging Officer/Marketing officer. An example of MR is shown below:

{	Langer of title:	BROWN A	Name of the RICE PROCES ddress of the LUNG REI	SSING ENTE Enterprise			Form No. 4
Batch No: Date:							
	Weight of			Milled	Rice, kg		
Variety	Clean Dried Palay, kg	MC, %	Weight of Good	Weight of Brokens	Weight of Brewers	TOTAL	Recovery, %
Prepared by:	(Milley Operator)			Received b	-	Micen/Secretary)	

Milling Operator/Quality Control Officer shall produce and distribute three (3) copies of the MR. One copy of the MR for:

- Packaging Officer
- Secretary (for recording purposes)
- Milling Operator (as source document)

6. Milling Operator shall then prepare a Milling Report Summary (MRS) for every month using the MR as source document for the entries. This form is useful in determining the beginning inventory of Milled rice of the BRPE for easy auditing of the inventory count. This shall be updated on every instance of milling operation. An example of MRS is shown:

			RPRISE	SSING ENTE Enterprise			per enfittine: temperature		
		ı	Y (MRS)	UMMAR	ORT S	LING REI			
		Rice, kg	Milled			Weight of			
Milling Recovery	TOTAL	Weight of Brewers	Weight of Brokens	Weight of Good	MC, %	Clean Dried Paloy, leg	Ratch #	Variety	Date
+									
+									
+									
+									
_									
+									
+									
+									

Milling Operator/Quality Control Officer shall produce and distribute three (3) copies of the MR. One copy of the MR for:

- Packaging Officer
- Secretary (for recording purposes)
- Milling Operator (as source document)

# **QUALITY CONTROL, PACKING & STORING**

- Quality control refers to a system of maintaining quality standards in the brown rice products.
- Packing/packaging is the process of ensuring adequate protection and safe delivery of product to the consumer. Meanwhile, storing is the process of keeping the grains, whether in bags or bulk, in a storage structure like the warehouse to protect from weather and pests for short or longer time.

### **Persons Involved**

- Manager that supervises the overall operation of the BRPE.
- Quality Control Officer which ensures the quality standards of the brown rice products.
- Packaging officer/Marketing Officer that monitors the packaging of and storage inventory of milled and packed brown rice.
- Laborer that conducts the quality control, weighing and packaging of brown rice including the maintenance and cleanliness of whole processing facility

The Marketing officer can also be the Packaging officer. This strategy is helpful in reducing the labor cost.

# **Milling Operation**

- 1. After milling, the following quality control activities shall be undertaken:
- a. Grading
- The process of classifying through visual observation the brown rice product into groups according to quality and size such as the percent head rice and brokens.

### NOTE:

- Grading improves the quality of the products which help to compete to the others and increase the value resulting to high profit.
- Grading process can be done using a mechanical grader and or manual grading. A mechanical grader separates the head rice from broken.
- The PHilMech impeller rice mill has a grader assembly which separates the headrice, brokens and brewers. The grader is shown below:



Grader Assembly of PHilMech Impeller Rice Mill

### b. Cleaning

- The process of removing impurities that are present from the brown rice product such as those defective grains (chalky, insect damage, immature), unhulled palay, dirt among others.

- c. Final Brown Rice Inspection
- Based on visual observation the brown rice product shall undergo final inspection to meet the following quality requirements:

Clean, wholesome, uniform in size and color.

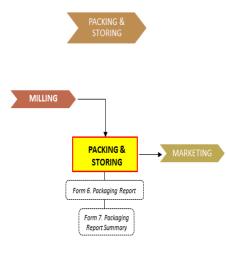
- Shall be safe and suitable for human consumption.
- Shall be free from abnormal flavors, sour, obnoxious smell or other undesirable odor and discoloration; and
- Shall be free from contaminants, parasites, micro-organisms, fungi or other poisonous or deleterious substances in amounts that may constitute a hazard to human health.

Sometimes the milled products have unhulled paddy, rice hull and immature grains. It can eliminate by manually picking the unnecessary object in the brown rice product.

### d. Hygiene/Sanitation

- The major hygiene problem arises in rice mill is from dust or bran which can collect on ledges and floors.
- If dust accumulates above equipment it may become rancid or infested and then fall as large lumps into the product, causing contamination.
- Accumulations of hull, bran/dust also attract rats and birds which contaminate grain and stored flour with hairs, feathers and excrete.
- A cleaning schedule should therefore be implemented each day by operators who have the responsibility and time to ensure that it is done effectively.

# **Packing**



- Brown rice shall be packed in suitable packages which shall of food quality, clean, safe and free from insect, pest and contaminants. They shall not impart any toxic substance or undesirable odor or flavors to the product.
- Brown rice shall be packed in containers which will safeguard the technological, hygienic and nutritional qualities of the products.
- Each package shall contain rice of the same type and of the same grade designation. Each package shall be securely closed and sealed.
- Vacuum plastic bags and woven polypropylene sacks are recommended for packaging the brown rice products.

### > Vacuum Plastic Bags

- For 1-or-2 kilograms packaging, brown rice shall be packed and sealed in vacuum plastic bag made of Nylon Polyethylene (PE) or Poly-nylon material.
- Vacuum plastic bag shall be 70-115 microns in thickness.
- Vacuum plastic bag should have atleast 12in x 10in dimensions (LxW) with the capacity of 1 or 2 kilograms.
- Vacuum plastic bag shall be ideal for vacuum sealing machine and impulse sealer machine.

### > Woven Polypropylene Sacks

- For 25 kilograms packaging, brown rice shall be packed in ordinary sacks or laminated sacks made of Woven Polypropylene material.
- Ordinary sacks or laminated sacks should have atleast 32in x 20in dimensions (LxW) with a folded/stitched base and a hemmed mouth.

# Labeling

- Label should be putting stickers on plastic bags, or by stamping using silk screen printing on ordinary sacks, and or use of laminated sacks bearing the brand name of the company/cooperative.
- Labeling for Vacuum Plastic Bags
  - > Sticker should attach to the vacuum plastic bag which serves as labeling for the brown rice products.
  - The sticker should have atleast 6in x 4in (LxW) dimensions depending on the size of the vacuum plastic bag.
  - > The sticker must be printed on vinyl sticker paper specifically in YUPO vinyl sticker with ultraviolet (UV) coating or lamination. A sticker that was printed in an ordinary sticker paper has a low quality and short life unlike the vinyl sticker with UV coating. Stickers with UV coatings prolong the life of the sticker which protects it from wet, dirt and fade of color.
- Labeling for Ordinary Sacks or Laminated Sacks
  - > For the ordinary sacks, silk screen printing should be used in labelling. Labelling using silk screen is the cheapest way to label the ordinary sacks. The ink used shall be air dry ink and it must be stick in Polypropylene material.
  - > For the Laminated sacks, printing of the label was included and the only thing you need to prepare is the design to be used.

    Laminated sacks can be ordered at printing press engage in sacks printing.

- In addition to the labelling requirements, each package shall legibly and indelibly marked with the following:
  - > Product name/Brand name
  - > Name, address and physical location of the manufacturer/ packer. Net weight, in kg
  - > Packing date
  - > Nutritional Content
- The figures below are the packaging materials used to secure and pack the brown rice.







Vacuum Plastic Packaging





Ordinary and laminated packaging sack

# Weighing

- The 1 or 2 kg brown rice pack shall be weighed using a digital weighing scale or low capacity mechanical weighing scale with a capacity of 1 kg to 10 kg for accurately weighing.
- The 25 kg brown rice sack shall be weighed using a digital weighing scale, mechanical or ordinary weighing scale with capacity of 25 kg to 50 kg.
- The digital weighing scale and mechanical weighing scale is shown in the next page.
- Brown rice products should be carefully filled to ensure that no dust or dirt and that the amount in the vacuum plastic and sack is the same as the net weight described on the label.



Digital Weighing Scale



Mechanical Weighing Scale

## **Sealing or Closing**

- For 1-or-2 kilograms packaging
  - > Brown rice pack in 1 or 2 kg packaging shall be sealed using vacuum sealer machine or impulse sealer machine.
  - The vacuum sealer machine should be floor type model, tabletop model or portable vacuum model with atleast 10 inches sealing length and atleast 10mm sealing width.

- > The vacuum sealer machine shall seal Nylon Polyethylene (PE) or Poly-nylon material.
- > The impulse sealer machine shall be foot sealer or hand sealer model with atleast 10 inches sealing width and atleast 2mm sealing width.
- The impulse sealer machine shall seal the openings of all kinds of plastic bags including anti-static and must have an adjustable heat timer.
- For 25 kilograms packaging
  - > Brown rice pack in 25 kg ordinary sacks or laminated sacks shall be closed using the bag closer sewing machine.
  - The bag closer sewing machine should be single thread or double thread chain stitch.
- The different sealing/closing machine is shown below:



Tabletop Vacuum Sealer



Bag Closer Sewing Machine



Impulse Sealer

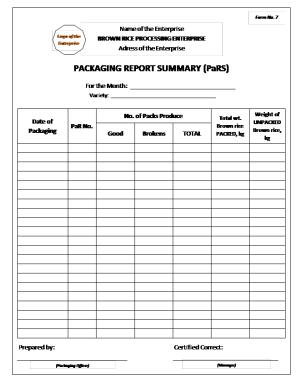
• After the brown rice is packed, the Packaging Officer/Marketing Officer shall prepare a Packaging Report (PaR) for proper recording of the packed brown rice. An example of PR is shown below:

1	aga afilia:	BROWN RICE	of the Enter PROCESSING s of the Enter	ENTERPRISE	Farmi	No. 6
		PACKAGIN	IG REPOF	RT (PaR)		
				PaR No:		
				Date:		
Date of	Variety	Total	No. of Pades Produce		Total wt.	Weight of UNPACKED
Milling	Variety	Weight,kg	Good	Brokens	PACKED, kg	Brown rice , kg
Prepared by:			Rec	ceived by:		
	chujing Office)		-	fillinda	Hay Officer/Secretary	

Packaging Officer shall prepare three (3) copies of the PR. One copy of the PR for:

- Manager (as source document for checks and balances)
- Secretary (for recording purposes)
- Packaging Officer/Marketing Officer (as source document)

• Packaging Officer/Marketing officer shall then prepare a Packaging Report Summary (PaRS) for every month using the PaR as source document for the entries. This form is useful in determining the monthly inventory of packed brown rice of the BRPE for easy auditing of the inventory count. This shall be updated on every instance of packing operation. An example of PaRS is shown:



Packaging Officer shall prepare three (3) copies of the PaRS. One copy of the PaRS for:

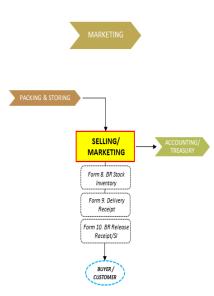
- Marketing Officer
- Secretary/Bookkeeper (for recording and for checks and balances purposes)
- Procurement Officer (as source document)

# **Storage**

- The purpose of grain storage facility is to provide safe storage conditions for rice grain in order to prevent grain loss caused by adverse weather, moisture, rodents, birds, insects and micro-organisms.
- Stacks of rice products shall be neatly and orderly arranged according to their categories and clearly indicated in order to prevent the mix-ups.
- Rice products shall not be stored with pesticides, fertilizers or other chemicals harmful for consumption.
- Maintain the cleanliness. Allow free air circulation inside the storage room. Clean the wall, ceiling and floor before storing grains.
- Avoid exposing the stored grains to high humidity. The rice bags/ packs should place in cool and dry place.
- The rice bags/packs should not directly stack or put on the floor. Those bags should be laid on the rack above 20cm above the floor. The use of wooden pallets shall be avoided as they can be the breeding grounds for rice pests.
- Adequate space between stacks of rice products shall be provided for ease of working and inspection. The wall space should be at least 0.50 m and between stacks should be around 0.6 m for good ventilation and ease of cleaning. Besides, the rice stacks should provide a space of at least 1 meter away from the roof.

### **MARKETING**

- refers to the activities of the enterprise associated with buying, advertising, distributing, or selling the brown rice product.



The Marketing officer can also be the Packaging officer. This strategy is helpful in reducing the involve personnel to lessen the compensation expenses.

#### **Persons Involved**

- Manager person responsible for supervising the overall operation of the BRPE.
- Marketing Officer responsible in monitoring the inventory of milled brown rice and summarizes the sold quantity of stocks. Marketing officer develop, implement and oversee strategy to market the brown rice products.
- Treasurer/Cashier facilitate the receiving and recording the payments of delivered packed brown rice and issuance of official receipts.
- Secretary- shall keep a copy of source documents pertaining to the monthly sales of packed brown rice of the BRPE.
- Laborer/Helper- shall help in the transfer and release of packed brown rice for delivery.

### **Ways to Market Brown Rice**

Marketing of brown rice come in two ways: (1) traditional marketing and (2) electronic marketing. Traditional marketing includes the face-to-face selling or direct selling while Electronic marketing or E-marketing is a new way to market the products using internet through the different online platform and selling applications such as facebook and Shopee.

For more details about Electronic Marketing especially Shopee see Annex 2. Annex 2 shows on how to have a Shopee Seller account and how to start selling brown rice on Shopee.

## **Receiving of Orders**

- Marketing Officer shall facilitate the receiving of orders of brown rice.
  - > Orders of brown rice from customers shall be received through the ff:
    - 1. BRPE dedicated cellphone number (call or text, BRPE's prerogative)
    - 2. BRPE Official Facebook page (through private message)
    - 3. BRPE Shopee store
  - To finalize the order of the customer, the following details of shall be supplied
    - 1. Customer's order
    - 2. Name of customer
    - 3. Address of customer
    - 4. Contact number
    - 5. Mode of procurement
      - For delivery
      - For Pick-up

For Delivery: Always inform the customer of the additional delivery fee, depending on the location of the delivery address. For Pick-up: Always set the specific date and time of pick-up.

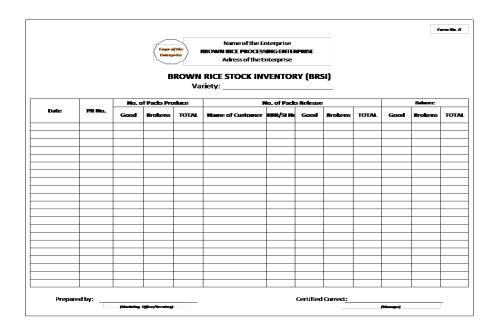
## **Preparation for Delivery**

• Upon the confirmation of order, the Marketing Officer shall prepare the order based on the detail of order received. Packed brown rice shall prepare with the help of the Laborer/Helper.

First-In-First-Out shall be followed in the preparation of the order of the customer.

- Specific orders shall be labelled accordingly to avoid mixing the allocation of products to other orders. Each order may be labelled with the ff:
- Customer's Name
- Number of packs ordered
- Mode of procurement
  - For Delivery: includes the date of Delivery
  - For Pick-up: includes the date and time of Pick-up

• The Marketing Officer shall then update the Brown Rice Stock Inventory (BRSI) on every release of brown rice product. This form is useful in the control and identification of inventory of brown rice stocks of the BRPE. The BRSI is shown below:



The Marketing Officer shall produce and distribute three (3) copies of the BRSI in every month. One copy of the BRSI for:

- Manager (as source document for checks and balances)
- Secretary/Bookkeeper (for recording purposes)
- Marketing Officer (as source document)

• After updating the BRSI, the Marketing Officer shall then prepare the Delivery Receipt (DR) and the BR Release Receipt/Sales Invoice (SI). The DR is shown below:

Enterprise	Name of the E CRICE PROCES Adress of the E	SING ENTERPI Enterprise	Form No. 9
DELI	VERY RECI	DR#: Date:	
Customer: Address:			
Particulars	Quantity	Unit Price	Total
This is to cert delivery stated above.	tify that I have	received the Payee:	total quantity of

The Marketing Officer shall produce two (2) copies of the DR. One copy of the DR for:

- Customer (original copy)
- Marketing Officer (as source document, duplicate copy)

• The BR Release Receipt/ Sales Invoice is shown below:

aga aj'ida:			e Enterprise <b>ESSING EN</b> T		
lindes paries:	A	dress of th	e Enterprise	•	
В	R RELEAS	E REÇEI	PT/SALE	s invo	ICE
ame:			BR	RR/SI No.	
ate:			_		
Date	Go	od	Broken		Total (Php
	No. of Pack	Amount	No. of Pack	Amount	Total (Pil)
TAL					
				ed by:	

The Marketing Officer shall produce BRRR/SI in duplicate. One copy of the BRRR/SI for:

- Customer (original copy)
- Marketing Officer (as source document, duplicate copy)

### **Distribution of Orders**

- Below are product distribution options that can be adopted by the BRPE.
  - > For Delivery by Partner Delivery Service Provider
    - The Marketing officer shall contact the partner delivery service provider for the pick-up and payment of order/s for delivery.
    - The order/s for delivery shall then be paid by the partner delivery service provider. The Marketing Officer shall then give the Delivery Receipt together with the Sales invoice upon payment.
    - The delivery service provider shall give the DR and SI to the customer upon delivery of brown rice products as a proof of purchasing.

### > For Pick-up

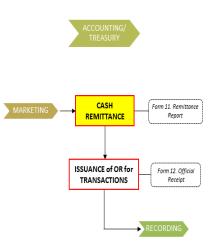
- The Marketing officer shall contact the customer and prepared the orders on the agreed date and time of pick-up.
- Upon payment, the Marketing Officer shall then prepare the Delivery Receipt together with the Sales Invoice.

### > For Delivery by BRPE

- The Marketing officer shall prepare the brown rice products and haul to the delivery vehicle and commence delivery.
- Before commencing delivery, the Marketing officer shall then prepare the Delivery Receipt and the Sales Invoice and give it to the deliver officer.
- Upon delivery, and upon receiving the payment, the delivery officer will give the DR and SI.

### **ACCOUNTING**

- Systems of recording and summarizing business and financial transactions and analyzing, verifying, and reporting the results.

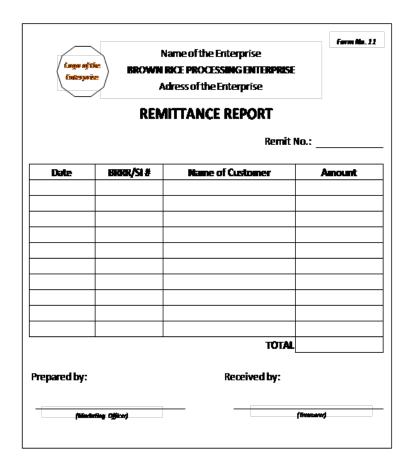


#### **Persons Involved**

- Manager person responsible for supervising the overall operation of the BRPE.
- Marketing Officer responsible in the remittance of cash payment of sold brown rice.
- Treasurer/Cashier facilitate the receiving and recording the payments of delivered packed brown rice and issuance of official receipts.
- Secretary- shall keep a copy of source documents pertaining to the monthly sales of packed brown rice of the BRPF.

### **Remittance of Sales**

- Marketing Officer shall prepare the Remittance Report. This form is useful in determining the inventory sales of the BRPE. This form is useful in the check and balances on the sales of brown rice. An example of remittance report is shown in the next page.
- Once prepared, the remittance report together with the collected payment, it will be remitted to the Treasurer/Cashier.
- The Treasurer/Cashier shall sign the Remittance Report to validate and account the remittance

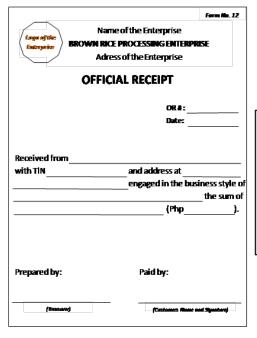


Marketing Officer shall prepare three (3) copies of the Remittance Report. One copy of the RR for:

- Treasurer (as source document for checks and balances)
- Secretary (for recording purposes)
- Marketing Officer (as source document)

## **Issuance of Official Receipt**

- Issuance of the Official Receipt (OR) shall only be prepared by the Treasurer, if and only if:
  - > Upon the request of the customer/s for their reference; and
  - > Full payment of accounts receivable by a specific customer
- For the preparation of the OR, the Sales Invoice shall be used as the basis for the details to be cited. A sample OR is shown below:

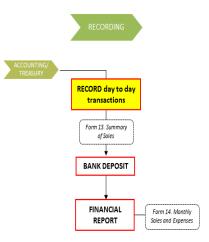


Procurement Officer shall prepare three (3) copies of the SIR and distributed to:

- Customer (original copy of the OR)
- Treasurer (source document for accounting and bookkeeping)
- Secretary (as source document for recording purposes)

### RECORDING

- Also known as bookkeeping. All the financial transactions are recorded in a systematic and chronological manner.



#### **Persons Involved**

- Manager person responsible for supervising the overall operation of the BRPE.
- Marketing Officer -
- Treasurer/Cashier/Bookkeeper shall consolidate all transactions involving the flow of monetary resources of the cooperative.
- Secretary- shall keep a copy of source documents pertaining to the monthly sales of packed brown rice of the BRPE.

## **Preparation of Summary of Sales**

- The Marketing Officer shall prepare a Summary of Sales. The SI and OR shall be the source document in accomplishing the Summary of Sales.
- The Marketing Officer shall consolidate all transactions for the marketing of brown rice by the end of each month. This shall also be subjected for evaluation and certification by the Manager.
- A sample Summary of Sales is shown in the next page.

	(memorie) BROWN	Name of the Ex RICE PROCESS dress of the E	ING ENTE	RPRESE		Form No.
	SUI For the Months	MMARY O	F SALES			
Date	Name of Customer	BBRR/SI	SI OR#		d Rice	Amount Paid, Php
				Good	Brokens	rau, rap

Marketing Officer shall prepare three (3) copies of the Summary of sales and distributed to:

TOTAL

Certified Correct:

- Manager

Prepared by:

- Treasurer (source document for accounting and bookkeeping)
- Secretary (as source document for recording purposes)

## **Deposit of Sales**

- Treasurer shall deposit the generated sales of the BRPE to the bank for safekeeping.
- Deposit of sales may be done on a regular basis, depending on the agreed frequency by the cooperative through a resolution.
- The passbook of the cooperative's account shall be updated upon deposit.

## **Preparation of Monthly Sales and Expenses**

- The Treasurer shall prepare the Monthly Sales and Expenses.
- The Treasurer shall consolidate all transactions involving the flow of monetary resources of the cooperative at the end of each month.
- Monthly Sales shall be in reference to the prepared Summary of Sales.
- All receipts pertaining to the expenses of the BRPE for each month shall be consolidated and recorded. This shall be subjected for evaluation and certification by the Manager. A sample Monthly Sales and Expenses is shown in the next page.
- At the end of each month, the Treasurer shall prepare a short report of the financial status of the cooperative referencing the prepared Monthly Sales and Expenses. This shall be presented during the monthly meeting of the cooperative.

Name of the Enterprise  RECOMN RICE PROCESSING ENTERPRESE Address of the Enterprise  MONTHLY SALES AND EXPENSES									Form No. 2			
	Date	Particulars	Transaction Receipt #	SALES	Purchases	EXPEN Operating Expenses	ISES Admin Expenses	Others	R	OUT	RALANCE	
	Beginning Bala	nce as of										

Balance Ending as of					
Prepared by:		Certified Corr	ect:		

Treasurer shall prepare duplicate copies of the Monthly Sales and Expenses. One copy of the monthly sales and expenses for:

- Manager (as source document for checks and balances)
- Treasurer/Bookkeeper (as source document)

## **ANNEX**

## **Annex 1. List of Supplier**

Item	Company	Address	Contact/Email address
Bag closer sew- ing machine	EIGHT LIFE TRADING	345 M.H. Del Pilar St. Arkong Bato, Valenzuela City	0995-164-0708/ florenzram@yahoo. com
	PHILIPPINE NEWLONG CORPORATION	3590 Davila Street Brgy. Sta Cruz Makati City	(02) 896-4876
Impulse sealers	COLENT MARKETING PHILIPPINES INCORPORATED	Berton's Place #46 Sta. Rosa Street, Quezon City	0917-508-2674
	EIGHT LIFE TRADING	345 M.H. Del Pilar St. Arkong Bato, Valenzuela City	0995-164-0708/ florenzram@yahoo. com
Ordinary/Lami- nated sacks	BELTRAN SACKS STORE	684 Sto. Cristo St. Binondo, Manila	0917-882-1936/ sako.binondo@ gmail.com
	RD SACK DEALER CORPORATION	#31 Ulingan East Lawang Bato, Valenzuela City	0917-676-1937/ rdsackdealer@ gmail.com
Stickers	LAVA PRINTING PRESS	148 Pag-asa St. Raymundo Ave., Caniogan Pasig City	0927-373-1892/ monlava@yahoo.com
Vacuum plastic bags	EIGHT LIFE TRADING	345 M.H. Del Pilar St. Arkong Bato, Valenzuela City	0995-164-0708/ florenzram@yahoo. com
Vacuum sealers	EIGHT LIFE TRADING	345 M.H. Del Pilar St. Arkong Bato, Valenzuela City	0995-164-0708/ florenzram@yahoo. com
	WEITEX SCALE INDUSTRIES	Tetuan St. Sta. Cruz, Manila	0917-810-0598/ weitexindustries@ gmail.com
Weighing scale	EIGHT LIFE TRADING	345 M.H. Del Pilar St. Arkong Bato, Valenzuela City	0995-164-0708/ florenzram@yahoo. com
	WEITEX SCALE IN- DUSTRIES	Tetuan St. Sta. Cruz, Manila	0917-810-0598/ weitexindustries@ gmail.com

#### Annex 2. How to Enroll and Sell on SHOPEE

Nowadays, marketing using internet is gaining popularity. E-marketing or electronic marketing is a new way to market the products. Different selling sites are easily accessible resulting in another way of marketing different products. One of the many selling sites is "SHOPEE". It serves users in Southeast Asia and Taiwan to buy and sell products online. Shopee presents an expansive range of products, a social community for exploration, and smooth and satisfactory services (Shopee.com).

Basic Requirement to Start Selling on Shopee

- 1. Mobile phone or desktop computer/laptop
- 2. Internet connection
- 3. Bank account (Where Shopee deposit you your earnings)
- 4. Brown Rice products you are going you sell
- 5. Name for your Store Your Store Name creates an impact to the customer; it will represent your Brand.

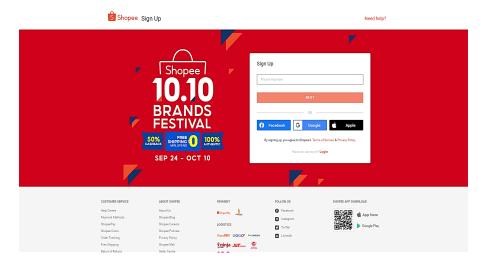
Getting started on Shopee is simply. Signing up in Shopee has two ways: using your mobile phone or using desktop computer/laptop.

### • Using Desktop computer/Laptop

1. Visit and create account on Shopee.ph. Click **Sign Up** button. You can Sign Up using your cellphone number, Facebook account, Google account/Gmail account and even Apple account.

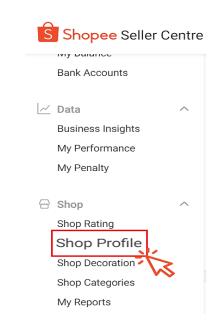


2. You will need to **add and verify your phone number and email** to ensure the account and your relevant product listings are visible to your potential buyers.



3. After you've completed the Signing Up, Go to **Seller Centre** and select **Shop Profile** to set-up and finish your Shop profile.





From the Shop Profile, you need to fill up the 3 main components:

### √ Shop Name

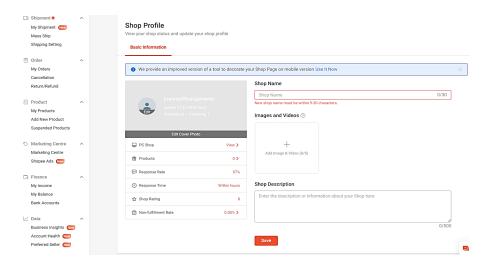
Name your shop with distinctive, realistic and which reflects your products.

### √ Images and videos

You need to give your shop a strong identity by uploading or adding up to 5 images/videos.

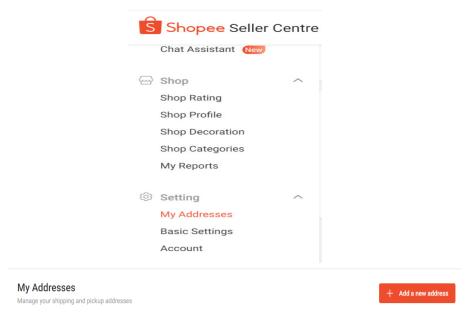
### √ Shop description

> Create short and informative description of your shop to gain shoppers/customers. You may include your shop/company history and the type of products you offer.



4. After setting up your Shop Profile you need to review the **Prohibited** and Restricted Items Policy of Shopee to ensure that your product can be listed for sale in accordance to their Shopee's Terms and Condition.

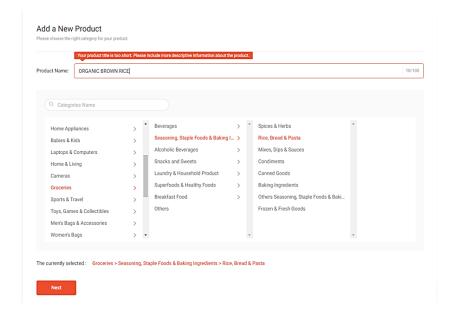
5. Click again **Seller Centre** and select **My Addresses**. My Addresses allows you to manage your Shipping and Pick-up Addresses



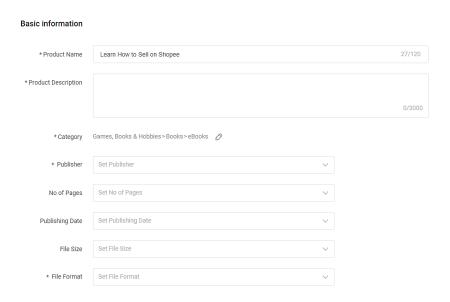
- > Add your pick-up address by clicking the +Add a new Address. You can add multiple pick-up address but it is advisable to place only one pick-up address.
  - 6. Next is to List your Product from Seller Center. Click again the **Seller Centre** and Select **Add New Product**.



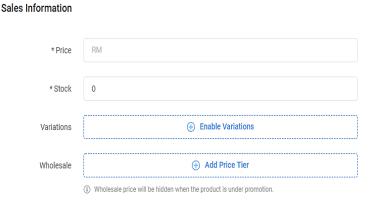
7. Fill up the **Product Name** and click in the **Groceries** category then click **Seasoning, Staple Foods**...and lastly click **Rice, Bread & Pasta** as the desired category for the Brown Rice



# 8. Insert the Product Description and other relevant product information.

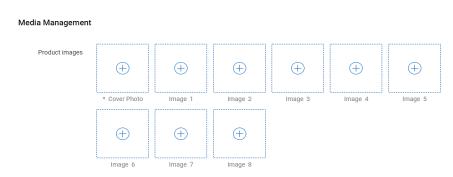


9. Insert the Product Price and Number of Stocks of brown rice.



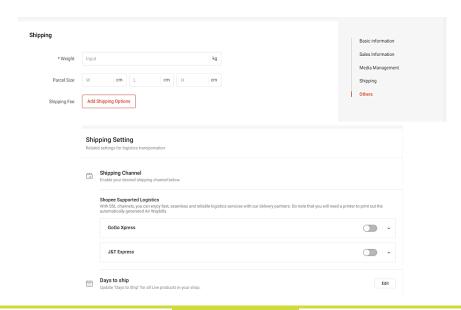
10. Insert high quality photos of Brown Rice product for the **Media Management**. Insert atleast 5 photos of your brown rice product with at most file size of 2 Mb per photo.

Notice: Photo size with greater than 2 Mb will not be uploaded



11. Arrange and insert the **Shipping Settings** like the weight, parcel dimensions or size, and the courier/delivery providers

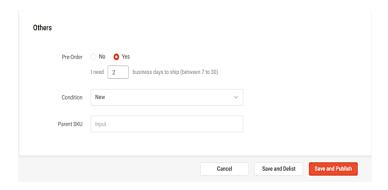
Notice: Different courier/delivery providers may have different shipping fees or restrictions on parcel size and weight. Select only **Shopee Supported Logistics** providers for inconvenience shipping.



12. After you have fill up all the necessary information, select the **YES** button under the Pre-Order tab wherein you need to select the number of days you need to ship the product.

Insert its condition as **NEW** and SKU number (optional) for easy inventory monitoring.

13. **SAVE** and **PUBLISH** it once completed for you to start selling your product. Your buyer can now start buying your brown rice from your shop.

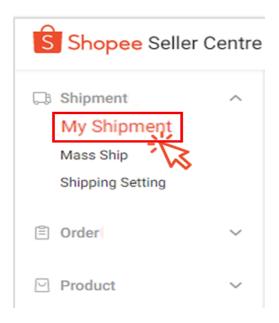


Notice: **Save** and **Delist** option is to be used if you would like to update the listings first without selling it as you only prepare it for a sale or campaign or launching of your shop etc.

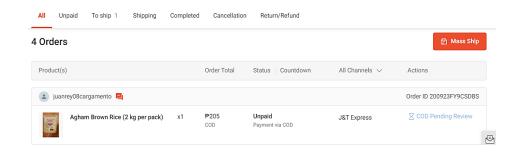
14. To improve the product exposure and to gain more views, you can use the BOOST NOW function. You can boost your products for 4 hours

## **Shipping of Orders**

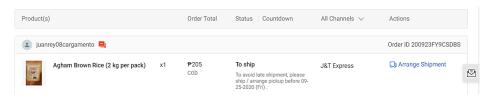
1. In the Seller Centre, click on My Shipment.



- 2. In My Shipment Tab, you can view the order of your customer.
- > When the selected payment option of the customer is <u>Cash On Delivery (COD)</u>, Shopee will Review it first for Approval before you can finally Arrange the Shipment of order. Reviewing time of Shopee will take for at least 10-30 minutes on regular days and 30 minutes or longer when on SALE day.

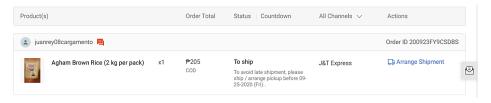


> When the selected payment option of the customer is through <u>Credit/</u>
<u>Debit card</u>. Shopee will no longer review the order instead you can
<u>Arrange Shipment</u> immediately.

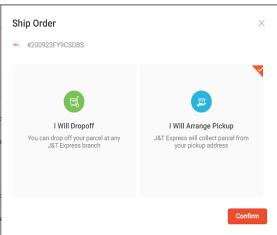


3. Click on **Arrange Shipment** to arrange for the shipment.

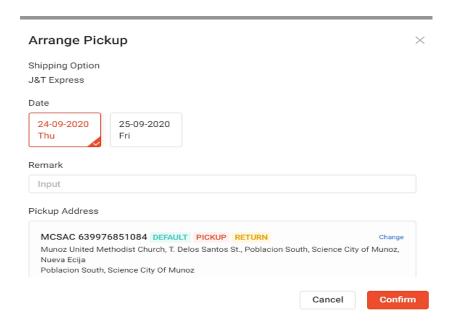
Notice: Make sure to arrange the shipment before the stated ship-by date.



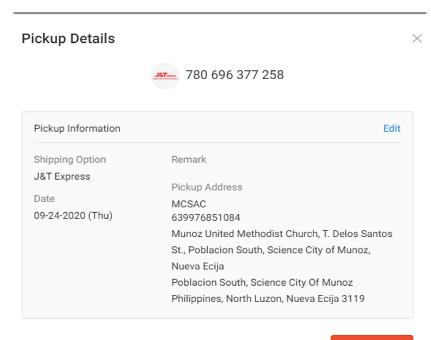
➤ After you click the Arrange Shipment, Ship Order icon will appear. Choose the I Will Arrange Pickup option. I will arrange pick up option is more convenience because the Delivery Service Provider will collect the parcel/order from your pickup address. Unlike the I Will Dropoff option, you are the one who will drop the parcel/order to the delivery service provider.



- > For the schedule of Pick-up, there are two optional dates that are available. Always choose the earliest date of pick-up.
- > One can also put remarks for the courier service, e.g. landmarks of pickup address. Put remarks if necessary.
- \*Note: It is discouraged to put a specific time of pickup for the rider. Pickup time varies from branch to branch.
- > Check the pickup address if it is correct. If not, it can be changed by tapping the "Change" option.
- Then click the Confirmation button to finalize the Pickup Details.



> After you Confirm, the summary of pick up details will appear as shown below:



Print Waybill

> Click the Print Waybill tab to show the Waybill and allows you to print it. The printed Waybill may be attached to the parcel. A sample Waybill is shown below.



- 4. Relay of Order Details
- After arranging the shipment, Details can be relayed through text message or private message on Facebook. Details of the order shall include:
  - √ How many packs ordered?
  - ✓ Name of Receiver/Customer
  - ✓ Contact Number
  - ✓ Delivery Address
  - ✓ Shopee Order ID
- > Pack and seal the order in accordance to the Shopee Order Packaging Guidelines and attach any required documentation like the Waybill.
- 5. Wait for the delivery service provider to pick-up the parcel/order. The service provider will call or text you about the pick-up details.
- > Once the courier service provider arrives at the pickup area, the order shall be given to them.
- > A copy of the receipt containing the tracking number shall be given by the rider to the Marketing Officer as reference that the order has been picked up already.
- 6. Monitoring of Order
- > The order shall be updated once received by the courier service provider. The status of the order shall display "Waiting for buyer to confirm order received".
- > The shipping of the order can be monitored using the app. Tap the Shipping Information to expand and see the current location of the item for delivery.
- > Another option of monitoring the order is to chat with the customer through the Shopee app.
- > Once the order has been delivered, the customer shall be contacted regarding the arrival of the order through chat via the Shopee app or a text message to their personal phone number.
- > Remind the customer to rate the shop on Shopee.

## **NOTES**

## **NOTES**

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