



NATIONAL FOOD AUTHORITY

### PRIMER ON PHILIPPINE GRAINS STANDARDIZATION PROGRAM

(REVISED EDITION)





## PRIMER

### ON THE

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2002

Produced by the NATIONAL FOOD AUTHORITY

### FOREWORD

As the Philippines faces up to the challenges and opportunities of globalization in the 21st century, grains standardization is undoubtedly, one of the key strategies for accelerating the modernization and enhancing the global competitiveness of the grains industry and the agriculture sector.

Thus, the National Food Authority in line with its mandate to promote the integrated growth and development of the grains industry has initiated the Philippine Grains Standardization Program (PGSP) in collaboration with the public and private sectors. Officially launched in May 1996, this vital grains industry development endeavor is envisioned to institutionalize an efficient, profitable, orderly and fair grains production and marketing system, through the effective nationwide implementation of the national grains standards. This primer is therefore essential in providing vital information for the continuing advocacy on grains standardization particularly among stakeholders of the grains industry --- the grain farmers, millers/processors, businessmen/retailers and the general consuming public, toward nurturing food quality and safety consciousness as integral to the way of life of Filipinos.

As the government lays down the foundations for a strong republic, these shared endeavors and aspirations assume greater significance, for nothing strengthens the nation more that liberating present and future generations of Filipinos from all forms of deprivations and ensuring food security and a better quality of life for everybody.

#### WHAT IS THE PHILIPPINE GRAINS STANDARDIZATION PROGRAM?

The Philippine Grains Standardization Program (PGSP) is a multi-sectoral effort spearheaded by the National Food Authority that aims to effectively implement or institutionalize the national grains standards through continuing advocacy, enforcement and monitoring activities among grains farmers, millers, traders or retailers and the general consuming public. It is one of the NFA major programs supporting the rice production enhancement program of the government. The NFA, by virtue of P. D. No. 4 and R.A. 7394 (Consumers Act of the Philippines) is mandated to establish and enforce the national grains standards in collaboration with various sectors.

#### WHAT IS THE NATIONAL GRAINS STANDARD?

It is a set of official rules prescribing standard specifications on the quality, packaging, labeling, including test and analysis of rice and corn and other grain commodities to help ensure efficiency, order and fair trade in the grains production and marketing system. It is a common language intended to facilitate transactions between buyers and sellers, particularly in the domestic grains market.

## WHO ARE THE COOPERATORS OF NFA IN THE PHILIPPINE GRAINS STANDARDIZATION PROGRAM?

The NFA, through a Memorandum of Agreement executed at the national and provincial levels, has enlisted the support and cooperation of grains industry stakeholders associations (farmers, millers, traders/retailers), National Government Agencies (NGAs), Local Government Units (LGUs), and other private organizations (media, consumers, agri-machinery, fabricators, sack manufacturers) in the conduct of continuing advocacy, enforcement and/or monitoring activities on PGSP among their respective constituencies or sectors. These cooperators are listed on page 18.

## WHAT ARE THE BENEFITS OR ADVANTAGES OF GRAINS STANDARDIZATION?

- Grain farmers, millers/processors and traders/businessmen, are assured of fair and reasonable returns or profits because of the objective and reliable basis of determining the quality, as well as, price of their products being sold in the market. There is a price incentive for producing or marketing better quality products.
- This improved profitability will encourage or stimulate private sectors investments in new grain production, processing and marketing technologies that will help improved efficiency, reduce post-harvest losses and enable the grain industry to compete in the domestic and export markets.
- 3. Grains standardization will help promote consumers' right and welfare due to transparent and fair marketing practices whereby consumers are assured of the quality and safety of the products offered to them, and more importantly, they can exercise their power of choice.
- 4. There would be a variety of competitively priced grains products catering to various consumers in both the domestic and export markets.
- 5. Finally, grains standardization would help cultivate food quality and safety consciousness among consumers.

### WHAT IS THE SIGNIFICANCE OF THE GRAINS STANDARDIZATION TO NATIONAL DEVELOPMENT?

As the Philippines gears up for globalization in pursuit of national development, grains standardization is one of the strategies for modernizing the agriculture sector particularly in improving the efficiency and global competitiveness of the grains industry. This is in line with the deregulation and trade liberalization policies of the country as a member of the World Trade Organization (WTO). To underscore the significance of the grains industry to national development. **Presidential Proclamation No. 1058** was issued on August 20, 1997, declaring **September 20-26**, of every year as the National Grains Industry Week.

Increased private sector investment in modern grain production, processing and marketing technologies will enable our local ricemillers, for instance, to produce world class products and services that would help generate export earnings for the country.

On the other hand, with the effective enforcement of the national grains standards as part of the country's food control system, we will be protected from possible entry and sale of imported grain commodities found contaminated, hazardous to public health or not conforming to the national grains standards.

## HOW CAN GRAINS STANDARDIZATION SERVE AS GUIDE IN THE PRICING OF VARIOUS RICE AND CORN COMMODITIES FOR SALE IN THE MARKET?

Inherent in the various grades of rice and corn commodities is the pricing differential whereby special rice, premium grade or better quality products should command a higher price than inferior ones.

For instance, grades of well-milled rice (WMR) with higher % headrice are priced than those of regular milled rice (RMR).

## WHEN IS THE START OF THE FULL NATIONWIDE IMPLEMENTATION OF THE REVISED NATIONAL GRAINS STANDARDS?

The implementation or enforcement of the Revised Philippine National Grains Standards takes full effect starting September 21, 2002. in commodities initially covered by the Philippine National Grains Standards for Rice and Corn as mandated by NFA Letter Circular No. AO-2K2-05-001, are palay, milled rice and shelled corn.

This means mandatory compliance by all sectors particularly the grains industry stakeholders, including the National Food Authority.

## WHAT ARE THE ESSENTIAL FEATURES OF THE NATIONAL GRAINS STANDARDS FOR RICE AND CORN?

1. Quality standards for a given commodity in terms of these parameters:

**Classification, Variety and Grades.** These parameters are further defined in terms of intrinsic or acquired characteristics of palay, milled rice and shelled corn as summarized in Tables 1, 2, and 3.

#### 2. Standard Packaging and Labeling.

These are specified in terms of prescribed packaging size in metric system, packaging materials, size and color of price tag and required information, among others. These are summarized in Table 4 and Table 5.

For example, a 50-kg milled rice and shelled corn for sale is now classified and graded, as well as, packed in color-coded container sacks, as follows:

CLASSIFICATION/GRADE	COLOR OF SACK
Special Rice	Sky Blue
Premium Grade Rice	Light Yellow
Well Milled Rice	White
Grade No. 1	
Grade Nos. 2, 3, 4 or 5 (Super)	
Regular Milled Rice	White
Grade Nos. 2, 3, 4 or 5	
Under Milled Rice	White
Grade Nos. 2, 3, 4 or 5 (Ordinary)	
Shelled Corn (All grades)	Light Green

The same color code corresponding to the classification and grades, is also reflected in the color of price tag for the above grain products which are being retailed in the market.

## WHAT DOES THE APPLICATION OF RULES ON THE METRIC SYSTEM IN GRAINS STANDARDIZATION ACTUALLY MEAN?

It means, the mandated use of unit weight in kilogram (using duly calibrated weighing scales) instead of volume (e.g., ganta, salop) as the unit of measure for rice and corn commodities in all transactions and documentations. It also means doing away with the use of the misleading and incorrect "Kilo", "KIGS", "KGS", "KGS", etc. To indicate the unit of measure for the weight of a given packaged product. Technically, the word kilo is just a prefix which simply means 1,000 times. The correct term is kilogram or its symbol, kg which is a combination of the symbols, **k** for kilo and g for gram. Thus, 1,000 grams can be best simply expressed as 1 kilogram (or 1 kg). Use the symbol **kg** when referring to both singular and plural forms of kilogram. For instance, **50 kg** for 50 kilograms or **1 kg** for 1 kilogram.

# WITH THE FULL IMPLEMENTATION OF THE NATIONAL GRAINS STANDARDS, WHAT WOULD BE REQUIRED OF GRAIN MILLERS, PROCESSORS OR PACKERS?

Concerned grain milers, processors or packers will have to strictly observe the proper grading, packaging and labeling of their products to be sold in the market. In the packaging and labeling of their products, rules on the metric system must also be observed. All the necessary information indicated on the labels or tags should be accurate and in accordance with the prescribed format. (Please see tables and sample illustrations). They are encouraged to closely coordinate with the NFA, packaging material manufacturers, or suppliers regarding prescribed packaging and labeling of their grain commodities for sale.

## ON THE OTHER HAND, WHAT WOULD BE REQUIRED OF GRAINS RETAILERS?

Concerned retailers will have to strictly observe proper use of packaging materials, labels and price tags on their products. Information on the tags and labels must be complete, accurate and in accordance with the prescribed format. (Please see tables and sample illustrations). For uniformity and consistency, they can secure standard price tags through their associations.

#### HOW CAN THE GRAIN MILLERS, PROCESSORS OR PACKERS EFFECTIVELY COMPLY WITH THE GRADING REQUIREMENT OF GRAINS STANDARDIZATION, ESPECIALLY IF THEY DO NOT HAVE THE NEEDED GRAIN LABORATORY FACILITIES?

They can have their grain samples analyzed and graded at NFA grain laboratories located in NFA regional and provincial offices nationwide. They have the option also to go to third parties and public or private grain laboratories to be duly accredited by NFA. Likewise, grain retailers and other interested parties may also avail of such grain laboratory services, in ascertaining the quality of grains received from their suppliers.

#### WHAT IS THE SIGNIFICANCE OF THE NATIONAL GRAINS STANDARDS IN THE IMPLEMENTATION OF THE INNOVATIVE GRAINS MARKETING PROGRAMS OF NFA IN THE GRAINS INDUSTRY?

Given that the national grain standard adopted as the common reference among market players, a rice farmer, for example, who decides to sell his produce to NFA or to a rice miller or trader, will have no difficulty transacting business or worry about being shortchanged. In fact, he would have the opportunity to optimize his profit because of the transparent and objective basis of the transaction based on mutually acceptable official standards. It is also possible to do business similar to an ATM-type banking transaction such that a farmer in Isabela who deposited his palay stocks in one of the NFA warehouses, will be able to withdraw the milled rice, or cash equivalent of the same from a NFA warehouse or branch office within Metro Manila or Southern Luzon. In short, through the national grains standards, the unhampered movement and trading of grain products across the entire country will be guaranteed and therefore beneficial to market players.

## WHAT IS THE ROLE OF LOCAL GOVERNMENT UNITS (LGU'S) IN THE ENFORCEMENT OF THE NATIONAL GRAINS STANDARDS?

Given the regulatory powers of LGUs vested under the Local Government Code, their regulatory personnel involved in the issuance of business license and market inspection could help in the enforcement of the grains standards within their areas of jurisdiction in accordance with the Memorandum of Agreement entered into with concerned NFA provincial offices.

#### HOW CAN THE GRAINS INDUSTRY STAKEHOLDERS ASSOCIATIONS SUCH AS THOSE FOR MILLERS AND RETAILERS HELP IN THE SUSTAINABLE IMPLEMENTATION OF THE GRAIN STANDARDS?

Being the industry stakeholder groups more directly concerned with the enforcement of the national grain standards among their ranks, these associations through their national and local leadership can cooperate with the NFA in training their members regarding grains standardization. Moreover, these responsible associations can police their own ranks and impose disciplinary action against their erring members.

#### HOW CAN ORDINARY CONSUMERS, CONSUMERS GROUPS, THE MASS MEDIA AND EDUCATIONAL INSTITUTIONS HELP IN THE ADVOCACY ON GRAINS STANDARDIZATION?

Knowing their basic rights as consumers and familiarizing themselves with the national grains standards, through active involvement in advocacy activity, ordinary consumers or consumers groups should always exercise vigilance against unfair trade practices in the grains market. The mass media, for its part can educate the people regarding the importance of grains standardization, as well as, assist in exposing unfair trade practices which are in violation of the grains standards and other existing rules and regulations on grains business.

Educational institutions belonging to elementary, secondary and higher levels can help promote grains standards consciousness among students and professionals by including grains standardization in their health and nutrition courses and related subjects on consumerism.

#### WHAT IF IN THE FUTURE, SOME PROVISIONS OF THE NATIONAL GRAINS STANDARDS WOULD NEED REVISION OR UPDATING TO REFLECT TECHNOLOGICAL AND MARKETING DEVELOPMENTS?

Grains standardization is a dynamic, continuing process. Mechanism is in place so that such revision or updating of the national standards is undertaken in consultation with the grains industry and other concerned institutions or groups from both the public and private sectors. In fact, an important component of the grains standardization program is the grains standards revision. In the long term, these standards are ultimately geared toward harmonization with international standards that would help promote trade among countries under an emerging global economic order.

#### TABLE 1. QUALITY STANDARDS FOR PALAY

			GRADE			
PARAMETER	PREMIUM GRADE	GRADE NO. 1	GRADE NO. 2	GRADE NO. 3		
CLASSIFICATION     Grain Size	Very long/ Long/ Medium/ Short	Very Long/ Long/ Medium/ Short	Very Long/ Long Medium Short	Very Long/ Long/ Medium/ Short		
VARIETY	Traditional/ Modern	Traditional/ Modern	Traditional/ Modern	Traditional/ Modern		
GRADE FACTORS     (% by weight)						
Purity, min. Foreign matter, max.	<b>98.00</b> 2.00	<b>95.00</b> 5.00	<b>90.00</b> 10.00	<b>85.00</b> 15.00		
<ul> <li>(a) Weed seeds and other crop seeds, max.</li> <li>(b) Other foreign matters,</li> </ul>	0.10	0.10	0.25	0.50		
max.	1.90	4.90	9.75	14.50		
Defectives:     Chalky & immature     kernels, max.	3.00	6.00	12.00	20.00		
Damaged kernels, max.	0.50	1.50	3.00	5.00		
Contrasting types, max.	3.00	6.00	10.00	18.00		
Red kernels, max.	1.00	3.00	5.00	10.00		
Discolored kernels, max.	0.50	2.00	4.00	8.00		
Moisture content, max.	14.00	14.00	14.00	14.00		

**NOTE:** Special variety palay shall be graded and designated according to the grade requirements of this standard and shall be identified under specific variety such as Dinorado, Sigadis, Milagrosa, Sampaguita, Sinandomeng, Kalinayan, Baysilanon, and other varieties certified by the National Seed Industry Council (NSIC).

#### TABLE 2. QUALITY STANDARDS FOR MILLED RICE

	GRADE					
PARAMETER	PREMIUM	GRADE No. 1	GRADE No. 2	GRADE No. 3	GRADE No. 4	GRADE No. 5
CLASSIFICATION Grain Size Degree of Milling	Very Long/ Long/Medium/ Short Overmilled/ Well Milled	Very Long/Long/ Medium/Short Well Milled Rice	Very Long/ Long/Medium/Short Regular Milled Rice	Very Long/Long Medium//Short Regular Milled Rice	Very Long/Long Medium/Short Regular Milled Rice	Very Long/Long Medium/Short Regular Milled Rice
VARIETY	Rice Traditional/ Modern	Traditional/ Modern	Traditional/ Modern	Traditional/ Modern	Traditional/ Modern	Traditional/ Modern
GRADE FACTORS (% I	by weight)		•		•	•
Brokens, max. (total including brewers)	5.00	10.00	15.00	25.00	35.00	45.00
Brewers, max.	0.10	0.20	0.40	0.60	1.00	2.00
Defectives:						
Damaged kernel, max.	0.50	0.70	1.00	1.50	2.00	3.00
Discolored kernel, max.	0.50	0.70	1.00	3.00	5.00	8.00
Chalky kernel, max.	4.00	5.00	7.00	7.00	10.00	15.00
Immature kernel, max.	0.20	0.30	0.50	2.00	2.00	2.00
Contrasting type, max.	3.00	5.00	10.00	-	-	-
Red kernel, max.	1.00	2.00	4.00	5.00	5.00	7.00
Foreign matters, max.	0.025	0.10	0.15	0.17	0.20	0.25
Paddy, max. (no . per 1,000 grams)	10.00	15.00	20.00	25.00	25.00	25.00
Moisture content	14.00	14.00	14.00	14.00	14.00	14.00
Milling Degree	OMR/WMR	WMR	RMR WMR (Super) UMR (Ordinary)	RMR WMR (Super) UMR (Ordinary)	RMR WMR (Super) UMR (Ordinary)	RMR WMR (Super) UMR (Ordinary)

#### TABLE 3. QUALITY STANDARDS FOR SHELLED CORN

		GRADE		
PARAMETER	PREMIUM GRADE	GRADE NO. 1	GRADE NO. 2	GRADE NO. 3
CLASSIFICATION				
ТҮРЕ	Yellow/White/ Mixed Corn	Yellow/White/ Mixed Corn	Yellow/White/ Mixed Corn	Yellow/White/ Mixed Corn
CLASS	Flint/Dent Pop Corn	Flint/Dent/ Pop Corn	Flint/Dent/ Pop Corn	Flint/Dent/ Pop Corn
VARIETY	Traditional/ Modern	Traditional/ Modern	Traditional/ Modern	Traditional/ Modern
GRADE FACTORS (% by weight)				
Foreign matter, maximum	0.50	1.00	1.50	2.00
Corn of other colors, maximum	2.00	4.00	6.00	8.00
Shriveled and immature kernels, max.	1.50	3.00	5.00	7.00
Damaged kernels, maximum	3.00	5.00	7.00	10.00
Moldy kernels, maximum	0.10	1.00	2.00	3.00
Moisture content, maximum	14.00	14.00	14.00	14.00

#### TABLE 4. STANDARD PACKAGING AND LABELING FOR MILLED RICE AND SHELLED CORN

COMMODITY,	P A	CKAGI	N G	LABELING
CLASSIFICATION AND GRADE	PACKAGE SIZE (kg)	TYPE OF MATERIAL	COLOR of PACKAGING MATERIAL	REQUIRED INFORMATION
A. BIG PACKAGE	15, 20, 25, 30, 35, 40, 45, 50 (multiples of 5)	Woven Polypropylene (WPP), non-transparent or transparent type)		
Special Rice			Sky Blue	<ul> <li>Classification (i.e., whether Well Milled, Regular Milled or Under Milled for rice)</li> </ul>
<ul> <li>Premium Grade Rice</li> </ul>			Light Yellow	<ul> <li>Variety (optional except for Special Rice)</li> </ul>
Well Milled Rice Grade No. 1 Grade Nos. 2, 3, 4, or 5 (Super)			White	<ul> <li>Grade (i. e., whether Premium Grade, Grade Nos. 1, 2, 3, 4 or 5)</li> </ul>
Regular Milled Rice Grade Nos. 2,3,4 or 5			White	<ul> <li>Net Weight (kg)</li> </ul>
Under Milled Rice Grade Nos. 2,3,4			White	Name and address of Miller
or 5 (ordinary)	One (1) cavan of rice or corn commodity shall be a unit containing fifty (50) kilograms net weight of such commodity. The words (when packed" and "as packed" following the net weight shall not be allowed.		Transparent WPP sacks shall be fully or partially color- coded for Special and Premium Grade Rice but shall be strictly colored white for other grades. However, the color- coded portion shall be dominant in proportion with the background.	<ul> <li>Name and address of Owner (in case of custom milling)</li> <li>Iron - Enriched Rice (starts 2004)</li> </ul>

#### TABLE 4. STANDARD PACKAGING AND LABELING FOR MILLED RICE AND SHELLED CORN

COMMODITY,	P A	CKAGI	N G	LABELING
CLASSIFICATION AND GRADE	PACKAGE SIZE (kg)	TYPE OF MATERIAL	COLOR of PACKAGING MATERIAL	REQUIRED INFORMATION
Shelled Corn Premium Grade, Grade Nos. 1, 2 or 3		Woven Polypropylene	Light Green	<ul> <li>Classification (i.e., whether White or Yellow Corn and Flint or Dent Corn for Shelled Corn)</li> <li>Grade (i. e., whether Premium Grade, Grades Nos.</li> </ul>
B. SMALL PACKAGE	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or fraction thereof (e.g., 2.5, 5.5, 12.5, etc.)	Polyethylene, paper or carton	Polyethylene bags may not be color-coded. However, color- coded paper corresponding to the classification and grade of	<ul> <li>1,2 or 3)</li> <li>Net weight (kg)</li> <li>The required information shall be printed in bold letters on the color-coded sacks and containers for milled rice and shelled corn, both for</li> </ul>
	eic. <i>)</i>		the commodity (refer to color- coding of big packages) may be inserted inside the package.	big and small packages.

#### TABLE 5. STANDARD REQUIREMENT FOR PRICE TAG IN UNPACKED RICE AND CORN FOR RETAIL

	PARTICULARS	STANDARD REQUIREMENT
1.	Size of Price Tag (length x width)	28 cm x 21.5 cm for big rice boxes (short bond paper)
		21.5 cm x 16.5 cm for smaller rice boxes (1/2 legal size bond paper)
2.	Color of Price Tag	
	Special Rice	Sky Blue
	Premium Grade Rice	Light Yellow
	Well Milled Rice	White
	Grade No. 1	
	Grade Nos. 2, 3, 4 or 5 (Super)	
	Regular Milled Rice	White
	Grade Nos. 2, 3, 4 or 5	
	Under Milled Rice	White
	Grade Nos. 2, 3, 4, or 5 (Ordinary)	
	Shelled Corn	Light Green
	Premium Grade, Grade Nos. 1,2,or 3	
3.	Color of Print on Price Tag	Black
4.	Prescribed Information	Price per kilogram (P/kg)
		Classification
		Variety (optional except for Special Rice)
		Iron-Enriched Rice (starting 2004)
		Grade

- NOTE: 1. Unpacked milled rice and corn for retail must be displayed in white painted rice/corn boxes which shall be free of posters/advertisements. The prescribed color-coded price tag shall be conspicuously displayed on the grains box.
  - 2. The required information shall be printed in bold letters and figures (except the symbol kg) on the color-coded price tag.

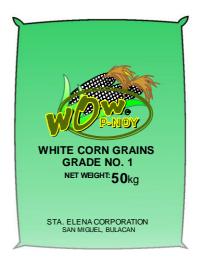
#### SAMPLE ILLUSTRATIONS ON STANDARD PACKAGING & LABELLING

### A. BIG PACKAGES (15-50 kg)





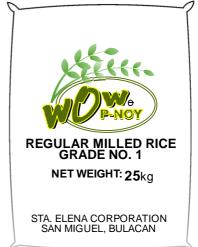




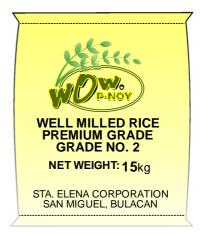
#### SAMPLE ILLUSTRATIONS ON STANDARD PACKAGING & LABELLING

### A. BIG PACKAGES (15-50 kg)



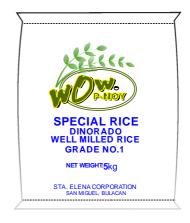






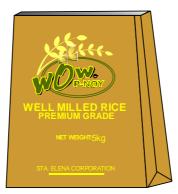
### B. SMALL PACKAGES (1-15 kg)



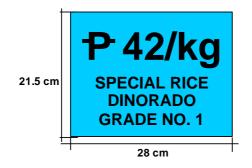








### C. PRICE TAG ILLUSTRATIONS







P 28/kg

RICE GRADE NO. 1

P 26/kg REGULAR MILLED RICE GRADE NO. 3



#### **USEFUL DEFINITIONS**

- AFLATOXIN A group of highly poisonous and carcinogenic compounds which are produced by molds or fungi Aspergillus flavus on suitable substrates such as corn, peanuts, coconuts, oilseeds, cassava, etc. Aflatoxin content is expressed in parts per billion (ppb).
- **AROMATIC RICE** Rice which gives off pleasant, sweet and fragrant odor.
- BREWERS Small pieces or particles of kernels that pass through a sieve having round perforations 1.4 millimeters in diameter. This is also known as "binlid" or "chips".
- BROKEN KERNELS Pieces of kernels smaller than 7.5/10 of the average length of the unbroken kernel.

BROKEN KERNELS &<br/>FOREIGN MATTER<br/>(CORN)Kernels and pieces of kernels of corn and other matters which pass through a No. 12<br/>sieve (a metal perforated with round holes 4.76 mm or 12/64 inch in diameter) and all<br/>other foreign matters remaining in such sieve after screening.

BROWN RICE Rice kernels from which only the hull has been removed. This is also known as "dehulled rice", "cargo rice", or "dehusked rice".

CHALKY KERNELS Kernels, whole or broken, one-half or more of which is white like the color of white chalk and is brittle upon removal of the hull for palay.

**CHEMICAL RESIDUE** Residue acquired by palay/rice/corn through the use of chemical substance as plant nutrient or as pesticides. The residue may also be acquired through other circumstances and at any stage in the growing, harvesting, distribution, marketing or processing of palay/corn.

- **CLASSIFICATION** A designation indicating the type of milled rice based on grain size.
- **CONTRASTING TYPE** Palay/rice kernels of different varieties other than the variety designated, wherein the size, shape and color differ distinctly from the characteristics of kernels of the variety designated.

**CORNGRAINS OF** Corn grains of different colors other than the color under consideration.

OTHER COLORS

**CORN VARIETY** This refers to the common name or specific varietal common name of a given shelled corn variety (i.e., Pioneer, SMC-1, BPI, etc.,)

DAMAGED KERNELS (Corn) Kernels or pieces of kernels of corn which are heat damaged, sprouted, ground damaged, weather damaged, moldy, diseased, insect-bored or otherwise materially damaged.

- DAMAGED KERNELS (Milled Rice) Kernels, which are obviously damaged by insects, water, diseases and/or any other means as seen by the naked eye.
- DAMAGED KERNELS (Palay) Kernels which are sprouted or distinctly damaged by insects, water, fungi and/or any other means.
- DEGREE OF MILLING The extent in which the bran layers and germ have been removed in milled rice.

**DENT CORN** Corn kernels which have dent in the broad end of the kernels causes by great shrinkage of soft starch between the two layers of corneous and flinty starch at the end of the endosperm.

DISCOLORED KERNELS	Kernels that have changed their original color as a result of heating and other means. This is also known as "yellow kernels" or "fermented kernels".
ENRICHED RICE	Milled rice to which fortified rice kernels are added to enhance its nutritive value.
FLINT CORN	Corn kernels with relatively large amount of hard endosperm on the sides and the inner portion is composed of soft starch. The color of the endosperm is either white or yellow.
FOREIGN MATTER (Milled Rice)	Organic and inorganic components other than whole or broken rice kernels (e.g., foreign seeds, husks, bran, sand, dust and other crop seeds.)
FOREIGN MATTER (Palay)	All matters other than palay grains such as (a) sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud, chaff, straw, and (b) other grains like weed seeds and other crop seeds.
GERM	Small white portion which lies on the ventral side of the rice kernel from where the seed germinates.
GLUTINOUS/WAXY RICE	A special variety of rice whose kernels are white and opaque or pigmented. The starch component consists almost entirely of amylopectin (98-100%).
GRADE	A designation indicating the degree of quality of rice and corn.
GRADE NO. 1	Any rice and corn variety which meet the second highest grade requirements for rice and corn as set forth in the herein prescribed national standards.
GRADE NO. 2	Any rice and corn variety which is lower in quality than Grade No. 1 but higher in quality than Grade No. 3, based on the grade requirements for rice and corn as set forth in the herein prescribed national standards.
GRADE NO. 3	Any milled rice variety which is lower in quality than Grade No. 2 but higher in quality than Grade No. 4 based on grade requirements for milled rice as set forth in the herein prescribed national standards. Any palay and corn variety which meet the lowest grade requirements for palay and corn as set forth in the herein prescribed national standards.
GRADE NO. 4	Any milled rice variety which is lower in quality than Grade No. 3 but higher in quality than Grade No. 5, based on grade requirements for milled rice as set forth in the herein prescribed national standards.
GRADE NO. 5	Any milled rice variety which meets the lowest grade requirements for milled rice as set forth in the herein prescribed national standards.
HEADRICE	A kernel or a piece of kernel with its length equal to a greater than 7.5/10 of the average length of the unbroken kernel.
HEAT DAMAGED KERNELS	Kernels and pieces of kernels of corn which have been materially discolored and damaged by external heat or as a result of heating caused by fermentation.
IMMATURE KERNELS	Kernels, whole or broken, which are light green and chalky with soft texture.
LONG GRAIN (Palay)	Palay whose average length of the full size palay grain is between 8.8 to 9.8 mm.
LONG GRAIN (Milled Rice)	Rice with 80% or more of whole milled rice kernels having a length of 6.4 to 7.4 mm.
MEDIUM GRAIN (Palay)	Palay whose average length of the full size palay rice grain ranges from 8.0 to 8.7 mm.

MEDIUM GRAIN (Milled Rice)	Rice with 80% or more of whole milled rice kernels having a length of 5.5 to 6.3 mm.
MILLED RICE	Kernels obtained after removal of husks and bran.
MIXED CORN	Consists of corn kernels of different colors.
MODERN VARIETY	Variety of rice and corn derived from recent genetic improvement of interbreeding of different varieties.
MOISTURE CONTENT (as received)	The water content of palay, milled rice and corn, expressed in percent (%) as received.
MOLDY KERNELS	Kernels or pieces of kernels which are contaminated with molds.
OVERMILLED RICE	Rice kernel from which the hull, the germ and the bran layers have been completely removed.
PALAY	Unhulled grain of Oryza sativa, which means, grain with the glumes enclosing the kernel. It is also known as "paddy" or "rough rice".
PALAY VARIETY	This refers to the category/species of palay denoting its genetic characteristics whether it is traditional variety (i.e., Intan, Raminad, etc.) Or modern variety which is a result of genetic improvement or inter-breeding of different varieties (i.e., C-4, IR Series, BPI Series, PSB Series, etc.
POP CORN	A type of corn which forms large flakes after the kernels explode in response to heating (popping expansion).
PREMIUM GRADE	Any rice and corn variety which meet the highest grade requirements for rice and corn as set forth in the herein prescribed national standards.
PURITY	Percentage of palay grains free of foreign matters.
RED KERNELS	Kernels that have red bran covering, wholly or partly.
REGULAR MILLED RICE	Rice kernel from which the hull, the germ, the outer bran layers and the greater part of the inner bran layers have been removed but parts of the lengthwise streaks of the bran layers shall be within the range of 20-40% of the kernels.
RICE VARIETY	This refers to the category/species of palay from which processed or milled rice was derived denoting its genetic characteristics whether it is traditional variety not belonging to special variety rice or a result of genetic improvement/hybridization.
	Traditional variety shall include all other indigenous or native varieties not included in the listing of special palay or rice (i.e., Intan, Raminad). Modern variety shall include genetically improved palay varieties exemplified by the IR-series, BPI series, PSB series and their common names.
SHELLED CORN	Corn kernels, mainly of either dent or flint varieties of the plant Zea mays. It is also known as "maize" or "corn grain".
SHORT GRAIN (Palay)	Palay whose average length of the full size palay grain is below 8.0 millimeters.
SHORT GRAIN (Milled Rice)	Rice with 80% or more of the whole milled rice kernels having a length of less than 5.5 mm.

SHRIVELLED AND IMMATURE KERNELS	Kernels or pieces of corn kernels which are not fully developed, thin and papery in appearance.
SIZE	Length category of at least 80% of the sample of palay whole milled rice kernels to which the sample belongs.
SPECIAL VARIETY PALAY	<ul> <li>This includes glutinous, aromatic palay varieties and those with excellent eating and nutritive quality. Palay varieties considered under the classification shall include but are not limited to the following:</li> <li>Dinorado</li> <li>Sigadis</li> <li>Milagrosa</li> <li>Sampaguita</li> <li>Sinandomeng</li> <li>Kalinayan</li> <li>Baysilanon</li> </ul>
SPECIAL RICE	This includes glutinous, aromatic rice and those with excellent eating and nutritive quality.
SPECIFICATION	A concise statement of a set of requirements to be satisfied by a product, material or a process indicating whenever appropriate, the procedure by means of which it may be determined whether the requirements given are satisfied.
STANDARD	A specification adopted for wide use or repeated utilization. It is the result of standardization effort approved by a recognized authority.
STANDARDIZATION	The process of formulating and applying rules in an orderly approach to a specific activity for the benefit and with the cooperation of all concerned, and in particular for the promotion of optimum over-all economy taking due account of functional conditions and safety requirement.
TRADITIONAL VARIETY	Refers to indigenous or native varieties of rice and corn other than special rice varieties.
VERY LONG GRAIN (Palay)	Palay whose average length of the full size palay grain is 9.9 mm and above.
VERY LONG GRAIN (Milled Rice)	Rice with 80% or more of whole milled rice kernels having a length of 7.5 mm and above.
WEED SEEDS AND OTHER CROP SEEDS	Seeds of any plant other than rice.
WEEVILY CORN	Corn infested with live weevils or other insects injurious to the grain.
WELL MILLED RICE	Rice kernels from which the hull, the germ, the outer bran layers and the greater part of the inner bran layers have been removed, but parts of the lengthwise streaks of the bran layers shall be less than 20% of the kernels.
WHITE CORN	Corn kernels of white color with not more than two percent (2%) of other colors. A slight tinge of other colors, other than white, shall not affect their classification as white corn.
YELLOW CORN	Yellow corn kernel with not more than two percent (2%) of other colors. A slight tinge of other colors, other than yellow, shall not affect their classification as yellow corn.

#### COOPERATORS OF NFA IN THE PHILIPPINE GRAINS STANDARDIZATION PROGRAM (National Level)

- Philippine Grains Industry Council (PGIC)
- Philippine Farmers Advisory Board (PFAB)
- Philippine Confederation of Grain Associations, Inc. (PHILCONGRAINS)
- Confederation of Grains Retailers Association of the Philippines, Inc. (GRECON)
- National Consumers Affairs Council (NCAC)
- Department of Education Culture and Sports (DECS)
- Commission on Higher Education (CHED)
- Bureau of Product Standards Department of Trade and Industry (BPS-DTI)
- Bureau of Domestic Trade Promotion (BDTP-DTI)
- Philippine Rice Research Institute (PHILRICE)
- Bureau of Post-Harvest Research and Extension (BPRE-DA)
- Agricultural Training Institute (ATI-DA)
- Food and Nutrition Research Institute (FNRI-DOST)
- Philippine Information Agency (PIA)
- Bureau of Local Government Development (BLGD-DILG)
- League of Provinces of the Philippines
- League of Cities of the Philippines
- League of Municipalities of the Philippines
- Provincial, City and Municipal Government (LGUs)
- Philippine Agricultural Journalist, Inc. (PAJ)
- Consumer Federated Groups of the Philippines, Inc.
- Agricultural Machineries Manufacturers and Dealers Association of the Philippines, Inc. (AMMDA)
- International Polymers Corporation (IPC)
- New Challenge Resources, Inc.
- NOTE: Through its field offices nationwide, the NFA also entered into a Memorandum of Agreement with the branches or local counterparts of the foregoing institutions and organizations and other allied institutions at the provincial/municipal or Local Government Unit (LGU) level.

#### MALACAÑANG Manila

#### BY THE PRESIDENT OF THE PHILIPPINES

#### PROCLAMATION No. 1058 DECLARING THE PERIOD FROM SPETEMBER 20-26 EVERY YEAR AS NATIONAL GRAINS INDUSTRY WEEK

WHEREAS, the Philippine grains industry comprised of rice and corn farmers/producers, processors/millers, traders/retailers and consumers, is a vital segment of the country's economy that accounts mainly for the annual gross output of the agriculture sector and provides livelihood to about 70% of the population;

WHEREAS, the total development of the Philippine grains industry is essential to the country's bid toward achieving Newly Industrialized Country (NIC) status by the turn of the century;

WHEREAS, the National Food Authority, created by virtue of Presidential Decree No. 4 series of 1972, as amended, is mandated, among others, to coordinate the activities of all government agencies engaged in the study, research and promotion of measures designed to enhance the integrated growth and development of the grains industry.

WHEREAS, there is a need to institutionalize a multi-sectoral annual celebration which will focus on the Philippine grains industry as a strategic sector of the economy, as well as, highlight the significant role of the various grains industry stakeholders and the National Food Authority, in collectively preparing the entire industry and the nation to meet the challenges and opportunities of globalization.

NOW, THEREFORE, I FIDEL V. RAMOS, President of the Philippines, by virtue of the powers vested in me by law, do hereby proclaim the period from September 20-26 of every year as National Grains Industry Week to coincide with the founding anniversary of the National Food Authority.

For this purpose, I call upon the National Food Authority to spearhead the annual nationwide celebration in collaboration with the Philippine Grains Industry Council and its member organizations.

The celebration shall give emphasis on the enhancement of the national food security, the promotion of food safety and quality consciousness among our people and fair trade practices in the grains market and the institutional development of farmers cooperatives into self-reliant and competitive economic entities.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the Republic of the Philippines to be affixed.

DONE in the City of Manila, this 20<sup>th</sup> day of August in the year of Our Lord, Nineteen Hundred and Ninety Seven.

By the President: D. TORRES

Executive Secretary

Malan

#### For further information, please contact:

The Director, Industry Services Department, or The Director, Technical Research and Services Department **NATIONAL FOOD AUTHORITY** Sugar Center Building, North Avenue, Diliman, Quezon City Tel. No. 454-9321 or 454-3294