



Department of Agriculture
Bureau of Agricultural Statistics

CEREALS AND FERTILIZER PRICE MONITORING (CFPM)

Agricultural Marketing Statistics Analysis Division (AMSAD)

CEREALS AND FERTILIZER PRICES MONITORING

I. BACKGROUND

The Bureau of Agricultural Statistics (BAS), particularly the Agricultural Price Statistics Analysis Section (APSAS) of the Agricultural Marketing Analysis Division (AMSAD) has been generating farm, wholesale and retail prices of palay/rice and corn. Farm prices are collected through the Farm Prices Survey (FPS) while wholesale and retail prices are gathered under the Agricultural Marketing News Service (AMNEWSS).

The FPS was initiated in 1957 by the then Division of Agricultural Economics of the Department of Agriculture and Natural Resources (DANR) to gather reliable price information at the farm level. This has been a continuing activity of the then Bureau of Agricultural Economics (BAEcon) now BAS with some modifications in its methodology. Wholesale and retail prices monitoring under the AMNEWSS started in 1969. A continuing Bureau activity, it has undergone several changes and developments to make it more responsive to the information needs of the farmers, entrepreneurs as well as planners in both government and private sectors. In 1994, two years after the launching of AGMARIS, AMNEWSS was integrated into the system.

In response to the need of the Department of Agriculture for more frequent monitoring of palay/rice and corn prices, the BAS designed and implemented a weekly monitoring of cereals and fertilizer prices in 1989 called the Cereals and Fertilizer Price Monitoring (CFPM).

Since the implementation of the CFPM, two sets of farm prices for palay and corn have been generated by the Bureau. Prices gathered from the CFPM are used only as indicators or preliminary data to address the immediate need of the DA and other government planning agencies for current data. The prices coming from the FPS remain the official price information for cereals. The wholesale and retail prices of cereals under the CFPM, on the other hand, are the ones being used as the official data since 1990. Prior to 1990, wholesale and retail prices of cereals are generated by the AMNEWSS.

Under the CFPM, dealer prices of fertilizers are covered and reported weekly. Four types of fertilizer are currently monitored, namely: urea, ammophos, ammosul and complete.

II. FARM PRICES OF CEREALS UNDER THE FPS

A. Methodology

1. Coverage

Under the FPS methodology, commodity coverage varies from one province to another. The FPS covers all provinces in the country. For cereals, the FPS basket includes palay fancy and other varieties and matured yellow and white corn (Attachment 2).

2. Frequency and Schedule of Collection

The FPS is undertaken monthly, from the 26th of the reporting month to the 3rd of the succeeding month. The reference period is the 30-day period prior to the time of collection.

3. Types and Sources of Information

Prices received by farmers are the farmers' selling prices for their palay and corn which depend on the place of sale. Sale may be within the production area or barangay, at the town or city proper or at the trading center. At each point of sale, every respondent is asked for the volume sold and freight incurred in marketing the products. If the farmer marketed palay and/or corn several times during the reference period, the latest information is reported.

Data are obtained from the farmers who sold palay and/or corn during the reference period.

4. Survey Design

Samples for palay and corn are chosen using a three-stage sampling technique with the province as the domain.

First stage - top 5 producing municipalities in the province for each crop during the month are chosen.

Second Stage - for every sample municipality, the top producing barangay for each crop during the month is selected.

Third Stage - for every sample barangay, 6 sample farmers per commodity are chosen. Selection of farmers is purposive, from those which traded the particular crop during the reference period.

Samples should be 30 farmers for each type of crop for whole province.

B. Data Collection/Monitoring Form

Primary data are gathered by trained personnel and data collectors using structured questionnaires or collection forms.

For palay and corn, a collection form for prices received by farmers for crops labeled FPS Form 1 is used as monitoring form (Attachment 3).

C. Transmission/Submission Form

POCs are required to submit print outs and diskettes containing raw data and provincial summary to Central Office on the 15th of the following month. Meanwhile, POCs without computer or have problems with their computer are required to manually process the data and submit the Provincial Summary (FPS Form 20) to the Central Office (Attachment 4).

III. FARM PRICES OF CEREALS UNDER THE CFPM

A. Methodology

1. Coverage

The CFPM covers all provinces with 45 provinces considered as priority for palay and 38 for corn. Initially, only special and ordinary palay and white and yellow corngrain were monitored. At present, however, fancy palay is included in the basket (Attachment 2).

2. Frequency and Schedule of Collection (Attachment 5)

Prices are collected weekly every Monday or Tuesday with Wednesday of previous week to Tuesday as the reference period. Transmission of prices to the Central Office is Tuesday. POCs without radio facilities are required to submit the data thru mail or telephone.

3. Types and Sources of Information

Farm prices under the CFPM are the selling prices of palay and/or corn farmers and/or buying prices of traders and grains warehouses from farmers less any freight or transport cost incurred during procurement of the product.

Information are gathered from farmers who sold their paly/corn and/or from traders and grains warehouses (with or without mills) who bought palay/corn from farmers during the reference period.

4. Number of Respondents

Samples are chosen purposively within the province. Respondents should be at least 5 farmers, traders and/or grains warehouses for each type of cereal.

B. Data Collection/Monitoring Form

Form to be used for price collection is MIS-2 (Attachment 7).

C. Transmission/Submission Form

Data should be transmitted to CO using the MIS-3 Form (Attachment 10). POCs without transceivers are required to submit data using the same Form.

III. WHOLESALE AND RETAIL PRICES

A. Methodology

1. Geographic and Commodity Coverage

a.) AGMARIS Provinces

Presently, 30 provinces including Metro Manila are implementing the AGMARIS system. Each province has varying schedule of data collection and commodity coverage as a result of the MINA undertaken in these provinces (Attachment 6).

b.) Non-AGMARIS Provinces

The remaining 49 non-AGMARIS or the so-called AMNEWSS provinces follow the existing CFPM methodology. Commodities covered for both wholesale and retail price monitoring include rice special and ordinary at the outset as well as corngrain (yellow and white) and corngrits (yellow and white). But now, with the recent developments in the palay/rice and corn situation, fancy and premium rice are also included in the basket.

2. Frequency of Collection

a.) AGMARIS Provinces

The frequency, days and time of collection vary from one AGMARIS province to another (Attachment 6). For instance, in Ilocos Sur, retail selling prices for cereals are collected at Vigan Public Market every Monday, Wednesday and Friday and at Candon Public Market every Wednesday and Sunday from 8:00 to 10:00 in the morning while in Nueva Vizcaya, retail prices are gathered from 9:00 to 10:30 a.m. every Tuesday, Thursday and Saturday at the Solano Grains Buying Stations.

b.) Non-AGMARIS Provinces

Wholesale and retail prices are collected weekly, every Monday or Tuesday with Wednesday of the previous week to Tuesday as the reference period (Attachment 5).

3. Types and sources of Information

a.) AGMARIS Provinces

The prices collected in AGMARIS provinces are the wholesale and buying and/or selling and retail selling prices.

b.) Non-AGMARIS Provinces

For wholesale, selling prices of warehouses are being collected for Non-AGMARIS provinces. Selling prices of retailers, however, are the type of prices reported for retail.

WSPs are gathered from grains warehouses with or without mills. In case all grains warehouses in the province are without mills, these may be tapped as sources of information.

Rice retailers in covered markets under the regular retail price monitoring or rice retailers in public markets in the provincial capital are the sources of retail prices.

c.) Definitions

Wholesale buying prices (WBP) are the prices at which traders pay for the commodities bought from the farmers and traders. Wholesale selling prices (WSP) are prices at which traders or distributors sell their commodities to other distributors and to retailers. Retail selling prices (RSP), on the other hand, are the prices at which retailers sell commodities to consumers.

4. Number of Respondents

a.) AGMARIS Provinces

In AGMARIS provinces, 5 respondents per item per collection day per market or collection point are required for both wholesale and retail prices.

b.) Non-AGMARIS Provinces

Respondents for wholesale prices should be at least 5 if the number of grains warehouses in the province is greater than 5; otherwise, all warehouses.

For retail prices, sample retailers should be 5 per commodity per market.

B. Collection Forms

1. AGMARIS Provinces

- | | | | |
|---------|---|------|-------------------------|
| a.) WBP | - | CF1A | |
| b.) WSP | - | Rice | : MIS-4A (Attachment 8) |
| | | Corn | : MIS-2 |
| c.) RSP | - | Rice | : MIS-4B (Attachment 9) |
| | | Corn | : MIS-2 |

2. Non-AGMARIS Provinces

- | | | | |
|---------------|---|------|----------|
| a.) Wholesale | - | Rice | : MIS-4A |
| | | Corn | : MIS-2 |
| b.) Retail | - | Rice | : MIS-4B |
| | | Corn | : MIS-2 |

C. Transmission Forms

All provinces, AGMARIS and Non-AGMARIS, should use MIS-3 in transmitting/submitting wholesale (WSP) and retail (RSP) prices together with the farm prices collected under the CFPM. WBP need not be reported weekly.

IV. FERTILIZER PRICES

A. Methodology

1. Coverage

All provinces are covered for fertilizer price monitoring. Commodities monitored are Urea (45-0-0), Ammonium Sulphate or Ammosul (21-0-0), Ammonium Phosphate or Ammophos (16-20-0) and Complete (14-14-14).

2. Frequency of Collection

Prices of fertilizers are gathered weekly on Monday or Tuesday with Wednesday of the previous week to Tuesday as the reference period.

3. Types and Sources of Information

Dealers' selling prices for fertilizers are the type of price monitored under this activity.

Prices are obtained from the Farm Prices Survey (FPS) sample dealers for inputs.

4. Number of Respondents

Required number of samples is at least 3 dealers per item per province if there are more than 3 dealers throughout the province; otherwise, all dealers of inputs should be interviewed.

B. Collection Form

In gathering fertilizer prices, MIS-2 Form should be used to facilitate recording of prices provided by respondents.

C. Transmission/Submission Form

Data should be transmitted or submitted to the C.O. together with the farm, wholesale and retail prices of cereals on Tuesday using MIS-3.

V. INSTRUCTIONS ON HOW TO ACCOMPLISH THE COLLECTION FORMS

- A. MIS-2** - Collection form for farm prices of palay/corngrain, wholesale/retail selling prices of corngrain/grits and dealer prices of fertilizers.

MIS-2 is the form to be used in all provinces in collecting farm prices of palay and corngrain, wholesale selling and retail selling prices of corngrain and corngrits and dealer prices of fertilizers. To accomplish the form, immediately fill up the blanks provided for the province and the reference period.

Column 1 – indicated in this column are the types of price and the items to be collected.

Columns 2-6 – enter in these columns the price quotation of each of the 5 respondents for every commodity.

Column 7 – enter here the prevailing price or the price quoted the most number of times by the respondents per item.

Column 8 – determine the lowest and the highest prices for the reference period per commodity and write them in this column.

In the case of AGMARIS provinces, the number of MIS-2 forms to be used every collection day for WSP and RSP of corngrains and corngrits will depend on the number of markets or collection points covered for each item. For instance, in Pangasinan, one MIS-2 each will be used for RSP of rice in Alaminos, Tayug, Dagupan City and San Carlos City markets.

- B. MIS-4A** - Collection form for wholesale prices of rice

MIS-4A is the collection form to be used in gathering wholesale selling prices of rice. It is designed to capture as much as possible all the price quotations of a wholesaler/sample.

Before filling up the columns, indicate first the market, province and the date of collection for AGMARIS provinces or the province and reference period for non-AGMARIS provinces.

Column 1 - listed in this column are the types of rice for which wholesale prices are to be collected. Under each type of rice are spaces for the names of respondents required in AGMARIS provinces.

Column 2 – refers to the respondent number. For each rice type, there are 5 respondents to be interviewed per market/collection point (AGMARIS) or province (AMNEWSS).

Columns 3-9 – enter in these columns the prices per kilo for each box or sack by respondent by type of rice;

Column 10 – refers to the prevailing price for each rice type. In determining the prevailing price for a particular type of rice, all the prices obtained from the 5 respondents in columns 3 to 9 should be considered. The prevailing price will be by rice type only, not by respondent.

Column 11 – enter here the lowest and highest prices among the prices of the 5 respondents listed in columns 3 to 9. The price range will be by rice type only, not by respondent.

For AGMARIS province, the number of MIS-4A forms to be used every day of collection will depend on the number of markets or collection points covered for each item.

C. MIS-4B – Collection form for retail prices of rice

This is the collection form to be used in gathering the retail prices of rice. Procedures on how to accomplish this form are the same as those for MIS-4A. MIS-4A and MIS-4B differ only in the type of price to be gathered.

For AGMARIS provinces, the number of MIS-4B forms to be used every day of collection will depend on the number of markets or collection points covered for each item.

In case there is no prevailing farm, wholesale and retail price, the following rules should be followed:

1. Arrange the data in an array. If there is an odd number of data points and there is no mode, take the middle value as the prevailing price.
2. If there is an even number of data points and there is no mode, take the average of the two middle values as the prevailing price. Round the computed average price to the nearest 5 centavos.
3. If there are multiple modes, take the average of the modes as the prevailing price. Round the computed average price to the nearest 5 centavos.

VI. PROCESSING OF DATA (FROM COLLECTION FORM TO TRANSMISSION/SUBMISSION FORM)

A. Non-AGMARIS Provinces

1. Data from MIS-2 – Farm prices (palay and corngrain), WSP (corngrain and corngrits), RSP (corngrain and corngrits), dealer prices of fertilizer:
 - a. Copy from MIS-2's column 7 the prevailing prices into corresponding columns in MIS-3 for each commodity.
 - b. Copy the price ranges determined in column 8 of MIS-2 for each item to the corresponding "Price Range" column of MIS-3.
2. Data from MIS-4A – Wholesale Selling Prices (Rice)
 - a. Get the prevailing wholesale selling price of each rice type from MIS-4A's column 10 and enter in MIS-3's column for "Prevailing Price".
 - b. Get also from Column 11 of MIS-4A the lowest and the highest wholesale selling prices for each rice type determined for the reference period and enter in column "Price Range" of MIS-3.
3. Data from MIS-4B – Retail Prices (Rice)
 - a. Enter in MIS-3 the prevailing retail price for each rice classification found in Column 10 of MIS-4B.
 - b. Copy from Column 11 of MIS –4B the retail price ranges of each rice type to MIS-3.

B. AGMARIS Provinces

1. Data from CF-1A – Wholesale buying price of cereals – follow processing procedures for commodities other than cereals.
2. Data from MIS-2
 - a. Farm prices (palay and corngrain) and dealer prices of fertilizers: procedures the same as those for non- AGMARIS provinces.
 - b. Wholesale Selling Prices (corngrain and corngrits)
 1. Gather all the MIS-2 Forms for all markets/collection points for the reference period.

2. By item or commodity, post all the prices in Columns 2 to 6 in all markets for all collection days in a worksheet in an ascending or descending order.
 3. Count the frequency of occurrence of a price quotation. The price with the highest frequency count is the prevailing price. In case there is no prevailing price, follow the rules on the previous pages in determining a prevailing price.
 4. Determine the lowest and highest prices from the array.
 5. Transfer the prevailing, low and high prices determined in 3) and 4) above to the corresponding Columns in MIS-3.
- c. Retail Selling Prices (corngrain and corngrits) – follow the procedures in B2b above.
3. Data from MIS-4A – Wholesale Selling Prices of Rice
 - a. Gather all the MIS-4A forms for all markets/collection points for the reference period.
 - b. By type of rice, post all the prices in Columns 3-9 in all markets in a worksheet in an ascending or descending order.
 - c. Count the frequency of occurrence of a price quotation. The price with the highest frequency count is the prevailing price. In case there is no prevailing price, follow the rules on the previous pages in determining a prevailing price.
 - d. Determine the lowest and highest prices from the array.
 - e. Transfer the prevailing, low and high prices obtained in c) and d) to the corresponding columns in MIS-3.
4. Data from MIS-4B – Retail Selling Prices of Rice – follow procedures set forth in B3 above for wholesale selling prices of rice.

VII. INFORMATION DISSEMINATION

A. Cereals and Fertilizer Price Bulletin

The prices gathered for the week are disseminated weekly through the weekly Cereals and Fertilizer Price Bulletin. This bulletin contains the prevailing prices and price ranges for the week from all the provinces. These prices are also compared to the previous week's, previous month's and last year's price levels. National average prices, computed simply from the prevailing prices as well as the lowest and highest prices for the week are determined using the price reports of the 45 priority provinces for palay (Attachment 11) and 38 priority provinces for corn (Attachment 12). These provinces are the major producers of palay and/or corn. A separate table for Metro Manila's prevailing and price ranges is also included in the bulletin.

Primary users of the bulletin are the Department of Agriculture, NEDA, NFA, and other government and private agencies.

B. Databank

The weekly prevailing prices and price ranges at the farm, wholesale and retail levels by province are posted in separate worksheets. **At the end of the month, provincial, regional and national averages are computed by simply averaging the weekly prevailing prices.** Determined also at the end of each month are the lowest and the highest prices reported at the provincial, regional and national levels. At the end of the year, annual average prices and price ranges for each commodity at the provincial, regional and national levels are likewise prepared.

These series of price data are the usual demand of researchers particularly from the academe, policy and decision makers from public and private institutions.

As mentioned earlier, the farm prices generated from the CGPM serve only as indicators of cereal prices. The data obtained from the regular FPS remain as the official farm prices on cereals. For wholesale and retail prices, however, those generated under the CFPM are considered as the official data since the methodologies of the AMNEWSS and AGMARIS are the ones followed in their collection.

Attachment 1

METHODOLOGY ON CEREAL PRICE MONITORING UNDER THE FARM PRICES SURVEY

A. PROVINCIAL/COMMODITY COVERAGE

- Covers all provinces
- Palay – fancy, other varieties
- Corn, matured – white, yellow

B. FREQUENCY/SCHEDULE OF COLLECTION

- Monthly with 30-day period prior to the time of collection
- Every 26th of the reporting month to the 3rd of succeeding month

C. TYPE OF INFORMATION

- Prices received by palay/corn farmers (selling prices of farmers)

D. SOURCE OF INFORMATION

- Farmers who sold palay and/or corn during the reference period

E. SURVEY DESIGN

- 3-stage sampling procedure using province as the domain
 - First Stage - 5 sample municipalities
 - Second Stage - 1 sample barangay per municipality
 - Third Stage - 6 sample farmers per sample barangay
- Purposive
- Maximum of 30 respondents per item per province