



REPUBLIC OF THE PHILIPPINES

PHILIPPINE STATISTICS AUTHORITY

Palay and Corn Production Survey

PALAY PRODUCTION SURVEY

5. Data Review and Validation

The PSA has mainstreamed a quarterly data review and validation process to ensure the quality of its statistical products. This is conducted in three (3) levels-the Provincial Data Review (PDR), Regional Data Review (RDR) and National Data Review (NDR).

The first level, PDR is done at the province and is attended by the provincial staff. The PSO is responsible for the conduct of the PDR, assisted by the focal person for the sub-sector. The RDR is presided by the RD and/or Statistical Operations and Coordination Division (SOCD) Chief and attended by all the PSOs in the region. The NDR is held at the Central Office with participation of the technical staff, RSSO representatives and management. At this level, one-on-one consultations between the sector/commodity specialists and the RSSO representatives are done to clear issues, if any, after which regional estimates are finalized and consolidated to come up with the national estimates. Both the regional and the national estimates are then presented to the management for final approval.

Three Levels of Review	Schedule
Provincial Data Review (PDR)	2 days after data processing at PO (2 nd week of the survey round)
Regional Data Review (RDR)	2 days after the PDR (3 rd week of the survey round)
National Data Review (NDR)	Last week of the survey round



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Note:

At the provincial level, the reviewers shall focus on the level that reflects the situation in the province. At the regional level, the focus is on the comparison between and among provinces in the region. At the CO, the national level data shall be in comparison between and among the regions and with related national data/information. The regional and national level data shall clearly reflect the relative contribution of its components by crop which varies by reporting period and the annual result.

5.1 Data Review

Data review process starts from data collection up to processing and generation of output tables. However, data examination is formalized during the PDR since it is in this stage where the data at the provincial level is analyzed as a whole. The process involves analyzing the survey data in terms of completeness, consistency among variables, trend and concentration of the data and presence of extreme observations. Correction of spotted errors in the data is done afterwards. The output of the process is a clean data file used in the re-computation of surveys estimates.

Manual editing is the initial point in data review process. This is done by the SRs and supervisors. Use blue ink ball pen in the manual editing. Inputs of the process are as follows:

- Masterlist of sample barangays and sample respondents;
- Accomplished and edited survey returns; and

Editing process start from completeness check, consistency check, correcting identified errors and computation of estimates based on clean data.

- Completeness check
 - Check the masterlist if all samples were covered.
From the accomplished questionnaire, check the names of the respondents from the masterlist.
 - Check for completeness of entries.
 - If there is production during the reference period, check:

- ✓ month harvested, area harvested, month when crop was planted
- ✓ quantity produced
- ✓ major types of seeds planted, generation of seeds planted
- ✓ product name of the variety planted
- ✓ method of crop establishment (palay)
- ✓ quantity of seeds planted
- If fertilizer was applied, check
 - ✓ area applied with fertilizer
 - ✓ quantity and grade of fertilizer applied
- If pesticide was applied, check
 - ✓ area applied with pesticide
 - ✓ quantity and type of pesticides applied
- There should be entry in disposition, assessment of farm production, awareness and availment of program interventions.
- Consistency check
 - Check for the consistency of the data across portions of the questionnaire
 - ✓ conformity of production data with the production form and unit of measure
 - ✓ breakdown of estimates by ecosystem and seed type
 - ✓ total palay farm area should be less than or equal to the agricultural area
 - ✓ total area harvested should be less than or equal to total area planted
 - ✓ area applied with fertilizer/pesticide should be less than or equal to the area harvested
 - ✓ area applied with fertilizer/pesticide should not exceed area planted
 - ✓ total production equals total disposition
 - Check for outlier figures
 - If unusual levels of estimates are derived, verify & review entries in the questionnaire.

5.2 Data Validation

The data validation process involves thorough analysis of the estimates generated from the clean data set which are compared with auxiliary information to incorporate the impact of other information and events not captured by the survey. The auxiliary information includes results from the Monthly Palay & Corn Situation Reporting System (MPCSRs), historical data series, report on weather condition, area and crop condition, irrigation, levels of input usage, supply and demand, marketing of agricultural products, and information on rice program implementation.

Inputs

- **PPS output tables.** These are the tables generated from the CSPro processing system developed by SDD. These will serve as bases in coming up with the production estimates for the reference quarter and the forecasts on standing crop and planting intentions (Appendix C). Other information being generated are fertilizer, pesticide and seeds usage, farmers' disposition of production and availment of program interventions. These tables are consolidated in the publication "Palay Production of the Philippines" and shall also serve as auxiliary information during the data validation process.
- **Historical data series.** Quarterly, semestral and annual data series of palay production, area harvested and yield.
- **MPCSRs** (latest result). Monthly crop monitoring report on the stages of standing crop (vegetative, reproductive and maturing), percent of actual harvests from standing crop and actual plantings from planting intentions (Appendix E).
- **Reports** - Narrative Report/PDR report (Appendix D). The PDR report provides a documentation of what transpired during the conduct of the provincial data review and validation. It gives a general description of the present agricultural situation in the province during the reference quarter. It also accounts for the major findings/problems encountered during the data review, the factors that contributed to these findings, and specific actions taken to address them. It contains the data

items that were subjected to adjustments based on the auxiliary information used during the data validation, the reason for doing the adjustment and the procedure employed to arrive at the adjusted estimate.

- **Auxiliary information**

- Weather – what about the weather
- Shifting – to or from what crop/activity
- Movement of Harvest – to or from what quarter
- Pests and Diseases – specify type of pests or diseases
- Interventions – what was availed

- **The validation process involves the following activities**

- Establish the acceptability of semester estimates which would rationalize the level of quarter estimates;
- Justify with sound reasons any significant changes (increase or decrease in the level of estimates);
- Assess the consistency of the survey-based estimate with the existing data series;
- Check for consistency of the data being validated with the latest MPCSR;
- Assess the consistency of reasons;
- Check for conformity of the estimates with the normal range of values in the data series; and
- Elaborate the reasons that affect the trend in production/harvest area/ yield.
Increased/Decreased due to:
 - Weather – what about the weather
 - Shifting – to or from what crop/activity
 - Movement of Harvest – to or from what quarter
 - Pests and Diseases – specify type of pests or diseases
 - Interventions – what was availed

5.3 Outputs for Submission

The National Review Sheet (NRS)

This is the main output of the validation process at all levels which shows the transformation of estimates in three (3) succeeding quarters from forecast stages (planting intention and standing crop) to actual or final estimate. It also contains the estimates based on survey, PDR, RDR and NDR.

The main data items contained in the NRS are the production; area harvested and yields per hectare by ecosystem and seed type. It also shows the growth rate of the current round's levels versus the previous round's levels and current round's levels versus the estimates in same period of the previous year. Sections for REASONS of material change compared to the previous round's forecast and REASONS of material change versus the estimates in same period of the previous year are also allotted in the NRS (Appendix B). Soft copies of the NRS should be submitted to CSD, immediately after the conduct of PDR and RDR.