



MINISTRY OF PLANNING & INVESTMENT  
**GENERAL STATISTICS OFFICE**

---

**PRODUCTION SURVEY OF PADDY  
IN VIETNAM**

**DO THI THU HA**  
*General Statistics Office of Vietnam*



# BACKGROUND

- Paddy is the most important crop in Vietnam, occupying 40% of gross output of agriculture
- The cultivated land of paddy is 4.2 million ha (43% production agricultural land area). Vietnam's climate is suitable for paddy production. It could be planted 2 times/year in the North and 3 times/year in the South
- 9.3 million households planting of paddy (65% of rural hous.)
- Paddy production in 2011 is 42.2 million metric tones, exporting 7.4 million tones rice. Import rice country 25 year ago, become the 2<sup>nd</sup> largest exporting rice country in the world



# PRODUCTION SURVEY OF PADDY

- ❖ Early forecast
- ❖ Method of data collection
- ❖ Sample size
- ❖ Sample selection and allocation
- ❖ Estimation of yield and production
- ❖ Constraints



# EARLY FORECAST

Early forecast is carried out to provide timely information on paddy production

The early forecasting of paddy yield is implemented by all communes normally twice a season:

- The first time when majority of paddy rice are in completed booting
- The second time when paddy rice are in dough ripe



# ACTUAL SURVEY

## Method of data collection

- Before 1993: Crop cutting
- Since 1993 up to now: Interview

**Survey unit:** household planting paddy

**The survey** has been conducted in district with 100ha or more paddy planted area



# SAMPLE SIZE

**A three stage** stratified sampling is applied for selection of sample

- The first stage sampling unit is the commune
- The second stage unit is village
- The third stage sampling unit is the household planting of paddy

Number of sample communes and sample households is **proportionately determined** to the number of communes and planted area of the district

- **Number of sample** communes of a district allocated as follows:

Number of communes of district	Number of sample communes
20 or more	7
10 to 19	5
9 or less	3



## SAMPLE SIZE

- **3 villages** will be selected for each sample commune
- **Number of sample households** will be selected for a district depend on the size of paddy planted area:

Paddy planted area of district	Number of sample households
10 000 ha or more	250
5 000 ha to 10 000 ha	200
500 ha to under 5000ha	150
100 ha to under 500 ha	70





# SAMPLE SELECTION

- Selection of sample communes: list all communes, calculation of sample interval - select the first commune (median), ...
- Selecting of sample villages: list villages then calculation of sample interval - select the first village (median),..
- Selecting of sample households: list households then calculation of sample interval - select the first household (median),..
- Sample households are chosen separately for each season/time and keeping fixed for some next coming seasons



# ESTIMATION OF YIELD AND PRODUCTION

Estimate for district level:

- Average yield of sample hous. of the district
- Production will be estimated based on the average yield and planted area of paddy of district

For districts under 100ha

Estimate for province level

Estimate for the whole country



# CONSTRAINTS

- Given the important role of paddy, there is extremely strong demand of local government on information of production and yield of paddy. The information is requested down to district and even to commune level while budget allocated for the survey is limited. In fact, some districts/provinces add more sample to estimate data for commune level by their own budget
- Large sample: up to now, yield and production is estimated for district level, total sample of the survey: more than 300 thous. hous./year
- The sampling errors, confident interval and variance have not been calculated.



MINISTRY OF PLANNING & INVESTMENT  
GENERAL STATISTICS OFFICE

**Thanks you!**