WEBTRAINING ON TESTING OF COMBINE HARVESTERS FOR REDUCING OF LOSSES AND INCREASED SAFETY

Utilization of Combine Harvester in Malaysia and Its Performance Control

11 October 2022, 14.00-16.30 GMT+8
OVERVIEW: COMBINE HARVESTER IN MALAYSIA

SIZE OF COMBINE HARVESTER
1. Big combine harvester
2. Small/Mini combine harvester

TYPES OF COMBINE HARVESTER
1. Tangential flow
2. Axial flow

ISSUES
1. No specification and reference model
2. Improper maintenance and setting
3. No SOP and Lack of skilled manpower

- Total combine: 1,500 units
- 15% owned by government sector
- 20% small/mini harvester

a. Big harvester
b. Small/Mini harvester (rice)
c. Small/Mini combine (maize)
d. Tangential flow harvester
f. Imported used harvester (wheat)
g. Reconditioned combine in progress

d. Axial flow harvester

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PEFORMANCE CONTROL:
COMBINE HARVESTER IN MALAYSIA

**SOP FOR HARVESTER**

1. **SOP - Combine Harvester Inspection**: To check and verify condition and performance of new and reconditioned combine.

2. **SOP - Combine Harvester Maintenance**: To ensure combine in tip top condition by implementing periodical maintenance.

3. **SOP - Combine Harvester Operation**: To achieve optimum performance by following the proposed guideline.

**COMBINE MONITORING APP**

- Calibrate, Record, Monitor

**MOBILE APP**

- Benefit
  - Ensure good condition of harvester through calibration based on SOP
  - Simplify filling checklist process
  - A system to identify harvester condition
  - Prolong harvester lifespan by doing proper maintenance

**GRAIN LOSS VERIFICATION**

- The verification focused at header and threshing mechanism
- Grain loss before control: Average 9%
- Grain loss after control: Less than 5%
WAY FORWARD - SPECIFIC TESTING NEEDS

Machinery Testing Laboratory

Development of Testing Centre (Test Manpower Training (Train the Trainer)) Implementation of ANTAM Test Code
THANK YOU