

## Pre-harvest Rice Management

### Maturity Indices for Rice for Harvesting

Time from planting to harvesting varies from 4 to 6 months. Rice is ready for harvesting when:

- Grains are hard when chewed, turning yellow / brown.
- About 80% of the grains have changed colour from green to straw colour. The rest of the grains being in the hard dough stage.
- Grain moisture content is 20-22%.
- When hand-dehulled, grain is clear and hard.
- Grain should be firm but not crumbly when pressed between the teeth.



**Fig1. Mature rice crop ready for harvesting**  
Source: Oliver Nyongesa



**Fig 2. Rice bird scaring in Kibos, Kenya** Source: Lusike Wasilwa

### Timeliness of harvest

- Proper timing is important factor in rice harvesting as it affects field losses, grain quality and marketability.
- Early harvesting results in more quantity of immature paddy, leading to increased broken rice during milling, and more chances of disease attack during storage.
- Delayed harvesting exposes the grain to attack by rodents, birds and insects; and leads to grain shattering during harvesting, cracking during threshing, and breakages during milling (Table 1).
- Delayed harvesting also increases risks of lodging, which complicates harvesting.

### Preparations for the harvest

- Drain all water from the paddy fields at least 7 days before harvesting.
- Scare birds from destroying the mature crop.
- Ensure that equipment for harvest and postharvest activities are available and in good condition.
- Decide where activities such as drying and threshing will take place.
- Have enough clean gunny bags for the harvested crop (30-36 bags per acre).
- Ensure that grain stores and sacks have been thoroughly cleaned.
- The new harvest should never be mixed with grain from the previous season to prevent transfer of pests from old to new harvest.

Table 1. Gross losses at different harvesting times based on crop maturity

Losses (%)	0.8	3.4	5.6	8.6	40.7	60.5
Harvest time (weeks)	-1	0*	+1	+2	+3	+4

\*Maturity date