

How to Sun Dry

What is sun drying?

Sun drying is the traditional method for reducing the moisture content (MC) of paddy by spreading the grains in the sun. The solar radiation heats up the grains as well as the surrounding air and thus increases the rate of water evaporating from the grains.

Why is proper sun drying important?

If sun drying is managed properly it can produce good quality grain. General guidelines for proper sun drying are:

How to sun dry properly

<i>Spread the grains</i>	<i>Mix frequently</i>	<i>Protect</i>
		
<ul style="list-style-type: none"> • Spread the grains on pavements, mats, nets or canvas in thin layers, ideally 2-4 cm but less than 5cm thick. • For faster drying place the grains/panicles in well aerated or windy areas. 	<ul style="list-style-type: none"> • Mixing is the most important activity for maintaining good quality. • Mix frequently, at least every 30 minutes. 	<ul style="list-style-type: none"> • Monitor grain temperature and moisture content. • Shade or cover when temperatures are above 50°C (42°C for seeds). • Collect/cover the grains during rain and at night. • Keep animals off the grains.

Technology options to improve sun drying

Sundrying can be improved by using simple tools and facilities



- Pavements with elevations for the grains and drainage channels for rain water.
- Tools or machines for mixing and collecting grains.
- Moisture meters and thermometers for monitoring the drying process.

Other issues

- To minimize cracking use sundrying for first-stage drying to 18% MC, safe for 2 weeks storage. Use other drying systems for final drying to MC below 14%.
- Do not dry on public roads because it pollutes the grains, hinders traffic and can cause accidents.

For more information contact

Agricultural Engineering Unit
 IRRI, DAPO Box 7777, Metro Manila, Philippines
 Tel.: (63-2) 580-5600, Fax.: (63-2) 580-5699
 Email: M.Gummert@cgiar.org
 J.Rickman@cgiar.org