Package of Practices (POP) – Sugarcane Variety CoJ 64

Introduction

CoJ 64 is a late-maturing variety originating from Jaunpur, Eastern UP. It is one of the few varieties suited for Bundelkhand's hard calcareous soils and erratic rainfall conditions. Its drought tolerance, ability to survive on limited irrigation, and adaptability to poorly drained heavy clay soils make it economically important for resource-poor farmers in Eastern UP and Bundelkhand (Jhansi, Lalitpur, Banda, Chitrakoot divisions).

Land Preparation

Soil and Climate: Clay loam, heavy loam, and calcareous soils with pH 7.5–8.5. Bundelkhand has erratic rainfall (60–100 cm) and high summer temperatures (up to 45°C). Drought tolerance of CoJ 64 suits this environment.

Tillage: Deep ploughing to 35 cm with subsoil plough to break hardpan in calcareous/hard soils. Apply lime @ 1–2 t/ha if pH exceeds 8.0 to neutralise alkalinity. Incorporate FYM 15 t/ha. Form furrows 90 cm apart, 30 cm deep.

Planting

Timing: Spring planting: March–April (later than western UP due to extended frost period in Bundelkhand).

Seed material: 35,000 three-budded setts/ha. Row spacing: 90 cm. Planting depth: 20–25 cm.

Seed Treatment

- HWT: 52°C for 30 minutes.
- Chemical: Vitavax 0.2% + Chlorpyrifos 0.1% dip.
- Seed biopriming: Azotobacter + PSB applied to setts before planting for root-zone nutrient promotion.

Planting Methods

Flat furrow method: Standard for Bundelkhand. In water-scarce conditions, adopt mulched furrow planting — lay dry crop residue (stubble, grass) immediately in and around furrow after planting to retain moisture.

Spacing: 90 cm row-to-row. Narrower spacing not recommended due to harsh summer conditions and need for inter-row air circulation.

Nutrient Management

Fertilizers: 200 kg N, 80 kg P_2O_5, 80 kg K_2O/ha (reduce N rate for rain-fed/semi-irrigated areas). K is critical for drought tolerance.

Organic: FYM 15 t/ha + vermicompost 5 t/ha where available. Reduces reliance on chemical fertilizers.

Micronutrients: Zinc Sulphate @ 25 kg/ha + Boron @ 1 kg/ha for calcareous soils prone to micronutrient deficiency.

Bio-fertilizers: Azotobacter @ 2 kg/ha + PSB @ 2 kg/ha in 3 splits.

Irrigation

Total: 5–8 irrigations (rain-fed and semi-irrigated conditions).

- Critical stages: Germination (April–May), tillering (June), grand growth (July–August, largely met by monsoon).
- Post-monsoon: 1–2 supplemental irrigations in October–November.

Rainwater harvesting: Farm ponds and field bunds for rainwater collection are strongly recommended in Bundelkhand blocks.

Weed Control

Pre-emergence: Atrazine @ 2 kg a.i./ha at 3 DAP.

Manual: Weeding + earthing up at 45 and 90 DAP.

Mulching: Dry crop residue mulch is highly effective in Bundelkhand — reduces weed germination and conserves critical soil moisture.

Pest and Disease Management

- Termites (major pest in Bundelkhand): Drench Chlorpyrifos 20 EC @ 4 L/ha in furrow at planting.
- Mealybug: Drought-stressed plants attract mealybug; drench with Dimethoate if infestation found.
- Red Rot: Variety has inherent resistance; retain HWT as additional safeguard.
- Wilt: Ensure proper drainage; avoid prolonged waterlogging after rare heavy rains.

Yield

Yield potential: Plant crop: 70–90 t/ha. Ratoon crop: 55–70 t/ha under rain-fed conditions.

Sugar recovery: 9.8% CCS. Late-maturing variety benefits from extended ripening period.

Best suited for: Eastern UP and Bundelkhand regions — Jhansi, Lalitpur, Banda, Chitrakoot, Jaunpur, Varanasi.

Ratoon Management

Stubble shaving: Shave to 8–10 cm depth.

Trash mulch: Essential in Bundelkhand — retain all trash as mulch to conserve soil moisture.

Irrigation: Supplemental irrigation in October–November for ratoon establishment.

Fertilizer: Topdress 30 kg extra N/ha at 30 DAS of ratoon. Inter-cultivation with blade harrow.

Harvest timing: Harvest ratoon at 12 months for maximum sugar yield in late-season crops.

Fair and Remunerative Price (FRP) of Sugarcane

The FRP is the minimum price that sugar mills are legally required to pay sugarcane farmers, fixed by the central government on CACP recommendations.

Season	FRP (₹/quintal)	Base Recovery
2025–26	₹355	10.25%
2024–25	₹340	10.25%
UP SAP 2024–25	₹370 (early varieties)	—

A premium of ₹3.46 per quintal is paid for every 0.1% increase in recovery above 10.25%. For mills with recovery below 9.5%, the minimum price is ₹329.05 per quintal.