INTERCROPPING IN SUGARCANE SCOPE COMPATIBLE CROPS EXPERIENCES & RESULTS

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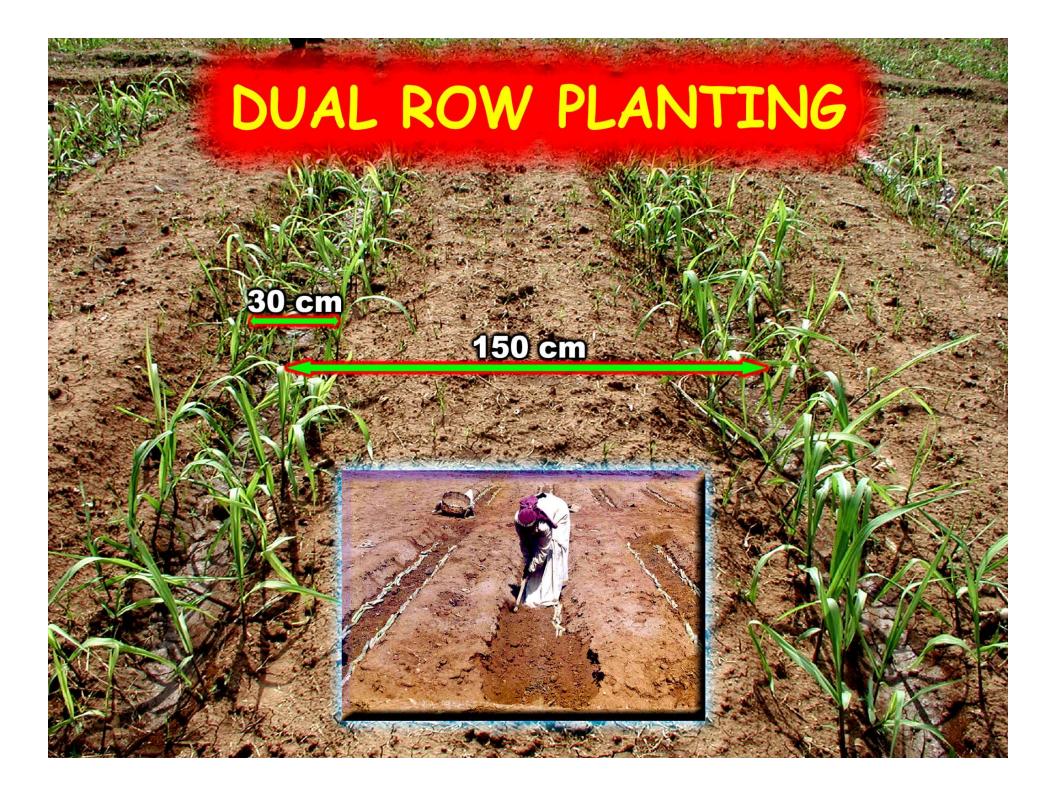
WIDE ROW SUGARCANE 150 cm inter row spacing To facilitate mechanization of cane cultivation

Facilitates intercropping

Facilitates use of power tillers and small machinery for intercultural operations

Facilitates easy movement of labour for field operations

Yield can be maintained adopting appropriate agrotechniques



## **ROW LENGTH PER HECTARE**

- 90 cm spacing : <u>10,000</u> =11,111 m 0.9
- 150 cm spacing :  $\frac{10,000}{1.5} = 6,667$  m

#### Seed rate of 75,000 two budded setts/ha

No. of two budded setts / m length in 90 cm rows	:	<u>75,000</u> 11,111	=	6.75
No. of two budded setts / m length in 150 cm rows	:	<u>75,000</u> 6,667	=	11.25

Seed rate for 150 cm rows, if 6.75 two budded setts are planted / m length of row :  $6.75 \times 6,667 = 45,000$ 

6.75 setts per metre length in WR -- yield reduction
because of lower stalk population Around 60,000 two budded setts
9 two budded setts per metre length of row

### **INTERCROPPING IN SUGARCANE**

Initial slow growth –
 3 months or more for canopy closure

Wider row spacing

## Profitability depends on

- Farmer's preference (Labour & Capital)
- Yield of base crop
- Yield of intercrop
- Price realized for the produce
- Highly erratic prices for the produce
- Marketability of the intercrop produce

# Practices to avoid reduction in yield of sugarcane

- Selection of intercrop of short duration with dwarf and compact canopy
- Planting geometry to avoid competition
- Meeting the nutritional needs of base crop and intercrop separately
- Applying major portion of nutrients to base crop after the harvest of intercrop

#### **Reasons for low adoption of ICS**

- Affects tillering Farmers come to the conclusion that ICS is deleterious
- Selection of competitive crops leads to deleterious effect – weans away the farmers
- Adoption of high population for IC reduction in cane yield – dissuades the farmer
- Fertilizers not applied to intercrop
- Unavailability of labour drudgery in field operations
- Cane yield under ICS marginally lower sugar factories do not encourage ICS

## **Suggested Recommendations**

- Wide row spacing
- Select a location specific short duration crops such as onion, coriander (leaf) etc.,
- Meet nutrient requirement of main & intercrop
- Mechanization of operations
- Irrigation Management