

Water management: For proper growth and optimum yield 10-11 irrigations are sufficient.

Weed management: Depending upon the severity of weeds, weeds can be managed by 2-3 manual weeding.

Plant protection :

Grow resistant varieties

Spray of neem based insecticides to avoid insects/vectors

Productivity and economics of maize - potato - okra cropping system under organic cultivation (2006-07 to 2012-13)

Crop/System	Grain yield (kg/ha)			
	Conversion period		4 th year	5 th year
	Mean of first 2 years	3 rd year		
Maize(grain)	4380	4416	4590	4860
Potato	12500	13166	21300	22300
Okra	3895	6460	10280	10530
Maize (grain)-potato-okra (Maize equivalent yield)	18457	23255	34777	36069

The gross returns from the organic production of maize (grain) - potato - okra system were ₹ 6,99,756/ha with ₹ 3,55,877/ha as cost.

ORGANIC PACKAGE FOR MAIZE-POTATO-OKRA SYSTEM



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Maize (grain)



Suitable varieties: Variety 'Star-56' and other low input requiring and resistant varieties to insect pest and diseases.

Sowing time: First week of July. To escape water logging maize should be sown on ridges in ridge and furrow system of sowing.

Seed rate: 20 kg/ha. Organically certified seed should be preferred for sowing.

Spacing: Row to row 60 cm and plant to plant 20 cm distance should be maintained.

Nutrient management:

Well rotten FYM @ 8.0 t/ha should be incorporated into the soil at least 20 days before sowing.

Vermicompost @ 4.0 t/ ha is top dressed before second irrigation.

Biofertilizers like *Azotobactor* (nitrogen fixer) and Phosphorus Solublizing Bacteria (PSB) each should be added @10 kg/ha in soil after final land preparation.

Water management: Depending upon the amount and frequency of rains during the growing season 3-4 irrigations are sufficient.

Weed management: Maize being widely spaced crop, weeds can be managed by 1-2 manual intercultural operations.

Plant protection:

Field release of Tricho-cards (*Tricogramma chilonis*) 3-4 times @ 30 cards/ha for stem borer.

Seed treatment with *Pseudomonas fluorescence* culture @ 4 kg/ha for stalk rot.

Potato



Suitable varieties: Variety 'Chipsona-3' and other low input requiring and resistant varieties to insect pest and diseases.

Sowing time: Up to last week of October.

Seed rate: 30 q tubers/ ha. Organically certified tubers should be preferred for sowing.

Spacing: Row to row 60 cm and plant to plant 20 cm distance should be maintained.

Nutrient management:

Well rotten FYM @ 14.0 t/ha should be incorporated into the soil at least 20 days before planting.

Vermicompost @ 7.0 t/ ha is top dressed before second irrigation.

Biofertilizers like *Azotobactor* (nitrogen fixer) and Phosphorus Solublizing Bacteria (PSB) each of are added @10 kg/ha in soil after final land preparation.

Water management: Potato can be successfully raised by applying five irrigations besides pre-sowing irrigation.

Weed management: Weeds under organic cultivation of potato can be easily managed by 2 manual weedings.

Plant protection:

Grow resistant varieties for late blight

Timely sowing to avoid early blight

Okra



Suitable varieties: Variety 'Arka Anamica' and other low input requiring and resistant varieties to insect pest and diseases.

Sowing time: Second week of March.

Seed rate: 18 kg/ ha. Organically certified seed should be preferred for sowing.

Spacing: Row to row 45 cm and plant to plant 30 cm distance should be maintained.

Nutrient management:

Well rotten FYM @ 8.0 t/ha should be incorporated into the soil at least 20 days before planting.

Vermicompost @ 4.0 t/ ha is top dressed before second irrigation.

Biofertilizers like *Azotobactor* (nitrogen fixer) and Phosphorus Solublizing Bacteria (PSB) each should be added @10 kg/ha in soil after final land preparation.