Krishi Netra
ISSN : 3048-5207

Economics of Paddy-Paddy Farming of Tenant Farmer in Eluru District

T. Srinivas[1], Y. Suneetha[2] and D. Manoj Kumar[3]
Regional Agricultural Research Station, Maruteru and
Acharya N.G. Ranga Agricultural University, Lam, Guntur
Corresponding Author: manojgene7@gmail.com

Manuscript No: KN-V2-07/004

Farmer : **Bandi Trimurthulu,** Mobile : 9701133783
Village :Bommidi, Mandal : Unguturu
Tenant farmer with no own land, cultivating paddy in land on lease basis for the past 25 years
Land owners are job holders/business persons
Lease amount : Amount equivalent to 16 bags/each season to be paid at the end of each season
Cost of cultivation in Kharif : 30,000/- per acre and in Rabi : 35,000/- per acre for Swarna variety
Swarna cultivated in Kharif season for Grain purpose and in Rabi for Seed purpose

KharifSeason :

1.Swarna – 27.0 acres – 40 bags of 75 kg/acre (Dry weight basis) sold @ 1637/- per bag of 75kg (MSP of 2183/- per quintal) in November 2023

- Gross Returns = 65,480/- per acre
- Cost of cultivation = 30,000/- per acre
- Net returns = 35,480/- per acre
- Total returns = 9,57,960/- for 27 acres in 140 days with Swarna variety
- Lease amount = 16 x 1637/- x 27 = 7,07,184/- for Kharif season
- Net profit to the tenant farmer = 2,50,776/- for 6 months or 41,796/- per month

Advantages of Swarna Variety:

- Cosmopolitan variety with assured yield, in spite of adverse climate
- Miller preferred variety due to high Head rice recovery (HRR)
- Tolerant to BLB, BPH and low input responsive variety
- Dormancy of two weeks and low shattering
- Also used for consumption in certain districts of the state

Disadvantages of Swarna Variety:

- Lodges completely at maturity during cyclones/heavy rains due to weak culm
- Highly susceptible to Blast

RabiSeason :

1. PR 126 – 7.0 acres – 68 bags of 75kg/acre (Fresh weight basis) sold @ 1270/- per bag of 75kg in April 2024

- Gross Returns = 86,360/- per acre
- Cost of cultivation = 30,000/- per acre
- Net returns = 56,360/- per acre
- Total returns = 3,94,520/- for 7 acres in 120 days with PR 126 variety

Advantages of PR 126 variety:

- Ready market for fresh produce without drying at the farmers field itself and instant cash to the farmer
- Short duration variety of 120 days and therefore Low GHG emission

Krishi Netra
ISSN : 3048-5207

- Drought tolerant and less water requirement per kg of grain
- Low biomass variety, suitable for parboiled rice and export to African countries, in view of rice kernel length >6mm

Disadvantages of PR 126 variety :

- Lack of availability of Pure and good seed
- Not notified for cultivation in the state of Andhra Pradesh
- Being discouraged by the Dept. of Agriculture and hence, procurement problem through RBK's, in case of large scale cultivation
- Discouraged by local millers, in view of the local mills being used for raw rice milling only

2. MTU 1121 - 3.0 acres - 55 bags of 75kg/acre (Dry weight basis) sold @ 1637/- per bag of 75kg in April 2024

- Gross Returns = 90,035/- per acre
- Cost of cultivation = 30,000/- per acre
- Net returns = 60,035/- per acre
- Total returns = 1,80,105/- for 3 acres in 130 days with MTU 1121 variety

Advantages of MTU 1121 variety:

- Variety with high yield potential
- Good head rice recovery
- Suitable for raw rice
- Preferred by local rice Millers
- Dries on the standing crop itself and hence, no need for further drying on floor

Disadvantages :

- Highly susceptible to BLB and Stem rot diseases
- 130 days duration in Rabi
- Market mostly through procurement by Govt. with no scope for instant cash and other issues related to procurement

3. MTU 7029 seed production – 17.0 acres – 55 bags of 75 kg/acre (Dry weight basis) sold @ 1900/- per bag of 75kg in April 2024

- Gross Returns = 1,04,500/- per acre
- Cost of cultivation = 35,000/- per acre
- Net returns = 69,500/- per acre
- Total returns = 11,81,500/- for 17 acres in 135 days with MTU 7029 variety seed

Gross total for 27 acres in Rabi (PR 126 + MTU 1121 + Swarna Seed) = 17,56,125/- in 150-180 days
Lease amount for 27 acres = 16 bags x 1270/- =20,320/- per acre or 5,48,640/- per 27 acres
Net profit during Rabi Season for 27 acres = 12,07,485/- in 150 – 180 days during Rabi season or 2,01,247/- per month
Average income per month during 2023-24 = 1,21,521/- per month for 27.0 acres of leased land

Benefits to the Owner : 12,55,824/- (7,07,184/- + 5,48,640/-) for 27 acres per year or 46,512/- per acre per year

The above story of the tenant farmer is expected to motivate and help the unemployed youth to return to the

Krishi Netra
ISSN : 3048-5207

villages and Agriculture and make it a profitable enterprise.
Critical Interventions required for increasing the farmer's income :

Kharif variety :

- 140 days duration, non-lodging variety with strong culm and high yield potential of 50 bags/acre and high HRR > 65% tolerant to BPH, BLB, Blast, dormancy of more than 2 weeks with germination < 10% in the first week, low shattering, brown glume colour, medium slender grain with transluscent grain and no abdominal chalkiness in addition to intermediate amylose content.

Rabi variety:

- 110-120 days duration, non-lodging variety with strong culm and high yield potential of 60 bags/acre and high HRR > 65% tolerant to BPH, BLB, Blast, dormancy of more than 2 weeks with germination < 10% in the first week, low shattering, medium slender or long slender (kernel length > 6.40mm) grain with transluscent grain and no abdominal chalkiness in addition to intermediate amylose content.

- Promotion of Wet direct seeding during Kharif and Rabi seasons with tractor drawn drum seeder to reduce the cost of cultivation by 5000-6000/- per acre
- Effective Weed control technology for transplanted and direct seeded rice to reduce labour costs for weeding
- Suitable varieties for wet direct seeding with non-lodging, anaerobic germination, increased root length and root volume, in addition to drought tolerance and above traits described for Kharif and Rabi seasons
- Seed to seed mechanization and promotion of farm machinery for weeding, fertilizer application and spraying
- Reduction of inorganic fertilizers by the incorporation of straw and bio-fertilizers to reduce the cost of cultivation
- Promotion of Green manure crop during the months of May-June for soil health and reduction of inorganic fertilizers for sustainable agriculture
- Establishment of Ethanol production industries for increased returns from Paddy straw and better price for drenched paddy during cyclones
- Creation of Farmer-Miller-Trader-Consumer linkages and clusters for the benefit of different stakeholders
- Promotion of Solar driers and Mini-rice mills on subsidy

The above interventions are expected to increase the farmer income by about 15-20 per cent, resulting in stable and sustainable agricultural systems and society.

Bandi Trimurthulu
(Progressive Farmer)

Principal Scientist (Rice)
RARS, Maruteru, ANGRAU, A.P