Cost analysis for Traditional and HYV of Paddy: a study on Tirunelveli District

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Abstract: As Mahatma Gandhi stated, India lives in towns and farming is the spirit of Indian economy. About 66% of populace depends specifically on Agriculture for its job. It contributes around 18 percent of the total national output. Agriculture meets sustenance necessities and produces a few crude materials for businesses. Paddy is a vital sustenance yield and it has more prominent financial significance among the nourishment crops, since it is one of the main creates in horticultural fares. Henceforth, the generation execution of the yield is of basic significance in enhancing the proficient utilization of assets. The expense of generation and net returns got per unit would decide the productivity of the yield. The gainfulness of an undertaking relies on the effective utilization of the assets underway. Further, the investigation of expense and returns structure of paddy would help the ranchers in guaranteeing appropriate asset mixes to expand the paddy yield, along these lines expanding the benefits. So the present investigation makes an endeavor to examine the creation and promoting of paddy in Tirunelveli District. The main objective of the study is to dissect the cost structure of paddy and its assortments as per cultivate measure in the two methods.

IndexTerms - Cost, Traditional, HYV, Paddy, Returns.

I. INTRODUCTION

India is an agrarian economy. Notwithstanding monetary advancement and industrialization agribusiness is the foundation of the Indian economy. As Mahatma Gandhi stated, India lives in towns and farming is the spirit of Indian economy. About 66% of populace depends specifically on Agriculture for its job. It contributes around 18 percent of the total national output. Agriculture meets sustenance necessities and produces a few crude materials for businesses.

Agriculture is considered as a vital way to continue the employment of masses. Nonetheless, confidence and independence in India has been concentrating on sustenance grains creation through farming approaches over timeframe and to achieve an extensive advancement, on that the nourishment grains generation has been raised to 257.07 million tons in 2014-15 from 52 million tons in 1951-52. Agriculture has been a lifestyle and keeps on being the absolute most vital employment of the majority. Agrarian approach center in India crosswise over decades has been on independence and confidence in nourishment grains creation. Impressive advancement has been made on this front.

Rice assumes an urgent job in Indian economy the staple sustenance for 66% of the populace. All inclusive, India positions in zone, 43.6 million ha and second underway (91.7 million tons) while every one of the states develop rice, the best seven rice delivering states Viz., West Bengal, Uttar Pradesh, Andhra Pradesh, Punjab, Orissa, Tamilnadu and Bihar.

The few way breaking impetuses are concerned and executed on agribusiness by Government of Tamilnadu which called as ranch level motivating forces, for example, cultivate edit the executives framework, Integrated cultivating framework, trim expansion, advances like rice escalation enhanced heartbeats creation advances at homestead level overall town idea, economical sugargane activities, accuracy cultivating, miniaturized scale water system and so on to introduce green upheaval other than arranging and actualizing huge number of plans for multiplying the generation and profitability of horticultural products and tripling the pay of the agriculturists.

At this crossroads, Tamil Nadu is one of the significant rice delivering states in India. Rice being the staple sustenance yield of Tamil Nadu, it is widely developed in every one of the locale of the state. The zone under rice development is around 22 lakh hectares, representing 33% of the gross trimmed territory of the state. The aggregate rice generation in the year 2000-2001 added up to 75 lakh tons.

The significance of farming in India emerges from the way that about 66% of the nation's populace specifically rely on agribusiness and one fourth of the national item is created by the rural area. Thus, it is critical that a distinct farming value strategy must be embraced. The rural value arrangement of the Government of India goes for (I) guaranteeing a profitable cost to ranchers for their deliver, (ii) guaranteeing supply of agrarian wares to the purchasers at sensible cost and (iii) setting up a structure of relative value, which accomplishes an attractive trimming design.

II STATEMENT OF THE PROBLEM

Paddy is a vital sustenance yield and it has more prominent financial significance among the nourishment crops, since it is one of the main creates in horticultural fares. Henceforth, the generation execution of the yield is of basic significance in enhancing the proficient utilization of assets. The expense of generation and net returns got per unit would decide the productivity of the yield. The gainfulness of an undertaking relies on the effective utilization of the assets underway. Further, the investigation of expense and returns structure of paddy would help the ranchers in guaranteeing appropriate asset mixes to expand the paddy yield, along these lines expanding the benefits.

In spite of the fact that generation is the commencement of the formative procedure, it could give less pick up to the makers except if there exists a proficient advertising framework. Farming showcasing is in this manner, of more noteworthy significance. Commercialization of agribusiness has additionally expanded the significance of promoting. Ranchers raise the yields with an expectation of getting reasonable returns for their hard work. For this, they rely available conditions, which are not extremely helpful for satisfy their expectations and desires. Constrained deals, variety of market charges, acts of neglect in unregulated markets and unnecessary go betweens are the issues looked by the ranchers. These issues of showcasing get

additionally included by the exceptional highlights of horticultural items to be specific, their inelastic interest, regularity in supply, spatially dissipated creation, massiveness and die capacity. Henceforth, the present investigation makes an endeavor to examine the creation and promoting of paddy in Tirunelveli District. The main objective of the study is to dissect the cost structure of paddy and its assortments as per cultivate measure in the two methods. The disproportionate sampling method used in the present investigation. An example of agriculturists gathered from four diverse sorts to be specific Marginal Farmers (60) Small Farmers (60), Medium Farmers (60) and Large Farmers (60) from each locale.

III REVIEW OF LITERATURE

Shukla (1966) has categorized cost into Cost A1, Cost A2, Cost B and Cost C. Cost A1 includes the cost of seeds, manures and fertilizers, plant protection, livestock expenses, hired human labour, irrigation charges, land revenue, interest on working capital, depreciation of fixed assets and miscellaneous expenses. Cost A2 covers Cost A1 plus rent paid for leased in land. Cost B includes Cost A2 plus rental value of owned land plus interest on fixed capital minus land revenue on owned land. Cost C includes Cost B plus imputed value of family labour.

Rajagopalan et al., (1978) studied the cost of production of crops in Tamil Nadu during the year 1978. His Concept cost A covers the value of human labour including family labour, Value of bullock labour, Value of machinery charges, Value of seed, Value of insecticides, Value of manures and fertilizers, Cost of irrigation and Interest on working capital. The cost C covers Cost A plus rent (including actual rent paid by the tenant or rental value of owned land) interest on fixed capital, land revenue, taxes and depreciation of implements and machinery. The cost A namely Value of hired labour (permanent and casual), Value of owned bullock labour, Value of hired bullock labour, Value of owned machinery, Hired machinery charges, Value of fertilizers, Value of manure (owned and purchased), Value of seed (with farm produced and purchased), Value of insecticides and pesticides, Irrigation charges (both owned and hired machineries), Canal water charges, Land revenue, cresses and other taxes, Depreciation on farm implements (both bullock drawn and used by human labour), Depreciation on farm building, farm machinery and irrigation structure, Interest on working capital and Miscellaneous expenses (artisans, so far and repairs to small farm implements). The cost A 2 includes Cost A1 and rent paid for leased in land. Further the cost B includes Cost A2 and Imputed rental value of owned land (less land revenue paid there upon) and Imputed interest on fixed capital (excluding land). He also mentions the cost C also. It includes Cost B and Imputed value of family labour.

Groenfeldt (2004) stated that paddy cultivation forms the basis of traditional Southeast Asian societies and the livelihoods of the people who comprise those societies. Historically speaking, paddy cultivation has always (at least for several millennia) been multi-functional – providing not only the raw material for subsistence and trade, but also serving as the central focus for family and community life as well as spiritual and religious expression. While times have certainly changed, this paper suggests that the multi-functional nature of paddy cultivation continues to be important, and that our concept of rural "livelihood" should incorporate these cultural dimensions.

Prasanna et al., (2004) studied on "Economic analysis on Paddy Threshing Methods". They stated that more than 15 per cent of production of paddy was loss as a post harvest losses with common paddy threshing and cleaning process with tractor treading. He argues that the small and combined threshing helps the farmers to avoid this kind of losses. He conducted his research on mechanical threshing methods and extended his focus on the factors influencing the adoption of paddy threshers also. He found that the farmer had more net income by using small and combined threshers instead of tractor treading. The level of net income of small and combined threshers was Rs.6345 and Rs.9071 respectively. He also found that the combined threshers were more efficient than small threshers. He pointed that 41.78 ha/yr, 3.47 ha/yr and 20.97 ha/yr was a economic operational area for tractor reading, small and combined threshers respectively. He highlighted that the indications such as income, cultivation and farming experience were significantly associated with the adoption of above said threshers. Ultimately he recommended that the above said threshers would help the farmers to avoid the past harvest losses.

Kumar, et al. (2005) in their study on "Technical Efficiency of Rice Farms under Irrigated Conditions of North West Himalayan Region (NWHR) – A Non-Parametric Approach" state that hill agriculture is practiced under tough conditions because of its unique character. The hill and mountain ecosystem is unique because of topographical features and climatic variations along the gradient. In general, hills receive 750 to 1250 mm precipitation; however, only about 10 per cent of the area is under irrigation in Uttaranchal hills that too confined to the lower valleys. Sub-optimal hydro-thermal regimes and shallow soil depths are further extension of cultivated land. Small and scattered land holdings and limited land use is also the main feature of hill agriculture. Therefore, the food produced is not sufficient to sustain for the whole year. These biophysical and socioeconomic constraints result in low technical efficiency as well as discourage farmers to bear the risk. In this context increasing technical efficiency assumes significance. Improving efficiency levels under these conditions is a big challenge for farmers in the NWH region. Rice being the most important staple food in NWH region, improvement in efficiency levels is one of the major means of sustaining their staple food production and thereby ensuring food security.

Suresh and Reddy (2006) make an attempt on "Resource-use efficiency of Paddy Cultivation in Peechi Command Area of Thrissur District of Kerala: An Economic Analysis". It dealt with the resource productivity and technical efficiency of paddy production. The study employed stratified random sampling and collected from 71 rice farmers as a primary data. The cost of cultivation of paddy has been found as Rs 21603/ha in the command area with a BC ratio of 1.34. The chemical fertilizers, farmyard manure and human labour were significant and positive for elasticity of coefficient and indicated that marginal return per one rupee increase to Rs 2.83, Rs 1.57 and Rs 1.17 for chemical fertilizers, farmyard manure and human labour respectively. He found that the average technical efficiency of the farmers found as 66.8 per cent in the command area. Further he found the factors which enhance the technical efficiency namely education and supplementary irrigation during the water-stress days. The study strongly believed for an equitable distribution of canal water and enhanced extension services for resource management in the area.

IV DISCUSSION

This section shows the cost and returns structures of farm size-wise namely marginal, small, medium and large farmers producing paddy as well as variety-wise namely High Yielding Variety and Traditional Variety of paddy. For this purpose, the collected data have been analysed with reference to cost and returns structure including various cost components used in the study area. The per acre average cost and returns structure of marginal, small, medium and large farmers cultivating paddy are furnished in Table 1.

TABLE 1
PER ACRE AVERAGE COST AND RETURNS STRUCTURE

SI. No.	Cost Component	Marginal Farmers	Small Farmers	Medium Farmers	Large Farmers
1.	Casual Labour (including family labour)	6329.98	6865.4	7439.24	7550.4
2.	Bullock labour	1240.0	1420.7	2073.75	1850.6
3.	Chemical fertilizer	2587.74	2558.33	2599.85	2586.01
4.	Pesticide cost	1199.14	1245.26	1065.34	1029.01
5.	Seed cost	778.16	776.43	899.26	977.11
6.	Farm manure	1080.32	992.32	1116.61	1273.48
7.	Cost of irrigation	513.6	567.12	622.72	571.68
8.	Interest on working capital	1119.04	1184.16	1120.84	1195.16
•	Cost A	14848.18	15609.72	16937.61	17033.45
9.	Rent	1537.92	1676.96	1720.96	1750.88
10.	Interest as fixed capital (excluding land cost) land revenue, less and taxes, depreciation of implements and machinery	566.67	754.26	999.36	1064.95
	Total – Cost C (total)	16952.77	18040.94	19657.93	19849.25
	Yield per acre in kg	2620.63	2505.62	2737.23	2557.36
	Gross Returns (Rs.)	32255.81	31671.66	35943.30	33560.02
	Net Returns (Rs.)	16303.04	14630.72	17285.37	14710.77

Source: Survey data.

It is understood from Table 1 that the marginal farmers produced 2,620.63 kgs of paddy and earned Rs.32255.81 per acre while their net returns per acre were Rs.16303.04. In the case of small farmers, the yield per acre was 2,505.62 kgs and they got Rs.31671.66 per acre as gross returns while their net return per acre was Rs.14630.72. With regard to medium farmers, the yield per acre was 2837.23 kgs and they earned Rs.35943.30 per acre as gross returns while their net return per acre was Rs.17285.37. In case of large farmers, the yield per acre was 2557.36 kgs and they realized Rs.33560.02 per acre as gross returns while their net return per acre was Rs. 14710.77. The cost analysis reveals that the per acre total cost, that is operational cost of cultivation for marginal farmers worked out to Rs.14848.18, whereas it was Rs.15609.72 for small farmers, Rs.16937.61 for medium farmers and Rs.17033.45 for large farmers. It is observed that total cost incurred was found higher in the case of large farmer compared to other farmer's category. The cost of Casual Labour forms the major component of the total cost of production for all the farmer categories. Next to Casual Labour, the amount spent on the use of chemical fertilizers occupied the major portion in the total cost of production. It came behind the cost of farm manure, cost of irrigation, pesticides, seed cost and bullock labour. The costs of the inputs such as Casual Labour, seed cost, farm manure and interest on working capital were higher for large farmers. In case of medium farmers, the inputs such as bullock labour, chemical fertilizer, cost of irrigation were higher whereas in case of small farmers, the input namely pesticide cost only was higher. Thus, it is inferred from the analysis that the medium farmers earned more net returns through paddy cultivation than the other farmer categories in the study area. The percentage of various cost components to total cost (Cost C) is presented in Table 4.15

Table 2 reveals that the percentage cost a variable inputs (Cost A) to total cost (Cost C) was 90.06 per cent for marginal farmers, 88.91 per cent for small farmers, 88.49 per cent for marginal farmers and 88.12 per cent for large farmers. In Cost A, Casual Labour cost was found to be high for marginal farmers which constitute 32.05 per cent followed by cost of chemical fertilizers. The small farmers spent 15.43 per cent of their total cost on the utilisation of chemical fertilizer while medium and large farms spent 14.40 per cent and 14.19 per cent respectively. Next to this the major cost component was cost of bullock labour which constituted 9.58 per cent, 8.29 per cent, 6.75 per cent and 6.15 per cent of the total cost for medium, large, small

and marginal farmers respectively. Cost of pesticides worked out to 5.89 per cent for the marginal farmers, 5.72 per cent for small farmer, 4.17 per cent for medium farmers and 3.93 per cent for large farmers. Farm manure constituted 4.45 per cent, 5.23 per cent, 5.15 per cent and 4.24 per cent for medium, small, large, marginal and small farmers respectively. The rent for land was higher for small farmers than the other farmer categories which constitute 8.25 per cent. Interest as farm assets, depreciation of implements and machinery involved 2.93 per cent for marginal farmers, 2.84 per cent for small farmers, 3.82 per cent for medium farmers and 4.12 per cent for large farmers of the total cost

TABLE 2
PER ACRE PERCENTAGE COST OF VARIOUS COST COMPONENTS TO TOTAL COST OF RICE

SI. No.	Cost Component	Marginal Farmers	Small Farmers	Medium Farmers	Large Farmers
1.	Casual Labour (including family labour)	40.05	42.70	42.34	42.53
2.	Bullock labour	6.15	7.75	9.58	8.29
3.	Chemical fertilizer	16.59	15.43	14.40	14.19
4.	Pesticide cost	7.89	5.72	4.17	3.93
5.	Seed cost	5.25	4.97	5.28	5.65
6.	Farm manure	5.15	4.24	4.45	5.23
7.	Cost of irrigation	3.59	3.74	3.80	3.50
8.	Interest on working capital	5.39	5.36	4.47	4.81
	Cost A	90.06	88.91	88.49	88.12
9.	Rent	7.01	8.25	7.69	7.76
10.	Interest as fixed capital (excluding land cost) land revenue, less and taxes, depreciation of implements and machinery	2.93	2.84	3.82	6.12
	Total – Cost C (total)	100.00	100.00	100.00	100.00

Source: Survey data.

Table 3 shows the economics of cultivating paddy for marginal, small, medium and large farmers cultivating paddy, the input-output ratios in terms of operational cost and total cost which found to be Rs.3.23 and Rs.2.96 respectively for marginal farmers whereas in case of small farmers it was Rs.3.07 and 3.80, for medium farmers Rs.3.17 and Rs.2.87 and for large farmers it was Rs.3.01 and Rs.2.73 respectively. The cost benefit ratio for marginal farmers showed that each rupee spent on paddy cultivation resulted in a benefit of Rs.1.96 per acre and in case of small farmers it was Rs.1.80, Rs.1.87 for medium and Rs..73 for large farmers. The economics of cultivating paddy revealed that the cultivation by medium farmers was more beneficial in terms of both yield and profit per acre. The total cost was higher for the large farmers, indicating the requirement of a more intensive care in use of inputs.

TABLE 3
ECONOMICS OF CULTIVATING PADDY FOR FARMERS CULTIVATING RICE

SI. No.	Cost Component	Marginal Farmers	Small Farmers	Medium Farmers	Large Farmers
1.	Gross return (Rs.)	32255.81	31671.66	35943.30	33560.02
2.	Total operating cost (Cost A) (Rs.)	14848.18	15609.72	16937.31	17033.45
3.	Net return over Cost A (Rs.)	18207.63	15861.94	19805.69	17236.57
4.	Total production cost (Cost C) (Rs.)	16952.77	18040.94	19957.93	19849.25
5.	Net return over cost (Cost C) (Rs.)	15303.04	13630.72	16285.37	13710.77
6.	Cost of production per kg. (Cost A) (Rs.)	6.57	6.88	7.40	7.44
7.	Cost of production per kg. (Cost C) (Rs.)	7.33	8.08	8.07	8.67
8.	Input-Output Ratio (Gross return/Cost A)	3.23	3.07	3.17	3.01
9.	Input-Output Ratio (Gross return/Cost C)	2.96	2.80	2.87	2.73
10.	Cost-Benefit Ratio (Net return over Cost C /Cost C)	1.96	1.80	1.87	1.73

Source: Computed data.

It is inferred from Table 4 that farmers cultivating high yielding variety of paddy produced 2621.71 kgs and earned Rs.34412.66 while their net returns were Rs.15750.44. Farmers cultivating traditional variety of paddy produced 2509.31 kgs and earned Rs.31357.31 whereas their net returns were Rs.15239.65, In overall farmers, yield per acre, gross returns and net return earned were 2581.26 kgs, Rs.32884.19 and Rs.15545.62 per acre respectively. It indicates that the high yielding variety of paddy cultivators were getting higher yield and thereby higher net income than the traditional variety of paddy.

The cost analysis shows that the per acre total cost, that is operational cost of cultivation for farmers cultivating HYV, worked out to Rs.17166.68, whereas it was Rs.15126.3 for TV. It is observed that total cost incurred was found higher in the case of farmers cultivating HYV compared to the farmers cultivating TV.

The cost of Casual Labour forms the major component of the total cost of production for both the farmers cultivating HYV and TV. Next to Casual Labour comes the amount spent on the use of chemical fertilizers. It came behind the cost of bullock labour, farm manure, interest in working capital, pesticides, seed cost and cost of irrigation. The costs of all the inputs except pesticide cost were found to be higher for farmers cultivating High Yielding Variety than the farmers cultivating Traditional Variety. Thus, it is revealed from the analysis that as in HYV of paddy, the farmers were found more efficient than the farmers cultivating TV of paddy, both cost-wise and returns wise.

Table 5 reveals that the percentage cost on variable inputs (Cost A) to total cost (Cost C) was 88.63 per cent for farmers cultivating HYV, 89.64 per cent for farmers cultivating TV and 89.20 per cent for overall farmers. In Cost A, Casual Labour cost was found to be high for farmers cultivating HYV, TV and overall farmers at 42.26 per cent, 42.95 per cent and 42.54per cent respectively followed by cost of chemical fertilizers. The farmers cultivating HYV of paddy spent 14.25 per cent of the total cost on utilisation of chemical fertilizers while farmers cultivating TV of paddy and overall farmers spent 16.32 per cent and 14.98 per cent respectively. Next to this, the major cost component was the cost of bullock labour which constituted 9.77 per cent, 6.10 per cent and 8.31 per cent of the total cost for farmers cultivating HYV, TV and overall farmers respectively. Cost of pesticides worked out to 4.19 per cent for farmers cultivating HYV, 5.35 per cent for TV of paddy and 4.76 per cent for overall farmers. Interest paid on working capital constituted 4.57 per cent, 5.33 per cent and 4.85 per cent for HYV, TV and overall farmers respectively. Interest on farm assets, depreciation of implements and machinery involved 3.92 per cent of the total cost for farmers cultivating HYV and 2.31 per cent for TV of farmers.

Table 4 furnishes information on the average cost and returns structure of farmers cultivating HYV and TV variety of paddy.

TABLE 4 THE PER ACRE AVERAGE COST AND RETURNS STRUCTURE

Sl. No.	Cost Component	HYV	TV	Overall Farmers
1.	Casual Labour (including family labour)	7410.4	6539.6	6975.39
2.	Bullock labour	2106.2	1244.1	1718.26
3.	Chemical fertilizer	2566.79	2569.51	2531.52
4.	Pesticide cost	1066.14	1123.92	1102.00
5.	Seed cost	915.00	782.57	849.66
6.	Farm manure	1167.65	1031.64	1114.44
7.	Cost of irrigation	598.09	515.46	553.71
8.	Interest on working capital	1136.41	1119.50	1118.01
	Cost A	16966.68	14926.3	15962.99
9.	Rent	1677.29	1558.03	1613.88
10.	Interest as fixed capital (excluding land cost) land revenue, less and taxes, depreciation of implements and machinery	1018.25	633.33	811.70
	Total – Cost C (total)	19662.22	17117.66	18388.57
	Yield per acre in kg	2621.71	2509.31	2581.26
	Gross Returns (Rs.)	15,725.55	14,047.32	14886.44
	Net Returns (Rs.)	15750.44	15239.65	15545.62

Source : Survey data.

TABLE 5
PER ACRE PERCENTAGE COST OF VARIOUS COST COMPONENTS TO TOTAL COST ACCORDING TO VARIETIES OF RICE

SI. No.	Cost Component	нүү	TV	Overall Farmers
1.	Casual Labour (including family labour)	42.26	42.95	42.54
2.	Bullock labour	9.77	6.10	8.31
3.	Chemical fertilizer	14.25	16.32	14.98
4.	Pesticide cost	4.19	5.35	4.76
5.	Seed cost	5.38	5.23	5.31
6.	Farm manure	4.73	4.78	4.83
7.	Cost of irrigation	3.67	3.58	3.61
8.	Interest on working capital	4.57	5.33	4.85
	Cost A	88.63	89.84	89.20
9.	Rent	7.45	8.05	7.71
10.	Interest as fixed capital (excluding land cost) land revenue, less and taxes, depreciation of implements and machinery	3.92	2.31	3.09
	Cost C (Total)	100.00	100.00	100.00

Source: Survey data.

It is understood from Table 6 that the input-output ratios in terms of operational cost and total cost were found to be Rs.3.07 and Rs.2.79 respectively for farmers cultivating HYV and Rs.3.15 and Rs.2.88 per acre respectively for farmers cultivating traditional variety of paddy. The cost-benefit ratio for high yielding variety showed that each rupee spent on paddy cultivation resulted in a benefit of Rs.1.79 per acre and for traditional, it was Rs.1.88.

TABLE 6 ECONOMICS OF CULTIVATING PADDY AMONG FARMERS CULTIVATING VARIETY OF RICE

SI. No.	Particulars	HYV	TV
1.	Gross return (Rs.)	34412.66	30457.31
2.	Total operating cost (Cost A) (Rs.)	16966.68	14926.30
3.	Net return over cost A (Rs.)	18245.98	17231.00
4.	Total production cost (Cost C) (Rs.)	19662.22	17117.66
5.	Net return over cost (Cost C) (Rs.)	15750.44	15239.65
6.	Cost of production per kg. (Cost A) (Rs.)	7.41	6.86
7.	Cost of production per kg. (Cost C) (Rs.)	9.40	8.69
8.	Input-Output Ratio (Gross return/Cost A)	3.07	3.15
9.	Input-Output Ratio (Gross return/Cost C)	2.79	2.88
10.	Cost–Benefit Ratio (Net return over Cost C /Cost C)	1.79	1.88

Source : Survey data.

The economics of cultivating high yielding variety of paddy showed that the farmers were more beneficial in terms of both yield and profit per acre. The total cost was higher for the farmers cultivating HYV, indicating the requirement of a more intensive care in use of inputs in the study area.

V CONCLUSION

Consequently, it is closed from the investigation that medium farmers are monetarily more effective than different farmers class regardless of assortments of paddy development in the examination region. This could be because of the better supervision and progressively productive homestead the executives supported by the littler size of operational possessions. This demonstrates separated from proficient allotment of information sources, direct supervision and homestead the executives are vital determinants of financial productivity.

REFERENCES

- [1] Basavaraja, H., S.B Mhajanasanshetti, and P Sivangaraju. "A Comparative Analysis of Traditional and SRI methods of Cultivation." *Indian Journal of Agricultural Economics* 63, no. 4 (December 2008).
- [2] Groenfeldt, David. "Appreciating the Hidden Value of Paddy Cultivation towards a New Policy Framework for Agriculture." INWEPF/SY/2004(3), 2004.
- [3] Kaur, Parvinder Jeet. "Production Costs and Efficiency of Marketing of Paddy in Hanumangarh District of Rajasthan." International Journal of Scientific Research 2, no. 2 (2013).
- [4] Kumar, L.R, K. Srinivas, and S.R.K Singh. "Technical Efficiency of Rice Farms under Irrigated Conditions of North West Himalayan Region- A Non Parametric Approach." *Indian Journal of Agricultural Economics* 60, no. 3 (July-September 2005): 483-491.
- [5] Lavleenkaur, and Nicsekhon. "Cost structure and Rate of Return in Major Paddy Producing States of India." *Agricultural Situation in India* xiii, no. 3 (June 2006): 155-162.
- [6] Naharajan, R.K., A.V. Rao, and D. Gandhi. "Rice Production in India during 1970's." *Agricultural Situation in India* XI, no. 11 (February 1986).
- [7] Prasanna, P.A. Lakshmi, Sant Kumar, and Aruna Singh. "Rice Production in India: Implications of Land Inequity and Market Imperfections." *Agricultural Economics Research Review* 22, no. 2 (2009).
- [8] Rajagopalan. Cost of Production of Major Crops in Tamilnadu. Coimbatore: Department of Agricultural Economics, 1978.
- [9] Ramanamoorthy. *Priceing of Paddy: A case study of Andhra Pradesh*. Department of Economic and Policy Research, Mumbai: Reserve Bank of India, 2000.
- [10] Ramesh, D., and K. Ramasamy. "India's Rice Production and Exports." Kissan World 31, no. 8 (August 2004).
- [11] Sekhar, C.S.C. "World Rice Crisis: Issues and Options." *Economic and Political Weekly*, June 2008: 13.
- [12] Shukla, B.D. "Input-Output relationship in Agriculture." Indian Journal of Agricultural Economics 21, no. 3 (1966).
- [13] Suresh, A, and T.R. Keshava Reddy. "Resource use efficiency of Paddy Cultivation in Peechi Command Area of thrissur District of Kerala: An Economic Analysis." *Agricultural Economics Research Review* 19 (January-June 2006).
- [14] Sushilakaul, Ram Ghasi, and Sanjeevpanwar. "Economic Analysis of Productivity and Profitability in rice Production in India." *Agricultural Situation in India* LXIII, no. 5 (August 2008): 295-299.
- [15] Tijani. "Analysis of the technical Efficiency of rice farms in Ijesha land of Osun State, Nigeria." *Agrekon* 45, no. 2 (June 2006).
- [16] Thiruchelvam. S., "Efficiency of rice Production and issues relating to Cost of Production in the districts of Anuradhapura and Polonnaruwa", Journal of Natural Science Foundation Srilanka, 2005, 33(4):247-256. <a href="https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CB0QFjAAahUKEwjJscKsKXHAhWCB44KHTEbByE&url=http%3A%2F%2Fjnsfsl.sljol.info%2Farticle%2Fdownload%2F2114%2F1767%2F&ei=HzLMVYmmHIKPuASxtpyIAg&usg=AFQjCNF7PXtRmaAx-RNbzk73hVg-lArqg&bvm=bv.99804247,d.c2E"