



ORIGINAL RESEARCH PAPER

Agricultural Science

PROPORTIONAL ANALYSIS OF ATMA AND NON ATMA WOMEN FARMERS IN TIRUVANNAMALAI DISTRICT, TAMIL NADU

KEY WORDS: cost of cultivation, Strength, Weakness, Opportunities

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ABSTRACT

In this study attempt to analysis the ATMA and Non ATMA women farmers in Tiruvannmalai district of Tamil Nadu. The study made use of primary data which was collected from the farmers of Tiruvannmalai district is analyzed by simple cost of cultivation and Strength, Weakness, Opportunities and Challenges of ATMA. The ATMA farmers are widely provided with the advances in crop production and their marketing facilities, there by reduction in cost of cultivation of ATMA farmers. Farming activities was the major contributor to the total income of the households in the study area. The study was indicated that the strength, challenges, opportunity and weakness of ATMA scheme.

INTRODUCTION

India is developing country. Agriculture plays a vital role in the Indian economy, because 70 per cent of the population is involved in this occupation. Women's participation rate in the agricultural sectors is about 47per cent in tea plantations, 46.84percent in cotton cultivation, 45.43per cent growing oil seeds and 39.13per cent in vegetable production. While these crops require labor-intensive work, the work is considered quite unskilled. Women also heavily participate in ancillary agricultural activities. According to the Food and Agriculture Organization, Indian women represented a share of 21per cent and 24per cent of all fishers and fish farmers, respectively. Despite their dominance of the labor force women in India still face extreme disadvantage in terms of pay, land rights, and representation in local farmer's organizations. Furthermore their lack of empowerment often results in negative externalities such as lower educational attainment for their children and poor familial health.

Women are the backbone of the development of rural and national economies. They comprise 43per cent of the world's agricultural labor force, which rises to 70per cent in some countries. That women play a significant and crucial role in agricultural development and allied fields including the main crop production, livestock production, horticulture, post-harvest operations, agro/ social forestry, fisheries, etc. Studies on women in agriculture conducted in India and other developing and under developed countries all point to the conclusion that women contribute far more in agricultural production that has generally been acknowledged. In order that farm women get a fair deal at the hands of change agents, one of the remedial measures that needs to be undertaken is to induct a sizeable number of well-trained women personnel in training and extension programmes of agricultural development agencies at all levels and more so at the grass-root level.

Agricultural Technology Management Agency (ATMA)

The scheme of ATMA is innovation in a Technology dissemination component of national Agricultural Technology project (NATP). This component aim to new district level and block level to move towards an district level and block level to move an integrated extension delivery.

The ATMA at district level would be increasingly responsible for all the technology dissemination activities at the district level. It would have linkage with all the line departments, research organizations, non-governmental organizations and agencies associated with agricultural development in the district. Research and Extension units within the project districts such as ZRS or substations, KVKs and the key line Departments of Agriculture, Animal Husbandry, Horticulture and Fisheries etc. would become constituent members or Key stake holders of ATMA. Each Research-Extension(R-E) unit would retain its institutional identity and affiliation but

programmes and procedures concerning district-wise R-E activities would be determined by ATMA Governing Board to be implemented by its Management Committee (MC).

Agricultural Technology Management Agency (ATMA) at district level have been set up to operationalize the extension reforms with active participation of farmers/ farmer groups, NGOs, Krishi Vigyan Kendras, Panchayati Raj Institutions and other Stakeholder operating at district level and below. The release of funds are based on Strategic Research and Extension plan (SREP)/ State Extension Work Plans (SEWPs) prepared by the State Governments. State level Extension Plans have been developed keeping in mind the strategic extension needs of the farmers. The technology broadcasting is made by ATMA is through training all the farmers industry, SC, ST and women farmers, member of SHG, Farmers interest group (FIG), commodity Interest group (CIG), Tamil Nadu women in Agri – Business abd extension scheme (TANWABE) and farmers association. ATMA scheme was implemented all the district of Tamil Nadu, one of them Tiruvannmalai district. In the year of 2005 the scheme was implemented in Tiruvannmalai district, it is have 18 blocks each blocks 500 members are beneficiaries of ATMA scheme and 20 percentage of women farmers are directly benefited in this scheme. The following objectives are to compare the technology adoption women farmers between ATMA and Non-ATMA in production of major crops and to study the strength, weakness, opportunity and challenges of ATMA scheme.

METHODOLOGY

Study area: The study was taken up in Tiruvannmalai district of Tamil Nadu, about the marketing development and economic status of ATMA and NON ATMA women farmers. The district is divided into 6 taluks namely, Tiruvannmalai, Chengam, Polur, Arani, Vandavasi and Cheyyar. There are 18 Blocks covering with 875 Panchayats with 1067 Revenue Villages. ATMA schemes are started 2009-10the scheme is implemented in all the blocks and Thiruvannmalai taluk is purposively selected.

The sample size was fixed at 60 (30 ATMA and 30 NON ATMA) women farmers in Tiruvannmalai Taluk, this taluk cover the 3 blocks Viz., Tiruvannmalai, Kelpennathur, Thurijapuram. The relevant primary data are collected from the ATMA &NON ATMA women respondents using interview schedule.

RESULTS AND DISCUSSION

The socio economic status of the sample respondents is presented in Table-1. It referred to the area of land in terms of acres the farmer cultivated at the time of enquiry. Since, wet land was predominant in the study area; the respondents were classified as marginal, small and large farmers based on the extent of land they cultivated.

Table – 1 Profile of the sample respondents

S. No	Factors	ATMA		NON-ATMA	
		Number of Households	Per cent	Number of Households	Per cent
I	Size of land holdings (ha)				
	<1 (small)	4.00	13.30	7.00	23.40
	1 to 2 (medium)	7.00	23.40	12.00	40.00
	>2 (large)	19.00	63.30	11.00	36.60
	Total	30.00	100.00	30.00	100.00
II	Farm size (ha)				
	Small(<2)	8.00	26.70	9.00	30.00
	Medium(2-3)	14.00	46.60	12.00	40.00
	Large(>3)	8.00	26.70	9.00	30.00
	Total	30.00	100.00	30.00	100.00
III	AGE				
	<30	9.00	30.00	2.00	6.70
	31 to 50	21.00	70.00	25.00	83.37
	>51	0	0	3.00	10.00
	Total	30.00	100.00	30.00	100.00
IV	Education				
	Illiterate	9.00	30.00	14.00	46.70
	School	21.00	70.00	16.00	53.30
	College	0	0	0	0
	Total	30.00	100.00	30.00	100.00
V	Annual income				
	Up to Rs.85,000	2.00	6.70	15.00	50.00
	From 85,000 to Rs.1,00,000	2.00	6.70	7.00	23.30
	Above Rs.1,00,000	26.00	86.60	8.00	26.70
	Total	30.00	100.00	30.00	100.00

Source- Primary Data

It could be observed that 63.3 percent of the ATMA women beneficiaries were large farmers followed by medium farmers (23.4 percent) and small farmers are merely 13.3 percent. At the same time medium farmers were more among non-ATMA farmers with 40 percent and large farmers (36.6 percent) followed by small farmers (23.4 percent), 46.6 percent of the ATMA women beneficiaries had medium family size followed by large and small family size of 26.7 percent each. Whereas non-ATMA farmers had medium family size 40% and followed by large and small family size of 30 percent each. 70 percent of the ATMA women beneficiaries had age up to medium age followed young age (30 percent) and old age farmers are zero level. the same time non-ATMA farmers medium age 10 percent and young age (6.7 percent) old age (83.3 percent). Middle aged people were more readily accepting the new technologies provided to them. 70 percent of the ATMA beneficiaries had education up to primary and secondary school level and illiterate (30 percent). At the same time 53.3 percent of the non-ATMA farmers had to education up to primary and secondary school level and 46.7 percent illiterate. 16.67 percent of ATMA farmers were more educated than that of non-ATMA farmers. more than two-third of the ATMA women respondents (86.6 percent) were under higher income group followed by medium and low income groups each with 6.7 percent.

Non-ATMA 50 percent of the farmers was low income

groups followed by higher income groups (26.7 percent) and medium income group (23.3 percent). It could be found that 60 percent of the ATMA women farmers are increasing our economic status compare to non-ATMA women farmers this may be due to the reason that they adopt the technology.

Table 2: Cost of cultivation Paddy (ATMA- NON-ATMA)

S.No	Particulars	ATMA (Rs/ha)	NON-ATMA (Rs/ha)
1	Preparatory cultivation	3200	4200
2	Seeds and Sowing/ transplanting	5500	6200
3	Basal fertilizers/FYM	2600	2500
4	Fertilizers	3200	3300
5	Labour cost for application	800	800
6	Weeding and other intercultural operations	3400	4400
7	Pest and Disease Control	3200	3000
8	Harvest	6500	6600
	TOTAL	28400	31000

It's observed from the above table, the cost for every operation in paddy cultivation is same for atma and non-atma farmers except preparatory cultivation, seeds cost and weeding operations, because the atma farmers were getting those inputs (machineries for preparatory cultivation, seeds and weeding machineries at subsidized price compare to non-atma farmers.)

The difference in preparatory cultivation, seeds and sowing/ transplanting and weed control operations were Rs. 1000, Rs. 700 and Rs. 1000 respectively.

Table 3: Cost of cultivation Black gram (ATMA- NON-ATMA)

S.No	Particulars	ATMA (Rs/ha)	NON-ATMA (Rs/ha)
1	Preparatory cultivation	1900	2300
2	Seeds and Sowing	4200	4800
3	Basal fertilizers/FYM	1500	1600
4	Fertilizers	3200	3100
5	Labour cost for application	800	800
6	Weeding and other intercultural operations	2500	3200
7	Pest and Disease Control	1200	1100
8	Harvest	4500	4400
	TOTAL	19800	21300

Its observed from the above table, the cost for every operation in black gram cultivation is same for atma and non-atma farmers except preparatory cultivation, seeds cost and weeding operations, because the atma farmers were getting those inputs (machineries for preparatory cultivation, seeds and weeding machineries at subsidized price compare to non-atma farmers.)

The difference in preparatory cultivation, seeds and sowing/ transplanting and weed control operations were Rs. 400, Rs. 600 and Rs. 700 respectively.

Table: 4 Strength, Weakness, Opportunities and Challenges of ATMA

S.No	Particulars	Facts
1.	Strength	First preference kindly provided by all the line departments in government based schemes, group forming is a one of the strength compare to another. Knowledge about all the government schemes
2.	Weakness	Family situation is one of the reason, co-ordination and active participation of all the members in group may not be possible all the time.
3.	Opportunity	Group members are provided with training for adaptation of new technology, all the new government projects are provided to this kind of groups.
4.	Challenges	Improving the income of the group, adopt and practices of all the technology, technology transfer to all the non-atma farmers and develop the agriculture.

CONCLUSION

To summarize the results, in land holdings, about 63 per cent of the sample atma farmers were large farmers and medium in case of non-atma farmers. Regarding family size both the atma and non-atma farmers having medium size family. It's looking into the age of the farmers both the atma (70 per cent) and non-atma (83 per cent) farmers were in-between 30 to 50 years of aging. Combining both atma and non-atma farmer's majority of the farmers were completed their schooling. Majority of the atma farmer annual income was above 1 lakh and in case of non-atma they are below 85,000 per annum. the cost for every operation in paddy cultivation is same for atma and non-atma farmers except preparatory cultivation, seeds cost and weeding operations, because the atma farmers were getting those inputs (machineries for preparatory cultivation, seeds and weeding machineries at subsidized price compare to non-atma farmers) and it same in case of black gram cultivation. So it is concluded from the results the atma farmers are getting advantages in crop production and also they are improving their production skills.

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