



PROFESSIONALISM IN PRODUCTION OF CHILLI CULTIVATION: THE RATE OF ADAPTABILITY IN TIRUNELVELI DISTRICT OF TAMIL NADU

S. Pradeep Kumar* Dr. S. John Mano Raj**

*Assistant Professor, Department of Business Administration, Kaypeeyes College of Arts & Science, Corsley Hills, Coonoor Road, Kotagiri, The Nilgiris.

**Associate Professor (Marketing), Indian Institute of Plantation Management, Jnana Bharathi Campus, P.O. Malathalli, Bengaluru.

Abstract

India is a nation with more than 1.25 billion population which leads to an excess pressure on the land. The average size of holdings in agriculture is shrinking year after year due to it. Green revolution has been a blessing by providing adequate food grains to the growing population. But the behavior pattern of the agriculture sector is not satisfactory. The growers' attitude are changing due to the unproductive nature of agriculture and they are trying to exit them out of agriculture in such situation the introduction of professionalism in the field of agriculture will help in the enhancement of the profits and farm gate prices of the growers. The paper tries to identify explore the extent to which professionalism is well applied in production and marketing of Dry chilli cultivation.

Key words: Professionalism, agriculture, Practices.

Introduction

Dry Chilli is the important spice that contribute to the exports well which is having more than 2000 species worldwide. It is cultivated in almost all the states of India widely even though the area and quantity vary. The importance of cultivating chilli has a dual advantage that lies in the fact that if the prices of green chilli is high it can be harvested and marketed as green chilli helping to earn better prices or else it can be left out to mature, harvested and dried to produce dry chilli. The dried chilli has a shelf life of three months to six thus provide the farmer adequate time to wait till better price arrives in the market. To identify the extent of professionalism in production criteria like the cropping season, type of soil, nursery, mainland preparation, usage of pesticides, weedicides application, irrigation, harvesting and drying is used. To identify the extent of professionalism in marketing criteria like storage and marketing is used.

Objectives of the Study

The study was designed with the objective of identifying the extent to which professionalism is applied under different activities of production and to give suggestions for improvement.

Methodology

The study was conducted among 225 chilli growers of Tirunelveli district 75 each belonging to marginal small and large category who produced dry chilli on a regular basis. The samples selected were uniformly similar in terms of their profile. Snow ball sampling method was used to identify the samples in the study area in Tirunelveli district as the growers were spread in a large area. The data was collected during the year 2017. A well designed interview schedule was used to collect data.

Professionalism in Production

Professionalism is the act of employing the modern technique, scientific methods, tools and tricks that helps in the process of improving production and quality. In the field of agriculture it can be applied freely in the process of production and marketing. Certain literature states that it is the extent to which the activities of life is done in a smarter way so that it is beneficial to the people involved in it. It creates value and benefits that support improvement in activities. Professionalism is applied in all activities to make it smarter and beneficial. In the study the researcher has tried to identify the extent to which professionalism has been in production. In the field of production it study the application of professionalism in cropping as per season, selection of the right type of soil, nursery preparation, mainland preparation, pesticides, weeding, irrigation, harvesting, drying is explained with the help of the statistics given below.

Fallowing cropping pattern as per the season

The below table presents the number of growers who follow the cropping as per season on regular and irregular basis. The best season for chilli cultivation is from January to June in the northern part and south June to December.



Table 1 Growers who Follow Cropping as per the Seasons

Fallowing cropping as per the seasons	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Regular	42	56.0	49	65.33	52	69.33	143
Irregular	33	44.0	26	34.66	23	30.66	82
Total	75	100	75	100	75	100	225

Source:Primary data

If the climatic conditions are favorable with annual rainfall between 900 mm to 1200 mm and temperature for chilli is ranging between 25⁰C - 30⁰C chilli can be cultivated throughout the year. But such favorable condition do not exist through the year thus the best season should be selected. The study revealed that out of the total 225 samples 42 marginal (56.0%) , 49 small (65.33%) and 52 large growers (69.33 %) fallow cropping as per season in aregular order and others are irregular.

Selection of the soil

Black soil is best suited for chilli cultivation but the growers undertake cultivation in different types of soil that is available due to the lack of awareness. The number of growers who select the right type of soil is given in the below table.

Table 2 Growers who Select the Right Soil Type for Cropping

Selection of the soil type	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Select the right soil type	57	76.0	61	81.33	66	88.0	184
Select a different soil type	18	24.0	14	18.66	9	12.0	41
Total	75	100	75	100	75	100	225

Source:Primary data

Nursery preparation

Nursery is prepared separately applying fertilizer and manure. Mild irrigation is done before sowing the seed. For the requirement of an 1 acre of land it requires nearly 0.700 kgs to 0.850 kgs of seed. Seed is treated with bio fungicide. Irrigation is done using rose can every day at least for one or two times depending on the climate for 36 days after sowing. After 36 days the plants are ready for transplanting to the main field. Pesticides are applied on the 15th and 25th day after planting.

Table 3 Growers who Follow Nursery Preparation Systematically

Fallowing nursery preparation systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	12	16.0	6	8.0	3	4.0	21
Sometimes	24	32.0	24	32.0	15	20.0	63
Occasionally	36	48.0	36	48.0	24	32.0	96
To a large extent	3	4.0	6	8.0	18	24.0	27
Always	0	0	3	4.0	15	20.0	18
Total	75	100	75	100	75	100	225

Source:Primary data

From the above table it is understood that even the large growers do not follow the nursery preparation well as only 15 growers out of 75 growers always prepare nursery systematically.

Main land preparation

The main land is ploughed four times, where chisel and disc ploughing is done once each and cultivator twice. The number of growers who follow main land preparation is given in the below table.



Table 4 Growers who Follow Main Land Preparation Systematically

Fallowing main land preparation systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	0	0	0	0	0	0	0
Sometimes	3	4.0	3	4.0	3	4.0	9
Occasionally	18	24.0	15	20.0	9	12.0	42
To a large extent	42	56.0	36	48.0	36	48.0	114
Always	12	16.0	21	28.0	27	36.0	60
Total	75	100	75	100	75	100	225

Source:Primary data

From the above table it is understood that in the case of systematic main land preparation only small number of marginal grower prepare it well and good number of the large growers prepare it well always.

Application of pesticides

Chilli crop is affected by different types of pests like thrips, pod borers, mites and other diseases like leaf spot, mosaic etc. Pesticides application has to be a regular practice to avoid pest and diseases. In most of the cases chilli growers resort to only four application of various measures to control pests and other diseases. The extent to which pesticides are applied well is given in the below table.

Table 5 Growers who Follow Pesticides Application Systematically

Fallowing pesticides application systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	21	28.0	9	12.0	3	4.0	33
Sometimes	18	24.0	12	16.0	9	12.0	39
Occasionally	18	24.0	15	20.0	15	20.0	48
To a large extent	12	16.0	21	28.0	18	24.0	51
Always	6	8.0	18	24.0	30	40.0	54
Total	75	100	75	100	75	100	225

Source:Primary data

From the above table it is understood that the application of pesticides is done mostly by the large growers whereas the small growers numbers are less compare to it.

Weeding of the main field

Weeds are common problem in chilli farms especially in the main land. Soon after the transplanting of the crops on the 36th day with in two weeks weeds starts growing in the main land. Weeding is done manually in most of the cases as use of weedicides require weedicides and equipment's for spraying which is costly followed by the large growers. Manual weeding is comparatively cheap and safe for chilli crops which is commonly followed by the marginal and the small growers. The extent to which weeding is done is given in the below table.

Table 6 Growers who Follow Weeding Systematically

Fallowing weeding systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	12	16.0	9	12.0	4	5.33	25
Sometimes	17	22.66	12	16.0	8	10.66	37
Occasionally	22	29.33	12	16.0	16	21.33	50
To a large extent	15	20.0	24	32.0	21	28.0	60
Always	9	12.0	18	24.0	26	34.66	53
Total	75	100	75	100	75	100	225

Source:Primary data



From the above table it is understood that the weeding is done well mostly by the large growers whereas the small growers they do not care about the weeds as the numbers who follow always and to a large extent is less.

Irrigation during cultivation

Irrigation is done from day one of sowing of seeds in the nursery. It is done once in two days maximum depending on the climate in nursery. Better irrigation is provided during the final days of nursery for easy transfer of the plants to the main land. In the case of chilli farming mainly channel irrigation is undertaken where small channels are created between the chillirows for ensuring free flow penetration of water in the main land. The extent to which irrigation is done systematically is given in the below table.

Table 7 Growers who Follow Irrigation Systematically

Following irrigation systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	0	0	0	0	0	0	0
Sometimes	12	16.0	9	12.0	6	8.0	27
Occasionally	21	28.0	13	17.33	12	16.0	46
To a large extent	27	36.0	32	42.66	24	32.0	83
Always	15	20.0	21	28.0	33	44.0	69
Total	75	100	75	100	75	100	225

Source:Primary data

From the above table it is under stood all category of the growers give importance to irrigation except a few marginal growers who little care about irrigation.

Harvesting of the produce

Harvesting is done manually by the growers. Harvesting starts soon after the green chilli converts to red colour which is harvested for drying in to red chilli. Multiple harvesting has to be done in an interval of 15 days as flowering from the 80th day will take place till the 120th day during the growth of the crop. Marginal and small growers harvest their crops with the help of family members mostly. Large growers uses paid labour for harvesting. The extent to which harvesting is done well is given in the below table.

Table 8 Growers who Follow Harvesting Systematically

Following harvesting systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	2	2.66	0	0	0	0	2
Sometimes	13	17.33	6	8.0	2	2.66	21
Occasionally	15	20.0	15	20.0	13	17.33	43
To a large extent	26	34.66	30	40.0	25	33.33	81
Always	19	25.33	24	32.0	35	46.66	78
Total	75	100	75	100	75	100	225

Source:Primary data

From the above table it is understood that harvesting is given good importance by all category of the growers especially the large growers followed by small growers and marginal growers respectively.



Drying of chilli

After harvesting the chilli is stored in bamboo basket, jute bags or kept in heaps for maximum of one day so as the red colour may evenly spread over the whole fruit. Drying takes 12 to 15 days which is done in the open court yard leveled well or concrete floor under the sun. After the first harvest is dried the second harvest will be ready for harvesting and drying. The extent to which drying is done well systematically is given in the below table.

Table 9 Growers who Follow Drying Systematically

Following drying systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	3	04.0	0	0	0	0	3
Sometimes	9	12.0	7	9.33	3	4.0	19
Occasionally	18	24.0	17	22.66	9	12.0	44
To a large extent	31	41.33	33	44.0	25	33.33	89
Always	14	18.66	18	24.0	38	50.66	70
Total	75	100	75	100	75	100	225

Source:Primary data

From the above table it is understood that drying is always done systematically mostly among the large growers where as others fall in the second place and the third place.

Storing of chilli after drying

Chilli is packed in jute bags holding 42 to 44 kgs of the produce and stored in the growers house ready to be disposed for marketing. The storing period depend upon the requirement of cash. The extent of systematic storage is given in the below table.

Table 10 Growers who Follow Post Harvesting Practices Systematically in Storage

Following storage practices systematically	Marginal Growers		Small growers		Large growers		Total
	No.	%	No.	%	No.	%	
Never	19	25.33	6	8.0	0	0	25
Sometimes	7	9.33	12	16.0	4	5.33	23
Occasionally	21	28.0	15	20.0	8	10.66	44
To a large extent	16	21.33	34	45.33	36	48.0	86
Always	12	16.0	8	10.66	27	36.0	47
Total	75	100	75	100	75	100	225

Source:Primary data

From the above table it is understood that storing is done not on a systematic basis. The lethargic behavior is seen among all growers especially the small growers.

Findings

In studying the extent to which professionalism is adopted among the marginal, small and large growers it is clear that the adoption of the professionalism among the growers is not up to the mark or not satisfactory in case of production especially in the case of the marginal growers. There is improvement in the case of the small growers compare to the marginal growers but this was only on a marginal scale. In case of the large growers there was better adoptability but there were good number of growers who did not follow professionalism to a better extent.



Conclusion

The study was helpful in understanding the extent to which professionalism is adopted among the marginal, small and large growers and identify the area where there is a possibility of improvement that can be helpful in improving the professionalism behavior of the growers. The lacking areas and the gaps if fulfilled will make the farmers smarter that help not only in increasing the output but also the quality of the produce which helps in commanding better prices by the growers. Thus increasing the farm gate prices leading to make agriculture a profitable occupation.

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