International Journal of Agriculture Innovations and Research
Volume 8, Issue 6, ISSN (Online) 2319-1473
Manuscript Processing Details (dd/mm/yyyy):
Received: 27/05/2020 | Accepted on: 10/06/2020 | Published: 23/06/2020

Farming Methodology in Himachal Pradesh a Study of District Shimla

Vishal Chauhan
Research Scholar, Department of Economics, Himachal Pradesh University, Summer Hill, Shimla, India.
Corresponding author email id: vishal.chauhan333.vc@gmail.com

Abstract **– Rational allocation and utilization of resources are key for optimum agriculture production which requires farmers decision making about inputs and further depends upon its knowledge and scientific temper as a scientific application of inputs and can lead to production optimization. From this paper one will try to understand the farming methods adopted by the horticulturist in fruits production and will give us an idea about the knowledge and scientific intellect of the farmers. The study was conducted in Jubbal and Kotkhai block of district Shimla from where the sample of 200 farmers of different holding has been collected from 10 different panchayats and has been analysed with the help of percentage method which revealed that most of the farmers having a knowledge about different farming methods across all farm size but very fewer farmers are making a judicial use of all these inputs as they possess less scientific knowledge about these resources.**

Keywords **– Farming Methods, Inputs, Knowledge, Resource Allocation, Scientific Application.**

I. INTRODUCTION

Horticulture has emerged as the main growth engine of Indian agriculture in the last two decades with a spectacular performance in terms of production. Horticulture contributes 30.4 percent of G.D.P of agriculture from nearly 13 percent of the total cropped area and support nearly 20.00 percent of the agriculture labour force. In India, the major share in total fruit production is of mainly banana (33.40 percent), Mango (20.7 percent), citrus (12.5 percent), papaya (6.3 per cent), guava (4.1 per cent), grape (2.9 per cent) and apple (2.8 percent). Fruit productivity in India is only 12.3 MT/ha in comparison to 23.3 in USA, 22.3 in Indonesia and 16.5 percent in Brazil. Productivity of apple is banana (37.0 MT) is better in India than the world average of 21.2 MT/ha, but lower than the best of 58.9 MT/ha in Indonesia. Productivity of orange is (11.6 MT/ha) in India. The productivity of apple is only 8.0 MT/ha in India. The reason for low productivity can be attributed chiefly to non-availability of quality planting material, dwindling natural resources, resource-poor farmers, small landholder farmers, extreme weather conditions, low adoption of modern technologies.

A key strategy in addressing such issues, in addition to policy support and a functioning market, is using science and technology innovatively to better understand and adapt to complex challenges. This approach is called the rational and scientific method. Scientific methods comprise of five major components i.e. observation, hypothesis, experimentation, analysis and conclusion. The person who applies this approach of the thought process in his/her life. This temper or attitude is commonly known as scientific temper or attitude. This is a form of mindset which can be found both amongst educated and illiterate persons. Farmer is a good example in this context. Those farmers, who are not educated, apply scientific temper and take the right decisions at the right moment in their farming practices. In this to happen, their experience, observation and analytical mind play a crucial role. Therefore, research and extension are among the core activities identified for accelerating agricultural growth and prosperity of farmers. A case study of Udham Singh Nagar district of Uttarakhand about socio-economic status of farmers and their perception about technology adoptionis done to examine the socio-economic status of farmers and their perception about technology adoption and the study finds that marginal and

small farmers are reluctant to use new technology because it increases the cost of production, whereas relatively large farmers believe that technologies are good to them in terms of high yield, fewer pests and more benefit. The study suggests that there is a need for government assistance to promote the participation of farmers, particularly female ones in agricultural training and workshop (Shalini Raghav and Chandra Sen, 2014).

Therefore, the current paper objective is to understand the scientific knowledge of the farmers of the study area and to find out the farming methodology being adopted by horticulture farmer with regards to (Soil application, plantation pattern, pruning and grafting techniques, spraying methods, insecticides & pesticides application, manures & fertilizers application, pollination pattern) which are principle inputs in fruit production and influence the production.

II. MATERIALS AND METHODS

To found the answers of the framed objectives the present study was conducted in Jubbal & Kotkhai Block of district Shimla which was divided into 10 different panchayats and thereafter two villages from every panchayat with 10 farming households of different categories (Marginal, Small & Medium) from each village has been randomly selected. However, the study is primarily based on primary data hence personal interview, face-to-face association with farmer respondents and observation method has been adopted to collect the relevant information and therefore analyse with the help of the simple tabular analysis based on means, percentage and frequency etc.

III. RESULTS AND DISCUSSION

Farmers Soil Application

Soil is the main ingredient in the farming and plays a very big role in enhancing crop productivity. Table 1.1 will reveal the farmer's knowledge and importance of soil and from the overall farmer's point of view, it came into existence that 51.00 percent of farmers don't test the soil but on the other hand 49.00 percent of all farmers test the soli of which 61.22 percent test it regularly whereas 38.78 percent don't do it regularly. However, 68.50 percent of overall farmers use the inputs as per the quality of soil and 31.50 percent refuse to see the soil quality before applying the input.

Table 1.1. Soil use by different farm size.

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1	Do you test your soil				
i	Yes	6	21	71	98
		(15.00)	(35.00)	(71.00)	(49.00)
ii	No	34	39	29	102
		(85.00)	(65.00)	(29.00)	(51.00)
1.1	If you do so than how many times?				
i	Regular	0	11	49	60

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
		(0.00)	(52.38)	(69.01)	(61.22)
ii	Irregular	6	10	22	38
		(100.00)	(47.62)	(30.99)	(38.78)
2	Do you apply Inputs as per the quality of the soil?				
i	Yes	23	38	76	137
		(57.50)	(63.33)	(76.00)	(68.50)
ii	No	17	22	24	63
		(42.50)	(36.67)	(24.00)	(31.50)
	Total Farmers	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in table is percentage analysis of column total.

When we look it from a farm size point of view it has been observed that medium farmers with maximum 75.00 percent followed by small farmers (35.00) percent and marginal farmers (15.00) percent do the testing of the soil of which marginal farmers with (100.00) percent do it irregularly but on the other hand with 52.38 percent small farmers, 69.01 percent medium farmers do it regularly. Most of the farmers across all farm size are applying the inputs as per the quality of soil and is showing an increasing trend with the increase in farm size. Hence, it came into the picture that small and marginal farmers are doing a less regular soil testing.

Plantation Method of Farmers

Plants determine the fruit production which further depends upon the quality of plant and its planting procedure. Table 1.2 will reveal the planting methodology of farming and from the overall farmer's point of view, it came into the picture that 99.50 percent of farmers follow set planting procedure but only 34.50 percent of farmers consult an expert for plantation. However, 15.50 percent of overall farmers are attending workshop/training, 32.50 percent farmers consulting books for the plantation and 89.50 percent do plantation as per the requirement of soil and climate. As far as a source of new tree/plant is concern 93.50 percent farmers take it from outside whereas 6.50 percent use their own.

Table 1.2. Plantation pattern of different farm size.

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1	Do you follow set planting procedure?				
i	Yes	40	60	99	199
		(100.00)	(100.00)	(99.00)	(99.50)
ii	No	0	0	1	1

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
		(0.00)	(0.00)	(1.00)	(0.50)
2	Have you ever consulted an expert for planting?				
i	Yes	3	13	53	69
		(7.50)	(21.67)	(53.00)	(34.50)
ii	No	37	47	47	131
		(42.50)	(78.33)	(47.00)	(65.50)
3	Do you plant your own trees or take it from outside				
i	Outside	40	57	90	187
		(100.00)	(95.00)	(90.00)	(93.50)
ii	Own	0	3	10	13
		(0.00)	(5.00)	(10.00)	(6.50)
4	You do plantation as per the requirement of soil, climate and location.				
i	Yes	35	52	92	179
		(87.50)	(86.67)	(92.00)	(89.50)
ii	No	5	8	8	21
		(12.50)	(13.33)	(8.00)	(10.50)
5	Have attended any workshop/training for this.				
i	Yes	1	6	24	31
		(2.50)	(10.00)	(24.00)	(15.50)
ii	No	39	54	76	169
		(37.50)	(90.00)	(76.00)	(84.50)
6	Did you consult any books for the plantation?				
i	Yes	1	12	52	65
		(2.50)	(20.00)	(52.00)	(32.50)
ii	No	39	48	48	135
		(37.50)	(80.00)	(48.00)	(67.50)
	Total Farmers	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in table is percentage analysis of column total.

As far as farm size is concern almost 100.00 percent of all farm size is following set plantation procedure. When we look towards farmers taking expert advice, attending a workshop, consulting books for plantation we have observed that with 42.50, 78.33, 47.00 percent of marginal, small and medium farmers followed by 37.50, 90.00, 76.00 and 37.50, 80.00, 67.50 percent is showing negative response for the same. However, plantation as per soil, climate requirement is concern farmers across all farm size has shown positive response. As far as sourcing of plants is concern marginal, small and medium farmers with 100.00, 95.00, 90.00 percent is sourcing from outside and is showing decreasing trends with increasing farm size. Therefore, we can say that farmers in the study area follow the plantation procedure but when it comes to workshops, training, expert advice and book consultation the response is not satisfactory.

Pruning & Grafting Techniques used by Farmers

Pruning & grafting is a fundamental exercise which is usually carried in the orchards during winters and plays a very big role in determining the plant strength and productivity. So, it becomes important for us to understand whether farmers in the study area are attending any workshop, training and consulting any books, experts for it as it is more scientific. Table 1.3 will reveal the pruning and grafting methodology of the study area and overall farmers picture reveals that 83.50, 76.50 percent of all farmers know about pruning and grafting. As far as the procedure of pruning and grafting is concern all farmers with 98.00, 96.50 percent follow it. When we look towards the farmers attending workshops and consulting books/experts we have found that with 89.50, 66.50 percent farmers response was negative.

Table 1.3. Pruning & grafting pattern of different farm size.

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1	Do you know about pruning?				
i	Yes	28	51	88	167
		(70.00)	(85.00)	(88.00)	(83.50)
ii	No	12	8	12	32
		(30.00)	(15.00)	(12.00)	(16.50)
2	Do you follow some procedure for pruning?				
i	Yes	38	59	99	196
		(95.00)	(98.33)	(99.00)	(98.00)
ii	No	2	1	1	4
		(5.00)	(1.67)	(1.00)	(2.00)
3	Do you know about Grafting?				
i	Yes	24	48	81	153
		(60.00)	(80.00)	(81.00)	(76.50)
ii	No	16	12	19	47

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
		(40.00)	(20.00)	(19.00)	(23.50)
4	Do you follow some procedure for Grafting?				
i	Yes	36	59	98	193
		(90.00)	(98.33)	(98.00)	(96.50)
ii	No	4	1	2	7
		(10.00)	(1.67)	(2.00)	(3.50)
5	Have attended any workshop/training for this.				
i	Yes	1	4	16	21
		(2.50)	(6.67)	(16.00)	(10.50)
ii	No	39	56	84	179
		(37.50)	(93.33)	(84.00)	(89.50)
6	Did you consult any books or expert for the pruning & Grafting?				
i	Yes	1	13	53	67
		(2.50)	(21.67)	(53.00)	(33.50)
ii	No	39	47	47	133
		(37.50)	(78.33)	(47.00)	(66.50)
	Total Farmers	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in table is percentage analysis of column total.

Farm size analysis reveals that when it comes to knowledge of pruning and grafting it is showing positive results with increasing trends with an increase in farm size. As far as the procedure of pruning and grafting is concern with almost above 90.00 percent across all farm size acknowledge the fact of following set standardized procedure. However, when it comes to farmers workshop/training and consulting of books/experts we have found that with 37.50, 93.33, 84.00 and 37.50, 78.33, 47.00 percent of marginal, small and medium farmers has shown negative response and refuse to attend such training and experts/books consultation. Hence, we can understand that farmers have knowledge of pruning and grafting but when it comes to training and expert/book consultation the contribution of farmers is very less.

Spraying Methods Adopted by Farmers

Spraying of medicines is a regular farming exercise which is needed and required for good crop production. Table 1.4 reveals the farmers spraying pattern in which we will first go with overall farmers point of view and have discovered that 100.00 percent of all farmers follow the set spraying procedure but when it comes to

consultation of books, experts and attending of workshop/training we have found that 42.00,56.50 and 11.00 percent of all farmers follow it.

Table 1.4. Spraying pattern of different farm size.

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1	Do you follow some procedure for spraying?				
I	Yes	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)
ii	No	0	0	0	0
		(0.00)	(0.00)	(0.00)	(0.00)
2	Do you consult any books for the same?				
I	Yes	7	18	59	84
		(17.50)	(30.00)	(59.00)	(42.00)
ii	No	33	42	41	116
		(82.50)	(70.00)	(41.00)	(58.00)
3	Have you ever consulted an expert for spraying?				
I	Yes	8	20	61	113
		(20.00)	(33.33)	(61.00)	(56.50)
ii	No	32	40	39	87
		(80.00)	(66.67)	(39.00)	(43.50)
4	Have attended any workshop/training for this.				
I	Yes	1	3	18	22
		(2.50)	(5.00)	(18.00)	(11.00)
ii	No	39	57	82	178
		(37.50)	(95.00)	(82.00)	(89.00)
	Total Farmers	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in table is percentage analysis of column total.

However, when we do farm size analysis we have discovered that 100.00 percent farmers across all farm size follow set spraying procedure and when it comes to consultation of books for spraying marginal and small farmers with 82.50,70.00 percent don't do it but with 59.00 percent medium farmers has shown a positive response. As far as expert consultation for spraying is concern with 61.00 percent medium farmers has agreed with it but with 66.67 and 80.00 percent small and marginal farmers doesn't agree with it.

Insecticides & Pesticides Application Techniques used by Farmers

Insects and pests are very big enemies of the crop and if not managed properly can cause a big harm to the production. From the given table 1.5 we will try to understand the insecticides and pesticides pattern of the study area, when we go from overall farm point of view we have observed that 98.50 percent of farmer follow the set procedure for it but when it comes to consulting of books and experts all farmers with 32.00 and 31.00 percent goes with it.

Table 1.5. Insecticides & pesticides pattern of different farm size.

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1	Do you follow some procedure for it?				
i	Yes	40	59	98	197
		(100.00)	(98.33)	(98.00)	(98.50)
ii	No	0	1	2	3
		(0.00)	(1.67)	(2.00)	(1.50)
2	Have you ever consulted any books for it?				
i	Yes	2	10	52	64
		(5.00)	(16.67)	(52.00)	(32.00)
ii	No	38	50	48	136
		(95.00)	(83.33)	(48.00)	(68.00)
3	Have you ever consulted an expert for it?				
i	Yes	4	16	42	62
		(10.00)	(26.67)	(42.00)	(31.00)
ii	No	36	44	58	138
		(90.00)	(73.33)	(58.00)	(69.00)
	Total Farmers	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in table is percentage analysis of column total.

As far as farm size point of view is concern across all farm size with more than 98.00 percent follow set procedure. However, when it comes to books consultation for insecticides and pesticides we have found that marginal farmers with 5.00 percent followed by small farmers 16.67 and medium farmers with 52.00 percent follows it and is showing increasing trends with an increase in farm size. When it comes to consultation with an expert it is showing minimum response with 10.00 percent for marginal farms followed by small farmers 26.67 percent and maximum with medium farms 42.00 percent. Therefore, we can say that farmers of the study area are following the set/standardized procedure for it but when it comes to books and expert consultation the response is very less especially in case of marginal and small farmers.

Manures & Fertilizer Application Methods followed by Farmers

Agriculture production depends upon the quality and health of soil and farmers make use of manures and fertilizers to enhance the soil fertility which plays a very big role in determining the strong agriculture production. Table 1.6 will reveal the picture of manures and fertilizer application pattern of the study area and when we look towards overall farmers point of view, we have found that 94.50 percent of farmers have knowledge about it and 88.50 percent apply it as per the soil and weather condition. As far as consultation of books, experts and attending of workshop/training is concern farmers with 32.00, 34.00 and 11.50 percent accepted the same.

Table 1.6. Manures and fertilizer use pattern of different farm size.

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1	Do you know about all this?				
i	Yes	36	57	96	189
		(90.00)	(95.00)	(96.00)	(94.50)
ii	No	4	3	4	11
		(10.00)	(5.00)	(4.00)	(5.50)
2	Do you apply this as per the requirement (soil, weather)?				
i	Yes	31	53	93	177
		(77.50)	(88.33)	(93.00)	(88.50)
ii	No	9	7	7	23
		(22.50)	(11.67)	(7.00)	(11.50)
3	Do you consult any books for the same?				
i	Yes	2	11	51	64
		(5.00)	(18.33)	(51.00)	(32.00)
ii	No	38	49	49	136
		(95.00)	(81.67)	(49.00)	(68.00)
4	Have you ever consulted an expert for this?				
i	Yes	3	20	45	68
		(7.50)	(33.33)	(45.00)	(34.00)
ii	No	37	40	55	132
		(92.50)	(66.67)	(55.00)	(66.00)
5	Have attended any workshop/training for this.				
i	Yes	0	4	19	23

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
		(0.00)	(6.67)	(19.00)	(11.50)
ii	No	40	56	81	177
		(100.00)	(93.33)	(81.00)	(88.50)
	Total Farmers	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in table is percentage analysis of column total.

Farm size point analysis reveals that the maximum number of farmers across all farm size have knowledge of manures and fertilizers and further do apply it as per soil and weather requirement. As far as consultation of books and experts is concern marginal, small, medium farmers with 5.00, 18.33, 51.00 and 7.50, 33.33, 45.00 percent has responded positively for the same and is showing increasing trends with an increase in farm size. However, when it comes to workshop /training for manures and fertilizers application marginal farmers with 0.00 percent is minimum followed by small farmers 6.67 and medium farmers with maximum 19.00 percent accepted to following the same. Therefore, we can say that farmers do have basic knowledge of manures and fertilizers but when it comes expert, books consultation or workshops and training the farmer's response is negative.

Pollination Methods Adopted by Farmers

There are some fruits like apples which are cross pollinator in nature are hence required some other fruit flowers for their fertility hence it becomes important for farms to understand these pollinators which will determine their production. Table 1.7 will tell the pollination knowledge of the study area and when we look towards overall farmers point it has been observed that 98.00 percent of farmers know about pollination with 42.50 percent having 11.00-20.00 percent pollinators in orchards followed by 37.50 percent having 21-30 percent pollinators, 15.00 percent above 30.00 percent and 5.00 percent between 0.00 to 10.00 percent. However, when it comes to farmers consultation of books, experts and attending workshop/training for pollination we have found 28.50, 24.00, 11.00 percent follows it.

Table 1.7. Pollination pattern of different farm size.

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1	Do you know about pollination?				
i	Yes	37	60	99	196
		(92.50)	(100.00)	(99.00)	(98.00)
ii	No	3	0	1	4
		(7.50)	(0.00)	(1.00)	(2.00)
2	What is a Percentage of pollinators at your orchard?				

Sr. No	Particulars	Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
i	0-10%	8	2	0	10
		(20.00)	(3.33)	(0.00)	(5.00)
ii	11-20%	24	31	30	85
		(60.00)	(51.67)	(30.00)	(42.50)
iii	21-30%	6	19	50	75
		(15.00)	(31.67)	(50.00)	(37.50)
iv	30% & Above	2	8	20	30
		(5.00)	(13.33)	(20.00)	(15.00)
3	Do you consult any books for the same?				
i	Yes	2	10	45	57
		(5.00)	(16.67)	(45.00)	(28.50)
ii	No	38	50	55	143
		(95.00)	(83.33)	(55.00)	(71.50)
4	Have you ever consulted an expert for it?				
i	Yes	3	7	38	48
		(7.50)	(11.67)	(38.00)	(24.00)
ii	No	37	53	62	152
		(92.50)	(88.33)	(62.00)	(76.00)
5	Have attended any workshop/training for this.				
i	Yes	1	4	17	22
		(2.50)	(6.67)	(17.00)	(11.00)
ii	No	39	56	83	178
		(97.50)	(93.33)	(83.00)	(89.00)
	Total Farmers	40	60	100	200
		(100.00)	(100.00)	(100.00)	(100.00)

Note: Figures in table is percentage analysis of column total.

Farm size analysis reveals that almost every farmer across all farm size has knowledge of pollination and when it comes to the percentage of pollinator in the orchard with 60.00, 51.67 percent marginal, small farmers having it between 11.00-20.00 percent and medium farmers within 21-30.00 percent is maximum. When it

comes to consultation of books, experts for pollination we have discovered that with 5.00, 16.67, 45.00 and 7.50, 11.67, 38.00 percent for marginal, small, medium farmers accept to do it and is showing increasing trend with increasing farm size. However, in terms of attending workshop/training for pollination, we have found that farmers across all farm size contribution is very less. Hence what we make out from the study area that farmers are having knowledge of pollination but their contribution in workshop/training, expert and book advise is very less.

III. CONCLUSION

Therefore, we can conclude from the discussion that farming like any other business has limited resources whose success depends up on the rational and scientific use of inputs which leads to resource optimization and profit maximization. Adopting scientific methods in farm management can provide a rational solution to the problem of resource allocation and utilization, which not only enhance factor inputs efficiency but also reduce wastages. The research was conduct to understand the farming methodology (conventional or modern) of the area farmers and will give us an idea about farmers scientific intellect which is important in modern farming world and research revealed that farmers do have a knowledge of pruning, grafting, pollination, spraying and others which are main inputs in agriculture productivity but when it comes to formal training and knowledge for the same farmer's participation across all the farm size is very less. It can be observed that most of the medium farmers are regularly testing their soil as compared to medium and small farmers however when we look towards the plantation methods it has been discovered that more than 80.00 percent of farmers across all farm size didn't attendant any workshop for the same. As far as pruning and grafting, spraying, pollination and manures/fertilizers application is concern almost 90.00 percent of farmers across all farm size have not attended workshop/training for the same. It has also been found that when it comes to expert advice and book consultation, medium farmers participation is comparatively better than small and marginal farmers. It becomes important for us to understand these loopholes and tries to fill these by making farmers aware about different techniques, methods, technology and motivating them to attend workshops and training for the same so that scientific intellect among the farmers can be created. Such practice will reduce the tradition/irrational farm management and make farming more scientific which not only enhance productivity but also increase the profit margin.

REFERENCES

[1] Department of Horticulture, Himachal Pradesh, India.
[2] R.H. Gautam., and R. Kaushal, "Horticulture: the growth engine of agriculture sector," A Journal on rural development, vol. 65, 2017, pp. 5-7.
[3] M.M. Gore, "Krishi Vigyan Kendra: Promoting scientific temper," A Journal on rural development, vol. 67, 2018, pp.19-20.
[4] J. Saxena, "New Initiatives in research and extension," A Journal on rural development, vol. 67, 2019, pp.23.
[5] R. Shalini., and S. Chandra," Socio-economic status of farmers and their perception about technology adoption: A case study of Udham Singh Nagar district of Uttarakhand," EPRA International Journal of Economic and Business Review, Vol. 2, 2014, pp. 7-13.

AUTHOR'S PROFILE

Mr. Vishal Chauhan is an M.A. (Economics), M.BA (Finance), SLET (Economics) and currently pursuing PhD in Economics from Himachal Pradesh University. He is working as assistant professor in management department at A.P. Goyal Shimla University, Himachal Pradesh and having a teaching experience of ten years in Economics, Finance at various levels of Under Graduation, Post-Graduation at various universities. He has attended 12 seminars, workshops and conferences with publication of several research papers. His research thesis is related to horticulture production in which economics of scale of different farm size of different crops will be revealed which therefore explains the resource efficiency and optimization of different farmers.