Information seeking and e-learning of Farming community in India through Agricultural telecenters: A study

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Abstract

The study describes information seeking of farmers' communities in the Himalayan state of Uttrakhand in India. The work reveals that there is a growing awareness among the farmers of this state and adjoining states. 4266 queries were received by G B Pant University of Agriculture and Technology's telecenter and farmers helpline in the period of 2006 -2008. Farmers sought most information from the toll free telecenter popularly known as Kissan (farmers) reference to the Information Center and use of the telecenter helpline was found to be substantially less. The telecenters function on 3 levels. Findings reveal that most information sought by farmers was provided in the local language by level I experts, who are Agricultural Science Graduates. Level II involves specific queries answered by subject specialists. The Helpline of universities functions at level II, where farmers can directly seek information from subject experts. Maximum information was sought in the month of September followed by October and November. These months are crucial for Rainy and Winter season crops, therefore requiring maximum attention of farmers in protecting their standing rainfed crops and planning winter crops. 1252 queries were received during 2006 on various subjects, which gradually increased to 1315 in 2007 and 1721 queries in 2008. Most information was sought on subjects like Agronomy and farmers' fairs. Substantial information was also sought on plant diseases, cultivation of vegetables, and seeds availability. Subject like solar energy, crop insurance, and silk production have been found to be the least popular among the farming community. The study further indicates that most information was sought on crops that provided quick cash rather than complicated subject like use of solar energy or silk production. Most farmers in India are involved in small or marginal farming, therefore prefer growing cash-crops as a source of income for their livelihood.

Introduction

Agricultural telecenter or tele information center is one of the important recent phenomena in India initiated to provide information to the farming community on various agricultural practices. The first one appeared in Europe in 1980's where the ideas spread very rapidly. More recently they have been established in other developing countries like Brazil which plans to develop large number of telecenter facilities across the country.⁽¹⁾

Indian economy has made a remarkable growth in the last decade including rapidly expanding of infrastructure in information and communication technology across the country. According to the world statistics and telecommunication report (<u>www.internetworldstat.com</u>) India continues to be one of the fastest growing major telecom market in the world. Sweeping reforms introduced by successive Indian government over the last decade have dramatically changed the nature of telecommunication in the country.

Telecenter is being viewed as an important means of disseminating information and e- learning while also addressing the digital divide. The country today has an impressive telecommunication network in both

private and government sector, over 5 lakh villages have public telephone in the country. The tele network is being put to effective use for delivering information and knowledge to the farming community. A system of farmers information center or popularly known as Kissan call center (KKC) was conceived in the year 2004 by the government of India for delivering information and knowledge to the farming community as per their day to day information need. ⁽²⁾

A telecenter in narrower term can be defined as a place that offers the public connectivity with computers and networks. According to Roman and Colte 2002 ^{(3).}

The term telecenter or call center seem to be arguably out dated, because of its narrower focus. A broader term like Kissan (farmers) Knowledge Center (KKC) or Kissan Information Center (KIC) seem to be more appropriate in the present context.

More comprehensively a telecenter may be defined as a public place where people can get a variety of communication services and whose aim is to benefit the community. The center can provide access to telephone and fax services, email, internet and electronic network, data bases and linked to libraries functioning as complete knowledge centers.

In India Kissan telecenter or call center or information center was conceived to provide faster information on agriculture and allied sector to the farming community. The scheme has been functioning from 21st January 2004 and is getting quite popular among the farmers. These information or call center can be accessed by farmers across the country on common toll free number 1551 from 6am to 10pm except Sundays and government holidays. Every state in India has telecenter and is expected to handle traffic from any part of the country.

The Kissan information center or call center functions at three levels, ⁽⁴⁾ level one is equipped with high quality bandwidth and is managed by an agricultural graduate having knowledge of local language and good communication skills. They are usually in a position to respond satisfactorily to most of the queries likely to be made by the farming community.

Level two consists of subject matter specialist (SMS) who are located at their respective work place e.g. Research stations, Kissan Vigyan Kendra's (KVK), Agricultural Universities or Colleges. Level two operator takes up the query if it is not satisfied at level one. The data relating to the caller seeking information including the question asked is forwarded to level II functionary on his computer along with the call.

It is noted that in usual cases the entire spill over question from the Ist level gets answered at this level. In situation where it is not possible to answer there is system to revert back to the caller by phone, fax or e-mail within 72 hours time. Level three consists of dedicated cell located at nodal offices across the country. These centers receives the question that have not been answered at first and second level and appropriate replies are framed in consultation with concerned subject specialist within or out side the state. Ideally a telecenter may receive queries from any state within the country.

The present study has been taken with view to analyze and find the information seeking pattern of the farming community through the farmers Helpline and Telecenter functioning at Agricultural Technology and Information Center (ATIC) of G B Pant University of Agriculture and Technology located in the northern hill state of Uttranchal now renamed as Uttrakhand. The ATIC is a "single window" support system linking various units of a research in the university with intermediary users and end users (farming community) in decision making and problem solving exercise. G B Pant University of Agriculture and Technology is one of the first renowned university of the country established in the year 1960 on the

American land grant pattern. The university has also been the harbinger of Green Revolution in the country.

Objectives

The present study has been taken with the following objectives:

- 1. To analyze the information seeking pattern of farming community in the state of Uttrakhand and neighboring States.
- 2. To evaluate the popularity of e- learning by farmers through telecenters in the period of 2006-2008.
- 3. To find the subject on which information was sought most by the farmers.
- 4. To evaluate the most important time(month wise) when queries were raised most.
- 5. To find the most active district and the state in terms of raising query for seeking information and problem solving.

Methodology

Data has been collected from the Telecenter and Helpline functioning at ATIC of G B Pant University of Agriculture and Technology. The number of queries made by the farmers to seek information from 2006-2008 on various subjects or areas of agricultural technology and practices has been grouped, classified and analyzed to find the various dimensions of the study. For assigning subject/concept and for the convenience of tabulation major keywords from the queries made by the farmers (which is recorded in the telecenter) have been taken into account.

Scope and Limitation

Access to data and timely completion are the two vital factors for the success and accomplishment of the objective of any investigation. Hence in consideration of vast range of data from tele information center across the country and limited time available to complete the study. The present study is adhered to analyze the afore said stated objectives in three years 2006-2008. The study includes the information seeking pattern of the farming community analyzed through the queries made to the Tele information center or Helpline of G B Pant University of Agriculture and Technology. Despite the limitations the findings are nevertheless suggestive of trends which are important for the agricultural professionals, policy makers, and managers to understand the situation of end users i.e. farmers interest and make improvements in transfer of agricultural technology.

Analyses and Interpretation

Analyses as far as possible in this study is made more depletive with the hope that it can serve multidimensional interest. Keeping the structural arrangement of data in view it has been analyzed as follows.

Year Wise Information Sought by Farmers

In order to ascertain the information sought by farmers year wise, data collected from the university telecenter popularly known as Kissan Call Center (KCC) and the Farmers Helpline is classified and presented in table 1.

Year	Number of Queries	Telecenter KCC	Telecenter Univ. Helpline
2006	1242	1230	12
2007	1323	1315	8
2008	1721	1721	0
Total	4189	4266	20

Table 1: Description of queries received

It is noted that the highest number of queries were made by the farmers in the year 2008. All queries were posed to the telecenter or KCC, surprisingly no information was sought from the farmers Helpline. It is also observed that there has been an increasing and continuous awareness among farming community over the period of three years from 2006 to 2008. The figures indicates that farmers have been finding the functioning of telecenters quite useful and informative for their day to day decision making and problem solving exercises. The university helpline received very few queries i.e. (only 20) in comparison to 4266 queries from telecenter or KCC. The reasons for fewer number of farmers making use of Helpline can be attributed to the fact it's a local paid call, where as information sought from KCC is through toll free number, possibly other reasons appears to be lack of awareness among farming community. Its also important to mention that Helpline functions directly at level two where farmers can directly put their queries to the subject matter specialist of the university. Perhaps most of the queries are satisfied by the agricultural graduates in the local languages of the farmers at level one, at the telecenter and therefore the farmers do not feel the need to approach further the Helpline. The situation indicates substantially good functioning of the telecenter.

Description of Information Sought Month and Year wise

In order to ascertain the queries made and information sought by the farmers community month and calendar year wise the data has been classified and presented in table 2. A close perusal of the table reveals that maximum information was sought in the month of September in all years from 2006 to 2008.

		2006			2007			2008	
Month/Year	No of questions	Telecenter KCC	Telecenter helpline	No of questions	Telecenter KCC	Telecenter helpline	No of questions	Telecenter KCC	Telecenter helpline
January	97	90	7	135	127	8	112	112	0
February	94	92	2	141	141	0	130	130	0
March	96	96	0	134	134	0	157	157	0
April	54	51	3	65	65	0	98	98	0
May	100	100	0	94	94	0	144	144	0
June	89	89	0	78	78	0	113	113	0
July	90	90	0	64	64	0	130	130	0
August	99	99	0	130	130	0	109	109	0
September	202	202	0	191	191	0	355	355	0
October	125	125	0	118	118	0	148	148	0
November	106	106	0	72	72	0	110	110	0
December	90	90	0	101	101	0	115	115	0
total	1145	1230	12	1323	1315	8	1721	1721	0

Table 2- Description of Queries month and Year wise

The table 2 reveals that the year 2008 received the highest 355 queries in the month of September followed by 202 queries in the year 2006 and 191 in 2007. The highest number of information being sought during this period reveals that Kharif season (rain fed crops) is standing in the field and needs attention of the farmers from diseases, insects and pests etc. It is interesting to note that maximum farmers are aware and have utilized the facility of telecenters in the most crucial period of their crops, by seeking information on best agricultural practices or techniques available in the country. It is also noted that September month is crucial for planning the Rabi or the winter season crops which are important cash crops for the farmers viz. the wheat crops, pulses oilseeds and vegetables. Some of the important cash crops grown in northern India are wheat, pulses, oils seed, and vegetables. The month of October and November is also popular information seeking time considering the factors mentions above on winter cropping. The study reveals that the year 2008 received 148 and 110 number of queries from the farming community in the month of October-November followed by 125 and 106 queries in the year of 2006 and 2007 respectively.

The study further reveals that maximum queries were also received in the month of February (141), March 134 queries and 135 queries the month of January. This can be attributed to the fact that the month of January, February and March is important time for Rabi or Winter crops, like potatoes, sugarcane, groundnuts, green vegetables oil seed etc that demands utmost attention of the farmers. Other reasons for maximum information seeking of farmers in this period appears to be the affect of cold weather on crops specially the livestock's. In northern India the winters are likely to be dry or rainy, the situation greatly affects the crop yield and is therefore, cause of concern for the farmers.

Subject wise description of Information

To ascertain the popular subject area on which the information was sought most by the farming community, the data collected from both telecenters i.e. KKC and the helpline were grouped subject wise confined to the various broad subjects in Agricultural Sciences. For the purpose of assigning subject/concept and the convenience of tabulation the investigators have taken into account the major key words from the queries made by farmers, for which a record is made in the tele information center. Table 3 shows the kind of information sought by the farmers. The figures indicates that most of the information was sought on subjects like Agronomy, Crop sciences or Crop Improvement followed by information on Kissan mela, Plant diseases Vegetable cultivation.. The farmers fair is held twice by G B Pant University of Agriculture and Technology in the month of March and October and therefore attracts a large number of local farmers. Other topics that attracted farmers attention was availability of seeds, cultivation of fruits and entomology.

The year 2008 received the highest 379 queries from farmers on agronomy and crop related problems, 330 queries on Kissan Mela, 201 queries on plant diseases and control were answered by telecenter staff. This trend continued in the year 2006 that followed the same pattern with 319 queries on crop sciences, 151 on Kissan Mela and 148 queries on Plant diseases which is slightly less in comparison to the year 2007 that received 161 queries on holding of Kissan mela followed by 154 queries on plant diseases etc. It is noted that most popular subject on which most farmers sought information, besides the above was Cultivation of Vegetables and Fruits, Insect and Pest, Seed availability and the Popular magazine "Kissan Bharti" published monthly by the University for the farming community written in simple Hindi language. The periodical is an important source of information on latest farming practices, high yielding varieties, crop improvement and information on disease and pest control.

		2006			2007		2008			
	No of	KKC	Helpline	No of	KKC	Helpline	No of	KKC	Helpline	
Subject	Qus.		-	Qus.		1	Qus.		-	
Seed availability	67	67	0	89	88	1	146	146	0	
Agril Implement	13	13	0	7	7	0	11	11	0	
Entomology	84	84	0	96	96	0	129	129	0	
Bee Keeping	17	17	0	11	11	0	12	12	0	
Soil science	7	7	0	9	9	0	14	14	0	
Mushroom Prod	6	6	0	5	5	0	8	8	0	
Weather	5	4	1	5	5	0	4	4	0	
Spices	5	5	0	9	9	0	10	10	0	
Fishery	6	6	0	13	13	0	3	3	0	
Farmers fair	151	151	0	161	161	0	330	330	0	
Kisan bharti	45	45	0	96	96	0	118	118	0	
Kisan Diary	5	4	1	15	15	0	17	17	0	
Marketing	6	6	0	2	2	0	3	3	0	
Plant Pathology	148	148	0	155	154	1	201	201	0	
Animal Disease	7	6	1	11	11	0	12	12	0	
Animal husbandry	25	25	0	18	18	0	22	22	0	
Floriculture	6	6	0	24	24	0	15	15	0	
Training	4	4	0	4	4	0	17	17	0	
Entrance exam	6	6	0	3	3	0	6	6	0	
Sericulture	3	3	0	0	0	0	0	0	0	
Veg. Production	127	127	0	108	104	4	81	81	0	
Literatures	2	2	0	10	10	0	16	16	0	
Solar energy	0	0	0	1	1	0	0	0	0	
Agronomy	319	315	4	284	282	2	379	379	0	
Forestry	18	18	0	18	18	0	17	17	0	
Information	22	19	3	23	23	0	31	31	0	
Fertilizer	8	8	0	13	13	0	16	16	0	
Crop Insurance	0	0	0	0	0	0	1	1	0	
Fruit production	107	106	1	100	100	0	71	71	0	
IFD	4	4	0	6	6	0	13	13	0	
Medicinal Plants	19	18	1	24	24	0	18	18	0	
Bio Gas	0	0	0	3	3	0	0	0	0	
Total	1242	1230	12	1323	1315	8	1721	1721	0	

Table 3- Subject and Year wise description of information.

* KKC - Kissan call center or (Farmers Call center) or tele information center for farmers

It would also be interesting to know the subject that received least attention among the farming community and on which least information or no information was sought for example Solar Energy, only one query was received in the period of three years (2006-2008) followed by information on Crop Insurance that too received one query in the year 2008. It is noted that both of these subjects are new to most farmers in the State and they lack awareness, Crop Insurance is a concept that is picking up and most of the farmers are still not aware of it. Other not so popular subjects are Bio gas, Weather forecast, Spices cultivation, Mushroom Silk production and Fisheries.

Description of Information sought on various subjects

To find the most popular subject that attracted the farmers interest month wise over the period of three years. The figures have been represented in **annex** -I. The figures give a clear representation of information sought from both telecenters month wise. A close perusal of the figures for the year 2006 indicates that most of the information was sought in the month of September (202 queries) this was followed by 128 queries in the month of October and 106 queries made in November. The most popular subjects receiving farmers interest has been Kissan Mela (farmers fair) on which 68 queries were made, Plant Diseases and Protection received 29 queries followed by information on Crop sciences and Agronomy that received 27 queries.

It is noted that that October is the month when Kissan mela (farmers fair) is held in the university and it is an opportunity for the farmers to know the various latest farming practices, agricultural technologies, problem solving, getting knowledge on farming implements, purchase seeds, interact with agricultural specialists. Perhaps this is one obvious reason for maximum number of queries being made on Kissan mela and also seed availability for which the farming community waits eagerly.

Yearly wise analysis of the figures indicates that Agronomy or Crop sciences was the most popular topic on which maximum information was sought by the farmers community across the whole year in 2006. Other popular topics that received farmers attention was information relating to Kissan Mela, and Plant diseases. Some of the most unpopular subject that received least or no interest from the farmers in the year 2006 have been Solar energy, Bio-gas plant, Crop Insurance etc. Subjects like Weather conditions or forecast situations in the region, Silk production or Sericulture, availability of Agriculture Literature in the center received minimum queries.

The year 2008 shows a similar trend with highest number of information sought again in the month of September with 355 queries made followed by October which received 148 queries. The month of March also received an high of 157 queries from both the telecenters. It is interesting to note that March is also a Kissan Mela (farmers fair) month therefore, attracted more queries as it has been noted in the month of October. The most demanding information sought in this year too has been on Kissan Mela receiving 161 queries followed by information on Plant Pathology (148) and vegetable production (127). In the year 2007 again maximum information was sought in September indicating September as the most popular and crucial information seeking month. Unlike 2008 this year received the second highest queries in the month January (135) and February (141) queries. The most important subject was crop sciences, information on Kissan mela and plant diseases.

Description of Information by Various Districts in the state

As mentioned earlier in the text, telecenters are expected to handle traffic from any districts within the state or from other states across the country. The study makes an effort to analyze the information sought by farming community across various districts in Uttrakhand (has 13 districts) and neighboring state of Uttar Pradesh (has 72 districts). Farmers from only 62 districts of Uttar Pradesh sought information were as farming community from all districts of Uttrakhand made use of telecenter. **Annexure-III** describes the number of queries received and answered by the telecenter staff and the University Helpline from 2006 to 2008. The figures reveals that the highest number of information was sought by the farmers of Udham Singh Nagar district, (180,178, and 227) queries made respectively in the year 2006- 2008 followed by Nainital that received 59, 47 and 62 queries across three years respectively. It is noted that Udham Singh Nagar district is a valley having most fertile land and farmers are actively involved in large scale farming. Besides the university is located in this very region and therefore the farmers have been getting maximum guidance and advise from the University's scientific community and extension workers. The farmers of Nainital and Pauri Garhwal districts are also quite aware and have made best use of the telecenter for seeking information. Farmers from the district of Pithaoragarh, Chamoli and Rudrapryag made the least use of the telecenter, these districts are located in remote and high altitude mountains, the farmers are poor, neglected and also lack awareness.

The telecenter also received overwhelming response from the neighboring state of Uttar Pradesh which is geographically plain in area. The number of queries from several districts of Uttar Pradesh indicates that farming community is quite aware of the telecenter facilities in disseminating information. The figures in annexure III indicates that the highest number of queries were received from the districts of Barelly with a total number of 484 queries (164,133, and 187), Muradabad received 250(58, 89, and 103) and the district of Pilibhit received 238 (76,59 and 103) number of queries respectively in the period of three years (from 2006 -2008). It is also worth noting that farmers in these district are largely progressive, besides being close to the university they are aware of the telecenter facilities and the advise they can get in problem solving. Farming community from district like Padona, Kaushambi, Shribasti have been found be least active in using the telecenter facilities, the figures indicates that very few number of queries were received from these places. It is observable that large number of farmers are not aware of the telecenter facilities and the call numbers, to whom and where to contact for field and practical problems. The agricultural officials and extension workers at block and village level in each district need to gear up in creating awareness and empowering the community towards an information society. There can be no second thought that awareness, access to information and communication plays an important role in improving the living condition of the farmers.

To find the kind of information sought by farmers across the county from other states, the queries received by telecenter has been classified state wise. A close perusal of the figures at **table 4** indicates that the highest number of information was sought by the farmers community of Uttar Pradesh (UP) state which received a total of 3065 (851,946,1265) queries. The state of Uttrakhand is ranked second which received 1084 (351,333,and 400) queries from 2006-2008 respectively. A total of Eighteen (5,5 and 8) queries were received from the state of Rajasthan state. More number of information being sought from the neighboring state of Uttar Pradesh indicates not only the awareness of the farmers but also the credibility of the University telecenter. It is important to quote that G B Pant University of Agriculture and technology had been instrumental in bringing green revolution in the country and therefore, the farmers have utmost trust in the functioning of the telecenter. Also the fact that the University was a part of Uttar Pradesh until 2000, before the state of Uttrakhand was created cannot be ignored.

2		2006			2007		2008			
State	No. of Qus.	K.C.C.	Helpline	No. of Qus.	K.C.C.	Helpline	No. of Qus.	K.C.C.	Helpline	
Uttarakhand	351	342	9	333	329	4	400	400	0	
Bihar	10	10	0	12	12	0	24	24	0	
Uttar Pradesh	854	851	3	946	942	4	1265	1265	0	
Maharashtra	2	2	0	2	2	0	1	1	0	
Nepal	3	3	0	1	1	0	1	1	0	
Chandigarh	0	0	0	1	1	0	0	0	0	

Table 4 -Description of Information Sought State wise

Arunachal Pradesh	0	0	0	1	1	0	0	0	0
Jammu	0	0	0	0	0	0	1	1	0
Andhra Pradesh	0	0	0	0	0	0	4	4	0
Gujrat	0	0	0	0	0	0	2	2	0
Jharkhand	1	1	0	2	2	0	3	3	0
Bengal	0	0	0	1	1	0	0	0	0
Himachal	0	0	0	2	2	0	0	0	0
Chatissgarh	3	3	0	4	4	0	0	0	0
Rajasthan	5	5	0	5	5	0	8	8	0
Delhi	3	3	0	3	3	0	4	4	0
Madhya Pradesh	7	7	0	2	2	0	5	5	0
Punjab	2	2	0	5	5	0	3	3	0
Hariyana	1	1	0	3	3	3	0	0	0
Total	1242	1230	12	1323	1312	11	1721	1721	0

The telecenters both KKC and the helpline received few queries from other states of the country. Its obvious that information need of the farmers from these states is being attended by their own respective telecenters. The study also indicates that farmers community made less use of the Helpline telecenter perhaps it's a paid call and farmers preferred to use the toll free numbers of Kissan telecenter or the Kissan call center.

Conclusion

Information and communication technology (ICT) has brought remarkable change in the nature, boundaries and structure of information. The ongoing movement towards electronic information society like all other sectors is pushing the agricultural sector also towards faster mode of communication and information dissemination for timely advise to the farming community using the power of online computer networks, tele information centers etc. The technology has brought impressive changes in the pattern of seeking information and e learning. The present study attempted to find information seeking pattern of the farmers community in the Himalayan State of Uttrakhand and adjoining states from telecenter. There has been a growing awareness among the farming community of this state and they have been finding the functioning of tele-centers in agricultural universities quite informative. The telecenter of G B Pant University of Agriculture and Technology received in all 4266 queries in the period of 2006 to 2008. The study shows that the farmers sought most information from the toll free tele-center popularly known as Kissan (farmers) Information Center or Kissan Call Center and use of helpline telecenter was found to be substantially less. The tele information centers functions at three levels. Finding revealed that most of information sought by the farmers was provided to the them in their local language by experts of level I who are agricultural science graduates. Level II involves specific queries answered by subject matter specialist. The Helpline telecenter of the university functions at level II where farmers can directly seek information from the subject experts. The study shows poor use of helpline services by the farmers which is likely to be due to their lack of awareness on helpline numbers or they are satisfied by the agricultural graduates operating at level one of the telecenter and therefore, they do not feel the need to approach further the Helpline. The situation indicates substantially good functioning of the telecenter and also indicates its popularity.

The study further revealed that maximum information was sought in the month of September followed by October and November. These months have been found to be quite crucial for Kharif (rainy season) and Rabi the (winter season) crops, therefore, required maximum attention of the farmers in protecting their standing Kharif crops and planning their winter crops. Maximum farmers are aware of the information services provided by the tele center and used it to acquire the latest information in the most crucial part of the year to protect their crops from diseases and pests. The year 2006 received 1252 queries on various subjects, which gradually increased to 1315 in the year 2007 and 1721 queries in the year 2008. Most information was sought on subject like Agronomy, Crop sciences or Crop Improvement and Kissan Mela (farmers fair). Substantial information was also sought on plant protection or diseases, cultivation of vegetables, and availability of seeds in the university. Subject like Solar energy, crop insurance, mushroom and silk production have been found to be least popular among the farming community. Insurance of crops is a new concept and many farmers lack awareness. Silk production and biogas requires larger investments therefore, lacks farmers interest. State wise perusal of queries reveals that the farmers from the state of Uttar Pradesh and Uttrakhand utilized maximum the services of the telecenters.

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Annexure-I

				2	006							
Subject	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Seed Availability	0	2	2	0	13	5	2	2	9	21	6	5
Agri. Implement	2	0	2	0	0	1	0	1	2	1	2	2
Entomology	1	8	6	4	12	4	12	14	15	3	3	2
Bee Keeping	1	3	3	1	1	0	2	2	1	1	1	1
Soil Science	0	0	1	0	3	0	1	0	1	0	1	0
Mushroom Prod.	0	2	1	0	0	1	0	1	1	0	0	0
Weather	1	0	0	0	0	0	3	0	1	0	0	0
Spices	0	0	2	1	0	1	1	0	0	0	0	0
Fishery	0	0	0	0	0	0	0	2	0	1	2	1
Farmers Fair	1	15	10	0	0	0	0	5	68	49	2	1
Kisan Bharti	7	3	2	2	2	2	2	4	8	6	3	4
Kisan Diary	0	0	0	1	2	0	1	0	0	0	0	1
Marketing	0	0	1	1	1	0	1	1	1	0	0	0
Plant Pathology	18	7	5	0	7	7	12	12	29	4	16	32
Animal Disease	1	0	1	1	0	0	0	1	2	0	1	0
Animal Husbandry	2	0	5	4	3	2	1	2	1	0	2	3
Floriculture	1	1	1	0	1	0	0	0	1	0	1	0
Training	2	0	0	0	0	0	0	0	0	1	1	0
Entrance Exam	0	1	0	0	0	2	1	1	0	1	0	0
Sericulture	0	0	0	0	0	1	0	2	0	0	0	0
Vegetable Prod.	18	5	13	8	8	8	16	9	8	7	19	8
Literature	0	0	0	0	0	0	0	0	0	0	1	1
Solar Energy	0	0	0	0	0	0	0	0	0	0	0	0
Agronomy	22	23	25	23	41	50	25	16	27	17	29	21
Forestry	3	4	0	1	2	0	1	4	0	2	0	1
Information	9	0	6	0	0	0	1	1	1	1	2	0
Fertilizer	0	0	0	0	0	0	0	2	2	2	2	0
Crop Insurance	0	0	0	0	0	0	0	0	0	0	0	0
Fruit Production	6	18	8	5	3	5	5	14	22	7	10	4
IFD	0	1	2	0	0	0	0	0	1	0	0	0
Medicinal Plant	2	1	0	2	1	0	3	3	1	1	2	3
Biogas Plant	0	0	0	0	0	0	0	0	0	0	0	0
Total	97	94	96	54	100	89	90	99	202	125	106	90

Table-4: Subject wise, Month wise and Year wise

					2006							
Subject	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Seed Availability	0	2	2	0	13	5	2	2	9	21	6	5
Agri. Implement	2	0	2	0	0	1	0	1	2	1	2	2
Entomology	1	8	6	4	12	4	12	14	15	3	3	2
Bee Keeping	1	3	3	1	1	0	2	2	1	1	1	1
Soil Science	0	0	1	0	3	0	1	0	1	0	1	0
Mushroom Prod.	0	2	1	0	0	1	0	1	1	0	0	0
Weather	1	0	0	0	0	0	3	0	1	0	0	0
Spices	0	0	2	1	0	1	1	0	0	0	0	0
Fishery	0	0	0	0	0	0	0	2	0	1	2	1
Farmers Fair	1	15	10	0	0	0	0	5	68	49	2	1
Kisan Bharti	7	3	2	2	2	2	2	4	8	6	3	4
Kisan Diary	0	0	0	1	2	0	1	0	0	0	0	1
Marketing	0	0	1	1	1	0	1	1	1	0	0	0
Plant Pathology	18	7	5	0	7	7	12	12	29	4	16	32
Animal Disease	1	0	1	1	0	0	0	1	2	0	1	0
Animal Husbandry	2	0	5	4	3	2	1	2	1	0	2	3
Floriculture	1	1	1	0	1	0	0	0	1	0	1	0
Training	2	0	0	0	0	0	0	0	0	1	1	0
Entrance Exam	0	1	0	0	0	2	1	1	0	1	0	0
Sericulture	0	0	0	0	0	1	0	2	0	0	0	0
Vegetable Prod.	18	5	13	8	8	8	16	9	8	7	19	8
Literature	0	0	0	0	0	0	0	0	0	0	1	1
Solar Energy	0	0	0	0	0	0	0	0	0	0	0	0
Agronomy	22	23	25	23	41	50	25	16	27	17	29	21
Forestry	3	4	0	1	2	0	1	4	0	2	0	1
Information	9	0	6	0	0	0	1	1	1	1	2	0
Fertilizer	0	0	0	0	0	0	0	2	2	2	2	0
Crop Insurance	0	0	0	0	0	0	0	0	0	0	0	0
Fruit Production	6	18	8	5	3	5	5	14	22	7	10	4
IFD	0	1	2	0	0	0	0	0	1	0	0	0
Medicinal Plant	2	1	0	2	1	0	3	3	1	1	2	3
Biogas Plant	0	0	0	0	0	0	0	0	0	0	0	0
Total	97	94	96	54	100	89	90	99	202	125	106	90

Annexure-II Subject Information Month wise and Year wise (2006-2008)

					2007							
Subject	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Seed Availability	5	4	3	2	8	0	1	9	17	26	12	2
Agri. Implement	0	1	0	1	0	2	1	1	0	1	0	0
Entomology	4	7	7	9	12	4	9	13	18	7	3	3
Bee Keeping	0	2	1	1	0	0	1	4	0	0	1	1
Soil Science	0	1	0	0	0	1	0	1	1	2	1	2
Mushroom Prod.	0	0	3	0	0	0	0	0	0	0	2	0
Weather	0	0	1	0	0	2	0	1	0	1	0	0
Spices	0	1	0	1	1	1	1	0	0	3	0	1
Fishery	0	2	1	0	2	0	0	0	2	1	4	1
Farmers Fair	3	25	44	1	0	0	0	1	73	14	0	0
Kisan Bharti	14	8	15	8	8	3	1	11	4	2	4	18
Kisan Diary	1	2	3	0	0	2	0	2	1	2	0	2
Marketing	0	0	0	0	0	0	0	1	1	0	0	0
Plant Pathology	27	5	5	3	3	5	16	29	20	8	13	21
Animal Disease	0	1	1	1	0	0	0	0	2	3	0	3
Animal Husbandry	3	2	3	1	0	2	0	3	0	1	2	1
Floriculture	3	2	2	1	1	1	2	5	3	1	2	1
Training	0	0	0	1	0	0	0	0	1	1	0	1
Entrance Exam	0	1	0	0	0	0	0	1	1	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0	0	0
Vegetable Prod.	24	17	3	6	9	10	2	4	15	9	4	5
Literature	0	3	3	0	0	1	0	2	0	0	0	1
Solar Energy	0	0	0	0	0	0	0	0	1	0	0	0
Agronomy	32	40	20	17	33	27	14	20	14	23	17	27
Forestry	2	2	0	1	2	2	2	2	3	2	0	0
Information	4	1	2	1	1	3	2	3	1	2	1	2
Fertilizer	0	0	2	2	0	3	2	1	2	1	0	0
Crop Insurance	0	0	0	0	0	0	0	0	0	0	0	0
Fruit Production	11	11	9	5	10	8	10	13	6	6	4	7
IFD	0	0	2	2	0	0	0	2	0	0	0	0
Medicinal Plant	2	3	4	1	4	1	0	1	2	2	2	2
Biogas Plant	0	0	0	0	0	0	0	0	3	0	0	0
Total	135	141	134	65	94	78	64	130	191	118	72	101

Continued Annexure II Subject Information Month wise and Year wise (2006-2007)

	2008											
Subject	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Seed Availability	0	9	18	9	32	3	4	6	18	20	22	5
Agri. Implement	0	1	0	0	2	0	0	0	0	5	2	1
Entomology	5	4	9	5	1	3	21	20	49	3	3	6
Bee Keeping	0	3	0	1	0	0	1	1	0	1	1	4
Soil Science	1	1	3	0	2	1	1	0	1	2	2	0
Mushroom Prod.	1	1	1	1	0	0	0	0	1	3	0	0
Weather	0	0	0	0	0	0	1	0	0	3	0	0
Spices	0	1	0	3	3	0	0	1	0	0	0	2
Fishery	0	0	1	0	0	0	1	1	0	0	0	0
Farmers Fair	5	39	45	0	1	0	0	9	166	65	0	0
Kisan Bharti	23	6	3	4	10	11	19	6	8	4	11	13
Kisan Diary	5	2	7	0	1	0	1	0	0	0	1	0
Marketing	0	0	0	2	0	0	0	0	1	0	0	0
Plant Pathology	17	12	9	8	8	6	19	35	54	8	8	17
Animal Disease	1	0	0	1	0	1	3	1	2	1	1	1
Animal Husbandry	2	1	0	1	5	3	0	1	5	1	2	1
Floriculture	2	2	1	0	0	4	1	0	2	2	1	0
Training	1	0	3	0	0	0	3	2	1	2	2	3
Entrance Exam	1	1	0	1	1	1	0	0	0	0	0	1
Sericulture	0	0	0	0	0	0	0	0	0	0	0	0
Vegetable Prod.	5	8	7	3	10	9	4	4	10	5	8	8
Literature	0	1	4	3	1	1	1	0	3	0	1	1
Solar Energy	0	0	0	0	0	0	0	0	0	0	0	0
Agronomy	24	21	37	37	46	54	34	14	22	16	33	41
Forestry	3	2	1	3	3	1	1	0	0	1	2	0
Information	4	3	0	1	2	2	5	3	4	3	2	2
Fertilizer	0	2	2	3	4	2	0	0	2	0	0	1
Crop Insurance	0	0	0	0	0	0	1	0	0	0	0	0
Fruit Production	5	6	5	9	7	7	9	4	6	1	7	5
IFD	2	3	0	0	2	1	0	1	0	1	1	2
Medicinal Plant	5	1	1	3	3	3	0	0	0	1	0	1
Biogas Plant	0	0	0	0	0	0	0	0	0	0	0	0
Total	112	130	157	98	144	113	130	109	355	148	110	115

Continued Annexure II Subject Information Month wise and Year wise (2006-2007)

Annexure III

District		2006			2007		2008			
(Uttarakhand)	No. of Qus.	K.C.C.	Helpline	No. of Qus.	K.C.C.	Helpline	No. of Qus.	K.C.C.	Helpline	
U.S. Nagar	180	173	7	178	174	4	227	227	0	
Bageshwar	5	5	0	5	5	0	2	2	0	
Pithoragarh	1	1	0	7	7	0	4	4	0	
Haridwar	24	24	0	20	20	0	25	25	0	
Pauri Garhwal	27	27	0	20	20	0	5	5	0	
Dehradun	16	16	0	20	20	0	23	23	0	
Champawat	17	16	1	6	6	0	6	6	0	
Chamoli	1	1	0	2	2	0	7	7	0	
Nainital	59	58	1	47	47	0	62	62	0	
Almora	18	18	0	12	12	0	12	12	0	
Rudraprayag	1	1	0	5	5	0	4	4	0	
Tehri Garhwal	0	0	0	2	2	0	7	7	0	
Uttarkashi	2	2	0	9	9	0	16	16	0	
Total	351	342	9	333	329	4	400	400	0	

Description of Queries received District wise from Uttrakhand

Description of Queries received District wise from Uttar Pradesh State

District		2006			2007			2008	
(U.P.)	No. of Qus.	K.C.C.	Helpline	No. of Qus.	K.C.C.	Helpline	No. of Qus.	K.C.C.	Helpline
Janshi	5	5	0	5	5	0	1	1	0
Eta	34	34	0	27	27	0	36	36	0
Etawa	4	4	0	4	4	0	6	6	0
Allahabad	7	7	0	5	5	0	4	4	0
Balia	1	1	0	0	0	0	3	3	0
Behriach	6	6	0	13	13	0	23	23	0
Bareilly	164	164	0	113	113	0	187	187	0
Banda	3	3	0	3	3	0	1	1	0
Barabanki	2	2	0	8	8	0	10	10	0
Basti	3	3	0	1	1	0		0	0
Badaun	38	37	1	42	40	2	70	70	0
Bulandsahar	32	32	0	82	82	0	52	52	0
Banaras	1	1	0	5	5	0	3	3	0
Kosambi	2	2	0	2	2	0	2	2	0
Kanpur	25	25	0	38	38	0	22	22	0
Kanpur Dehat	4	4	0	1	1	0	1	1	0
Kushi Nagar	3	3	0	5	5	0	6	6	0
Kannauj	1	1	0	6	6	0	4	4	0
Mau	2	2	0	0	0	0	1	1	0
Mathura	14	14	0	2	2	0	14	14	0

Maharajganj	5	5	0	10	10	0	4	4	0
Moradabad	58	58	0	89	88	1	103	103	0
Muzaffernagar	12	12	0	12	12	0	20	20	0
Meerut	5	5	0	7	7	0	6	6	0
Mainpuri	3	3	0	0	0	0	0	0	0
Biznaur	23	23	0	39	39	0	65	65	0
Mirzapur	3	2	1	9	9	0	3	3	0
Siddarth Nagar	2	2	0	0		_	2	2	0
Chitrakoot	3	3	0	1	1	0	0	0	0
Firozabad	5	5	0	6	6	0	0	0	0
Hardoi	8	8	0	21	21	0	12	12	0
Hathras	9	9	0	3	3	0	3	3	0
Pilibhit	76	75	1	59	59	0	149	149	0
Padrona	1	1	0	0	0		0	0	0
Pratapgarh	8	8	0	2	2	0	4	4	0
Sribasti	1	1	0	0	0		0	0	0
Rai Bareilly	7	7	0	9	9	0	4	4	0
Rampur	71	71	0	43	43	0	64	64	0
Sahjahanpur	42	42	0	32	32	0	50	50	0
Sant Ravidas Nagar	2	2	0	11	11	0	7	7	0
Saharanpur	19	19	0	19	19	0	42	42	0
Sitapur	6	6	0	8	8	0	26	26	0
Sonbhadra	9	9	0	3	3	0	4	4	0
Sultanpur	5	5	0	3	3	0	3	3	0
Unnao	4	4	0	11	11	0	7	7	0
Devaria	4	4	0	4	4	0	5	5	0
Chandoshi	5	5	0	8	8	0	7	7	0
Farukhabad	8	8	0	16	16	0	24	24	0
Fatehpur	5	5	0	0	10	0	5	5	0
J. P. Nagar	18	18	0	5	5	0	7	7	0
Azamgarh	2	2	0	3	3	0	1	1	0
Agra	7	7	0	13	13	0	19	19	0
Aligarh	24	24	0	19	18	1	34	34	0
Ghaziabad	10	10	0	3	3	0	5	5	0
Gonda	4	4	0	5	5	0	7	7	0
Gorakhpur	8	8	0	14	14	0	7	7	0
Gautam Budh Nagar	3	3	0	2	2	0	2	2	0
Gazipur	6	6	0	11	11	0	6	6	0
Lucknow	12	12	0	9	9	0	12	12	0
Faizabad	0	0	0	8	8	0	4	4	0
Jaunpur	0	0	0	5	5	0	7	7	0
Amroha	0	0	0	2	2	0	4	4	0
Orieya	0	0	0	1	1	0	4	4	0
	0	0	0	59	59	0	77	77	0
Lakhimpur	0	0	0	0	0	0	6	6	0
Jaalaon Ambedker Nagar	0	0	0	0	0	0	6 2	6 2	0
0	0 854	851	3	946	942	4	1265		0
Total	004	100	3	940	942	4	1200	1265	U