# Agricultural Associations in India: A Study

# KP Singh and Dipti Gulati

Dept of Library and Information Science, University of Delhi, Delhi–110 007 E-mail: singhkp\_1972@yahoo.co.in; diptigulati83@gmail.com

#### **ABSTRACT**

Agriculture is a vital component to the Indian economy and is necessary to all our daily needs. The professional associations are committed to accelerate the growth and development of agricultural education, research and extension in the country. The present study explores the quantitative and qualitative growth of the agricultural associations in India and their nomenclature. Study also highlights the various activities undertaken by the agricultural associations in promotion of agricultural publications, organisation of conferences/seminars, fellowships/scholarships/awards. A list of agricultural associations in the country is also provided.

**Keywords:** Indian agricultural associations; agricultural associations; agricultural journalism; agricultural learned societies; agricultural academies

#### 1. INTRODUCTION

Agriculture has played a key role in the development of human civilisation. Until the industrial revolution, the vast majority of the human population labored in agriculture. Agriculture refers to the production of food and goods through farming and forestry. Agriculture was the key development that led to the rise of civilisation, with the husbandry of domesticated animals and plants creating food surplus that enabled the development of more densely populated and stratified societies. The agriculture sector is important for food security, employment generation, and economic growth. However, concern has now been expressed on the decline in agricultural growth. Modern agriculture is knowledge-based, in which education at all levels; particularly higher education has an important role. It is time and again said that India is primarily an agrarian society. Even today almost 70 per cent of the population depends on agriculture, but in the last century, the country's economic and social life revolved around agriculture and peasants1.

According to Dictionary of Library and Information Science, an association is defined as "group of persons who have joined a formal organisation devoted to pursuing common interest or purpose, usually by paying annual membership fee"<sup>2</sup>. In the present day environment, there is greater co-operation among farmers owing to which a number of agricultural associations are being born across the globe. The agro-associations and trade groups are

usually public relations organisations founded and funded by corporations that operate in the agro industry. The primary goal is generally to promote the various segments of the industry through PR activities such as advertising, education, political donations, lobbying, and publishing.

Those involved in agriculture realise the need for people to step forth and provide a strong and educated voice to lead agriculture and bring the needs and issues of the agricultural industry to the forefront at the community, state, national, and international level. These professional associations provide a platform to the agricultural and rural communities to publish and disseminate their research findings.

#### 2. NEED AND PURPOSE OF STUDY

The growth and development of any discipline is the indicator of the of the well established networks of the professional associations and their role in the concerned field such as academic and research, research scholarships/fellowships and awards, products promotion, and publishing, etc. The role being played by the Royal Society of London, Zoological Society of London, Institution of Electrical Engineers (IEE), UK and Institution of Electrical and Electronic Engineers (IEEE), USA are well known in their respective sectors. Similarly, the role of the National Academy of Agricultural Sciences (NAAS) is well known in the Indian Agricultural Sector. Through the literature review, it was found that there is no

such study undertaken on this topic so far, which provides the overview of all the agricultural associations in India. Therefore, realising the need and significance of such studies for the agricultural researchers/professionals in the country the present study has been undertaken.

## 2.1 Objectives of Study

The present study has the following objectives:

- To find out different associations related to agricultural sciences and technology in India
- To study the state-wise distribution of the agricultural associations
- To identify whether the associations organises the conferences and seminars for the betterment of the users and provide fellowship/scholarship to the researchers

- To find out the quantative growth of research publications being published by agricultural associations; and
- To compile a list of agricultural associations in India

#### 3. METHODOLOGY

The study is based on the extensive survey of published literature under the study such as directories of associations, government records (Annual Reports), Websites of the associations and through internet.

### 4. DATA ANALYSIS AND INTERPRETATIONS

The collected data has been presented in the tables along with their interpretations.

The data has been collected of about 52 associations. Table 1 shows the names and addresses of these associations.

Table 1. Profile of the agricultural associations

S. No.	Name of association	Year of establisment	Contact information
	Andhra Pradesh		
1.	Federation of Farmers Associations (FFA)	2000	Flat No. 209, Vijaya Towers, Santhi Nagar, Masab Tank Hyderabad – 500 028 Tel: 040-23319643; Fax: 040-23378046 E-mail: indian_farmers_federation@yahoo.com chengal_ifia@yahoo.com URL: http://www.indianfarmers.org/
2.	Indian Tobacco Association (ITA)	1967	9th Line, Srinivasarao Thota, G.T. Road Guntur, Andhra Pradesh Tel: 0863-2216238, 2230245; Fax: 0863-2355269 E-mail: ita_guntur@yahoo.co.in; itagnt@sancharnet.in URL: http://www.smenetwork.net/tita/
3.	Peddireddy Thimmareddy Farm Foundation (PTRFF)	2000	Flat No 208, Vijaya Towers, H.No. 10-2-287/1/A, Shantinagar, Hyderabad-500 028 Tel: 0091-40-66665277; Fax: 0091-40-23319643 E-mail: info@ptrff.org; ptrffindia@yahoo.com URL: http://www.indianfarmers.org/
	Assam		
4.	Assam Tea Planters Association (ATPA)	1936	Assam Tea Planters Association A.T. Road, Tarajan PB No- 21, Jorhat – 7850 01, Assam Tel: 91-376 2371487; Fax: 91-376 2371557 URL: http://atpa.in/
5.	Tea Research Association (TRA)	1891	Tocklai Experimental Station Jorhat-785 008, Assam Tel: 91-0376-2360973, 23600974; Fax: 91-0376-23600974 E-mail: director@tocklai.net; info@tocklai.net URL: http://www.tocklai.net/
	Delhi		·
6.	Agricultural Economics Research Association (AERA	.) 1987	Division of Agricultural Economics, IARI Pusa Campus New Delhi-110 012 Tel: 011-25847501 25842951 URL: http://www.aeraindia.in
7.	Agricultural and Organic Farming Group (AOFG)	2001	B-279 (New B-1101) New Ashok Nagar, Near Sangam Gali, New Delhi – 110 096 Tel: 011 22742592, 22718818, 22716245; Fax: 011 22742287 E-mail:aofgindia@rediffmail.com; emkoshy52@gmail.com URL: http://www.agricultureinformation.com

8.	All India Bio-Tech Association (AIBA)	1994	VIPPS Center-2, Local Shopping Centre Block EFGH, Masjid Moth, Greater Kailash-II, New Delhi–110 048 Tel: 011-29211487 (Direct), 29220546/547 Fax: 011-29223089, 29229166 E-mail: unmalik@aibaonline.com URL: www.aibaonline.com
9.	All India Food Processors Association (AIFP)	1943	206, Aurobindo Place Market, Hauz Khas, New Delhi- 110 016 Tel: 011-26510860/ 26518848; Fax: 011-26510860 E-mail: aifpa@vsnl.net URL: http://www.aifpa.net/
10.	Association of Synthetic Fiber Industry (ASFI)	NA	125 Uday Park Ist Floor New Delhi–110 049 Tel: 011-26964154; Fax: 011-26515462 E-mail: asfi@eth.net
11.	Consortium of Indian Farmers Associations (CIFA)	2000	8/32, South Patel Nagar, New Delhi–110 008 Tel: 011-25842111; Fax: 011-25842123 E-mail: cifa_delhi@yahoo.co.in; chengal.p@gmail.com URL: http://www.indianfarmers.org/
12.	Crop Care Federation of India (CCFI)	1960	201-202, 2nd Floor, Hari Sadan, 4637/20, Ansari Road, Darya Ganj, New Delhi–110 002 Tel: 011-23243970; Fax: 011-23263014 E-mail: admin@cropcarefed.com URL: http://www.cropcarefed.com/
13.	Etomological Society of India (ESI)	NA	Division of Entomology, IARI, New Delhi-110 012
14.	Fertilizer Association of India (FAI)	1955	FAI House, 10, Shaheed Jit Singh Marg New Delhi–110 067 Tel: 011-26567144 ; Fax: 011-26960052 E-mail: general@faidelhi.org URL: www.faidelhi.org
15.	Global Agro-Industries Forum (GAIF)	NA	Indian Council of Agricultural Research Krishi Bhavan, New Delhi-110 001 Tel: 011-23384450; Fax: 011-23387705 E-mail: secy.icar@nic.in URL: www.gaif08.org/
16.	Indian Dairy Association (IDA)	1948	IDA House, Sector-IV, R.K. Puram, New Delhi–110 022 Tel: 011-26170781, 26165355, 2617978; Fax: 011- 26174719 E-mail: ida@nde.vsnl.net.in URL: www.indairyasso.org
17.	Indian Maize Development Association (IMDA)	1991	N-75, Connaught Circus, (Opposite ECE House) New Delhi-110 001 Tel: (Direct) 23358134, (Board) 41523422, 23313195 Fax: 011-23325289; E-mail: slchopra@imdadel.info URL: http://www.imdadel.info/
18.	Indian Pest Control Association (IPCA)	1967	Flat No. 11, 1st Floor (Alishan Banquet Complex) 40, D.L.F. Industrial Area Kirti Nagar, New Delhi–110 015 Tel: 011-2515 2741, 4509 2006; E-mail: delhi@ipca.org.in URL: www.ipca.org.in/
19.	Indian Society of Genetics and Plant Breeding (ISGPB)	1941	F-2 First Floor, NASC Complex, D.P.S Marg, Post Box-312, IARI, New Delhi–110 012 Tel: 011-65909037, 25843437 E-mail: isgpb@rediffmail.com; smstisgpb@gmail.com URL: www.isgpb.co.in/
20.	Indian Society of Soil Science (ISSS)	1934	First Floor, National Societies Block National Agricultural Science Centre Complex, Dev Prakash Shastri Marg, Pusa, New Delhi–110 012 Tel: 011-25841991; Fax: 011-25841529 E-mail: isss1934@yahoo.com; isss.secretary@gmail.com URL: www.isss-india.org/
21.	Indian Sugar Mills Association (ISMA)	NA	Ansal Plaza 'C' Block, 2nd Floor August Kranti Marg, Andrews Ganj New Delhi Tel: 011-26262294-97; Fax: 011-26263231 E-mail: isma@indiansugar.com / isma@vsnl.com URL: http://www.indiansugar.com/

22.	National Academy of Agricultural Sciences (NAAS)	1990	NASC Complex, DPS Marg, Pusa New Delhi–110 012 Tel.:011-25846051, 52; E-mail: naas@vsnl.com URL: www.naasindia.org/
23.	National Seed Association of India (NSAI)	NA	909, Surya Kiran Building, Kasturba Gandhi Marg, New Delhi-110 001. Tel: 011-43533241-47; Fax: 011-4353 3248 URL: www.nsai.co.in
24.	Sugar Technologists Association of India (STAI)  Goa	1925	Plot No: 15, 3rd Floor, 301, Aggarwal Okhla Plaza, Community Centre, Okhla Phase-1, New Delhi–110 020 E-mail: office@staionline.org; administration@staionline.org URL: www.staionline.org/
25.	Organic Farming Association of India (OFAI)  Haryana	NA	G-8, St. Britto's Apartments, Feira Alta, Mapusa-403 507 Tel: 0832 2255913/ 2256479/2263305 URL: www.ofai.org
26.	Karnal Agricultural Implements Manufacturer's Association (KAIMA)  Karnataka	NA	Sham Nagar, G. T. Road, Karnal-132001, Haryana
27.	Association of Food Scientists and Technologists (AFST)  Kerala	1957	CFTRI Campus Mysore–570 020, Karnataka Tel: 0821-2515557; Fax cum Phone-0821-2518670 E-mail: afstimys@yahoo.com URL: http://afsti.in
28.	Association of Planters of Kerala (APK)	NA	3rd Floor, 3D, Capitol Centre Opp. Govt. Secretariat M.G. Road Thiruvananthapuram Tel: 0471-2461793; Fax: 0471-2461791 E-mail: planters@vsnl.com
29.	Federation of Coconut Farmers in Kerala (KERAFRED)	NA	KERATOWER, Water Works Compound Vellayambalam, Vikas Bhavan (P.O), Thiruvananthapuram (Dist), Kerala State, 695 033 Tel: 0471-2321660, 2326153, 2326209, 2326736 Fax: 0471-2326298 URL: www.kerafed.com/
30.	Indian Agricultural Association (IAA)	NA	IAA Bhavan, Old City Tourist Home Building, University P.O Thiruvananthapuram-695 034 Tel: 91 471 6522 650; E-mail:iaacentral@gmail.com, URL: www.iaacentral.org
	Madhya Pradesh		
31.	Soyabean Processors Association (SPA)	1979	Scheme No. 53, Near Malviya Nagar, A.B. Road, Indore Tel: 91-731-2556530-33; Fax: 91-731-4004300 URL: www.sopa.org/
	Maharashtra		
32.	Association of Seed Industry (ASI)	NA	2nd Floor, Khetan Bhavan, J. Tata Road Mumbai–400 020 Tel: 022-204-9497; Fax: 022-204-7871 E-mail: deo@bom2.mahyco.com
33.	Bio Diesel Association of India (BDAI)	NA	A412 Royal Sands, Link Road, Andheri (W) Mumbai–400 053, Maharashtra Tel: 022-40168190; Fax: 022-26356508 E-mail: info@bdai.org.in URL: www.bdai.org.in
34.	Bombay Tea Traders Association (BTTA)	1968	G-30, APM Complex, Market-I, Phase-II, Masala Market, Vashi, Navi Mumbai–400 703 Tel: 91 22 2765 2270 - 2341 2525 - 2789 3903 URL: http://bombayteaassn.com/
35.	Debons Agro Association (DAA)	NA	Debons House, Jaysingpur, Shirol Kolhapur Maharashtra-416 101
36.	Federation of Tea Traders Association of Maharashtra (FTTAM)	NA	Girnar Complex, Kureshi Nagar, Kurla (East) Mumbai Tel: 022-24056500; Fax: 022-24056511/12 E-mail: harendra@girnar.com
37.	Grain, Rice and Oilseeds Merchants Association (GROMA)	NA	A/2/1, Groma House, 2nd Floor, Plot No. 14-C, Sector-19 Vashi, Mumbai–400 703, Maharashtra Tel: 27897454/27897455/27897456; Fax: 27897458 E-mail: groma@vsnl.com

38.	Indian Micro-Fertilizers Manufacturers Association (IMFA)	NA	201, ShriKrishna Apartments, 2nd Floor, 39/A, Gultekadi, Market Yard Road, Opp. Apsara Theatre, Pune–411 037 Maharashtra Tel: 020-26446864 Fax: 020 - 26444759 Mobile: 9422318857, 9422318858 E-mail:microassoindia@yahoo.co.in contact@imma.co.in URL: www.imma.co.in
39.	Pesticides Manufacturers and Formulators Association of India (PMFAI)	1967	D-516, Crystal Plaza, Andheri Link Road, Andheri (W), Mumbai-400 053. Tel: 022-2673 4845, 2673 4846; Fax: 022-2673 4847 E-mail: pmfai@bom4.vsnl.net.in/info@pmfai.org URL: http://www.pmfai.org/
40.	Protein Foods and Nutrition Development Association of India (PFNDAI)	2000	Mahalaxmi Chambers, 22 Bhulabhai Desai Rd., Mumbai–400 026 Tel: 022-2353 8858; Fax: 022-2353 8998 E-mail: pfndai@pfndai.org URL: www.pfndai.com
	Tamil Nadu		
41.	Biodynamic Association of India (BAI)	1993	BDAI Secretariat Ichor Estate, Pethuparai Perumalmalai P.O. Kodaikanal 624 104 Tamil Nadu URL: http://www.biodynamics.in/
42.	Southern India Mills Association (SIMA)	1933	41, Race Course, Coimbatore–641 018, Tamil Nadu Tel: 0422-2221391, 4225333; Mobile: 91 99524 32480 Fax: 91 422 4225366 E-mail: info@simamills.com simacbe@airtelmail.in URL: http://www.simamills.com/
43.	T N Government Agricultural Association	NA	45-3rd Floor, 2nd Street Sait Colony Egmore
44.	United Planters Association of Southern India (UPASI)	1893	Chennai–600 008 Tamil Nadu; Tel: 044-28190999 Glenview, Coonoor–643 101, Nilgiris, Tamil Nadu Tel: 0423-2230270; Fax: 0423-2232030 URL: http://www.upasi.org/
	West Bengal		
45.	Agri-Horticultural Society of India (AHSI)	1820	1, Alipore Road, Kolkata-700 027, Tel: 033-24791713 /0834; Fax: 033-24793580 E-mail: ahsi@vsnl.net URL: www.agrihorticultureindia.com
46.	Crop and Weed Science Society (CWSS)	2004	Department of Agronomy, Faculty of Agriculture, Bidhan Chandra Krishi Viswavidyalaya Mohanpur–741 252, Nadia, West Bengal Tel: 03473-222269 Ext.89; Fax: (03473)222273/75/77 URL: http://cwssbckv.org/
47.	Darjeeling Tea Association (DTA)	1892	'Royal Exchange' 6, Netaji Subhas Road, Kolkata West Bengal-700 001 Tel: 033-2210 2408; 033-2231 0433 E-mail:tboardcp@cal3.vsnl.net.in, teaboard@teaindia.org URL: http://www.darjeelingtea.com/
48.	Indian Association of Cultivation of Science (IACS)	1876	2A & 2B Raja S C Mullick Road Kolkata-700 032.
			Tel: 033-2473 4971 /5374 /3073 /3372 /5904 /3542 /2883 Fax: 033-2473 2805; Telegram: INDASSON E-mail: helpdesk@iacs.res.in URL: http://www.iacs.res.in/
49.	Indian Bio Organic Tea Association (IBOTA)	NA	34 A, Metcalfe Street Calcutta-700 013, West Bengal Tel: 033-2250015; Fax: 033-2259511
50.	Indian Tea Association (ITA)	1881	Royal Exchange, 6 Netaji Subhas Road, Calcutta–700 001 Tel: (91-33) 2210-2474; Fax: (91-33) 2243-4301. E-mail: ita@indiatea.org, URL: http://www.indiatea.org/
51.	Jute Manufactures Development Council (JMDC)	1983	3A, Park Plaza, 71 Park Street, Kolkata-700 016 Tel: 033-2226-3438/2217-2107; Fax: 91 33 2217-2456 E-mail: jmdcindia@vsnl.com jmdc@jute.com URL: http://www.jmdcindia.com
52.	State Agricultural Technologists Services Association (SATSA)	1951	8D, Krishna Laha Lane, Kolkata-700 012 Tel: 9433445531, 9433414400 E-mail: satsa.wb@gmail.com URL: http://www.satsawb.org/

Table 2 represents the data concerning the statewise distribution of associations. It is depicted that Delhi region has maximum number of associations, i.e., 19. In Maharashtra, there are 9 associations; and 8 are in West Bengal. Andhra Pradesh and Kerala have 3 associations each. Assam has 2 associations and other states like Goa, Karnataka, Haryana, and Madhya Pradesh have one association each. Table 3 shows the subject coverage of the various associations. It has been observed that maximum number of associations are found under Agriculture and other allied areas. Among other allied areas which include horticulture, jute, tea, tobacco, soybean, etc., sugar as a subject has 7 associations under the category.

Table 4 represents the data of distribution of publication by the different organisations. About 14 organisations publish the primary publications, i.e., journals under various subjects. The frequency of

Table 2. State-wise distribution of agricultural associations

S. No.	States	No. of associations
1.	Andhra Pradesh	3
2.	Assam	2
3.	Delhi	19
4.	Goa	1
5.	Haryana	1
6.	Karnataka	1
7.	Kerala	3
8.	Madhya Pradesh	1
9.	Maharashtra	9
10.	Tamil Nadu	4
11.	West Bengal	8

the maximum publications is bi-monthly and quarterly.

Table 5 shows that out of 42 agricultural associations taken in this category 31 associations organises the conferences and seminars for the betterment of the members associated to the associations. It also provides list of 12 associations which provide fellowships and scholarships to the scholars for the furtherance of their research activities.

Table 3. Subject-wise distribution of agricultural associations

S. No.	Subject	No. of associations
1.	Agricultural Sciences (in General)	22
2.	Biotechnology	1
3.	Coconut	1
4.	Crop Sciences	2
5.	Dairying	1
6.	Entomology	1
7.	Fertilizers	2
8.	Genetics	1
9.	Horticulture	1
10.	Jute Science	1
11.	Maize	1
12.	Organic Farming	2
13.	Pest Control	1
14.	Seed Science	2
15.	Soil Science	1
16.	Soybeans	1
17.	Sugar	2
18.	Synthetic Fibers	1
19.	Tea	7
20.	Tobacco	1

Table 4. Distribution of publications

S. No.	Name of the association	Publication	Frequency
1.	Agri-Horticultural Society of India	Horticultural Journal	Y
2.	Agricultural Economics Research Association	Agricultural Economics Research Review	HY
3.	All India Food Processors Association	Indian Food Packer	BM
4.	Association of Food Scientists & Technologists	Journal of Food Science and TechnologyIndian Food Industry	BM
5.	Crop and Weed Science Society	Journal of Crop and Weed	-
6.	Fertilizer Association of India	Indian Journal of Fertilizers	-
7.	Indian Association of Cultivation of Science	Indian Journal of Physics	-
8.	Indian Dairy Association	Indian Journal of Dairy SciencesIndian Dairyman	BM
9.	Indian Society of Genetics and Plant Breeding	The Indian Journal of Genetics & Plant Breeding	Q
10.	Indian Society of Soil Science	Journal of Indian Society of Soil Science	Q
11.	Southern India Mills Association	SIMA Review	М
12.	Soyabean Processors Association	SOPA-Digest	М
13.	State Agricultural Technologists Services Association	SATSA Mukhopatra	Q
14.	United Planters Association of Southern India	Planters Chronicle	М

Table 5. Distribution of organisation of conferences/workshops and provision of fellowship/scholarship

S. No.	Name of association	Organisation of conferences/workshops	Provision of fellowship/scholarship
1.	Agri-Horticultural Society of India	Yes	No
2.	Agricultural Economics Research Association	Yes	Yes
3.	Agricultural and Organic Farming Group	Yes	No
4.	All India Bio-Tech Association	Yes	Yes
5.	All India Food Processors Association	Yes	Yes
3.	Assam Tea Planters Association	No	No
7.	Association of Food Scientists and Technologists	Yes	No
3.	Bio-Diesel Association of India	No	No
9.	Bio-Dynamic Association of India	Yes	No
10.	Bombay Tea Traders Association	No	No
11.	Consortium of Indian Farmers Associations	Yes	Yes
12.	Crop Care Federation of India	Yes	No
13.	Crop and Weed Science Society	Yes	Yes
14.	Darjeeling Tea Association	No	No
15.	Federation of Coconut Farmers in Kerala	No	No
16.	Federation of Farmers Associations	Yes	No
17.	Fertilizer Association of India	Yes	No
18.	Global Agro-Industries Forum	Yes	No
19.	Grain, Rice and Oilseeds Merchants Association	N.A.	No
20.	Indian Agricultural Association	No	No
21.	Indian Association of Cultivation of Science	Yes	Yes
22.	Indian Dairy Association	Yes	No
23.	Indian Maize Development Association	No	No
24.	Indian Micro-Fertilizers Manufacturers Association	Yes	No
25.	Indian Pest Control Association	Yes	No
26.	Indian Society of Genetics and Plant Breeding	Yes	No
27.	Indian Society of Soil Science	Yes	No
28.	Indian Sugar Mills Association	No	No
29.	Indian Tea Association	No	No
30.	Indian Tobacco Association	Yes	Yes
31.	Jute Manufactures Development Council	Yes	Yes
32.	Karnal Agricultural Implements Manufacturer's Association	N.A.	Yes
33.	National Academy of Agricultural Sciences	Yes	Yes
34.	National Seed Association of India	Yes	No
35.	Organic Farming Association of India	No	No
36.	Peddireddy Thimmareddy Farm Foundation	Yes	No
37.	Pesticides Manufacturers and Formulators Association of India	Yes	No
38.	Protein Foods and Nutrition Development Association of India	Yes	Yes
39.	Southern India Mills Association	No	No
40.	Soyabean Processors Association	Yes	Yes
41	State Agricultural Technologists Services Association	N.A.	No
42.	Sugar Technologists Association of India	Yes	No
43.	Tea Research Association	Yes	No
44.	United Planters Association of Southern India	Yes	No

# 5. CONCLUSIONS

The professional associations acknowledge the role in agriculture information producing, publishing and dissemination. This information plays a very important role in the production of food and other raw materials in the country. These associations also apprehend the

problems and accordingly formulate actions to achieve educational improvement, economic opportunity, and social advancement and, thereby, promote the national well-being. One of the primary goals of these professional associations is to strengthen the agricultural sector by promoting information exchange and improving communications among the agricultural communities.

#### **REFERENCES**

- 1. Singh, K.P. Glimpses of Indian agricultural education and information use. Lambert Academic Publishing, Delhi. 2009.
- **2.** Reitz, J.M. Dictionary of library and information science. Libraries Unlimited, Westport, Connecticut. 2004. pp. 156-57.

#### **About the Authors**

**Dr K.P. Singh** is working as Senior Assistant Professor at the Department of Library and Information Science, University of Delhi, Delhi. He obtained his MSc (Agricultural Sciences) from Meerut University,

while MLIS, MPhil, both in Library & Information Science, from University of Delhi in 1997 and 2004, respectively. He obtained PhD (Library & Information Science) from GNDU, Amritsar (Punjab) in 2007. He has received fellowships and awards such as UGC-JRF/NET, ICAR-JRF, and DRDO-JRF for higher studies in agricultural sciences and LIS. His areas of interest include: ICT in libraries, knowledge management, design and development of online directories, e-content management, e-learning, e-portals, e-S&T information sources, and information seeking behaviour.

Ms Dipti Gulati obtained her BLIS, MLIS, and M Phil in Library and Information Science from the University of Delhi and is presently pursuing PhD in LIS as a UGC/ Senior Research Fellow from the Department of Library