

## MAPPING OF INTELLECTUAL ASSETS IN DR. PANJABRAO DESHMUKH KRISHI VIDYAPEETH, AKOLA: A SCIENTROMETRIC STUDY

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### ABSTRACT

*The present study is based on the Scientometrics and this is a type of research method used in library and information science. Present paper deals with the contribution of Research Assistant in Dr. P.D.K.V., Akola. It deals with the year wise growth and Types of Intellectual assets/research Trends & Distribution of the types of intellectual assets. The study is related to the impact of research under different Crop Research Stations in Dr.P.D.K.V. and analyses the strong and weak areas of research, collaborative nature of research which is related in terms of the authorship pattern. The results show the there is a significant growth of Intellectual Assets in the Gender, Age, Designation, and Subject wise.*

**Keywords:** Research, Research Trend, Scientometrics, Authorship Pattern, Quantitative Data.

### 1. INTRODUCTION

The origins of the term Scientometrics reach further back, when two Russian scientists Namilov and Mulchenko coined the Russian term 'naukometriya', the Russian equivalent of the term Scientometrics (Nalimov & Mulechenko, 1969; Nalimov, 1970). The

The research has been done on Scientometrics analysis: Research Trend of Research Assistant in Dr. P.D.K.V., Akola. Whereas the studies on Scientometrics and its papers objectives were done by, Dr. Dr. Veer D.K., (2014). Waghmare S.S., (2014). Kadam S.S.,

focus of Scientometrics is the measurement of science and is therefore concerned with the growth, structure, interrelationship and productivity of scientific disciplines (Hood & Wilson, 2001a, 291).

(2014). Garg K.C. and Anjana A. K. (2014), Rao Nageswara K., & Other (2014), Gopalkrishnan S & Other (2015), Kumar Anil H., Dora Mallikarjun & Desai Asha (2015), Shelke S. M., (2015), In addition to this.

### 2. OBJECTIVES OF THE STUDY

The main objectives of the present study are:

1. Observe the Dr P.D.K.V., Research Trend in Various Practices.
2. Find the Intellectual Assets of year 2006 to 2015.
3. Find the Distribution of Types of Intellectual Assets.
4. To Study the Gender, Age Group, Designation, & Subject Wise.

### 3. SCOPE & LIMITATON

The main purpose of this study is to find out the information about the recent communication trends in the advancement of the field of multidisciplinary subjects, for this purpose the study is based on

Intellectual Assets Symposia, Seminars, Conferences, Journals, Chapters in Books, Books, Extension Articles, and Research Projects. By the Research Assistant in the crop research station of Dr.PDK

Vidyapeeth from 2006 to 2015.Using Statistical techniques for presenting the

data in histogram Charts, bar charts, Colum charts, line charts etc.

**4. METHODOLOGY OF THE STUDY**

This study uses intellectual assets data from the year 2006 to 2015 to understand the broad characteristics of the Intellectual assets of the research assistant

in the Dr.PDK. Vidhyapeeth. The data for this study was taken from the personally collected questionnaire by each research assistant.

**5. DATA ANALYSIS**

**5.1. Year wise Growth of Intellectual Assets**

Dr.P.D.K. V., Research Trend on Crop research stations research assistant

intellectual assets is a tool to evaluate the performance at various levels.

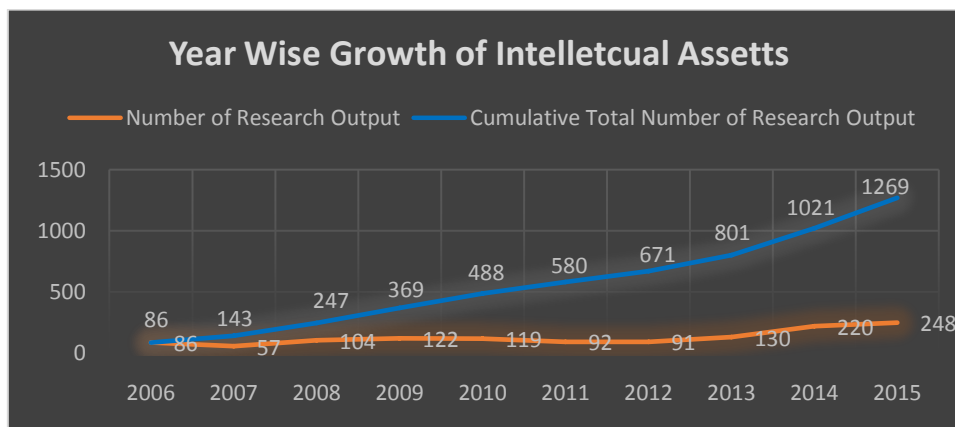
Table & Figure 1 show that the per year wise growth rate of research tend by the research assistant of Dr.P.D.K. Vidyapeeth. During the first year of the study its intellectual assets trends shows a

steady intellectual assets rise from 86 (6.78%) intellectual assets in year 2006 to 248 (19.54%)Intellectual assets in the year of 2015.

**Table 5.1. Year wise Growth of Intellectual Assets**

S. No.	Year	Number of Intellectual Assets	%	Cumulative Total Number of Intellectual Assets	Cumulative %
1	2006	86	6.78	86	6.78
2	2007	57	4.49	143	11.27
3	2008	104	8.20	247	19.46
4	2009	122	9.61	369	29.08
5	2010	119	9.38	488	38.46
6	2011	92	7.25	580	45.71
7	2012	91	7.17	671	52.88
8	2013	130	10.24	801	63.12
9	2014	220	17.34	1021	80.46
10	2015	248	19.54	1269	100.00
<b>Total</b>		<b>1269</b>	<b>100.00</b>	-	

**Figure 5.1. Year wise Growth of Intellectual Assets**



**5.2. Distribution of Types of Intellectual Assets**

Table & Figure No. 2. reveals that Distribution of research trend in Types of Intellectual Assets The results of the study point out 56(4.41%) of the intellectual assets are distributed as Symposia as a published article, 89(07.01%) is for published in seminar volumes, and higher

In other educational activities highest performance of research assistant in Recommendations 32(2.52%) & poor

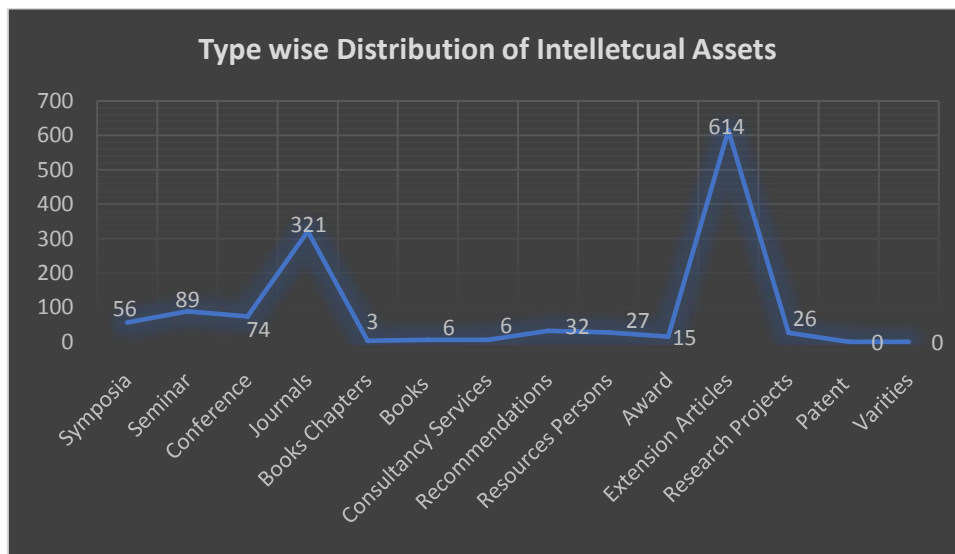
research trend of research assistant are in extension articles 614(48.38%) its including Leaflet, Folder, Popular Articles & Technical Articles. Comparison other poor's research trends in Chapters in Books & Consultancy Services 06 (0.47%).

performance in award 15 (1.18%) campers's other

**Table No. 5.2. Distribution of Types of Intellectual Assets**

S. No.	Types of Intellectual Assets	No. of Intellectual Assets	%	Cumulative Total Number of Intellectual Assets	Cumulative %
1	Symposia	56	4.41	56	4.41
2	Seminar	89	7.01	145	11.43
3	Conference	74	5.83	219	17.26
4	Journals	321	25.30	540	42.55
<b>Table No. 5.2. To be Continued.....</b>					
5	Books Chapters	3	0.24	543	42.79
6	Books	6	0.47	549	43.26
7	Consultancy Services	6	0.47	555	43.74
8	Recommendations	32	2.52	587	46.26
9	Resources Persons	27	2.13	614	48.38
10	Award	15	1.18	629	49.57
11	Extension Articles	614	48.38	1243	97.95
12	Research Projects	26	2.05	1269	100.00
<b>Total</b>		<b>1269</b>	<b>100.00</b>		

**Figure No.5. 2. Distribution of Types of Intellectual Assets**



### 5.3. Gender wise Distribution of Intellectual Assets

It can be observed from Table No. 3. Presented that the 19 Male and 15 females Research Assistant. The table no. 3. Shows that there are totals 1269 Intellectual Assets. Male Research Assistant Have Contributed 699 (55.08%)

Intellectual Assets, while female Intellectual Assets Have Contributed 570 (44.12%) Intellectual Assets. It indicates that Male Research Assistant have more intellectual assets than Female Research Assistant

**Table No. 5.3. Gender wise Distribution of Intellectual Assets**

S. No.	Gender	No. of Respondent	% of Respondent	Intellectual Assets	%
1	Male	19	55.88	699	55.08
2	Female	15	44.12	570	44.92
<b>Total</b>		<b>34</b>	<b>100.00</b>	<b>1269</b>	<b>100.00</b>

### 5.4. Age Group Wise Distribution of Intellectual Assets

Table No.5.4. Indicated that the Age Wise Respondent and Intellectual Assets of respondent. It is found that there are The above table show that the majority of the Research assistants are belong to 31-40 age group 21 (61.76%), 10 (29.41%) are belong to 41-50 age group. 2 (5.88%) Research Assistants belong 21-30 age groups it shows that Miss Nages.M., and Miss. Vilhekar S.C. 1 research assistant

belong to above 51 age group (2.94%) it shows that Shri. Kharat B.S. It shows that Mrs. Sadafale M.M., Dr. Vaidkar R.D., Dr. Nemade D.K., Shri. Gomase A.S., Dr. Khandare A.P., Shri. Dange A.M., Mrs. Mohod V.D., Mrs. Palaspagar N.B., Shri. Iratkar V.B., Shri. More W.W. with an equal age Group 41-50. Having ranks first, second, third, fourth, respectively. From table we observe that

**Table No. 5.4. Age Group Wise Distribution of Intellectual Assets**

S. No.	Age Groups	No. of Respondents	% of Respondent	Intellectual Assets	%
1	21-30	2	5.88	118	9.30
2	31-40	21	61.76	859	67.69
3	41-50	10	29.41	277	21.83
4	Above 51	1	2.94	15	1.18
<b>Total</b>		<b>34</b>	<b>100.00</b>	<b>1269</b>	<b>100.00</b>

### 5.5. Designation Wise Distribution of Intellectual Assets

It can be observed from Table No. 5.5. Presented that the 18 Junior Research Assistant and 16 Senior Research Assistant. The table no. 5.5. Shows that there are totals 1269 Intellectual Assets. Junior Research Assistant Have Contributed 654 (52.94%) Intellectual

Assets, while Senior Research Assistant Intellectual Assets Have Contributed 515 (47.06%) Intellectual Assets. It indicates that Junior Research Assistant have more intellectual assets than Senior Research Assistant.

**Table No. 5.5. Designation Wise Distribution of Intellectual Assets**

S. No.	Designations	No. of Respondents	% of Respondent	Intellectual Assets	%
1	Junior Research Assistant	18	52.94	654	51.54
2	Senior Research Assistant	16	47.06	615	48.46
<b>Total</b>		<b>34</b>	<b>100.00</b>	<b>1269</b>	<b>100.00</b>

### 5.6. Subject Wise Distribution of Intellectual Assets

In Agriculture total 11 subjects but 8 subjects Research Assistants are working in various research stations in PDK Vidyapeeth. The intellectual assets output of these subjects is given in the Table No. 5.6. Agricultural Botany is top with 276 Intellectual assets which is 21.75% of the total contribution. The second rank is to

the Agricultural Entomology with 247 (19.46%) Intellectual assets. The less number of Intellectual assets is brought out by the Animal Husbandry & Dairy Science 58 (4.57%) Intellectual assets & second less number of intellectual assets is brought Agricultural engineering i.e. 59 (5.88%) Intellectual assets.

**Table No. 5.6. Subject Wise Distribution of Intellectual Assets**

S. No.	Subjects	No. of Respondents	% of Respondent	Intellectual Assets	%
1	Agricultural Botany	8	23.53	276	21.75
2	Agricultural Economics	3	8.82	75	5.91
3	Agricultural Engineering	2	5.88	59	4.65
4	Agricultural Entomology	5	14.71	247	19.46
5	Agricultural Extension Education	1	2.94	91	7.17
6	Agricultural Plant Pathology	4	11.76	133	10.48
7	Agronomy	5	14.71	143	11.27
8	Animal Husbandry & Dairy Science	2	5.88	58	4.57
9	Soil Science & Agricultural Chemistry	4	11.76	187	14.74
<b>Total</b>		<b>34</b>	<b>100.00</b>	<b>1269</b>	<b>100.00</b>

### 5.7. Authorship Pattern

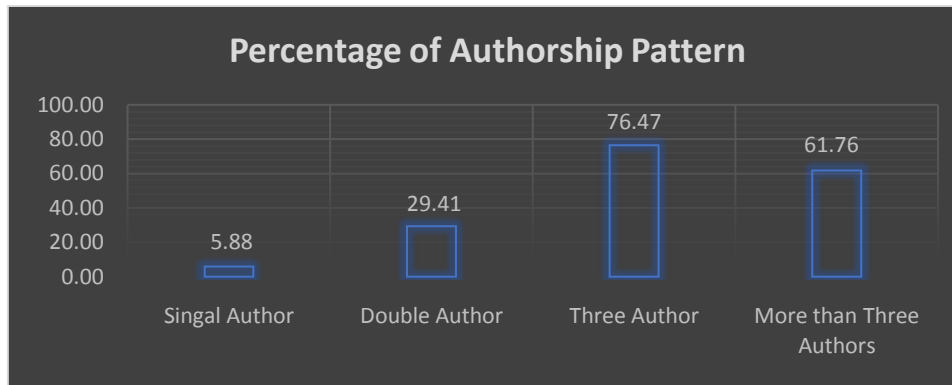
It can be noted from Table figure no. 5.7 shows the authorship pattern as observed in this study. The study shows that in the field of research assistant of research stations in Dr.PDK Vidhyapeeth. It is clear that 02 (05.88%) research assistant using single authorship pattern;

while 10 (29.41%) research assistant preferred double authorship pattern; followed by 26 (76.47 %) research assistant using three authorships and 21 (2.56%) librarians using more than three authorship pattern in their publication.

**Table No. 5.7. Authorship Pattern**

S. No.	Authorship Pattern	No. of Respondents	%
1	Single Author	2	5.88
2	Double Author	10	29.41
3	Three Author	26	76.47
4	More than Three Authors	21	61.76

Figure No. 5.7. Authorship Pattern



### 5.8. Rank List of Authors and Intellectual Assets

Table No. 5.8. Shows that Ranking of the Authors. It can be found that the shri. Gomase A.S. he is under 41 to 50 age group & his senior research assistant under the discipline Extension Education is the most prolific author who has contributed 91 intellectual assets in Symposia, Seminar, Conference, Journal, Book Chapter, Book, Consultancy Service, Recommendation, Resource Person, Award, Extension article, & Research

project during 2006-2015; Miss Nage S.M. She is under 21 to 30 age group & she is senior research assistant under the discipline of Agricultural Entomology. Mrs. Khambalkar S.V. she is under 31 to 40 age group & she is junior research assistant under the discipline of agricultural engineering. The detail ranking of the authors is presented in Table No.5.8.

Table No. 5.8. Ranking of Authors &amp; Theirs Intellectual Assets

S. No.	Name of Authors	No. of Intellectual Assets of Research Assistants	Ranking	%
1	Gomase A.S.	91	1	7.17
2	Nage S.M.	86	2	6.78
3	Khambalkar S.V.	83	3	6.54
4	Nandapure S.P.	79	4	6.23
5	Damre P.R.	78	5	6.15
6	Chikte P.B.	72	6	5.67
7	Patil S.P.	71	7	5.59
<b>Table No. 5.8. To be Continued.....</b>				
8	Burghule S.K.	70	8	5.52
9	Patil K.P.	46	9	3.62
10	Giri J.M.	44	10	3.47
11	Padghan P.R.	42	11	3.31
12	Khan F.S.	41	12	3.23
13	Dange A.M.	39	13	3.07
14	Fatak S.U.	37	14	2.92
15	Jadhav K.A.	33	15	2.60

16	Nemade D.K.	33	15	2.60
17	Vilhekar S.C.	32	16	2.52
18	Ukey N.S.	30	17	2.36
19	Khedkar M.B.	26	18	2.05
20	Palaspagar N.B.	25	19	1.97
21	Thawari S.B.	24	20	1.89
22	Khandare A.P.	22	21	1.73
23	Vaidkar R.D.	20	22	1.58
24	Kharkar A.P.	20	22	1.58
25	Mohod V.D.	18	23	1.42
26	Dhage S.J.	18	23	1.42
27	Kalane P.N.	17	24	1.34
28	Sadafale M.M.	16	25	1.26
29	Kharat B.S.	15	26	1.18
30	More W.V.	13	27	1.02
31	Bhowate R.T.	12	28	0.95
32	Dhage R.D.	12	28	0.95
33	Pardey V.P.	4	29	0.32
34	Iratkar V.B.	0	30	0.00
<b>Total</b>		<b>1269</b>		<b>100.00</b>

Figure No. 5.8. Top 10 Ranking of Authors



## 6. CONCLUSION

The intellectual assets show a steady growth during the period of study which shows that the subject under the research assistant of various research stations are successful in carrying out research activities. Those subjects which show a decrease in the output needs to be further encouraged. Most of the Intellectual assets are contributed as

extension articles published. There are also intellectual assets in Journals articles published. There are also papers published in the Seminar volumes, Conference proceedings and Symposia volumes. Which indicate that research assistant is getting enough opportunities to present their papers in types of extension articles & Journals. The authorship pattern shows

that there are more multiple authored papers than single authored which indicates good collaboration of research in agricultural disciplines. The participatory

The research productivity can be increased by improving further the research environment, upgrading the infrastructural facilities, recruiting more qualified research assistant and increasing the participation in research activities.

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research activities need to be encouraged which will further improve the quality of scientific research.

More incentives, rewards, and encouragement should be given to the faculty members for publishing in high NASS Score journals. Research assistant should be encouraged to conduct collaborative work of research projects.