Publications of Rabindranath Tagore: A bibliometric study

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The paper highlights the publication productivity of Rabindranath Tagore, the Nobel Laureate poet of India. He has published 199 Bengali books during 1878-1941 and 36 titles were published posthumously making it 235 Bengali books to his credit. In his seventies (the last decade of his life), when he ventured into the world of painting, surprisingly his literary productivity increased considerably instead of going down. He published as many as 55 books apart from producing 2000+ paintings. Tagore's productivity encompassed all branches of literature, i.e. poems, dramas, letters, novels, essays, songs, travelogues, comedies, short stories, addresses, textbooks and autobiography. His productivity coefficient for Bengali books is 0.84 which indicates that he had a steady publication record throughout his literary career. He has published 91 out of 95 short stories in 16 communication channels. Publication density of short stories is 5.69, publication concentration is 12.5 and productivity coefficient for short stories stands at 0.32.

Keywords: Rabindranath Tagore; bibliometrics; publications; literary form; short stories

Introduction

Rabindranath Tagore (1861-1941), the fourteenth child of Debendranath Tagore (1817-1906) and Sarada Devi (1826-1875) was born on 7th May 1861 in the ancestral mansion of the Tagore family in Jorasanko, in central Kolkata. Rabindranath Tagore, the myriad-minded poet and writer composed his first poem at the age of eight and by the end of his life at the age of eighty, he has created literature in all forms like poetry, short stories, novels, essays; initiated and edited various journals; prepared Bengali textbooks, penned thousands of letters; and crossing the age of seventy he created more than two thousand paintings and drawings¹. Rabindranath, the writer of two national anthems, has composed more than two thousands songs² known as *Rabindra Sangit* that have become a symbol of cultural ethos of both India and Bangladesh. Tagore's literary journey started with the publication of the first poem signed in his own name Hindu Melār Upahār (The Gift of Hindu Mela). The poet read this poem at the 9th annual conference of Hindumela on 12th February, 1875. The poem was of 22 stanzas with 88 lines. It was published in the Prabashi Patrika in 1338 (B.S) Magh issue³ and first verse narrative Banaphul (The Wild Flower) was published in Jnanankur and Pratibimba. The last birth

day of Rabindranath (7th May 1941) is marked with the publication of three books, one in verse called *Janmadine* (On my Birthday), one comprising short stories, *Galpasalpa* and the English version of *Chhelebela* (Boyhood days). The first verse narrative *Banaphul* is a long narrative poem in eight cantos, running over 1600 lines. It is the story of a young girl Kamala who was brought up by her father in a solitary retreat in the Himalayas⁴.

Rabindranath had no formal institutional educational degree, but his family's piety, honesty, love of nature and sense of beauty made a great impression on him. Ramananda Chatterjee, a renowned literary personality of Bengal referred the family as "the most gifted in Bengal in the realms of religion, philosophy, literature, music, painting and art"⁵. histrionic Rabindranath the himself acknowledged "one great advantage which I enjoyed in my younger days was the literary and artistic atmosphere which prevailed in our house"6.

Rabindranath received the Nobel Prize for literature on 13th November 1913 for *Gitanjali (Song Offerings)* published by Indian Society of London on 1st November 1912. The recommendation to Swedish Academy came from another Nobel laureate Werner von Heidenstam. He wrote "They [songs] gave me hours of intense enjoyment; it was like drinking the water of a fresh, clear spring...There is nothing in his work that is controversial and offensive, nothing vain, worldly and petty, and if ever a poet may be said to possess the qualities that make him entitled to the Nobel prize, it is he"⁷.

Tagore's intellectual output, Tagoreana covers all aspects of human life such as society, religion, aesthetics. education. rural reconstruction. nationalism, internationalism in all forms of literature as well as drawings and paintings. Bibliometric study on different segments of his literary creation such as songs⁸, letters⁹, Nobel Prize winning book of poems Gitanjali (Song Offerings)¹⁰ etc have been carried out. But no study has been carried out considering his total intellectual output in different literary forms particularly from the point of view of information science. But quantitative and qualitative studies of productivity of a creator with proper graphical representation help to analyze and understand his/her contribution in proper perspective.

A good number of scientometric studies on the works of Nobel Laureate¹¹⁻¹⁹ scientists have been carried out. Besides studies have been reported on the works of other eminent scientists²⁰⁻²⁷ to draw their scientometric portrait. But for quantitative analysis of publication profile of social scientists, bibliometric techniques²⁸⁻²⁹ had been applied. Here these have been applied to measure production output of the Nobel Laureate Rabindranath Tagore.

Objectives of the study

- To measure quantitatively Rabindranath's contribution to literature;
- To find out year-wise growth of publications;
- To identify literary-form-wise distribution of publications; and
- To identify core communication channels preferred by Rabindranath for the publication of his short stories.

Methodology

Creation of bibliometric profile requires quantitative and qualitative documentation of an individual scholar. Its graphic representation facilitates easy and clear perception of a scientist. A comprehensive bibliography consisting of Bengali and English books written by Rabindranath Tagore compiled in chronological order. were The bibliography includes all publications of his lifetime

(n=199) and also posthumous publications (n=36) in Bengali language as well as books in English language (n=52). The year of publication has been considered as contribution in a particular year. Rabindranath wrote 95 short stories and used different communication channels for publication. Short stories by the poet have been considered as scientific communication as they carry messages on social, political, economic, cultural aspects of the society. The books and short stories are the source of this study. The present study is limited to published books (including books on songs, letters, paintings etc) and short stories only.

Results

The first book of Rabindranath Kavi-Kāhini was published in 1878 by his friend Probadh Chandra Ghosh. The second one Banaphul was published in 1880 by the poet's elder brother Somendranath Tagore. Sailesh Chandra Majumder of Majumder Library was the first professional publisher who published Kāvyagrantha (collected works) in 1903-04. Before that Rabindranath had to publish his works using his own fund excepting three namely: Kadi o Komal (published by People's Library in 1886), Chithipatra (published by Sarat Kumar Lahiri & Co. in 1887) and Panchabhūt (published by Sur Company in 1897). Rabindranath established Visva-Bharati Granthan Vibhaga, the publishing Department of the University in 1923. Since then the Department is taking the responsibility of publishing Tagore's works.

Rabindranath published 199 books in a span of 56 years (1878-1941). The number of posthumous Bengali publications totals 36 (1941-1979). Visva-Bharati published all unpublished works of Rabindranath particularly collection of letters, essays, lecturers as individual volume after his death. The grand total of the publications is 235 as shown in Table 1. It may be noted that during his lifetime the author did not publish any Bengali book in the years 1879. 1890, 1898, 1902, 1904, 1913, 1915, and 1924. It looks unbelievable that the year in which he won the Nobel Prize, his mighty pen did not yield any Bengali book! The maximum number of books (N=9) came out in 1907, 1908 and 1936 when he was 46, 47 and 75 years old. It may be noted that in his seventies he ventured upon another field of art, i.e. painting and profound contributed profusely. Despite his engagement in painting, his literary activity did not diminish at all rather increased. In his seventies he

Author's age	Year	No. of publications	Cumulative total	Publishing age
17	1878	1	1	1
19	1880	1	2	2
20	1881	4	6	3
21	1882	2	8	4
22	1883	3	11	5
23	1884	5	16	6
24	1885	3	19	7
25	1886	1	20	8
26	1887	2	22	9
27	1888	2	24	10
28	1889	1	25	11
30	1891	1	26	12
31	1892	2	28	13
32	1893	2	30	13
33	1894	5	35	15
34	1895	1	36	15
35	1896	2	38	10
36	1890	2	40	18
38	1897	1	40	18
39	1900	5	46	20
40	1900	3	40	20 21
40	1901	3	52	21 22
44	1905	2	54	22
45	1905	3	57	23
45	1908	5 9	66	24 25
47	1908	9	75	26
48	1909	6	81	27
49	1910	5	86	28
50	1911	1	87	29
51	1912	7	94	30
53	1914	5	99	31
55	1916	7	106	32
56	1917	1	107	33
57	1918	2	109	34
58	1919	1	110	35
59	1920	2	112	36
60	1921	1	113	37
61	1922	3	116	38
62	1923	1	117	39
64	1925	3	120	40
65	1926	5	125	41
66	1927	2	127	42
67	1928	1	128	43
68	1929	7	135	44
69	1930	1	136	45
70	1931	7	143	46
71	1932	4	147	47
72	1933	8	155	48

Table 1—Chronological distribution of Bengali books					
Author's age	Year	No. of publications	Cumulative total	Publishing age	
73	1934	3	158	49	
74	1935	3	161	50	
75	1936	9	170	51	
76	1937	5	175	52	
77	1938	6	181	53	
78	1939	4	185	54	
79	1940	6	191	55	
80	1941	5	196	56	
80	1941*	3	199	56	
81	1942	3	202	57	
82	1943	3	205	58	
84	1945	2	207	60	
87	1948	2	209	61	
90	1951	3	212	62	
91	1952	1	213	63	
93	1954	2	215	64	
94	1955	1	216	65	
95	1956	1	217	66	
96	1957	1	218	67	
98	1959	1	219	68	
99	1960	2	221	69	
101	1962	1	222	70	
102	1963	3	225	71	
103	1964	1	226	72	
104	1965	1	227	73	
105	1966	1	228	74	
106	1967	1	229	75	
107	1968	1	230	76	
111	1972	1	231	77	
113	1974	2	233	78	
116	1977	1	234	79	
118	1979	1	235	80	
Post-1941 books are posthu	mous publications				

produced as many as 55 books. In no other decades of his life he could produce so many books. This period was the most productive period of Tagore's life. This may be a rare phenomenon which only further studies can corroborate.

Tagore's productivity is graphically presented in Fig. 1 for his lifetime publications and in Fig. 2 for posthumous publications.

The productivity coefficient could be obtained by the simple formula of 50 percentile age per total productivity age. Fifty percentile age is the number of years during which 50% of the papers (books in this study) were published starting from the year of publication of the first paper. Productivity age on the other hand is the count from the year in which first paper by an author was published till the last year of publication³⁰. Tagore's productivity coefficient for Bengali books is 0.84 (considering publishing age as 80 i.e. including posthumous publications).

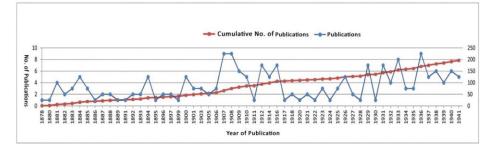


Fig. 1-Tagore's publication productivity upto 1941

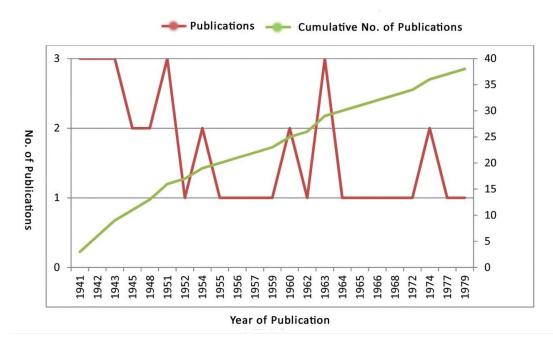


Fig. 2—Tagore's posthumous publications (1941-1979)

Rabindranath created his literary works embracing all literary forms. A literary form-wise distribution of his intellectual output is given in Table 2 and Figure 3. It is seen that his books on essays top the list (N=47), followed by drama (46), verse (44), songs/poems (22), novels and short stories (13 each), and so on.

Essays and other works in English

Rabindranath predominately wrote in Bengali, but there are 52 books in English to his credit produced in a span of 21 years (1912-1941) (Table 3). His writings in English are mostly translations of his own work in Bengali. Only *Poems of Kabir*, a translation of poems by Kabir is an exception. Like Bengali books, Tagore's writing in English covers different literary forms. Table 3 shows that five English books appeared in 1913, 1917, and 1921. Prior to 1913, only one book was translated. Tagore's winning of Nobel Prize in 1913 seems to have inspired the poet to go for more translations. The English translations of his book continued till the end of his life.

Table 4 shows the distribution of English books according to literary forms. Expectedly books of poems top the list with 15, followed by short stories and dramas (7 each), essays (5), and so on.

Among all his publications, 82% are in Bengali and the remaining 18 % are in English language. With copyright to Tagore's works ending and as more books of Tagore are being translated, it is expected that the percentage of English books will rise.

Short stories

The art of short story writing has in recent times received a great deal of attention in literary circle. A study of Rabindranath's short stories in the chronological order would help study pattern and change in joint family life, outside family ties, social structure etc., and also change of elements of dialogue from third person narratives to dialoguebased writings. Rabindranath wrote 95 short stories³¹ of which 91 were published in 16 communication channels as shown in Table 5. It can be observed from the Table 5 that *Sādhanā* and *Bhārati* were his most preferred journals to place his short stories.

It can be observed from Table 6 that 1891 and 1892 are the most productive year in terms of publication of short stories by Tagore.

Productivity coefficient for short stories of Rabindranath is 9/28 i.e., 0.32 (where 9 is 50 percentile age and 28 is total productivity age). Publication density³² is defined as the ratio of total number of papers published to the total number of journals in which papers were published. Publication density of Rabindranath's 91/16 i.e. short stories is found to be 5.69. Publication concentration on the other hand is the ratio in percentage of the channels having

Table 2-Literary form-wise distribution of Bengali books						
Literary form	Total number of books	FPY	LPY	%		
Verse	44	1878	1965	18.72		
Drama	46	1881	1979	19.58		
Letters	21	1881	1974	08.94		
Novel	13	1883	1934	05.53		
Essays	47	1883	1968	20.00		
Songs/Poems	22	1884	1954	09.36		
Travelogues	7	1891	1963	02.98		
Comedy	5	1892	1948	02.13		
Short Stories	13	1894	1940	05.53		
Address	9	1907	1977	03.83		
Textbook	4	1910	1931	01.70		
Autobiography	2	1912	1940	00.85		
Drawing and Paintings	2	1940	1951	00.85		
Total	235	100.00				

FPY=First Publication Year, LPY= Last Publication Year

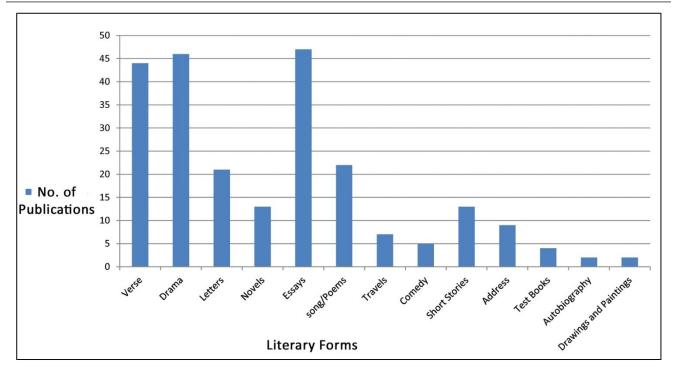


Fig. 3-Literary form-wise distribution of productivity

Table 3—Year-wise publication of English books					
Age	Year	No. of publications	Cumulative total	Publishing age	
51	1912	1	1	1	
52	1913	5	6	2	
53	1914	3	9	3	
55	1916	3	12	4	
56	1917	5	17	5	
57	1918	4	21	6	
58	1919	2	23	7	
60	1921	5	28	8	
61	1922	2	30	9	
62	1923	1	31	10	
63	1924	3	34	11	
64	1925	4	38	12	
67	1928	4	42	13	
68	1929	1	43	14	
70	1931	2	45	15	
72	1932	2	47	16	
74	1935	1	48	17	
75	1936	1	49	18	
76	1937	1	50	19	
79	1940	1	51	20	
80	1941	1	52	21	

 Table 4—Literary form-wise distribution of English books

Literary form	Number of books	FPY	LPY	%
Poem	15	1912	1936	28.85
Short Stories	7	1913	1941	13.46
Essays	5	1913	1923	09.62
Drama	7	1913	1925	13.46
Autobiography	1	1917	01.92	
Address	7	1917	1937	13.46
Novel	3	1919	1924	05.77
Letters	3	1921	1935	05.77
Compilation	3	1928	1929	05.77
Autobiography	1	1940	01.92	
Total	52	100.00		

Table 5—Channel-wise scattering of short stories (SS)

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Sl. no.	Journals	No. of SS	FPY	LPY	%
1.	Bhārati	16	1878	1911	17.58
2.	Nabajiban	01	1884	1884	01.10
3.	Bālak	01	1885	1885	01.10
4.	Hitavādi	07	1891	1891	07.69
5.	Sādhanā	36	1891	1895	39.56
6.	Sakhā o Sāthi	01	1895	1895	01.10
7.	Pradeep	02	1900	1900	02.20
8.	Bangadarshan	03	1902	1904	03.30
9.	Prabāshi	06	1907	1941	06.59
10.	Subajputra	10	1914	1917	10.98
11.	Chotogalpa	01	1933	1933	01.10
12.	Anandabazār (Puja Sankha)	03	1939	1941	03.30
13.	Sanibārer Chithi	01	1939	1939	01.10
14.	Desh	01	1939	1939	01.10
15.	Visva-Bhārati Patrikā 01	1942	1942	01.10	
16.	Ritupatra	01	1955	1955	01.10
Total	91	1887	1955	100.00	

Table 6—Year-wise publication of short stories					
Age	Year	No. of publications	Cumulative total	Publishing age	
17	1878	1	1	1	
18	1879	1	2	2	
23	1884	2	4	3	
24	1885	1	5	4	
30	1891	12	17	5	
31	1892	12	29	6	
32	1893	7	36	7	
33	1894	7	43	8	
34	1895	6	49	9	
37	1898	7	56	10	
39	`1900	5	61	11	
40	1901	1	62	12	
41	1902	2	64	14	
43	1904	1	65	15	
46	1907	1	66	16	
50	1911	2	68	17	
53	1914	7	75	18	
56	1917	3	78	19	
64	1925	1	79	20	
67	1928	1	80	21	
68	1929	2	82	22	
72	1933	1	83	23	
78	1939	3	86	24	
79	1940	1	87	25	
80	1941	2	89	26	
81	1942	1	90	27	
94	1955	1	91	28	

half of the papers published to the total number of journals in which those papers were published. Tagore published his short stories in 16 channels among which two channels namely *Bhārati* (n=16) and *Sādhanā* (n=36) covers more than half of the short stories. Hence, publication concentration of short stories would be : $2/16 \times 100$ i.e. 12.5.

Conclusion

In case of literature what matters is the depth of knowledge and the wisdom expressed in writings. The romantic touches reflected in the novels of Rabindranath come from his rapport with the beauty and mystery in nature deeply rooted in social, family and individual life. It is desirable to see the novels as a part of changing social history – reflection of society. In his short stories also, problems relating to personal, familial, social, etc are not denied but presented in an aesthetically valid universe. These reflections can never be measured with mere statistical indicators.

While considering the literary productivity of Rabindranath one should not forget that Rabindranath not only expressed his vision on society, education, rural development, religion, in his numerous writings but also tried to give it a concrete shape with the establishment of his experimental school at Santiniketan and rural reconstruction programme at Sriniketan. He wished to "bring to the village health and knowledge, wealth and peace in which to live, wealth of time in which to work and to rest and enjoy" ³³. Reform of education and regeneration of villages were the major tasks of his life.

References

- 1 Ray P P, Tagore in print: a comparative study before and after expiry of copyright, (Concept Publishing; New Delhi), 2012, p. 87-108.
- 2 Ray P P and Sen B K, Rabindrasangit (songs of Rabindranath Tagore): a bibliometric study, *SRELS Journal of Information Management*, 49(4) (2012) 343-358.
- 3 Bandyopadhyaya B, *Rabindra grantha-parichay* (1878-1943), (Sahitya Niketan; Calcutta), 1349(B.S.), p. 28.

- 4 Kripalani K, *Rabindranath Tagore: a biography*, (Visva Bharati Granthan Vibhaga; Cacutta), 1980,p. 66.
- 5 Chatterjee R, *Rabindranath Tagore, Modern Review.* 50(6) (1931) 675.
- 6 Tagore R, *Reminiscences*, (Macmillan; London), 1917, p.116-117.
- 7 Robinson A, *The art of Rabindranath Tagore*, (Rupa; Calcutta), 1989, p.33.
- 8 Ray P P, Rabindrasangit (song of Rabindranath Tagore): a bibliometric study, SRELS Journal of Information Management. 49(4) (2012) 343-358.
- 9 Ray P P and Sen B K, Letter correspondence of Rabindranath Tagore: a study, Annals of Library and Information Studies, 59 (2) (2012)122-127.
- 10 Ray P P, Gitanjali (Song Offerings): a bibliometric study, SRELS Journal of Information Management. 49(6) (2012) 601-613.
- 11 Gupta D K, Chandrasekhar: winner of the Nobel Prize for physics: a citation analysis of his work, *Annals of Library and Information Studies*, 30(14) (1999)177-184.
- 12 Kademani B S, Kalyane V L and Jange S, Scientometric portrait of Nobel Laureate Dorothy Crowfoot Hodgkin, *Scientometrics*, 45 (2) (1999) 233-250.
- 13 Kademani B S, Kalyane V L and Kademani A B, Scientometric portrait of Nobel Laureate Dr. C. V. Raman, *Indian Journal of Information, Library and Society*, 7 (3-4) (1994) 215-249.
- 14 Kademani B S, Kalyane V L and Kademani A B, Scientometric portrait of Nobel Laureate S. Chandrasekhar, JISSI: The International Journal of Scientometrics and Informetrics, 2 (2-3) (1996) 119-135.
- 15 Kademani B S, Kalyane V L and Kumar V, Scientometric portrait of Nobel Laureate Harold W. Kroto, *SRELS Journal of Information Management*, 39 (4) (2002) 409-434.
- 16 Kademani B S, Kalyane V L and Kumar V, Scientometric portrait of Nobel Laureate Ahmed Hassan Zewail, *Malaysian Journal of Library and Information Science*, 6 (2) (2002) 53-70.
- 17 Kalyane V L and Kademani B S, Scientometric portrait of Barbara McClintock: the Nobel Laureate in Physiology, *Kelpro Bulletin*, 1 (1) (1997) 3-14.
- 18 Kalyane V L and Sen B K, Scientometric portrait of Nobel Laureate Pierre-Gilles de Gennes, *Malaysian Journal of Library and Information Science*, 1 (2) (1996) 13-26.

- 19 Koganuramath M M, Angadi M, Kademani B S, Kalyane V L and Jange S, Physics Nobel Laureate Wolfgang Ketterle: a scientometric portrait, *Malaysian Journal of Library and Information Science*, 9 (2) (2004) 35-61.
- 20 Hazarika T S, Sarma D and Sen B K, Scientometric portrait of Nayana Nanda Borthakur: a biometeorologist, *Annals of Library and Information Studies*, 57 (1) (2010) 21-32.
- 21 Kademani B S and Kalyane V L, Bibliometric indicators of publication productivity analysis of an individual scientist, *JISSI: The International Journal of Scientometrics and Informetrics*, 2 (4) (1996) 49-58.
- 22 Kademani B S, Kalyane V L and Balakrishnan M R, Scientometric portrait of P. K. Iyengar, *Library Science*, 31 (4) (1994) 155-176.
- 23 23.Kademani B S, Kalyane V L and Kademani A B, Scientometric portrait of Sir K. S. Krishnan, *Indian Journal* of Information Library and Society, 9 (1-2) (1996) 125-150.
- 24 Kademani B S, Kalyane V S and Kumar V, Scientometric portrait of Vikram Ambalal Sarabhai: a citation analysis, *SRELS Journal of Information Management*, 37 (2) (2000)107-132.
- 25 Kademani B S, Surwase G and Kumar V, Bhabha Scattering: a scientometric view. DESIDOC Journal of Library & Information Technology, 29 (4) (2009) 3-11.
- 26 Kalyane V L and Kademani B S, Scientometric portrait of R. Chidambaram: a publication productivity analysis, *Journal of Information Sciences*, 5 (3) (1995) 101-140.
- 27 Kalyane V L and Munnolli S S, Scientometric portrait of T.S. West, *Scientometrics*, 33 (2) (1995) 233-256.
- 28 Sinha S C and Ullah M F, Information profile of an Indian bibliometrician: Bibliometric study of Dr. I.N. Sengupta's publications, *Indian Journal of Information, Library and Society*, 7 (3-4) (1994) 250-261.
- 29 Tiew W S, Khoo Kay Kim, Professor of Malaysian history: a bibliometric study, *Malaysian Journal of Library and Information Science*, 4 (2) (1999) 47-57.
- 30 Sen S K and Gan S K, Bibliometrics: concept and application in the study of productivity of scientists, *International Forum on Information and Documentation*, 15 (3) (1990) 13-21.
- 31 Tagore R, *Galpaguccha*, (Visva Bharati Granthan Vibhaga; Calcutta), 1999.
- 32 Vinkler P, Bibliometric analysis of publication activity of a scientific research institute, (Elsevier; Amsterdam), 1990, p. 09-334.
- 33 Tagore R, *Jivansmriti*, (Visva Bharati Granthan Vibhaga; Calcutta), 1405(B.S),p.13.