# Physical verification as administrative and collection evaluation tool: A study of Institute of Agriculture Library; Visva-Bharati 

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Received: 10 June 2017; revised and accepted: 05 February 2018


#### Abstract

This article is the result of an intensive stock verification of more than 50000 documents of an academic library (Institute of Agriculture; Visva-Bharati) established in 1957. The physical verification process includes physical noting of all accession number of books on and out of stack and use of LibSys software to generate reports. The paper highlights that physical verification of collection can help in identifying major areas of loss and thereby can help in framing administrative guideline for collection evaluation and management policy. The paper also urges for review of existing government rules regarding loss of books and weed-out policy.


Keywords: Physical verification; Collection management; Classification; Loss of books; General Financial Rules (GFR)

## Introduction

Institution of Rural Higher Education was set up at Sriniketan in 1957. In the early years, the Institution offered three-year diploma course in Rural Services and two-year certificate course in Agriculture. The main objective of the Institution then was to play a leadership role by providing agricultural information for sustainable rural economic development. On September 1 1963, Palli Siksha Sadan was set-up for offering three and four year degree courses in agriculture and social work. Later social work was transferred to Department of Social Work of Palli Samgathan Vibhaga in 1975. In revised Visva-Bharati Act of 1984 it again renamed as Palli Siksha Bhavana (PSB, Institute of Agriculture) which offers Graduation, Post-Graduation and PhD programme in agriculture ${ }^{1}$. PSB library serves Palli Siksha Bhavana comprising of nine departments of agriculture, Department of Social Work and Palli Charcha Kendra (Department of Rural Studies) in particular and to others departments of Visva-Bharati in general.

The library has a collection on 50064 documents on agricultural education, research and extension including journals and gray literature in agriculture. As a part of Visva-Bharati Library Network known as Gitanjali Net, the library is automated using LibSys software. Besides access of collection through OPAC (Open Public Access Catalogue), access to digital and
electronic resources, information services, IT-enabled services are provided by the library.

A good number of studies have been conducted on different aspects of stock verification such as on identifying loss of books ${ }^{2-5}$, methods of stock verification and policies ${ }^{6-9}$, library professionals' attitude towards stock verification ${ }^{10-11}$ etc. There seem to be no study that looks at period of acquisition and relating it to losses as well as using classification scheme to identify thrust area of missing subjects.

## Objectives of the study

- To track growth of collection;
- To identify major areas of missing collection;
- To evaluate missing collection and frame proper management policy; and
- To analyze existing rules regarding loss and weed-out policy.


## Methodology

Physical verification process was completed in a semi-automated library environment of the PSB library. Accession numbers of all the books in the stack were noted down. Daily transaction of the circulation section was also taken into consideration.

Identification mark put on every document so taken into account for physical verification. Steps involved in the process such as initiating stock verification, verification of records and verification of reports functions were used. Many a times, accession register was consulted for missing documents whose data are not available in LibSys, for price, binding, etc. Total missing books ( $\mathrm{n}=5656$ ) were classified according following Dewey Decimal Classification scheme for subject wise identification of missing books.

## Analysis

Numbers of missing books were tabulated per five thousand collections as shown in Table 1. It helps to get an idea of growth of library collection since the inception of the library and the missing of books. For example, library added first five thousand in six years,
next five thousand in less than five years but it took more than nine years (18.5.66-13.11.75) for adding next five thousand books (10000-14999). It can also be noticed that percentage of missing books reduces remarkably from accession number 30000 (since 19.3.1994).

Actual collection of library is the resultant of number of documents accessioned less the missing books. The resultant effect of collection from 12.12.1956 to 19.01.2017 has been shown in Fig. 1 that derived from Table 1.

Total missing books ( $\mathrm{n}=5656$ ) were arranged according to ten main classes of DDC (Table 2). It helps to identify broad subject-wise number of missing books. It is observed that social science, technology and science occupy a major portion (76.8\%) of missing books.

| Table 1—Growth and loss of library collection (book) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Accession date | Accession No. | No of books lost | \% of loss | Cumulative loss | \% of loss |
| From - to |  |  |  |  |  |
| 12.12.56-25.11.62 | 0-4999 | 335 | 6.70 | 335 | 5.92 |
| 25.11.62-18.04.66 | 5000-9999 | 1017 | 20.34 | 1352 | 23.90 |
| 18.04.66-13.11.75 | 10000-14999 | 970 | 19.40 | 2322 | 41.05 |
| 13.11.75-23.03.80 | 15000-19999 | 704 | 14.08 | 3026 | 53.50 |
| 23.03.80-10.06.88 | 20000-24999 | 868 | 17.36 | 3894 | 68.84 |
| 10.06.88-19.03.94 | 25000-29999 | 657 | 13.14 | 4551 | 80.46 |
| 19.03.94-18.12.98 | 30000-34999 | 465 | 9.30 | 5016 | 88.68 |
| 18.12.98-3.07.05 | 35000-39999 | 357 | 7.14 | 5373 | 94.99 |
| 3.07.05-15.03.11 | 40000-44999 | 228 | 4.56 | 5601 | 99.03 |
| 15.03.11-19.01.17 | 45000-50064 | 55 | 1.10 | 5656 | 100.00 |



Fig. 1—Actual collection of library

| Table 2-Missing of books according to ten main classes DDC |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Class No. | Class description | No. of Books | \% of loss | Cumulative loss | Cumulative \% of loss |
| 000 | Computer Sc., information\& general works | 174 | 3.08 | 174 | 3.08 |
| 100 | Philosophy \& psychology | 143 | 2.53 | 317 | 5.61 |
| 200 | Religion | 25 | 0.44 | 342 | 6.05 |
| 300 | Social sciences | 2196 | 38.83 | 2538 | 44.88 |
| 400 | Language | 215 | 3.80 | 2753 | 48.68 |
| 500 | Science | 605 | 10.69 | 3358 | 59.37 |
| 600 | Technology | 1543 | 27.28 | 4901 | 86.65 |
| 700 | Arts \& recreation | 35 | 0.62 | 4936 | 87.27 |
| 800 | Literature | 525 | 9.28 | 5461 | 96.55 |
| 900 | History \& geography | 195 | 3.45 | 5656 | 100.00 |

Table 3-Loss of books on Social Science (300)

| Class No. | Class Description | No. of Books | $\%$ of loss | Cumulative loss | Cumulative \% of loss |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 001.42 | Research methods | 52 | 2.37 | 52 | 2.37 |
| 301 | Sociology \& anthropology | 344 | 15.66 | 396 | 18.03 |
| 305.4 | Women study | 34 | 1.55 | 430 | 19.58 |
| 307 | Communities | 60 | 2.73 | 490 | 22.31 |
| 310 | Statistics | 149 | 6.79 | 639 | 29.10 |
| 320 | Political science | 135 | 6.15 | 774 | 35.25 |
| 330 | Economics | 521 | 23.72 | 1295 | 58.97 |
| 338.1 | Agronomy | 127 | 5.78 | 1422 | 64.75 |
| 340 | Law | 107 | 4.87 | 1529 | 69.62 |
| 350 | Public Administration | 11 | 0.50 | 1540 | 70.12 |
| 360 | Social Problems and services | 75 | 3.42 | 1615 | 73.54 |
| 361.3 | Social work | 394 | 17.94 | 2009 | 91.48 |
| 370 | Education | 175 | 7.97 | 2184 | 99.45 |
| 380 | Commerce | 12 | 0.55 | 2196 | 100.00 |

Three major subjects namely social science (300), science (500) and technology (600) were further classified to identify more details of missing books (Tables 3, 4 and 5). It is seen from Table 3 that books on economics, social work and sociology missing the most ( $\mathrm{n}=1259$ ) and comprises $57.32 \%$ of missing books in social science. Similarly, genetics, plant science and chemistry are three major areas of missing books in science. Most of the books on technology are on agriculture. One can notice diverse subjects of missing books on agriculture and related subjects that include insect, pests, entomology, soil and agriculture (Table 5).

## Discussion

Missing or loss of books in library depends upon size and use of library collection as well as its
accessibility, vigilance as preventive measure. "In an open access, some loss must be expected in spite of the greatest vigilance on the part of the staff....the management must be prepared to write-off books every year, say about one volume for every 2000 volumes issued for consultation or loan" ${ }^{12}$. UGC committee on University and College Libraries suggested "loss of 3 books per 500 issued books should be treated as negligible loss" ${ }^{13}$. Education Department, Government of India in its meeting held on 10th Feb 1981 resolved that " 4 books per 1000 issued be treated as inevitable loss in the open access system and this loss should be written off by any authority concerned ${ }^{14}$. Later on it was noticed in GFR that "loss of five volumes per thousand volumes of books issued/consulted in a year may be taken as reasonable provided such losses are not attributable to

|  |  | Table 4—Loss of books on Science (500) |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class No. | Class Description | No. of Books | $\%$ of loss | Cumulative loss | Cumulative $\%$ of loss |  |  |  |
| 510 | Mathematics | 33 | 5.46 | 33 | 5.46 |  |  |  |
| 530 | Physics | 51 | 8.43 | 84 | 13.89 |  |  |  |
| 540 | Chemistry | 79 | 13.06 | 163 | 26.95 |  |  |  |
| 550 | Earth sciences | 11 | 1.82 | 174 | 28.77 |  |  |  |
| 570 | Biology | 69 | 11.40 | 243 | 40.17 |  |  |  |
| 572 | Biochemistry | 55 | 9.09 | 298 | 49.26 |  |  |  |
| 576.5 | Genetics | 116 | 19.17 | 414 | 68.43 |  |  |  |
| 577 | Ecology | 21 | 3.47 | 435 | 71.90 |  |  |  |
| 579 | Microbiology | 47 | 7.77 | 482 | 79.67 |  |  |  |
| 580 | Plants (biology) | 94 | 15.54 | 576 | 95.21 |  |  |  |
| 590 | Animals (zoology) | 29 | 4.79 | 605 | 100.00 |  |  |  |

Table 5-Loss of books on Technology (600)

| Class No. | Class Description | No. of Books | $\%$ of loss | Cumulative loss | Cumulative \% of loss |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 610 | Medicine and health | 27 | 1.75 | 27 | 1.75 |
| 630 | Agriculture | 142 | 9.20 | 169 | 10.95 |
| 630.715 | Agriculture extension | 12 | 0.77 | 181 | 11.72 |
| 631.37 | Agriculture engineering | 67 | 4.34 | 248 | 16.06 |
| 631.4 | Soil science | 157 | 10.17 | 405 | 26.23 |
| 631.521 | Seeds | 26 | 1.75 | 431 | 27.98 |
| 631.53 | Plant propagation | 49 | 3.17 | 480 | 31.15 |
| 631.58 | Farming | 59 | 3.82 | 539 | 34.97 |
| 631.7 | Water conservation | 38 | 2.46 | 577 | 37.43 |
| 631.8 | Fertilizers | 46 | 2.98 | 623 | 40.41 |
| 632 | Plant pathology, Diseases | 115 | 7.45 | 738 | 47.86 |
| 632.5 | Weeds | 48 | 7.11 | 786 | 50.97 |
| 632.7 | Insect, Pestology, Entomology | 208 | 13.48 | 994 | 64.45 |
| 633 | Field \& plantation crops | 117 | 7.58 | 1111 | 72.03 |
| 634 | Orchards, fruits, forestry | 86 | 5.57 | 1197 | 77.60 |
| 635 | Horticulture | 90 | 5.83 | 1287 | 83.43 |
| 635.9 | Flowers and ornamental plants | 25 | 1.62 | 1312 | 85.05 |
| 636 | Animal husbandry | 133 | 8.61 | 1445 | 93.66 |
| 637 | Dairy | 12 | 0.77 | 1457 | 94.43 |
| 639 | Hunting, fishing | 20 | 1.29 | 1477 | 95.72 |
| 641 | Food | 66 | 4.28 | 1543 | 100.00 |

dishonesty or negligence" ${ }^{15}$. The number of books of 'reasonable loss' tends to be increasing with time. But there is ample scope to review number of lost books in the modern library environment with applications such as RFID available. Even this study also shows that losses were reduced to $1.1 \%$ during the recent span from 15.3.2011 to 1.1.2017.

During tabulation of data it was observed that initially library collection was limited to number of broad subjects. But proliferation of subjects was
noticed from late seventies. This is true in case of social science in general and agriculture in particular.

Among the lost books nearly than $80 \%(n=4479)$ are text books and $83 \%(\mathrm{n}=4683)$ are paperbacks which also includes text books. Loss of last book dates back to 29.3.2012 which is also a paperback textbook on plant diseases. There are 187 lost foreign books which is $3.31 \%$ of total figure. Price of lost books and its pagination also may be a matter of study such as a book on Siksha by Rabindranath Tagore of

264 pages published in 1958 was just Rs. 3/- and now is priced at Rs.110/- in 2016.

## Conclusion

It may be concluded that physical verification of library collection is essential to not only know the status of exact collection but also frame weed-out policy and take corrective measures by library administration and do frame collection development policy. Attitude of library personnel plays a pivotal role towards physical verification. Counseling of students can help in prevention of loss of books ${ }^{16}$. It can also help in framing collection management policy as missing or loss of books are of high demand and special vigilance in those particular areas can be applied. But reviews of existing government rules regarding loss books and weed-out policy is the need of the hour keeping in mind the nature of book (text/reference), physical description (hard/soft bind) as well as normal life of book as material object. Particularly when GFR no. 136 states "loss of book of a value exceeding Rs. 1,000 (Rupees thousand only) and rare books irrespective of value shall invariably be investigated and appropriate action taken" ${ }^{15}$.

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