INFORMATION FOR SMALL INDUSTRY: A SURVEY

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Presents the results of a survey carried out with a sample of 51 small scale industrial units situated in and around the twin cities of Hyderabad and Secunderabad for identifying (i) role of information & information activities in the small scale industries; (ii) role of various agencies in the industrial information transfer; (iii) specific information services & products which they require & the sources they tap to obtain these information & for creating an awareness among them about the information activities of the country & also for eliciting their suggestions. Suggestions of the respondents have been listed. The need for building up a more effective national network of industrial information has been emphasised. Management, staffing, function, etc., of local information centres of industrial estates areas have also been outlined.

The process of industrialisation of a country, state or a region and hence the improvement of national economy depends on the extent, type as well as on the effective utilisation of the resources. Industrial information is one of the most important of these resources, since the exploitation of other resources depends upon it. Information is an essential input to the small industries development programme, whether in promoting entrepreneurship or in increasing the effectiveness of the performance of established industries. But the information requirements of small enterprises are little known and poorly understood.

Considerable activity is now taking place in planning of national information system, optimum utilisation of existing information systems and services and development of new systems and services. In this connection, it would be appropriate to find out not only the information needs of small entrepreneurs but also their views on the type of services which would be relevant to them for rational decision making.

It is the responsibility of the industrial information workers to interact constantly with the entrepreneurs and to streamline the process of information communication to industry. In order to facilitate the effective communication of industrial information, the information workers need to conduct periodic surveys which would enable them to get acquainted with the needs and problems of the entrepreneurs. Here, in the succeeding sections the details of such a survey conducted for this purpose and the results obtained are presented.

OBJECTIVES OF THE SURVEY

The broad objectives of this experimental study were:

- To identify the role of information in small scale industries.
- To identify the overall information activities and problems in small scale industries.
- To identify the main sources in which they locate useful information and topics on which they need information.
- To identify the role of various industries, associations, special libraries/information centres and other governmental agencies in the transfer of industrial information.
- To identify the specific information services and products in which the small entrepreneurs are usually interested.
To stimulate the intake of industrial information by the small entrepreneurs by making them aware of the present day information activities in the country.

- To get their general opinion about the present day information services in the country and their suggestions in this connection.

**SCOPE OF THE SURVEY**

This survey is confined to the small scale industries situated in and around the twin cities of Hyderabad and Secunderabad. The total number of respondents are 51 out of which 15 are from chemical units, 12 are from mechanical units, 9 each from electrical and electronics units and 6 are from miscellaneous units which include the units manufacturing cotton and industrial yarns, optical instruments, flow meters, ceramic products, sports goods and rubber mouldings.

**METHODOLOGY OF THE SURVEY**

1. **Designing the Questionnaire**

   The questionnaire was first designed and circulated among 15 small entrepreneurs who manufacture different types of products with a view to modifying it after getting the feedback from them. Thirteen out of 15 questionnaires were collected with the respondents' feedback and then the original questionnaire used in this survey was designed, which is exhaustive enough to cover all the objectives mentioned in the preceding section of this chapter, together with general information on the units and the respondents. Certain "check questions" on some aspects were also included and purposefully placed at odd places.

2. **Sampling**

   The first step after designing the questionnaire is to select the units. The sampling technique applied here is "random sampling". The application of the random sampling technique for the purpose of this survey can be justified with the following arguments:

   Small scale industries need variety of information on variety of aspects from time to time. Different industries may manufacture different products i.e. some of them may manufacture chemicals, some of them electrical items, some may manufacture electronics items and so on. The small industry products today range from an ordinary 'nut' to sophisticated 'electronic calculators'. Take, for example two units, one manufacturing chemical products and the other manufacturing electrical items like "switch gears". Both the above units require what is called "technical information", which includes production processes, production problems and some technological developments. The actual content of the information surely varies, but in the view of the information worker, it is essentially technical information in either case. Likewise, some units may require information on the regulations involved in the use of industrial alcohol and some units may require information on the regulations involved in the use of boilers, which essentially falls under regulatory information in both the cases. Some units may require information on insurance health facilities available for their employees and some may require information on group insurance schemes available which essentially come under personnel information.

   Further, the investment pattern also varies from one small industry to the other, but the investment of all small scale industries is well below or just up to the mark that was laid down by the definition of the small scale industry.

   The above mentioned points clarify that for the information worker, the characteristics of all small scale industries, irrespective of the products they manufacture are the same. It can also be said that they operate in the same environment. Therefore, the random sampling technique applied for this study can be justified on the basis of the above enunciated points.

   A careful consideration of all the sampling techniques revealed that the random sampling technique used in this study is more practical and meaningful and serves the purpose adequately.

**RESPONSE FROM THE SMALL ENTREPRENEURS**

Actual field work was started in April 1979, when the questionnaires were submitted to the units. Each of the questionnaire filled in by the entrepreneurs was scrutinised carefully and internal discrepancies and inconsistencies, if any, were discussed with industrialists to get necessary clarification and plausible explanations which were incorporated in the questionnaires. The field work was over by the end of August 1979.

The long spread period of the actual field work was due to a number of difficulties faced in the work. Firstly, it was found to
be difficult in majority of the cases to locate the units and to contact the responsible person for getting the information required. In many cases the address obtained was insufficient and it became difficult to locate the number of the building. Even after locating the units, many more visits were necessary to contact the responsible person. Some units repeatedly reported the absence of the proprietor/manager. Some proprietors/managers granted time for the interview, but were found to be repeatedly not available at the given time. Some of them bluntly refused to give the required information. Due to these reasons, the questionnaires were submitted only to 90 units out of the total sample 130 selected for submitting the questionnaires. All the entrepreneurs to whom the questionnaires were submitted were given 15 days to fill in all the information. But in most of the cases they took more than one month to return the filled questionnaires. Some of the industrialists, even after repeated reminders and personal visits, could not keep up their promise. These units were ultimately discarded from the list. The total number of industrialists who had responded were 51 out of 90 to whom the questionnaires were given.

It must be stated that some industrialists did understand the vital importance of a survey of the present type and supplied all the information willingly. Some of them went ahead and acquainted us with the peculiar problems of their units, commented on the present state of the information services in the country, and requested emphatically to include suitable suggestions and recommendations in the present work.

During the course of further analysis of the data collected, whenever any clarifications were required or more elucidation was desired on certain peculiarities observed, some of the respondents were contacted a number of times and it must be noted with gratification that they did spare their valuable time to discuss the points placed before them.

SUGGESTIONS FROM THE RESPONDENTS

Twenty three respondents have expressed dissatisfaction about the present day industrial information set up in the country. They feel that there should be a good centralised system with reprographic facilities in each and every industrial city. These systems should supply specialised product line information and industrially experienced persons should be made incharge of these centres. They have also suggested that improvements must be made in coordinating the efforts of various agencies in this line.

Seven respondents from electrical and electronics units have stated that major research in their sphere of activity is being done in Russia, Japan and West Germany and many developments are being reported in these languages. They have suggested that national industrial information services should also take the responsibility of translating these articles into English and other local languages and supply the same to the concerned entrepreneurs.

Eighteen respondents have suggested that special libraries/information centres should provide lending facilities which will enable them to study the subject matter of their interest without wasting much of their time.

Two respondents feel that the present working of information centres of various agencies is medium scale oriented and tends to be a little too western at times and irrelevant to the local conditions. They suggest that there is a requirement of a system which can provide appropriate and basic information and data relevant to the local conditions at a very nominal cost. Such a system should necessarily embrace both technical and commercial aspects of small industry management.

One respondent feels that due to the fast rate of industrial growth, particularly small scale sector, the competition is increasing. He suggests that there is a need to restructure the whole industrial information set-up and to make the entrepreneurs aware of the latest technical and other commercial developments.

One respondent suggests that task forces may be set up in national information services which would keep monitoring the running of small industries and tackling the problems as and when they come.

Almost all the respondents feel that there is a need to set up an information system which would take care of market trends of different products and supply this information to the required entrepreneurs. They have also felt the need to streamline the publication and communication of regulatory information.

CONCLUSIONS OF THE SURVEY

Information qualifies as a major input and becomes a common factor in decision making and overall control in small scale enterprises. All the respondents have agreed that the information generated within their organisations as a result of day-to-day operations is as important as the external environmental information and felt the need for a formal organisation of it.
Small scale industrialists do not allocate fixed budget for procuring information material and they acquire it as and when the need arises. Out of the five industry groups considered, electronics units are spending more money for procuring information material. This is due to the fact that the electronics field is taking roots in India presently and the publications in this field are yet to be streamlined (i.e. they are procuring more number of foreign periodicals). Almost all the small entrepreneurs depend on various sources outside their organisations viz. people engaged in similar type of business, different associations, special libraries/information centres, consultants and research institutions for their information needs. It appears that the degree of dependence on these sources is more than 50 per cent of their overall needs. The tendency of the small entrepreneurs is to procure the information material which would have immediate bearing on their activities and due to this, they are ignoring the developments (both technical and commercial) which would affect their activities in the long-run.

There is a general agreement among the respondents that they do face different problems in acquisition and organisation of their information material even though the quantum of it is very small and they are keen to organise the same. This suggests that there is a need to implement the techniques of documentation even in small industries to facilitate easy retrieval of information. In a majority of the sample units, informal information services like lending documents within the firm, circulation of books and periodicals and literature searches are being conducted.

The sources in which small entrepreneurs locate useful information are different types of periodicals, books and other reference material, publications brought out by different associations and they also approach different consultants. The topics on which they need information regularly are marketing; product diversification and development and various government regulations. The topics on which they need information occasionally are production problems, safety, records management etc.

All the small scale industrialists depend on several sources outside their organisations for their information needs out of which the people engaged in similar type of business appear to be the most sought-after source. This shows that the entrepreneurs in the first instance tend to contact some people to solve their problems. Therefore, there is a need to motivate the entrepreneurs to depend more on documentary sources.

All the small scale entrepreneurs are conscious of utilising the existing special library/information service facilities available in the country. Even the entrepreneurs who are not in a position to spare time to visit libraries are aware of the usefulness and resourcefulness of libraries in solving their commercial and technical problems.

The information services which the entrepreneurs need are - providing answers to their queries, newsletters on a particular industry group like plastics, fine chemicals, ceramics etc., news briefs which notify about the current developments in the field of their interest, technical digests which notify all the scientific and technological developments in a particular field, providing a list of abstracts/summaries of latest articles and management digests which inform about the latest trends in management. All the respondents have indicated their willingness to pay for such services.

The formats of presentation of information to the entrepreneurs are-a periodical form, a service that notifies about the printed information which will be supplied on request and a sheet confined to a single topic.

Small entrepreneurs are finding it difficult to obtain the information on topics like product diversification and development, marketing information and government regulations.

BUILDING UP A MORE EFFECTIVE NATIONAL NETWORK OF INDUSTRIAL INFORMATION

1. Need for Local Information Centres in Industrial Estates/Areas

The fundamental characteristics of Indian small industry are their wide dispersal throughout the country and a wide diversity in the nature of the products that are being manufactured. It has been seen that small industrialists are constrained to limit their expenditure on procuring information material and to conduct their information activities in an organised way. Therefore, they depend on various governmental and other agencies for obtaining the required information. Several efforts are being made by the Government in building up a national network of industrial information to facilitate effective transfer of information to start and to operate small industries efficiently. The effectiveness of this network depends on the coordination between the industry and various organs of the network, i.e. it does not suffice setting up different agencies and providing linkages among themselves. It is fundamental
periodicals each on a continuous basis in which the titles of two periodicals are the same. Consider that they also procure some books and other reference material like handbooks, manuals, etc. out of which some are common. Now, if these two units pool their resources and conduct their information activities in a coordinated way, they can avoid the procurement of one set of common material. This money can be utilised for procuring some more information material relevant to both the units. In other words, this sort of coordinated approach enables to enrich their information resources besides reducing their dependence on sources outside their organisations. Similarly, if all the units in an industrial estate/area pool their resources and organise their information activities in a coordinated way, it is possible to build up a centralised information system for that particular estate. The success of this approach depends more on the involvement and coordination extended by the concerned entrepreneurs. Such information centres during the process of growth not only build up a good collection of their own, but also establish linkages with several other national, regional and local information agencies and help to accelerate the transfer of industrial information to small industries. This approach will surely lead to building up an effective national network of industrial information. Such local information centres in industrial estates/areas can be called - "Industrial Estate Information Systems" (IEISs).

3. Role of Governmental and other Agencies in Developing IEISs

Since the exploitation of the available knowledge and know-how is of fundamental importance to the process of industrial development, Government must accept the responsibility for the transfer of information to industry in the same spirit that they accept the responsibility for economic development itself. Industrial information services require Government support. At present, all such services are partly or wholly subsidised by the Government. Government and national industrial information services should also accept the responsibility for establishment and operation of local information transfer services in industrial estates. The success of IEISs programme depends to a large extent on the role played and cooperation extended by the concerned governmental agencies and departments.

Firstly, the entrepreneurs need to be motivated to recognise the vital importance of establishing IEISs. The State Government authorities like Directorate of Industries should assume the responsibility of motivating the
entrepreneurs and if necessary, they should also make it obligatory on the part of the entrepreneurs to participate in IEISs development programme.

Secondly, to start with, the Government should assume the responsibility of providing financial support for constructing building and for procuring necessary equipment to IEISs.

Thirdly, the national industrial information services can draw up detailed schemes in establishing IEISs. These schemes include the methods of organising the information material, assisting IEISs in drawing up their acquisition policies and planning different information services to member units. Further, they will have to coordinate their activities continuously with IEISs by supplying the required information. Various regulatory bodies also should establish communication links with IEISs and supply the regulatory information from time to time. The national industrial information services can also perform a very important function of training the staff members of IEISs.

4. Management and Staffing of IEISs

Almost every industrial estate would have the Industrial Estate Manufacturers Association constituted by the elected office bearers from the entrepreneurs. A separate committee can be appointed either from these office bearers or by electing the office bearers from the member entrepreneurs to look after the management affairs of IEISs. This committee can be called "Managing Committee" and from time to time would look after the policy issues concerning IEISs. The functions of the Managing Committee will include - fixing the amount that should be contributed by each member entrepreneur, deciding on the acquisition policy of information material, deciding on the services to be rendered, etc. The committee would also conduct general body meetings from time to time to decide on various issues that may arise during the operation of IEISs. Besides this, the committee would decide from time to time on matters regarding the sort of linkages that should be established between IEISs and various other agencies. In a nutshell, the Managing Committee would control and coordinate the overall activities of the IEISs.

One of the first decisions to be made is the number of staff members required for the level of service wanted. In the initial stage, the IEISs unit can be staffed by one professionally trained person with some industrial experience aided by administrative assistant (cataloguer). As the use made of publications grows and the size of the collection of materials expands, one person cannot be expected to do everything adequately. Other staff members, both professional and clerical, must be employed to take over different activities and render specialised services required by the entrepreneurs.

5. How IEISs should Function

To start with, each member entrepreneur will contribute the amount of money specified by the Managing Committee and this will become the financial input for the IEISs. For example, if there are 100 units in an industrial estate/area and each one contributes Rs. 2000-3000 in the beginning and continues to do so every year, the total amount will be Rs. 2-3 lakhs per year which will be adequate enough to set up and operate a sound information centre.

The present holdings of all the member entrepreneurs (books, periodicals etc.) will form the primary input. Later on, the centre will acquire books, periodicals and other information material to cater to the needs of each individual member unit. The acquisition policy and other issues can be reviewed from time to time by the Managing Committee in consultation with the head of the centre.

The staff of the centre, from time to time, would device the necessary information services to the member entrepreneurs. They also can process and evaluate the information and maintain an index for the relevant information. Lending facility of books and periodicals can also be provided to member entrepreneurs. Books and periodicals can be displayed in the centre to facilitate the entrepreneurs and their staff members to go through them and obtain the required information. Besides these, they can render a very important service of answering the technical queries posed by the member units. In case the queries fall outside the purview of the system, they would contact various other agencies and/or institutions where the information is available and supply it to the concerned entrepreneur. Apart from these services, these centres will constantly coordinate their activities with national industrial information services and other regulatory bodies to obtain the relevant information. In short, the IEISs will take care of the overall information needs of each member entrepreneur.

6. Common Benefits that Entrepreneurs Can Derive out of IEISs

The establishment of IEISs would relieve the entrepreneurs of the burden of acquiring and processing the information material. The IEIS will take care of all the technical and
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commercial developments and each one will be supplied with the relevant information from time to time.

With the limited amount that each entrepreneur contributes, he will have access to more number of information sources in his sphere of activity and can also avail himself of the lending and various other services which would be rendered by IEISs.

Since the location of IEIS is in the industrial estate itself, the entrepreneurs need not spend much of their time even if they want to make a personal visit to the centres to obtain the required information.

These centres on behalf of each entrepreneur will keep contact with various agencies, regulatory bodies and other institutes and this will eliminate the problem of entrepreneurs contacting these agencies individually.

APPENDIX

Questionnaire for Surveying the Information Needs of Manufacturers.

1. Name
2. Designation
3. Qualifications & experience.
4. Name and address of the organisation.
5. Year of establishment.
6. Type of organisation (Please tick one)
   - Private company
   - Partnership
   - Sole proprietorship
   - Public limited company
   - Subsidiary of large company
   - Others (please specify)
7. Nature of activity (please tick in appropriate square)
   - Manufacturing and selling own products
   - Manufacturing under contract
   - Selling goods made by others
   - Providing services (such as repairing)
   - Consultancy
   - Others (specify)
8. Type of products manufactured.
9. Could you give the number of employees in each of the following departments.
   - Administration
   - Production
   - Research & Development
   - Marketing & sales personnel
   - Others
   Total employees
10. (a) If you are a member of the following types of organisations please tick the relevant type and write the name of the organisation.
    - Trade association
    - Professional association
    - Commercial association
    - Other institutes, associations
    - Not a member of any association or institution.
    (b) If your organisation is a member of the following types of organisations please tick the relevant type and write the name of the organisation.
    - Trade association
    - Professional association
- Commercial association
- Other institutes, associations
- Not a member of any association or institution.

16. In which of the following sources do you locate the useful information.
- Books
- Journals (Trade, technical, etc.)
- Newspapers
- Advertisement brochures
- Standards
- Trade, professional, commercial associations & their meetings and publications.
- Handbooks
- Research institutes
- Work manuals
- Consultants
- Banks and financial institutions
- Other people engaged in similar type of business.
- Others, please specify.

17. On which of the following topics your organisation needs information regularly and occasionally.

Regularly Occasionally Needed
- Production problems
- About the activities of the competitors
- Relevant technological innovations.
- Market trends.
- Product diversification
- Trade statistics of your products.
- Records management
- Tenders and contracts
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- Managing employees.
- Office and factory equipment
- Prevention of accidents
- Government policies and other regulatory information.
- Others, please specify.

18. A lot of data is generated within an organisation as a result of day-to-day operations like production and sales figures, production schedules, experimental results of R & D, performance reviews, payrolls, balance sheets, etc. These are highly essential for decision making at top corporate level, to assess past performance and to predict future trends. Please indicate your view.

a) Please indicate the mode of organisation of the above type of data in your organisation.
   - Department-wise
   - Centralised
   - Separate record keeping
   - Other forms, please specify.

b) What type of information do you consider more important.
   - internal information
   - external information
   - both internal and external
   - none of the above

19. If you have a collection of books, reports and other documents what are the specific problems in

a) acquisition of documents
b) processing of documents
c) storage of documents to retrieve when information is needed
d) servicing of documents.

20. What services are being offered (please answer Yes/No.)
   a) Bringing out accession list of publications added to the library? Yes/No
   b) Circulation of books and periodicals Yes/No
   c) Lending documents within the firm Yes/No
   d) Literature searches Yes/No
   e) If any other services are offered, please specify.

21. If you have a collection of books, reports, etc. and information services are being offered, what is the strength of the staff both professional and non-professional (in the library/information centre).

22. How far does the library/information unit of your organisation meet your information needs.
   - Completely
   - about 75%
   - about 50%
   - about 25%
   - Not at all

23. When you seek information which falls outside the purview of your system, which of the following sources you are most likely to tap.
   - a library
   - a consultant
   - any Government agencies
   - a research institution
   - a trade or professional association
   - someone outside who is engaged in the similar type of business
   - Others, please specify.

24. Please indicate how often you sought assistance or information outside your business/organisation.
   - once in a week
- once in a fortnight
- once in a month
- once in 3 months
- once in 6 months
- once in a year
- Seldom sought any information

25. When seeking this information from an outside source do you.
- Write
- Telephone
- Make a personal visit

26. Have you ever visited or contacted a library/information centre for any information in connection with your organisation.
- Yes/No

27. If not, was it for any of these reasons (please answer this question only if you have ticked 'NO' in question 26).
- You have all the information you need in your organisation
- You did not think a library would have sufficiently practical information.
- You feel it would take too much of your time to find the information you wanted in a library
- You get the information from other sources
- Others, please specify.

28. If you had sought information from an outside library/information centre, did you find what you were looking for.
- Yes
- No
- Only part of it

29. If you are a member of trade or technical association when you have queries, do you normally
- Find answer in the printed information that has been sent out by the organisation.
- Telephone the trade or business association.
- Contact someone else not connected with your trade or business association.

Below are listed a number of ways by which information might be made available to you. Could you indicate which ways you would prefer, numbering 1 to the most preferred and 6 to the least preferred.

1 2 3 4 5 6
- Periodical type
- by a service that notified to you of printed information likely to be of interest to you, which is available on request.
- on a sheet confined to a single topic
- by a visit to library
- in a folder with a number of loose sheets each concerned to a single topic.
- by a telephone call to an information centre which could give answers to some enquiries and direct you to person who could give information on more specialised enquiries.

31. If an information centre is set up which is capable of supplying information of value to your organisation -
a) Which of the following services you would like to have. (Please tick)
- Answering technical queries (this service is intended to provide answers to your specific technical or commercial problems by literature searches. This includes supplying the list of manufacturers/suppliers of raw materials, machinery, other items of interest to you, and trade statistics of particular items, etc.
- Providing a list of titles of latest articles in your sphere of activity and which are likely to be of interest to you.
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- Providing a list of abstracts (summary) of latest articles in the sphere of your activity.
- News briefs, which notify you about the current developments in technical, commercial field of your interest.
- Technical digests which notify all the scientific and technological developments in your field of activity.
- Management digests which keep you informed about the trends in management of production, maintenance, personnel, etc.
- Data sheets in the form of graphs, illustrations, tables, and other data.
- State-of-the-art/trend reports which give the information about status of particular item, or particular group of items in terms of scientific and technological, demand and supply, future projections, etc.
- Bibliography which provides a list of all relevant articles, books, patents, etc. on any specific topic of your interest.

b) Will you be prepared to pay for such services?

c) Whether you need such services at all ........

32. In order to get a better idea of your information needs, could you give an outline of problems, which remain unsolved in your business.
- Technical
- Marketing
- Productivity
- Finding sources of supply of raw materials/machinery and equipment.
- Diversification or new product line.
- Regulatory information.
- Others, please specify.

33. Have you additional remarks/comments concerning your information requirements, problems in obtaining the required information, the forms in which useful information is/should be made available etc?

Signature ......................

Name: .........................