

# [Research problem](https://assignbuster.com/research-problem/)

### CHAPTER-2:

### FORMULATION OF RESEARCH PROBLEMS AND STEPS OF RESEARCH

### 2. 1 INTRODUCTION:

One of the important concepts and the back bone of research analysis is that of ‘ identifying research problem(s)’. This is the real difficulty that commonly creates puzzle in the minds of researchers at the initial stage of research work. It is rather researcher’s perception or recognition of a difficulty that motivates him/her for planning a research. All the imagination that rules in the mind of a researcher while recognizing about a research, difficulty may not be necessarily a best fit and accurate problem, for which, the process and task of identification of a good research problem is considered as a ‘ discovery in itself’.

### 2. 2 FORMULATION OF RESEARCH PROBLEM

However, in a general meaning, a research problem may be stated as some difficulty which an individual (manager) or organization(s) or society faces and the solution on the existing difficulty is sought. A proper, systematic and thorough analysis of a research problem will definitely enable the researcher (may be social scientist in case of social science research or business executive in case of business research) to be on the right track in the process of research. As it is often said that a problem or difficulty may be defined/stated clearly treated as half solved. As much as the researcher is clear about the problem, it will be better on his/her part to smoothly carry on the entire consequential steps continuously one after the other in the process of execution of a scientific research work.

### 2. 3 COMPONENTS OF RESEARCH PROBLEM:

The components of identifying a research problem imply that of analyzing some basic necessities which are required in the process of identifying a research problem. In this process, a research goal should satisfy five basic requirements as outlined below:

### a. Existence of Both Researcher(s) and Respondent(s):

One of the basic requirements for identifying a research problem is the presence of both the parties- the researcher(s) and the respondent (s). The respondent(s) may be an individual or a group who face some difficulty or problem. Similarly, the researcher may be an individual or a group who want to solve the existing problem of the respondent(s). The respondents may be the customers, employees, executives etc., in case of business research where as they may be common human beings in case of social science research. For example, if the respondents are not facing any difficulty, then there may not arise any question of decision-making and hence, no chance of research.

### b. Both Must Have Some Objectives:

The second basic requirement is that, to identify a research problem, both the parties must have some objectives. The respondents want to fulfill their basic requirements of life, want to live in a healthy environment, willingness to purchase new products, to maintain standard of living and as a whole are having unlimited wants. The researchers task is to solve the existing huddles in the process of achieving the desires of the respondents i. e., satisfaction of unlimited human wants.

c. Both Must Have Some Doubt While Selecting Alternatives:

The respondents are having a number of alternatives with them. This creates doubts in their mind while deciding which alternative to select. Similarly, the researchers are also having few alternatives in the form of doubts. This may lead to the question of selecting the important one that can solve the existing problem in a better way.

For example: Let that Hindustan Unilever Ltd. (HUL), is interested to lunching a new brand of tooth paste, with the brand name ‘ PARAS’ in India. The R&D cell of HUL is interested to know the market picture of this product and wants to predict the feasibility of the product in the market before introducing it. The researchers of HUL may identify some problem areas like: Who are the major competitor in this product category?, What are the brand image and share of different competitors?, What is the dealers’ reaction towards the proposed product? In which market segment (area) HUL should concentrate? etc. All these are required for the R&D members for suggesting their management while deciding on whether to lunch the product or not? All the four alternatives chosen can give the answer to the question that whether or not to go for the new product. But due to some constraint the team has to make a choice between the alternatives and have to concentrate on any one or few alternatives. Now it is very difficult on the part of the researcher(s) to decide that which one will give better result to achieve at the desired objectives. Similarly, the respondents are also having number of alternatives with them while purchasing a product.

### d. There Must be an Environment:

An activity can emerge in an environment. Like wise a research problem can exist in an environment. The environment may be social, business, political, demographic, technological or any such environments characterized by problems of any kind.

### 2. 4 FACTORS OF PROBLEM IDENTIFICATION:

Originating problems or questions constitute the initial phase in the process of problem-formulation. The process of problem finding is having some component of analysis. These components answer to the general questions like how to proceed in the process of problem identification? In this connection Gupta 2001, distinguishes three principal components in the progressive formulation of a research problem like:

\* What one wants to know? (The originating a general question)

\* Why one wants to have the particular questions answered? (the rationale behind the question)

\* Analyzing the questions formatted in search of their appropriateness.

### a. What One Wants to Know?

This type of question generally represents the beginning of certain difficulties or challenges which, should be formulated in such specific terms so as to indicate where exactly the answers to the problem can be found. One type of originating question calls for discovering particular matter of common interest. Another type of originating question draws direct attention to the search for analysis and comparison between different variables in a society. Some questions may be descriptive in nature, while another group of researchers may raise the questions based on the adequacy of certain concepts, while some may be interested in analyzing observed empirical generalizations and so on.

### b. Why One Wants to Have the Particular Question Answered?

The second phase of problem formulation is that of analyzing the vagueness or rational of the formulated question. Rationale is defined as the statement of reasons why a particular question is having some value in that circumstances. Hence, it answers to the question how the answers to the question(s) formulated will contribute to theory or/and in practice?

### c. Analyzing the Questions Formulated:

Each question differs to that of another question in their degree of specificity. Some questions may be quite diffused where as some may be relatively specific and some questions formulated may be undifferentiated or fused. Thus the questions must be broken down into several specifying questions related to the particular aspects may be from management field or related to the areas of social science or can be any combination between the two.

### 2. 5. NATURE OF THE PROBLEM:

One of the important concerns before finalizing the problem in research is that of thoroughly scanning the nature of the identified problem(s) by the researcher. As it is already stated earlier that the researchers may face number of huddles (i. e., limited time, less budget, lack of resources etc.) in the process of research, hence, they have to compare the huddles that they are facing and the nature of problem they have identified. The following derivation will help the reader in clarifying this concept.

## Case-1: When the problem is narrow in scope

Foe example: ‘ Soft drink habits of management students of a particular institute of a specific area?. Like ‘ Soft drink habits of management students of IM&F, Bangalore’.

‘ Socio-economic condition of fruit sellers of Noida’ etc

Solution: These cases require less time to execute, less expensive and also requires fewer resources.

### Case-2: When the problem identified is broad in scope

For example: ‘ Impact of world economic crisis on corporate employment’

‘ Impact of government programmes on rural development in India’

Solution: Take Long time, expensive and need more resources.

### Case-3: The problem identified cannot be measured

For example: ‘ Will this new information technology make society better?’

‘ Is it possible to shift the human being to Moon to settle there?’

Solutions: Difficult to estimate.

Based on the accessible limitations, the researchers are advised to select their own problem. If they are having less time, less finance to execute research work etc., here it is advisable to identify a research problem which may be narrow in scope and so on.

### 2. 6. SOURCES OF IDENTIFYING RESEARCH PROBLEM(S):

Where is the problems lie? or what will be the sources of research problem? This is the question that generally puzzles the minds of researchers at the beginning stage of the research. Most of the researchers are always in search of research problems. The task of problem selection is always confusing. One can explore a research problem basically from three important sources. They are

1. Researcher’s own interest

2. Contemporary interests of the researcher

3. Identifying unexplored areas

### 1. Researcher’s Own Interest:

Gupta (2001) pointed out that personal values play an important role along with other determinants in the selection of a topic of research. Researcher(s) with different values tend to choose different topics for investigation. It is always advisable and better to select the problem based on the own interest of the researcher itself. A researcher may select a problem for research from a given situation or circumstances or existing theory as per his/her area of interest. One may generate an idea either while reading a research paper or reading a particular subject in self interested areas. For example, while doing my Ph. D in economics, I am very much interested to explore the level of living in India.

### Box-2. 1: Illustration of Own Interest in Research

A popular way of looking at the level of living of the people in the country is to look at the state of inequality in the distribution of income and the level of poverty by analysing their consumption pattern. One of the major curiosities in the Indian economy is to define and estimate a poverty line and to determine the percentage of people below it. There are number of methods to estimate poverty line and number of indices to measure the magnitude of inequality and incidence of poverty. The scope of the study is limited to some popular and widely used traditional, modern (non-ethical) and the recently developed ethical measures of poverty and to some positive and normative measure of inequality to estimate the incidence of poverty and magnitude of inequality in the state.

### 2. Contemporary Interest of the Researcher:

In the busy world, a researcher may come across various problems which require a specific study. Beside personal interest, social and or business environmental conditions do often shape the preference of investigators in order to identify research problem (s). Since societies and/or business environments differ in respect of the premium they place on the work in different fields, hence, these differences affect the choice of research topics. In a given socio-business condition, thousands and thousands of opportunities prevail and can be identified. It is however, researcher’s own conscious, matters a lot while identifying a research problem. For instance, suppose the prices of major durable goods like that of TVs, washing machines etc., are reducing day-to-day in the electronic market in India, here, the researcher may be interested to study the extent of reduce in price in different time periods, factors that are influencing the acquisition of durables, diffusion of durable goods and hence, demand for the durable goods in the market and so on. Conversion of a problem of contemporary interest into a good and interesting research topic depends largely on the skill and expertise of the researcher in that field of knowledge.

### 3. Gap in the Existing Theories/Principles:

The third source in the process of problem identification is of analyzing the existing gap in the available theories or principles in literatures. Irrespective of rapid expansion of communication, there still exists gap between what is known and what is unknown. This identification of gap between the two is the task of the researcher while selecting a research problem. This type of research would be extending and broadening the field of knowledge in that area. The theoretical or empirical studies conducted on this basis may sometimes alter, modify or revise the existing theories or principles. Here, the researcher uses some existing theories or principles from any discipline of knowledge, may be managerial economics, macro economics, international trade, marketing management, consumer behaviours, finance etc., in the empirical analysis and suggest some modification or development of some new theories in the existing one.

### Box-2. 2: Methods of Estimating Unit Consumer Scales:

Consumption pattern of a household, in general is affected by several factors, which may be of economic and non-economic in nature. For example, age-sex distribution, marital status, occupation etc., of the members of the household might be the significant determinants of the consumption pattern in addition to income, tastes, size of the household etc. Since different types of household members have different needs and ability to consume, the actual decisions regarding expenditure by a household are considerably influenced by the consumption of the household (in terms of age-sex etc.). Several researchers1 have proposed alternative methods of estimation of unit consumer scales (to estimate the ‘ specific’ and ‘ income’ unit consumer weights, which constitute ‘ specific’ and ‘ income’ scales respectively).

In the beginning, the effect of a single additional individual on the household consumption was used to investigate, by comparing group of households with identical composition except for the presence or absence of one members. This approach was soon abandoned in view of its inefficient results and various other difficulties (Kemsley, 1952). The limitations of this method are: (1) it is difficult to get sufficient number of households of the requisite type and (2) it is possible that consumption pattern of the households of this type may be different by several other factors such as income distribution, regional, climatic and social conditions etc.

As a result, subsequent researchers in the field mainly considered child as a fraction of an adult. Although, this idea was originally propounded by Carrol and Bright (1875) and then by Engel (1857) but its scientific treatment was done by Sydenstricker and King (1921).

Singh (1968), Singh and Nagar (1973) adopted a modified version of Prais and Houthakker’s iterative procedure to estimate both the specific and income scales independently of any such restrictions and assumptions as employed in the models of Forsyth (1960), Barten (1969) and Coondoo (1973, 1975). It is obvious that the same form of the Engel function (in per capita or per unit terms) may not describe the consumption pattern with respect to all the items of consumption. Prais and Houthakker choose to work with only the semi-log and the double-log in their study. However, Singh and Nagar’s model need not be constrained by any particular form of the Engel function. Instead, they scan through eleven different functional forms and (viz. L, DL, SL, EX, LI, HYP, P, LP, LO, LLI and SLI) and select for the purpose of analysis the one which (i) provide initial and final critical levels of demand below and above which the consumer would not have any demand for the item in question however low or high his income may be, (ii) satisfy the Slutsky’s conditions and (iii) explains the maximum variation in the dependent variable.

Hence, it can be said that selection of a research topic is not the end of research process rather it is only half a step forward. The selection of topics does not help the researcher to see the data are relevant to the methodology to be used, the design of the research etc.

### 2. 7. PROCESS FOR FORMATION OF A RESEARCH PROBLEM:

There are number of processes of identification of research problem. They are as follows:

### 1. Systematic Inquiry Through Pilot Survey:

Having a few alternatives in mind, the researcher has to inquiry about the viability of each alternative through pilot survey. The process of pilot survey is nothing but is the preliminary study that the researchers are generally doing before finalization of research topic. This will help the researcher in keeping close contact with the problem to that of related requirements like-the condition of the study area, the nature of the respondents, the expected difficulty in data collection, the time frame required to complete the study, the approximate budget required etc., to solve the problem identified. Some times, it so happens that, the problem selected even though looks easy but in practice it is not so easy to execute.

### 2. Survey of Existing Literature:

Scanning the literature is having multiple advantages to the researcher. In one hand, it helps the researcher to be familiar with the concepts already available in the literature, hence, add some new knowledge to the researcher in the required area. On the other hand, it also helps the researcher in selecting new alternatives, fixation of hypotheses, deciding objectives of study and so on from the existing literature.

### 3. Group Discussions:

Group discussions is the process of discussing about particular topics among the persons who are associated with the work. In group discussions each person in the group shares their own existence and knowledge on a particular topic. It may help the researcher in getting the number of new ideas or knowledge to the existing source of knowledge. Again, discussions with the experts also pave a new way and new idea in the existing field. It also provides some practical knowledge which will help the researchers in the process of execution of the research work. Hence, it can be said that a problem/statement gives information concerning who, what, where and how?

### 2. 8. CRITERIA OF A GOOD RESEARCH PROBLEM:

Before finalization of the research problem, the researcher should aware of several conditions and considerations although there is no hard and first rule that all the research problem should follow all the criteria, still few criteria in the form of conditions might be listed for guidance in the selection of a topic. They are: (a) Clarity in problem -the problem selected must have perfect clarity without creating any confusion; (b) Novelty- The problem formulated should be original one so that it should not involve objectionable duplications. Originality is the basic credit point of any research; (c) Logical and Systematic- Research is guided by logic or reasoning; (d) Interesting and Importance- The problem formulated for research should be interesting for the readers and the problem should be significant enough and involve an important principle or practice; (e) Relation between Variables- The problem under study must be in a position to highlight the nature, extent and implications that exist among variables of the study; (f) Availability of adequate information on data- The research work chosen should ensure the devices and procedures etc.

### 2. 9. DIFFICULTIES OF RESEARCH IN INDIA:

India is a pluralistic country. It is not only pluralistic in religion, geographic conditions, body color, living standards etc., but also pluralistic in economic conditions. It generally, possesses characteristics of a typical Under Developed Country (UDC). Before explaining the difficulties that the researchers in India are facing, it is better to narrate some of the distinctive characteristics of the Indian economy.

### 1. Low Per Capita Income:

India’s per capita income is very low compared to the developed countries of the world. The World Development Report 2005 categorized India as a low income category (GNI per capita of $765 or less in 2003) calculated on basis of income aggregates. Similarly, India is also placed in the category of Medium Human Development countries category with HDI value as between 0. 05 to 0. 799 calculated, based on the human development aggregates in the world.

### 2. Inequalities in Income Distribution:

Another related characteristic of the Indian economy is the prevalence of gross inequalities. The World Bank, in its World Development Report, 2002, has revealed that the richest 10 per cent took 33. 5 per cent of the total income and the poorest 10 per cent received only 3. 5 per cent of the total income distribution in India. The larger number of people in the top group includes owners and managers in the private sector, managers of public enterprises, workers in large public and private sector enterprises, government workers at the middle levels and small family farmers in the prosperous rural areas.

### 3. Predominance of Agriculture:

Agriculture is the mainstay of Indian economy. Agriculture and allied sectors contribute nearly 22 per cent of Gross Domestic Product of India, while about 65-70 per cent of the population is dependent on agriculture for their livelihood.

### 4. Low Productivity:

There are wide difference in the level of productivity in different sectors between the advanced and the backward countries. The average productivity in Indian agriculture is about 40 times below the productivity level in U. S. A. and Canara. Difference in the industrial productivity between advanced and backward nations is also found to be very significant.

### 5. Technological Backwardness:

The techniques of production employed in most of the sectors of the underdeveloped economics are either absolute or outdated. In India, for example, agriculture is still carried out with the centuries old techniques. Similarly, modernization in the industrial sector is also found to be very limited, as most of the industries still employ techniques which have been long discarded in the western countries. The transport sector still needs more improvement.

### 6. Deficiency in Capital:

A common characteristic of all the underdeveloped countries is the deficiency in capital. The rate of capital formation in India has been depressing low.

### 7. Rapid Growth of Population:

The rate of growth of population in underdeveloped countries is generally very high. This is primarily because of the high birth rate and low death rate.

### 8. Existence of Unemployed and Disguised Unemployment:

Unemployment, underemployment and disguised unemployment are very common feature of the underdeveloped nation, as India. Since, population grows rapidly, labour is a prime factor and it is not possible to provide employment to all the people who are capable of work and willing to work. Consequently unemployment and underemployment is found to be very common. In the agricultural sector of the economy, disguised unemployment exists to a considerable degree.

### 9. Poor Quality of Human Capital:

Human capital implies the quality of the country’s labour force. It is the labour which has to play a great role in building up the economy. Public expenditure on education, medical care and social services goes a long way to improve the quality of labour in the nation. Unfortunately, in India masses still continue to be illiterate and ignorant. For this reason, India is lack of skilled experts in various sectors.

### 10. Under-utilisation of Natural Resources:

In India, still now a large proportion of its forest are laying unexploited. Similarly, the water resources of the country are again remaining unutilized. A better use of all these actual and potential resources pave the way in support of improvement in economic activity and the volume of national production, hence, level of living.

The above features and remaining more, point out that India is an underdeveloped country. In the years after independence the government of India has awakened to the need of economic development of the country and has made an organized effort and initiated the process of development in the country. As a result of these efforts the pace of development has gathered momentum and the country is making a steady progress towards development.

In such a situation, it is very easy on the part of a researcher to find out accurate problems/ideas/objectives of research within a short span of time. But in the process of execution of research work, he/she may face numbers of difficulties. These difficulties generally emerge as bottlenecks in the process of research in our country. Even though, the literature points out about the presence of a number of huddles that the researchers generally face, some important factors are narrated below:

### 1. Lack of Specialized Institutions:

In India, we have lack of specialized research institutions for conducting frequent research and development in our preferred areas, particularly in management.

### 2. Lack of Adequate Source of Literature:

Since we are lack of adequate specialized research institutions, hence, there is lack of rich library for getting adequate literature. Even though in some particular cities there exist rich libraries but still they seem to be very few in numbers in comparison to requirement. In such a situation, the researchers are spending huge amount towards maintenance expenditure before the collection of required materials. This task is expensive and also time consuming. Such facts are generally de-motivating the researchers.

### 3. Lack of Adequate Data:

Collection of primary data is time consuming and expensive. In India, a researcher is not getting adequate data for conducting research work. There are few organizations that collect primary data (panel data) from the field periodically. But the cost of the data available for sell is very high. For example, suppose a person is interested in consumer expenditure data. The best source of data is that of NSSO unit record data. It is surprising that the data CD of 61st round consumer data costs around Rs. 18000/-, which is very expensive and is beyond the limit of the individual researcher(s).

### 4. Lack of Experts:

We have very limited experts in different fields of research in social sciences and also in management. Since, we have limited institutions and also because of improper salary structure in comparison to developed countries, experts are getting maximum exposure in developed countries and also the working environment is also very attractive and good. This encourages most of our scholars to settle abroad.

### 5. Technical Bottlenecks:

Technology in 21st century is changing very faster. But in India most of the research scholars are using traditional means of technology in research, which are both time consuming and requires more personal involvement.

### 5. Infant Industry Condition:

Most of the industries in India are in Infant stage. For this reason, the industries in India are lack of their own research and development cell. Since, the execution of independent research is expensive, requires more time and human resources, thus, the industries prefer to conduct research through consultants and NGOs, rather than opening up of their own R&D department.

### 6. Dualistic Economy:

Indian industrial sector shows dualistic economic structure i. e., the presence of modern sector and the traditional sector. Similarly, small pockets of development exist in towns and metropolitan cities where the industry has grown and the trade is flourishing. On the other hand, the rural areas continue to be in the grip of backwardness, poverty and stagnation. All these create problems to the researcher to get adjusted with these dualistic natures of the economy.

### 7. Democratic form of Government:

Since, Indian constitution is adopting the democratic form of Government; hence, we have no strict legal code and conduct for the research. By the way, it is essential for the formation of a code and conduct specifying methodologies and procedure of research and related issues to make the research process more uniform and ethical.

### 8. Lack of Adequate Financial Assistance to Researcher:

There is lack of certain economic institutions like financial institutions and credit agencies for funding the research work. As funding is not available, it is discouraging research work.

### 9. Time Consuming:

Research process is mostly time consuming. Since we are using all most all the traditional technique of research, hence, it requires much time. This is discouraging for further research.

### 2. 10 LINKING RESEARCH TO PRACTICE:

Olivier Serrat (2005) of Asian Development Bank, in his volume ‘ Linking Research to Practice’ which is meant for ADB’s series of knowledge solutions pointed out that research greatly exceeds its application in practice. So, he pointed out that researchers must pay greater attention to the production of their research findings in a flexible range of formats in recognition of the varied needs of readers. To him, research is about both generation and enunciation of findings. An enunciate policy is the expression of a research institution’s mission and values to its staff members and to the public. It establishes a common vision and the values and measures that can be engaged to achieve accessibility to information content. An enunciate policy can be an effective and economical instrument that links research to practice but in reality it is observed that except few there may be rarely such other institute who are following this in practice. Thus, he advocated for the definite existence of an enunciation policy and an enunciation plan for each research agenda. Enunciation tactics will then automatically come into play.

### Drawing a Enunciate Plan:

The most successful enunciate processes are usually designed before the start of a research agenda. It should produce a response-utilization of the research findings-on the part of users. While drawing an enunciation plan, researchers should consider at least the following seven major elements:

a. Impact and Outcomes: What is the desired impact of enunciation? What outcomes does the enunciation plan aim to accomplish? In what ways the users are benefited?

b. Users: Which users are most affected by the research? Which would be most interested in learning of the research findings? What are their scope and characteristics?

c. Information Content: Does the information content match the users’ expressed informational needs? Does the comprehension level require to understand the information content that match the characteristics of the users? Is the information content reviewed through a quality control mechanism to ensure accuracy and relevance?

d. Medium: What is the most effective enunciation method to reach each user group? What reso