RESEARCH

WHAT DOES IT MEAN, IN YOUR OPINION??

DEFINITION FOR RESEARCH

Scholar Redman and Mory-

is a systematic effort to gain a new knowledge.

Advanced Learner's Dictionary of Current English-

is a careful investigation for inquiry especially through search for new fact in any branch of knowledge.

CliffordWoody-

Research comprises defining and redefining, formulating hypothesis or suggest solutions, collecting, organizing and evaluating data, making deduction and reaching conclusion, and at last carefully testing a conclusion to determine whether they fit for formulating hypothesis.

DEFINITION FOR RESEARCH

- The word research (1570) refers to "act of searching closely" for a specific person or thing, the word being derived from 1530s Modern French recerche(back-formation from Old French recercher) meaning to "seek out, search closely".
- -Merriam Webster Dictionary- involves investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws.
- -In simple words research is a scientific and systematic study of ground facts that are compiled, analysed and evaluated with findings and conclusions that provides knowledge of the existing conditions and suggests remedial measures for any issues if existing or projected to achieve the larger goal which may be driven by ecological, economic or societal concerns.

WHY IS RESEARCH CONDUCTED????

PURPOSES OF RESEARCH

The purpose of any research include all or some of the following

To discover new knowledge ie new ideas or new facts.

To identify and describe a new phenomenon.

To make predictions and make estimation of a phenomenon.

Offer explanation of a phenomenon based upon described characteristics.

Give a critical reasons why something is happening.

Enable theory development or confirmation, validation of existing theories (basic research) or develop new ideas that strengthen a theory.

And.....

What are the themes under which research can be done in Geography?? (Share the branch of Geography to which your title of Mini project/Dissertation falls in)

SIGNIFICANCE OF RESEARCH IN GEOGRAPHY

- -Geographical research is significant as it provides a basis for explaining the <u>regional variations</u> and accounts for <u>spatial planning</u> that is necessary to strengthen the nation in terms of its strategic, demographic, social, and economic growth and development.
- -Geography research deals with a wide range of subject matter, most of which, whether physical or environmental, or social, political, economic, or cultural.
- -Geography as a discipline certainly has an advantage as it integrates the knowledge of physical and human sciences and brings meaningful research with a holistic approach to sustainable development in contemporary times.

RESEARCH METHODOLOGY (RM) IN GEOGRAPHY

- -The subject Geography is unique as it encompasses various branches such as the
- -physical science -includes geomorphology, climatology, oceanography, bio-diversity),
- -human geography –includes demography, cultural geography, economic and commercial geography, transport geography, regional planning, political geography, industrial geography, tourism geography),
- -applied geography: recently with new issues emerging in nature that are caused because of human intervention special attention is needed. these are environmental geography, agricultural geography, regional planning, the geography of settlements, welfare geography etc. this involves study of both physical and human geography to mitigate any environmental issues such as global warming, pollution (air, water, land and noise), ozone layer depletion, acidification, desertification, floods and droughts, poverty, terrorism, diseases etc. this discipline therefore requires a coordination of experts from the field, applied sciences (geo-physics, geo-chemistry, bio-geography) cartography, gis and regional planners.
- -Each of the specialized branch of geography adopts a scientific method in its quest to bring out contemporary issues and find relevant solutions crucial for achieving desired results.

- -RM has witnessed drastic changes over the past century as much of the geographical concerns ranged over contemporary physical and human space and into their past arrangements, for which the methods adopted became progressively more quantitative. (Gomez & Jones III, 2010).
- -With advanced technologies and theoretical perspectives of the latter decades of the twentieth century, the geographical inquiry and methods of data collection and analysis helped to expand its research scope with regards to object/subject studied.
- -The physical branches of geographical research have undergone tremendous improvements with the availability of satellite observed data since 1970s.
- -Developments took place in human geography with the use of spatial data analysis through quantitative methods and scientific approaches in an attempt to explain the past and prevailing outcomes of human societies with their landscapes.
- -Any geographical research involves field observation, recording of the observed facts with appropriate units of measurement, and analyzing the compiled data with appropriate techniques, findings, conclusions, and disseminating this research information to others for use and further research.

- -Geographical studies are distinct from any other disciplines as it emphasizes spatial aspects at a particular time period or over a time period.
- -lt deals with locational and regional attributes and their spatial relations which shape the earth's surface.
- -Geography analyses the physical, sociocultural, economic, and political landscape and the relationships between places over a period of time.
- -It thus seeks to examine the relationship between the earth and its people through the study of place, space, and the environment- asking questions of where, what, and also why and how?
- -Geographical investigations also examine regional differences, patterns, and interrelationships so as to get a better understanding of both the physical and human world by analyzing the spatial form and patterns of distribution and interactions.
- -Of late with the digital revolution and application of GIS, modern simulation models help predict the future spatial changes that may occur with reference to any aspect under study.
- -This geographical research study, therefore, helps to provide appropriate policies and planning measures for the implementation and smooth functioning of the environment and society.

Types of Research

1. Descriptive Research

Descriptive research is carried out to study the phenomena which require fact-finding and its underlying explanations.

Descriptive research focuses more on addressing the "what" question.

It undertakes to observe, describe, and classify phenomena.

It relies on qualitative analysis for data collection.

2. Analytical Research

Analytical research, however, uses the facts, information, data etc. which are already available and based on a hypothesis evaluates the subject of study and makes a critical evaluation.

3. Applied Research

Applied research aims at finding a solution for an immediate problem facing a society or an industrial/business organization. The central aim of applied research is to discover a solution for some pressing practical problem

4. Fundamental Research

Formulation and generalization of a theory is mainly concerned with this type of research, i.e., fundamental research. This type of research is also called pure or basic research. Fundamental research is mainly concerned with generalizations and with the formulation of a theory. Research concerning human behavior is a good example.

5. Quantitative Research

This is based on the measurement of quantity or amount. Hence, it is only applicable to those phenomena which can be expressed in terms of quantity. This research helps to quantify data and examine the relationship among variables.

6. Qualitative Research

Qualitative research is a holistic approach that involves in it discovering, describing, explaining and interpreting collected data.

7. Conceptual Research

This type of research is related to some sort of abstract idea or theory, which is undertaken by philosophers or thinkers to develop a new theory, idea, or insight. It leads to the development of new concepts or to reinterpret of existing ones.

8. Empirical Research

Empirical research relies on the experience and observation of the researcher.

It is based on the scientific method analyzing it with appropriate quantification techniques and arriving at findings and conclusions.

It is data-based research with conclusions that are capable of being verified by observation or experiment.

It is based on a quantification approach with focused objectives, a theoretical approach, hypothesis testing and deductive reasoning.

9. One-time Research

As the name suggests, one-time research explores a thing or particular phenomenon at one time and then the researcher evaluates the findings from that observation.

10. Longitudinal Research

This is a type of research that observes the same thing or the same phenomena in different time periods.

11. Field Research

It is very common type of research. Field research is done on the field on the basis of field survey and then the collected data and information are evaluated during the course of post-field work.

12. Laboratory Research

When the collected physical samples (e.g., soil samples, water samples, etc.) are examined in the laboratory to meet the findings of a research is termed as laboratory research.

13. Diagnostic Research

The research which follows case study method in it is known as diagnostic research.

14. Historical Research

Historical research denotes the observation, utilization, evaluation or appraisal of used historical resources.

WHAT STRATEGY WILL YOU FOLLOW IN RESEARCH???

(CLEVER PLAN, PATTERN IN ACTION, APPROACH, GAME PLAN, DESIGN...)

Which strategy is most suitable

There is no one right strategy or correct strategy in doing a research.

There is no best strategy but the one which can help to solve a problem is the best.

The strategy should be taken prio for the research so choose the best suited according to the purpose.

How do we know that this strategy is good?

There are a number of criteria to consider and these include

- i. Relevance
- ii. Feasibility
- iii. Accuracy
- iv. Objectivity
- v. Coverage
- vi. Ethics

Relevance

Does the research you intend to carry out address current issue in a society

- a) Current commonly talk about and affect people ie environmental degradation, governance
- (Corruption) the impact of governance on management and sustainable utilization of natural resources (disease environment and poverty)
- b) Will your research build upon existing knowledge? Is it going to make a contribution on what is being known?
- c) Are you going to use the existing theory? are specific theory being tested
- d) Is your research coming with new theory?

Feasibility

Criteria for feasibility

- a) Time is there sufficient time for you to do research, i.e. to collect data, analyze and come up with results? How much time are you locating in designing, analysing and writing a report?
- b) Resources do you have enough resources to cover your research (i.e. financial resources)
- c) Accessibility information can be available but not accessible. The research design should make sure that information is accessible.

Accuracy

Criteria for accuracy

- a) Will the research you want to carry out provide true and honest findings
- b) Precise and detailed data (full and honest answers to questions)
- c) Do you as a researcher focus on the vital issue

Objectivity

Criteria for objectivity

- a) Will the research give you a fair and balanced picture
- b) Will the research provide an option of free for personal values, beliefs and background
- c) Will the researcher maintain an open mind about the findings as well as be able to recognize the limitations about the approach taken?

Coverage

- You need to question whether the all right things have been included
- All the questions should cover the issues being investigated ie people and events. The extent of responses (the response rate)

Ethics

- Ethics has to do with rights and feelings affected by research that you conduct. (Because of money respondents can give or not give or exaggerate the information)
- Avoid deceiving people who are going to give you data use an informed consent (truth information)
- Avoid misrepresentation
- Protect the identities of people with whom you are conducting research on.

WHAT ARE THE TERMS THAT YOU KNOW REGARDING RESEARCH????

(CROSSWORD PUZZLE)