ABSTRACT

Knowledge is indispensable for the understanding and promotion of technical, economic and social change in societies. The unwritten knowledge/wisdom continually used and developed by generations, coming out of experience through tradition, heritage, culture or family or social setup is called traditional knowledge. Indigenous knowledge is the sum total of the knowledge and skills which people specific to geographical area and culture possess, and which enable them to attain the best out of their natural environment. An old African proverb states “when a knowledgeable old person dies, a whole library disappears.”

The terms Indigenous knowledge and Traditional knowledge are frequently used in the same context to distinguish the knowledge of traditional and indigenous communities from other types of knowledge, such as the knowledge of scientific and industrial communities. Traditional knowledge is a broader category that includes indigenous knowledge as a type of traditional knowledge held by indigenous communities (Mugabe 1999). While “traditional knowledge” and “indigenous knowledge” are not synonymous, they share many attributes, such as being unwritten, customary, pragmatic, experiential, and holistic. Here also both the terms have been used interchangeably.

Traditional farmers in India developed agricultural practices to successfully grow crops and raise animals in the highly diversified agro-ecological conditions with the help of locally available raw materials. The resource poor farmers with the help of highly efficient techniques that depend on locally available, low cost inputs get their lively hood.

The role of Traditional knowledge in healthcare is indisputable. Because of better cultural acceptability, better compatibility with the human body and lesser side effects the recognition of traditional medicine is now a days getting popularity.

The contribution of indigenous and local communities to the conservation and sustainable use of biological diversity is indisputable. The
growing interest in the potential contribution of indigenous knowledge to sustainable development is becoming manifest.

In spite of the growing awareness among the intellectuals about the value of traditional knowledge regarding agriculture, health care, handicrafts etc, a little effort has been made to identify, document, validate and protect this knowledge. There is a great threat that this knowledge will be completely lost or be misappropriated by the time we really understand the worth of this valuable knowledge system.

It is anticipated that indigenous peoples’ traditional knowledge may be important sources of new technology for the future.

The thesis has been organized in the following order. Chapter one describes the introduction about traditional knowledge. It’s various uses and its importance, Some agricultural and traditional medicinal data are also used. The Objective of the study has been stated.

The present need of the study is

**Problem statements and Objectives**

1. To look into the contribution of TK in day to day life.
   
   Q.1 How does TK help in enriching agriculture, medicines?
   
   Q.2. What is its role in conserving bio-diversity and sustainable development?

2. To look into the issues of TK holders.
   
   Q.3. How do we handle issues related to the questions of their rights nationally as well as internationally?
   
   Q.4. How do we ensure that the traditional knowledge holders could get benefit from the cultural capital that they have sustained, harnessed and developed.

The second chapter deals with the review of literature. A brief overview of the traditional agricultural sector in India is presented in chapter three.
Traditional agriculture, is a sustainable indigenous farming practice, that results out of the coevolution of local social and environmental systems and that exhibit a high level of ecological rationale expressed through the intensive use of local knowledge and natural resources, including the management of agrobiodiversity in the form of diversified agricultural systems.

Having a varied favourable agro-climatic condition India is a major producer of horticultural crops such as fruits, vegetables, root tuber, ornamental aromatic plants medicinal herbs, spices and plantation crops like coconut, arecanut, cashew and cocoa. Its loudable achievements can be termed as more than 30.5% GDP of agriculture has been contributed by Horticulture.

The technological modernization in Agriculture is highly successful at meeting its primary objective of increasing crop yields and augmenting aggregate food supplies, in order to answer the problem of feeding the increasing world’s population, yet, despite its success at increasing aggregate food supply, as a development approach it has not necessarily translated into benefits for the lower strata of the rural poor in terms of greater food security or greater economic opportunity and well-being.

Studies of impact have shown that the better-off strata of rural society have gained access to better incomes generated by the introduction of technology whereas the poorest strata have tended to lose access to income that was available before its introduction. However, most farmers have not willingly adopted this, rather it has been forced on them by a package of government policies, subsidies and selective price incentives.

The structure and performance of herbal medicinal system is used in chapter four.

Medicine is the field where Indigenous Knowledge is taught both in informal as well as formal subject in educational institutions. India has many Ayurveda, Unani, Siddha & Homoeopathy medical colleges and several university departments. All herbal drug based systems come under the control of Indian System of Medicine and Homoeopathy (ISM&H).
Chapter five deals with the legal status of traditional knowledge. The study aims at exploring the potentials and finding the means and ways of promoting the traditional knowledge by developing effective policy recommendations for the achievement of benefit sharing of the traditional knowledge holders of India in particular and the world population in general.

The sixth chapter deals with the research methodology. The broad aspects of research methodology are briefly given below:

**Nature of the Study**

The nature of this study is characterized by the following features-

1. Descriptive Research.
2. Applied Research
3. Empirical research
4. Exploratory research

As the major purpose of this research is the description of the state of affairs as it exists. This research has been put into the descriptive research category. It aims at obtaining the information on people’s attitudes towards the acknowledgement of the contribution of traditional knowledge. The management of traditional knowledge is socially oriented and leads to the improvement of quality of life and supplies better amenities to mankind in keeping with the growing and varied requirements of the society.

As the research aims at finding a solution for an immediate problem facing a society it has been categorised under the heading of Applied research.

Most of the times relying on experience and observations has been preferred over relying solely on theory, or research has been done without giving due regards for the system and theory. It is data based research, coming up with conclusions which is capable of being verified by observations and especially when the available information is insufficient, the empirical study is the only way to get it.
The approach of the study is exploratory in the sense that it is mostly directed towards the development of hypothesis rather than their testing. This approach is generally followed for new areas of investigations where the problem itself may not be very clear and is needed to be diagnosed. The domain of the research is also required to be reasonably wide but properly specified.

As the research is concerned with qualitative phenomenon, i.e., phenomenon relating to or involving quality or kind is has been categorized as a qualitative research. This research aims at discovering the mindset of general public regarding traditional knowledge, using in depth interviews for the purpose. Applying qualitative research is relatively a difficult job and needs some more experience and observations.

This approach can further be specified as inferential approach, as this research forms a data base from which characteristics or relationships of population has been inferred. This means survey research where a sample of population is questioned to determine its characteristics, and is then inferred that the population has the same characteristics.

An advantage of this approach is that it brings the researcher and the respondent face to face and their cooperative efforts help to build up a better research database. Personal contact enables the researcher to use his intelligence to elicit precise information from them and analyze the data in the light of his experience. In fact it establishes a liaison between the research laboratories and field situations and stimulates research both ways.

Covering the whole area being enriched with the contribution of traditional knowledge was not possible in the study due to time and cost constraints. The study has been divided in two parts.

Firstly a step has been taken towards achieving the goal of finding out the important areas where the contribution of Traditional Knowledge is very high or the areas highly enriched with traditional knowledge by conducting a survey at Aligarh district of UP. This study aimed to use primary cross-sectional data to identify the areas in which the use of traditional knowledge is very high. And also the areas in which the contribution of ITK is high in
enriching the fields. Using stratified random sampling, 180 participants were selected to take part in this study, and data were collected through a structured questionnaire by interviewing the selected participants.

For the purpose of drawing conclusions and testing of hypothesis, the following methods were used in the process of data analysis:

1. percentage calculation for different parameters
2. Rank coefficient using the ranks and multiplying them with the appropriate weightage-coefficients rank wise
3. Rating scores for Likert scale analysis by multiplying the frequencies with the appropriate weightage-coefficients
4. T test for significance test

As a result of the analysis it has been found that unanimously irrespective of age, profession and location the respondents acknowledged the use of traditional knowledge, though their preference in the level of use varied. Most of the respondents went in favour of three areas where the use of traditional knowledge is very high. These are Agriculture, Herbal Medicine and Handicraft.

Chapter seven and eighth deals with quantitative and qualitative analysis of the primary data collected.

When asked about the enrichment of these areas their result went to Agriculture the most.

As the whole world is being considered as a global village i.e., the borders of the countries are about to deplete and knowledge is easily transferred into a marketable commodity; there is a growing realization that the traditional wisdom representing our cultural identities is being lost. Easy accessibility of ITK leads it to be susceptible to misappropriation. In recent past a lot of cases of bio-piracy has been noticed.

The issue of Traditional Knowledge has become contentious with the emergence of new intellectual property rights (IPR) and the conflicts between the provisions of Trade-Related Aspects of Intellectual Property Rights
(TRIPS) agreement, the UN Convention on Biological Diversity (CBD) and the FAO International Treaty on Plant Genetic Resources (ITPGRFA).

In order to sustainably use the components of biological diversity Article 10(c) of Convention on Biological diversity states, “Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements”

Finally the ninth chapter concludes the thesis and gives some relevant suggestions.