

Indigenous Knowledge System and Documentation Process

P.Laxmi prasanna¹ and Jakkannagari Chaithanya²

¹Ph.D research scholar, Department of Agriculture Extension, Agriculture College, Bapatla, ANGRAU.

²Ph.D research scholar, Department of Agronomy, College of Agriculture, SVPUAT Modipuram, UP

ARTICLE ID: 024

Introduction

Indigenous Knowledge refers to the unique, traditional, local knowledge existing within and developed around the specific conditions of women and men indigenous to a particular geographic area. Indigenous knowledge is the local knowledge - knowledge that is unique to a given culture or society. IK contrasts with the international knowledge system generated by universities, research institutions and private firms. It is the basis for local-level decision in agriculture, health care, food preparation, education, natural resource management, and a host of their activities in rural communities (Warren, 1991). Indigenous knowledge is the information base for a society, which facilitates communication and decision-making. Indigenous information systems are dynamic, and are continually influenced by internal creativity and experimentation as well as by contact with external systems (Flavier *et al.*, 1995).

The term indigenous technical knowledge is often camouflaged with the belief that is associated with forthcoming happenings and the innovations made by the farmers to solve specific problems. Some of the related terms are:

- **Indigenous Knowledge (IK):** is the participants' knowledge of their temporal and social space. Indigenous knowledge as such refers not only to knowledge of indigenous peoples, but to that of any other defined community.
- **Indigenous knowledge system (IKS):** delineates a cognitive structure in which theories and perceptions of nature and culture are conceptualized. Thus it includes definitions, classifications and concepts of the physical, natural, social, economic and ideational environments. The dynamics of IKS takes place on two different levels, the cognitive and the empirical. On the empirical level, IKS are visible in institutions, artifacts and technologies.

Process and methods of ITK analysis

A. Identification and collection of ITK: methods and techniques

- Documentation of oral histories
- The Delphi method
- Agro-ecosystem analysis a) Mapping (ecological, agronomic, seasonal, spatial) b) Transect
- Manual discriminative analysis (ask farmers to discriminate practices and find rationality)
- Decision tree analysis
- Use of local resource persons
- Linguistic and historic analysis of concepts, vocabulary and key words
- Ethno botany
- Critical incident analysis (farmers 'seed exchanges and new variety introduction)
- Analysis of peasants' journals and newspapers

B. Documentation Types of documentation

- Documenting large variety of practices without scientific validation
 - Documenting prevalent practices and comparing them with traditional ones
 - Documenting the practices/details of experimentation on a specific aspect and understanding the various linkages
 - Documenting the practices evolved to mitigate specific problems of farming or for sheer survival under conditions of ecological and economic stress
 - Documenting practices that had evolved in response to specific external interventions
- Methods and Techniques

- Notes
- Photos
- Audio-recordings
- Video-recordings

C. Testing and Validation: method and techniques

- Prepare a list of all the collected ITK practices
- Decide the continuum for rating the rationality of ITK with specific weight ages

Continuum Weight age

Very rational 5

Rational 4

Undecided 3

Irrational 2

Very irrational 1

- Send the list of ITK practices to experts for their opinion and judgment on each practice.
- Calculate the weighed mean score of individual practices.
- Select practices above mean score as rational.

Developing extension programme to validate farmer experiments

Farmers are not passive consumers, but active problem solvers who develop for themselves most of the technology they use. For many hundreds of years before today's national agricultural research systems were set up, farmers did their own research. And, by integrating technology from different sources and continuing to adapt it on their farms, they still do so today. Indigenous knowledge systems form the basis for informal experimentation of farmers. The factors which influence farmer experimentation are:

- ❖ **Ecological:** innovations that result due to interaction among crops, soil, and climate
- ❖ **Historical:** a major happening such as crop failure or year of glut or scarcity
- ❖ **Serendipity:** a practice discovered by farmers accidentally
- ❖ **Economical:** Farmers innovate new practices taking advantage of government subsidies for flood and drought relief activities.

Validating farmer experiments is an extension process in which SMSs encourage farmers to replicate their own experiments in their own environment in order to:

- ❖ Understand experiments in the socio-cultural and agro-ecological environments
- ❖ Determine the impact of the experiments on productivity, profitability, and sustainability of the agricultural system

The various steps involved in the process of developing the extension programs are:

- ❖ Selecting "research minded" village extension workers
- ❖ Identifying "research minded" farmers who are already involved in farmer experiments; and

- ❖ Establishing programs for validating farmer experiments

The various steps involved during the process of validating farmer experiments are:

- ❖ Understand the rationale behind farmer experimentation.
- ❖ Recording the mode of conducting experiments.
- ❖ Identifying farmers' evaluation criteria.

Understanding, identifying, recording, and evaluating farmer experiments form the various stages of validating farmer experiments. It is important that extension personnel must understand the farmers' criteria when they explore indigenous approaches to experimentation.

References

- Appleton, H.E. and Hill, L.M. (1994). Gender and Indigenous Knowledge in Various Organisations. *Indigenous Knowledge and Development Monitor*, 2, 3
- Flavier, J.M. (1995). "The regional program for the promotion of indigenous knowledge in Asia", pp. 479-487 in Warren, D.M., L.J. Slikkerveer and D. Brokensha (eds) *The cultural dimension of development*:
- ICAR., New Delhi, Hand book of Agriculture, pg 1418, 1420, 1433.
- Messerschmidt, D. (1986). People and resource management systems of the uperp kali gandaki: In *Common Property Management* National Academy Press, Washington D.C.
- Mishra, P.K., Sastry, G., Osman, M., Babjee Rao, N. and Maruthi Sankar., G.R. (2002). *Dividends from Soil and Water Conservation Practices (A Brief Review of Work done in Rainfed Eco-Regions)*. NATP, CRIDA, Hyderabad. 40p.
- Roy, S., Rathod, A., Sarkar, S. and Roy, K. (2015). Use of ITK in Plant Protection. *Popular Kheti*, 3(2): 75-78
- Warren, D. M. (1991). The Role of Indigenous Knowledge in Facilitating the Agricultural Extension Process. Paper presented at International Workshop on Agricultural Knowledge Systems and the Role of Extension. Bad Boll, Germany, May 21-24.