



Indigenous technical knowledge in livestock sector

Dr. Brij Vanita¹, Dr. Ankaj Thakur², Dr. Rajni Chaudhary³, Dr. Neha Chauhan¹,
Anshul Thakur⁴

¹Scientist, KVK Mandi

²Assistant Professor, DGCN COVAS, CSKHPKV Palampur

³Scientist, ICAR NTRS Garsa

⁴Independent Researcher, Sunder Nagar

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Many explanations have been given in the context of traditional knowledge. It is a storehouse of knowledge that is passed on from one generation to another by understanding the complexity of the relationships between humans and their environment on the basis of experience, practice and culture. There is a popular saying - "The death of a wise old man is the disappearance of the whole library". Every area of growth, including agriculture and livestock, has seen a recent uptick in the use of the term "indigenous technology." Indigenous technical knowledge (ITK) is the term used to describe the special, conventional, local knowledge that exists within and has been created around the particular circumstances of women and men who are indigenous to a given geographic location. Main sources of traditional knowledge are farmer, elderly, folk literature, stories, songs, ancient documents etc.

Local knowledge is an example of how people navigated their surroundings successfully. A society's information base facilitates communication and decision-making. Agriculture, raising animals, providing medical treatment, preparing food, educating children, protecting the environment, and a variety of other activities are all based on ITK. ITK is conveyed and transmitted orally, through concrete instances, and via culture. Today's policymakers, scientific community, and extension personnel are beginning to understand the value and significance of ITKs in agriculture and livestock sector.

The value of ITK

The fundamental traits of ITK support resource conservation and effective resource use through environmental friendliness, reduced capital expenditure, cost effectiveness, and successful bi-product and waste recycling & usage. The majority of ITKs are location-specific, made from materials that may be found nearby, and the results of unofficial study. ITKs have been proven to be resource-conserving



and socially desirable, as well as economically accessible, sustainable, and posing little risk to users. ITK thus provides a foundation for community-based problem-solving techniques. ITK is significant not only for the culture and society in which it originates, but also for the adoption of novel technologies by extension employees, scientists, and for technology-focused programmes by research managers, administrators, and planners. A development program's effectiveness depends on local support and expertise with local farming techniques, which aids extension agents in their understanding and interaction with the community.

Few examples of ITK practiced by farmers of District Mandi, Himachal Pradesh

Bloat

- a) Boil 15 gram carom seeds (*Ajwain*), 15 gram Mint (*Pudina*) leaves or mint leaves extract and 10 gram Asafoetida (*Hing*) in 500 ml water. Drench the lukewarm boiled mixture. Mode of usage- Oral, Twice a day
- b) Administer 1 litre sour buttermilk to the animal orally. Mode of usage- Oral ,Once a day for 2-3 days
- c) Grind 20-25 gram of Peppermint Fennel Seeds (*Kadwi Saunf*), roast them in a pan on low heat. These are then grinded and administered orally to the animal by mixing either with half litre lukewarm water or half litre sour buttermilk. Mode of usage- Oral, Once a day for 2-3 days

Allergic reaction, Dermatitis

- a) Take 20 gram Black pepper (*Kali mirch*), 10 gram Iodised Salt and 8 gram Vitex negundo L. (*Banha*) powder . Make a fine paste (electuary) of above ingredients and apply a layer of this paste on the tongue of animal. Mode of usage- Paste / electuary at once

Diarrhoea

- a) 4-5 kg Psidium guajava (*amrud*) leaves fed as a fodder to animal. Mode of usage- Oral, Once a day for 1-2 days
- b) 500 ml rice water (*Peech*) drenched to the affected animal. Mode of usage -Oral, Twice a day for 1-2 days

ITK's advantages and limitations

ITKs are important in fostering the development of sustainable livestock. ITKs undoubtedly have a lot of possibilities in this area, but we must recognize and value each one's unique advantages and constraints. This ought to direct our choice of appropriate ITKs for integrating with contemporary technology in the larger goal of sustainable cattle development.

Benefits of ITKs

Since ITKs are site-specific, they easily fit into the framework of sustainable development. They apply the inventiveness and intelligence of the rural populace. Therefore, we can improve rural people's capacity for innovation by supporting ITKs. It also promotes the wise use of locally accessible resources



or inputs. Thus, by encouraging ITKs, we can ease the demand for expensive external resources and inputs. Additionally, this will aid in preventing pollution and environmental deterioration.

Constraints of ITK

ITK has its own limitations, despite the fact that it helps people get the first self-belief and confidence they need to combat the fatalism of poverty and promote some degree of self-development. ITK is distributed uniformly both within and between communities since distribution is based on the ability of the individual to handle the information, monopolization of the knowledge, and particular socioeconomic groups. Therefore, it is not possible to manage indigenous technology independently of social, political, and economic institutions.

Conclusion

ITK is a useful tool for development. The majority of ITK are used in complicated, diversified, and risk-prone locations by marginal and small-scale farmers in developing nations, according to research on their use in agriculture & livestock sector. These ITK have scientific parameters, and the most recent method in the technology generation of scientific agriculture includes integrating ITKs into the research process by evaluating their scientific viability for offering thorough and efficient location-specific solutions in agriculture & livestock. However, ITK remains a resource that is under-utilized in development-related activities. In order to increase the sustainability of rural development initiatives, it must be thoroughly examined and implemented into formal study and extension practices. Understanding, documenting, and disseminating ITK in order to preserve, transfer, or adopt it elsewhere will require special efforts.