

ANIMAL HUSBANDRY TRADITIONAL KNOWLEDGE IN KANCHEEPURAM DISTRICT

K. Devaki^{1*} and P. Mathialagan²

¹*Assistant Professor, ²Professor and Head

Department of Veterinary & Animal Husbandry Extension, Madras Veterinary College,
Chennai-7

E-mail: k.devaki@tanuvas.org.in (*Corresponding Author)

Abstract: India, the country of Rishi and Krishi, has a very rich heritage of traditional health control and several treatment systems that have been used for animals since time immemorial. Traditional knowledge is characterized as the sum of experience and knowledge for a given ethnic group, which forms the basis for decision making in regard to familiar and unfamiliar problems and challenges. In this article, different traditional practices in dairying, sheep and goat farming, poultry farming, and duck rearing were discussed.

Keywords: ITK, TK, traditional practices, dairying, poultry farming, duck rearing.

INTRODUCTION

Since independence all efforts in India were concentrated on developing an allopathic-based veterinary infrastructure entirely under the government sector. There has been neglect of traditional systems and knowledge to the extent that many of us, even those specializing in veterinary medicine, are unaware of ancient literature and some are even skeptical about it (Rangnekar,1998). In recent years emphasis has shifted towards modern science in the maintenance and development of livestock.

With the development of modern medicine, especially after the second world war, traditional medical practices have been increasingly replaced and overlooked at the international level, mostly because many people regarded them as ineffective and useless (Bizimana,1997). Modern medicine was thought to be able to solve almost all health problems of humans and animals. But this overestimation of modern medicine has changed in the course of the 'green wave' since the 1970s, particularly in industrialized countries. The 'green wave' has been characterized by an increasing demand for natural products in the form of drugs, food and cosmetics and was mainly triggered by the side effects resulting from the increasing use of chemicals in various areas of life including medicine. The reconsideration of traditional medicinal systems in the industrialized world and the fact that modern medicine is too

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expensive for many developing countries were the main reasons for the decision of the World Health Organization (WHO) in the 1970s to promote traditional medicated systems by checking scientifically the efficacy of plants used in traditional medicine and to identify the principles responsible for genuine therapeutic effects (Bizimana,1997).

India, the country of Rishi and Krishi, has a very rich heritage of traditional health control and several treatment systems (Ayurvedic, Unani, Homeopathy) that have been used for animals since time immemorial. These practices have been percolating from one generation to another by oral transmission and considered to be the holistic approach for livestock management methodologies adopted by non-literate cultures. All over India, there are experienced and knowledgeable specialists who practice indigenous techniques but their knowledge is not well documented, merely being transmitted verbally from one generation to the next.

Various Streams of Medication Prevailing in India

- Oral folk stream – Folk medicine
- Codified classical stream – Ayurveda, Siddha, Unani and Tibetan medicine
- Allied systems - Yoga and naturopathy
- Systems of foreign origin – Homeopathy, Western biomedicine

INDIGENOUS ANIMAL HUSBANDRY PRACTICES

Indigenous animal husbandry practices are classified into two major divisions viz., traditional knowledge and Ethnoveterinary practices.

TRADITIONAL KNOWLEDGE (TK)

Traditional knowledge (TK), also known as indigenous knowledge (IK) or local knowledge (LK) generally refers to the matured long-standing traditions and practices of certain regional, indigenous, or local communities. It also encompasses the wisdom, knowledge, and teachings of these communities.

Traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. Collectively owned, traditional knowledge takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, customary laws, local language, and animal husbandry and agricultural practices, including the development of plant species and animal breeds.

Traditional knowledge is of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, animal husbandry, forestry and environmental management in general. Traditional knowledge is often associated with and embedded in traditional/local languages. There is a great deal of concern by the international community that humanity is losing traditional knowledge, language diversity, cultural diversity and biological diversity and studies showed that all these forms of diversity seem mutually reinforcing and dependant. Why is that important? Human survival depends on humanities resilience and resilience is strengthened by diversity.

Traditional knowledge is characterized as the sum of experience and knowledge for a given ethnic group, which forms the basis for decision making in regard to familiar and unfamiliar problems and challenges.

The indigenous technical knowledge (ITK) regarding animal husbandry is considered as old as domestication of various livestock species. Unfortunately, these practices, which are in vogue throughout rural India, are little documented and there is danger of extinction of this knowledge. Thus it has become imperative to collect and document these practices and to assess their validity.

Simply indigenous knowledge is the traditional inherent knowledge of the society people about various aspects of life and development. IK is a means of articulating what people know and—for the future—creating new knowledge from the intersection of their capacities and the challenges of development.

Why TK is important?

- Valuable not only to those who depend on it in their daily lives, but also to modern industry and agriculture. Many widely-used products, such as plant-based medicines, health products and cosmetics, are derived from traditional knowledge. Other valuable products based on traditional knowledge include agricultural and non-wood forest products as well as handicraft.
- Can make a significant contribution to the conservation and sustainable use of biological diversity. Research has proven that indigenous and local communities living on their traditional territories can increase the local biological diversity and genetic diversity through their traditional practices.
- Can make a significant contribution to sustainable development. Most indigenous and local communities are situated in areas where the vast majority of the world's genetic

resources are found, and many of them have cultivated and used biological diversity in a sustainable way for thousands of years.

- The skills and techniques used by indigenous and local communities provide valuable information to the global community and a useful model for biodiversity policies. Furthermore, as on-site communities with extensive knowledge of local environments, indigenous and local communities are most directly involved with in-situ conservation and sustainable use.

Indigenous Technical Knowledge (ITK) is of great significance in the sector of animal husbandry. This knowledge is imperative in keeping a healthy livestock and for economic benefit. However, the irony is that such technical knowledge prevalent in different traditional communities is not properly documented due to which most of them are at the verge of extinction (Borthakur and Singh, 2012).

Traditional Knowledge about Dairying

Traditional healers know a lot about the transmission and spreading of diseases. Therefore disease prevention plays an important role, for instance traditional tick control. They reported the following:

- Nomads used to avoid places with high infestation of ticks.
- Animals were fed with plants containing a high level of salt, thus the ticks fall off.
- Before leaving the enclosure in the morning, women and children collect ticks from the animals and throw these ticks into a fire burning near the entrance to the enclosure
- Shady trees were avoided in case of ticks infestation
- Tick eradication by burning the infested pasture was widely used.

There are two main systems or methods of treating diseases viz., Magic–Religious healing, mostly done by reading the Koran. This is in accordance with the findings of Padmakumar (1998).

Under the practical treatment, the most common treatment is the scarification and bloodletting in order to free the animal from spoiled blood and using red-hot plates on animal body to burn disease spot. Indication of this type of therapy is lameness, the rheumatic complex, skin diseases and infectious diseases of the alimentary and respiratory tract.

Rajan and Sethuraman (1997) reported that indigenous disease control measures are carried out through herd management viz:

- Herd dispersion is used to reduce the risk of infecting all animals belonging to one household.

- Choosing animal for breeding was based on the health of the animal
- Prevention of contact between healthy and ill animals
- Diseases prevention can cause herdsmen and his herds to move.
- Pastoralist avoids regions where insect or cattle rearers use medication without proper care and therefore complications arise.
- There may also be over-dosage, false applications and wrong treatment.

TRADITIONAL KNOWLEDGE ABOUT SHEEP AND GOAT FARMING

The droppings of sheep and goat contain higher nutrients than farmyard manure and compost. On an average, the manure contains 3 per cent N, 1 per cent P₂O₅ and 2 per cent K₂O. It is applied to the field in two ways. The sweeping of sheep or goat sheds are placed in pits for decomposition and it is applied later to the field. The nutrients present in the urine are wasted in this method. The second method is sheep penning, wherein sheep and goats are kept overnight in the field and urine and fecal matter added to the soil is incorporated to a shallow depth by working blade harrow or cultivator.

TRADITIONAL KNOWLEDGE ABOUT POULTRY FARMING

Although, majority of the poultry owners were rearing the birds in backyard/free-range system but they made necessary arrangement for night shelter of the birds to protect them from predators which is similar to the findings of Mandal *et al.*, (2006). Majority of the poultry owners constructed separated house for birds, whereas, only few farmers reported that birds shared the same house with the owner.

Most of the backyard poultry owners stop broodiness in the hen by taking her off the nest and dunking her lower half (underside) into a bucket of cool water until her feathers are wet. Other cruel methods include plucking its feather from its body and pierce the same in the nose and tying the hen in a tree upside down.

DUCK REARING TRADITIONAL KNOWLEDGE

Broody hens are widely used for hatching eggs. Now-a-days artificial incubators owned by the egg vendors/traders are being extensively used by the duck farmers to fetch the required ducklings. Candling of egg is done on the seventh day of incubation using torchlight in the darkroom. The infertile eggs are removed. On 28th day, the ducklings are removed from the incubator/hens and reared separately. The Hatching percentage is 60-70 % (Gajendran *et al.*, 2005). It is also learnt from this study that the high percentage of infertility more often was due to wider male female ratio.

The ducklings will be brooded in a country method by using pneumatic tyre used for tractors. Three days old ducklings will be transported in a locally made bamboo baskets to sell them locally through cycles.

Among the ducks, the common disease conditions noticed were gasping for breath, swelling of joints etc. The farmers used decoction made of roots of paragrass, omum, vasambu (*Acorus calamus*) and Poduthalai leaves (*Lipia nodifloara*). This is in accordance with the findings of Gajendran and Karthickeyan (2011)

Conclusion

In case of traditional societies, the local indigenous individual is the major actor. In many cases, the indigenous communities are not well aware of the value of their indigenous knowledge which has been passing from generation after generation. Actors such as scientific institutions and NGOs could play crucial role in this regards for capacity building among the indigenous community and popularization of traditional methods and techniques. In today's context, there is an urgent need to evaluate and popularize indigenous innovation. Government schemes and Research and Development activities should reach the indigenous users and scientific rationale behind these indigenous technologies should be studied for patenting the same.

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