International Journal of Bio-resource and Stress Management 2016, 7(3):501-507 DOI: 10.5958/0976-4038.2016.00080.4

Short Research Article

Value Addition of Novel Herbal Livestock Medication *Mastiherb* in Treatment of Mastitis Sustained by Creative Communities from the Regions of Dang, Gujarat

Ukhardiyabhai Sombhai Raot[1], Mahesh Parmar[2], Purshotam Patel[2], Ramesh Patel[2], Deepa Moni Gogoi[1], Jayshree Patel[1], V. Sivapregasam[3], Vivek Kumar[1], R. K. Ravikumar[1*] and Vipin Kumar[1]

[1]National Innovation Foundation-India, Satellite Complex, Ahmedabad, Gujarat (380 015), India
[2]Society for Research and Initiatives for Sustainable Technologies and Institutions, Navrangapura, Ahmedabad, Gujarat (380 009), India
[3]Animal Husbandry & Animal Welfare Dept., Govt of Puducherry (605 001), India

Article History

Manuscript No. AR1573
Received in 24th April, 2016
Received in revised form 4th June, 2016
Accepted in final form 6th June, 2016

Correspondence to

E-mail: ravikumar@nifindia.org

Keywords

Indigenous, knowledge, communities, mastitis, technology, livestock, behaviour

Abstract

Accessibility for livestock health care has been great challenge in hilly regions and remote areas. Communities across different regions try and find alternative cost effective solutions for livestock welfare. Indigenous Knowledge Research System provided necessary health care, minimize disease incidence and sustain livestock productivity. National Innovation Foundation-India with help of Society for Research and Initiatives for Sustainable Technologies and Institutions had identified, value added an indigenous knowledge practice of Shri. Ukhardiyabhai Sombhai Raot against mastitis among farm animals. The formulation *Mastiherb* was developed, tested and found effective against clinical conditions. Development of socially acceptable product was shared with creative society towards enhancing wider benefit. Globally there was not much successful evidence in emphasizing need to share advancement of documented practice with custodian of knowledge, fundamental ethos of Honey Bee Network. This had helped in formation of network among informal knowledge holders in the regions of Dang, Gujarat State. This had provided intellectual space for creative community to know each other, share and discus their rich experience. The research study tries to articulate generation of social goods from communities' collective action and need for specific strategy to convert them into employment opportunities. The study demonstrated the importance of value addition to novel folkloric medications and an implementation model for technology development, sustaining, sharing, and scaling up of low cost locally available medications. Engagement with creative communities illustrated establishment of knowledge network can be possible through socially relevant action research.

1. Introduction

Significance of agricultural activities towards enhancement of income among farming communities and sustaining food security has been enormous (Surtia et al., 2016). In this system, livestock population plays an important role through mixed crop-livestock farming system (Maass et al., 2012). Livestock sector is socially, economically significant as it provides multifunctional outputs as well as socio-cultural security (Sirohi and Chauhan, 2010). However, this sector is plagued by various ailments, of which mastitis is an important economic ailment affecting ruminant production system (Hillerton and Berry 2005; Ramkumar et al., 2003). Clinical mastitis also affects reproductive function of animal (Hertl et al., 2010), limits udder immunity (Alnakip et al., 2014) and renders total loss of revenue to farmers. Nature of this disease, cost of medication, difficulties in reaching out to needy livestock population and accessibility to diagnostic facilities were main impediments (Devgania et al., 2015). Even after intensive research and prevention measures for decades, the disease remains the biggest economic loss to dairy industry (Pyorala, 2002). Pyorala (2006) also share that inspite of antimicrobial treatment for more than 50 years efficient, safe and economical treatment is lacking. Problems reported by farmers have to prioritize for improved adoption of livestock technologies (Degu, 2012). Availability of labour, highly escalated cost of inputs, seasonal challenges, poor