

ITK (Indigenous Technical Knowledge) observed as part of RAWEP at Kothur village of Telangana

Janu S Nair

Department of Entomology, College of Agriculture, Vellayani, KAU, Kerala

SUMMARY

RAWEP – Rural Awareness Work Experience Programme , opens up a wide window to learn the actual socio – economic conditions of an Indian farmer and his knowledge in raising his crops. The same implied to me at my RAWEP as well, conducted at the Kothu village of Mulugu ward of Telangana. The ITKs that I observed were cycle harrow, pig scare, bottle wind chain.

INTRODUCTION

ITKs that we see today went through several modifications according to different socio-economic environments of diverse communities. They depict the heritage, creativity, inheritance of traditional culture over the years. But despite, ITKs receive less recognition from institutions and authorities. Hence there is an urgent need to recognize its value in terms of culture, heritage, tradition and ancient wisdom. It is mainly passed down generations through folklore, myths, customs, folk songs, proverbs, puppetry and other traditional methods (Swathi et al., 2009). The paper is focused on the documentation of various Indigenous Technical Knowledge (ITK) observed as part of RAWEP from Kothur village of Telangana.

Cycle Harrow

In this area most of the farmers own small scale of land , hence hiring bullocks is not feasible always. As from the words of Mr. Mallesh (RAWEP host farmer) , cycle harrows were far more cheap and feasible for regular intercultural operation such as weeding. Farmers in this area recycle old and damaged cycles in the form of hand operatable harrow, hence the name cycle harrow. This weeder can be used by young farmers and women with ease. The front part or handle bar of the cycle is replaced above the working end for good grip while operation. The parts like pedal, chain and chain wheel, back wheels were removed to reduce hindrances and weight. Attachments like weeding fork or harrow were attached to the working end securely. The attachments could be toothed harrows, sharp blade for tilling. The attachments could be changed or replaced as per the need of farmer at a very low price. This was a boon to many marginal farmers and was spotted in majority of agriculture fields.



Using cycle harrow to remove weeds from inter row spaces



Making of pig scare using Old Saree



Tying the bottle wind chain to trees

Pig Scare

Pigs damaged the agriculture fields and cause considerable damage. Their feeding habits leads to trampling crops, permanent damage to plant root system, and can also damage temporary fences and farm equipments . Wild pigs overturn the soil while foraging (i.e. rooting), increasing erosion and altering the soil structure and subsequent nutrient cycle (Wirthner et al. 2011, Palacio et al. 2013). Since the marginal farmers cannot afford over costly or permanent fence their fields are prone to such attacks. Many marginals farmers of the

locality used saree fence as a low cost protection system for their fields , which lacks the strength to prevent the entry of pigs. The farmers here believe pigs can be threatened by placing a human resembling structure on field using old sarees or colourful clothes. This technique is found useful to many farmers in this locality and hence widely adopted over the area. Generally any bright coloured clothes , preferably saree is tied to the stone poles in field and secured using contrasting coloured shawls . this structure from far gives the appearance of a man and hence said to scare pigs from entering the fields even during absence of farmers.

Bottle Wind Chain

As mentioned above, pigs cause large destruction of crops , not ignoring the fact that birds too play a vital role in crop loss. Birds eat away the seeds sown and hence affecting the cultivation from the very first phase. They have wide range of feeding habitats which vary according to the genus , season ,crop etc. in general they feed on seeds , germinating growth , pods , cobs. The damage caused can be very detrimental when they approach the field as large flocks. The farmers here found an effective way to scare these by producing sounds, for which they used 3 or more preferably glass bottles and heavy metal structures like nails or bolts. They tied the bottles at varying height with alternate nails or bolts attached to it. The whole structure is then hung to any tree branch or a height, in direction of wind. When wind blows it enables the metal pieces to hit the glass bottle and produce noise. The farmers believe that it scares the bird and gives birds the sense of presence of farmers in field. This technique was noticed in most of the fields where they placed multiple number of it to increase efficiency.

REFERENCES

- Suraj Bhan, V.K. Bharti, Meetali, Deepshikha, Sandeep Bharti and Sanjay Bharti (Impactful Indigenous Technical Knowledge (ITK) for sustainable agriculture) Journal of Soil and Water Conservation 15(4): 349-355, October-December 2016.
- Sasanka Lenka and Abhijeet Satpathy (A Study on Indigenous Technical Knowledge of Tribal Farmers in Agriculture and Livestock Sectors of Koraput District) Indian Journal of Extension Education Vol. 56, No. 2 (April-June), 2020, (66-69).
- Gopal M Bhise, Maharashtra, NIF (national innovation foundation) 2002 consolation award at 2nd national grassroots innovation awards.
- Boyce, C. M., Ver Cauteran, K. C., Beasley, J. C., Timing and Extent of Crop Damage By Wild Pigs (*Sus Scrofa* Linnaeus) To Corn and Peanut Fields
- Vinita Pandey, Ritu Mittal and Preeti Sharma, Documentation and Application of Indigenous Traditional Knowledge (ITK) for Sustainable Agricultural Development, Published 15th March 2017