

## **RESEARCH NOTE**

### **Indigenous Practices of Tribals in Agriculture and Animal Husbandry in Khedbrahma Taluka of Sabarkantha District of Gujarat**

**B.T. Patel<sup>1</sup>, M.S. Trivedi<sup>2</sup> and K.D. Solanki<sup>3</sup>**

#### **INTRODUCTION**

In Gujarat, Sabarkantha district ranks seventh among all the districts in terms of tribal population. Above 90 per cent tribals of the district live in Vijaynagr, Khedbrahma, Bhiloda and Meghraj talukas.

Khedbrahma taluka comprises of 137 villages, out of which 97 are tribal villages. About 60 per cent of the population of the taluka is tribal. Most of the tribals of taluka are settled agriculturists. Recommended production technologies are being communicated to the tribals to increase productivity of crops and livestock through extension agencies and different mass media. Some of the technologies are adopted by them, but they are still adopting some local practices developed through experiences of several years which are location specific, low-cost, ecologically friendly and based on using locally available resources. In recent times, greater attention has been paid to make use of indigenous knowledge in overall development process in fields like agriculture, animal husbandry, health, etc. Keeping this in view, an attempt was made to know the indigenous practices followed by tribal farmers in agriculture, storage of grains, animal husbandry, etc.

#### **METHODOLOGY**

Present study was conducted in

Khedbrahma taluka of Sabarkantha district in Gujarat State. Eight villages of four growth centres of the Tribal Upliftment Project of Gujarat Agricultural University, Khedbrahma were selected for the study. Aajavas and Salera villages of Poshina growth centre, Umbora and Navamota villages of Kheroj growth centre, Kadha and Navaghara villages of Lambadiya growth centre and Bharamiya and Chada villages of Matoda growth centre were selected for the study. The information was collected through interactions with the tribal farmers individually and in group during June, 1992.

#### **RESULTS AND DISCUSSION**

Some of the indigenous practices adopted by tribal farmers on their farms with scientific justification are listed below :

##### **Crop Production :**

###### **(i) Maize :**

Local maize variety is preferred for cultivation by the farmers due to its short duration or early maturity character. Hybrid varieties are having late maturity. If there is no rain at the time of pollen emergence stage, there is a considerable reduction in yield. Moreover, tribal farmers feel that local maize variety is sweet in taste as compared to hybrid varieties.

---

1 Deputy Director of Extension Education (Zone), GAU, Sardar Krushinagar.  
2 Ph.D. Scholar, GAU, Sardar Krushinagar.  
3 Assistant Extension Educationist, GAU, Sardar Krushinagar.

(ii) **Wheat :**

The farmers are using higher seed rate (150 to 160 kg/ha) than recommended seed rate (100 to 125 kg/ha). If there would be comparatively high temperature during the vegetative growth phases, tillering is affected. Therefore, higher seed rate is used in order to maintain plant population and thereby to get optimum yield of the crop.

(iii) **Summer Greengram/Blackgram :**

Seeds of greengram/blackgram are broadcast in wheat fields after harvesting of the crop without primary tillage. Then, the field is irrigated and planking is done. The farmers believe that due to this practice, they are getting good germination and yield. A possible explanation is that this method helps in timely sowing by saving time in land preparation. Irrigation after sowing ensures better germination and thereby more plant population per unit area. This method also decreases the cost of cultivation.

**Storage of Grains :**

(i) They prepare themselves **kothi** (storage-bin) from **Santhi**, locally available material from forest. An inner portion of **kothi** is pasted with dung and soil mixture and grains are stored in it which remains for a longer time in good condition.

(ii) Sun drying of grains is carried out during **Krushan Paksha** (moonless period) for three to four days and the sun-dried grains are kept under shed during night. They are then cleaned and stored. It

prevents from infestation of stored grain pests.

**Animal Husbandry :**

(i) Mixture of maize and barely is soaked in water and fed to milch animals in the morning and evening. Immature cobs of maize and tender leaves of **Dodi (Leptadenia reticulata)** are also fed to milch animals for more milk production.

(ii) The tribal farmers keep **deshi** hens. They are well adapted to local climatic condition. Also, **deshi** eggs fetch more price as compared to eggs of exotic breed in local market.

**Animal Health :**

(i) **Fracture :** The mixture of soil at the root of **kerdo (Capparis decidua)** and **kuvar patha (Aloe vera)** is boiled, allowed to be cooled and then applied on the skin at the site of fracture. The stripes of bamboo (**Dendrocalamus strictus**) are then placed over it and bandaged. The mixture becomes hard like plaster of paris and thus, it is a substitute of plaster of paris. The above treatment is used for curing the fracture.

(ii) **Tympany :** The mixture of neem leaves (**Azadirachta indica**), bark of fresh root of teak (**Tectona grandis**) and palas (**Butea monosperma**) is crushed. The juice is extracted from the mixture and then salt is added. The same mixture is drenched to the animal for the treatment of tympany.