



DOCUMENTATION OF INDIGENOUS AGRICULTURAL KNOWLEDGE PRACTICES OF NASHIK FARMERS

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ABSTRACT :

In India agricultural field tremendous uses of chemicals for different purposes. Modern practices effectively working but it's contributing for pollution. In old time farmers applied indigenous agricultural knowledge in large scale. Indigenous agricultural knowledge reliable, ecofriendly, but modern farmer unaware about indigenous knowledge. Present work little contributed to documentation of indigenous agricultural knowledge and high lighting importance of indigenous knowledge for modern farmers.

INTRODUCTION

Now a day's India is fast developing country, tremendous advancement in science, agricultural & industrial field. a craze of globalization created adverse effects on ecosystem. In agricultural area every day new pesticides & fertilizers introduced to control pest & increase productivity. No doubt the new invention in agricultural field help to increase productivity of land but it's also breaks a delicate balance of environment. In India food supply is limited & population is more, thousands of people consumed only one time food due to poverty & shortage of food. High population put huge pressure on agricultural field for production purposes. Shortage of water, less productive land it's another problems for farmers. Present day modern practices in agricultural field contributed to contaminate environment, this practices created toxic stress on ecosystem. In ancient time in India traditional knowledge, skill, experienced, ideas of old peoples applied in agricultural field for tackle food shortages problems repel pest & conservation of nature. But due to modernization communication gap between village farmer & citizen increase, Indigenous Knowledge is diminishing because no proper documentation of Indigenous Knowledge.

Scientist in different field also showing interest on indigenous practices, there are limited works done on Indigenous Knowledge. This knowledge confined in localized area, Indigenous Knowledge passed only oral communication. Indigenous practice necessary to maintaining ecological balance & play important role in sustainable development. The present work highlighting importance of Indigenous Knowledge & increase awareness among the young farmers.

Material and Methods

The present data author collected by interaction with experienced farmers & group discussion with farmers from different villages of Nashik region of Maharashtra state of India.

Results and Discussion

Modern techniques contaminate environment despite that modern farmers not serious about that, now its need to applied old techniques, skills, natural methods in agricultural practices to control pollution. Several scientists also supported the Indigenous practices of farmers, farmers easily adopt this technique, it's feasible & ecofriendly. In Japan, China, USA farmers shift to organic farming & old practices avoiding uses of chemicals.

(Elliot et al.,2010 and Joshi CP et al.,2006) discussed that old agricultural practices such as Intercropping rotation ,green manures etc high potential to enhanced nature & become sustainable .Another researcher S.kumaret.al (2011) stated that Bihar farmer’s marginal & small farmers. Theyhighly applied indigenous knowledge for agricultural productivity. Indigenous Knowledge provided valuable resources for sustainable development.Leelesh Kumar et al (2018) conducted study in Chhattisgarh area,in this region rice is main crop cultivated. Old Farmers applied Indigenous Knowledge effectively for cultivation of rice & increase productivity. In nashik area farmers using Indigenous Knowledge in agricultural area and it’s beneficial for sustainable development. Indigenous Knowledge eco friendly, proper documentation and collaboration with modern techniques helpful for ecosystem.

Table- Documented Indigenous Knowledge used by farmers

Sr.No.	Indigenous Agricultural Practices	Action
1	Guava leaf powder spraying on crops	Control rice weevil (Sitophilusorzyae)
2	Paddy seeds+ Neem leaves (Azadiractaindica)	Repel& kill pest
3	Salt apply on paddy leaves	To control jowar stem borer
4	Milk + paddy mixture	reduce leaf spot
5	Seed + Pudina (Menta sativa)	Protect plant from viruses infection
6	T -shape bamboo stands for birds in crop field	To control insects& larvae
7	Jamun Branches (Eucynajambolona) placed at corner of of sugarcane field	Fox will not entering field
8	Mango sapling during full moon phase	Healthy & vigor plants
9	Sprinkled lime solution over banana bunches	Early ripening of fruits
10	Spraying tobacco leaf extract on banana crops	To control leaf spot
11	Sprinkled cow urine on crops	To prevent plant diseases
12	Neem leaves (Azadiractaindica) placed at storage container’s bottom	Protect stored grains
13	Seed stored in earthen pots	Storage for longer period
14	Food grains stored in container coated with cow dung & Mud	Protect from pest
15	Dark cloud color ,wind direction West to East	Indicates heavy rain
16	50 gmsJaggery + 100 gms ginger (Zingiberofficinale)	To treat mouth disease of livestock
17	Aloe vera + Neem leaves (Azadiractaindica)	To treat skin diseases of cattle
18	Turmeric paste	For treating injury
19	Cotton seed + Jaggery mixtures	For enhancing milk production of cattle
20	Castor seed extract mixing with water	Treating constipation of live stock
21	Tulsi(<i>Ocimum sanctum</i>) + Neem leaves (Azadiractaindica)	To control Ectoparasite of live stock
22	Ants carrying eggs in their mouth	Indicates heavy rain
23	Fire flies seen at night on trees	Indicates early monsoon
24	Birds taking dust bath	Indicates early monsoon
25	Garlic (<i>Allium sativum</i>) paste	To Treat cough of live stock
26	Pure Honey liquid	To treat eye problems
27	Eggs + honey mixtures	To treat hooves diseases

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