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"RECLAIMING THE WEEDS: THE CULTURAL AND ECOLOGICAL SIGNIFICANCE OF WEEDS IN THE RAJBANSHI COMMUNITY OF COOCHBEHAR, INDIA"

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ABSTRACT

In the beginning, there were no weeds. It is with us since the agricultural revolution probably started some twelve thousand years ago. Nature does not regard weeds as a separate category. This paper explores the dual perspectives of "weeds" in the cultural and agricultural context of the Rajbanshi community in Coochbehar, India. Rajbanshi people, descendants of Koch kings, are traditionally seen by the mainstream upper cast as "bratya" or outcasts, much like the weeds that grow in fields, unwanted by modern agriculture but integral to the local ecosystem. While weeds are often viewed negatively as pests that steal nutrients, shelter pests, and grow faster than crops, they also possess valuable qualities. Some weeds, such as dandelions and clover, enrich the soil by pulling up deep nutrients or fixing nitrogen, supporting agricultural productivity. Weeds also provide other benefits, such as pest control, erosion prevention, and acting as "living mulch." The paper focuses on the role of weeds in Rajbanshi culture, where they are used for medicinal, culinary, and ritualistic purposes, often passed down through local knowledge systems.

The study highlights how, over time, modern agricultural practices and socio-economic changes have led to the gradual disappearance of these vital plants and traditional knowledge. Local healers, such as kabirajs, use weeds to treat a variety of ailments, from bone fractures and jaundice to common infections. Additionally, weeds are incorporated into daily life through food and rituals. This research aims to document the cultural and ecological significance of weeds, emphasizing their continued importance to the Rajbanshi people in the face of modern agricultural development. Through interviews and field studies, the paper seeks to preserve the knowledge of medicinal weeds before it is lost due to socio-economic shifts and agricultural changes.

KEYWORDS: Weeds, Rajbanshi Community, Cultural Significance Agricultural Practices Traditional Knowledge

INTRODUCTION

Here is a tragic indigenous relationship is excavated, where both the factors are in one-way unwanted (bratya). Rajbanshi khatrio of Coochbehar in one view are the descendents of Koch king but in another view, they are known as bratya khatrio as they have escaped from battlefield to save them from the torture of Parashuram, and the other factor is the weed, which are also unwanted (bratya) to the modern agriculture system. It is one face of truth but the other face is quite different. In the beginning, there were no weeds. It is with us since the agricultural revolution probably started some twelve thousand years ago. Nature does not regard weeds as a separate category. One widely accepted definition of weed is a plant that grows where it is not wanted. As they are commonly known as- nutrition stealer, gives shelter to the pest, and has a greater growth rate than that of crop plants. There are only about 250 plant species which are sufficiently troublesome universally to be regarded as weeds (Altieri and Liebman, 1988) However, this is not all; there is also another beautiful side. My paper tries to focus that side where weeds are the nutrition puller as their roots can penetrate that layer of soil where the roots of crop plants cannot, Dandelions, for example, bring up nutrients like calcium and nitrogen from deep in the soil with their taproot, and clover hosts nitrogen-fixing bacteria in its roots, fertilizing the soil directly. Where the number of weeds projects them as primary host and thereby reduces, the loss of productivity and some weeds attract beneficial insects, which in turn can protect crops from harmful pests. Weeds may also act as "living mulch", providing ground cover that reduces moisture loss and prevents erosion. The dandelion is also one of several species, which break up hard pan in overly cultivated fields, helping crops grow deeper root systems. In 2011, genetic evidence showed that all forms of Asian rice, both *Oryza indica* and O.*japonica*, sprang from a single domestication that occurred 8,200–13,500 years ago in China of the wild rice Oryza *rufipogon*. *Oryza rufipogon* is an invasive species and listed as a 'noxious weed' by the United States. Cooch Behar district mainly inhabitate by Rajbanshi people. Life and livings of these peoples were largely dependent on nature. Weeds play great role in their life from palatable dish to the offerings to the God. Here peoples relies much more on local kabirajes than modern medicinal system for bone setting, jaundice, neurotic disorder, piles, arthritis, miscarriage , abortion etc. Local *kabiraj gunin and baidyas* have plenty of secret knowledge about local weeds and their medicinal uses. However, as the people of *Rajbanshi* community are socio-economically backward; and earn their livings purely from cultivation. Recently they show their ever-increasing interest in cash-crop cultivation, at the cost of habitats of large number of medicinal weeds. This paper tries to discuss on the implications of developmental activities and changing socio-economic conditions of *Rajbanshi* people on their traditional knowledge. Information about weeds and their role are tried to be gathered from local people like *kabiraj baidyas* before their obliteration.

STUDY AREA

Mekhliganj is a marginal CD Block of Cooch Bihar district, delimited by Jalpaiguri district on north and Bangladesh on south, Haldibari Block on west and Mathabhanga on east and watered by the river Tista, Dharla, Saniajan, Sutunga and numbers of other small stream. It is located at 26°21′N 88°55′E has an area of 288.64 km. As per 2011, Census of India Mekliganj CD Block had a total population of 155,250, of which 150,767 were rural. Scheduled Castes numbered 110,595 and Scheduled Tribes numbered 1918.Total Area available for cultivation in Mekhliganj CD block is 23,431 hectare.

OBJECTIVES

Our objectives are to ponder the role of weeds to the life and culture of *Rajbangshi* people. With the advent of enlightenment, introduction of modern agricultural system flourishes in this area at the cost of large varieties of so-called weed plants. The power of which are still unknown to the modern world. Our objectives are to find out the role weed as medicine, food to the day to day life of Rajbanshi people of this area.

METHODOLOGY

Information was gathered through taking interview of the informants and as witness of the uses during the period of studies in the field. The field study was carried out by putting questionnaire to people of different age group, of different socio-economic strata, and *kabirajs*, *ojhhas* and *gunins*.The informants were requested to accompany us in the field to detect the plants and their locations. Plants were identified using relevant scientific literature. Information collected from them lured us to analyze the data scientifically and systematically that help us to correlates socio-economic upliftment with the changing pattern of agriculture. That leads to gradual loss of weeds and their importance.

FINDINGS

In rituals

Rajbanshi people have age-old traditions to treat a number of plants as a part of their rituals. They believe that God as well as demon is dwelt in some plants-

At *Ambabuchi* of hindu festival a twig of *Azadirachta* indica, (Family-Meliaceae) they used to hang in front of entry of hut. They believe that it will protect them from snake attack. *Lannea coromandelica*,(Houtt.) Merr, Family Anacardiaceae. is an evergreen tree, it is worshiped as jiga puja for the women suffering from repeated miscarriage Sal tree is being the worshiped for vigour (*Shorea robusta*, Family-Dipterocarpaceae).Marriage between two plants (*Ficus benghalensis* and *F. religiosa*, Family-Moraceae) for sonless women.On the last day of the Bengali year (*March*-April), a spring hunt is arranged by the Rajbansis. It is called Bisuma. During the whole moth of *Chiatra* the *Rajbabansis* eat and drink decoction of some, bitters e.g. Brihati (*Solanum indicum*), Basak (*Adhatoda Vasica*) etc weeds (*Susmita Roy*,2016) Besides above mentioned plants *Cynodon dactylon*, twig of *Clerodendrum infortunatum*, flower of *Colocasia antiquorum* are used in different festivals

Plants in daily life:

Areca and Betel (Guā-Pān)-guests are always welcome by offerings of gua pan.Luffa cylindrical (Dhundhul) Family-Cucurbitaceae-dried fruit used as used as bath sponge.Ritha (*Sapindus saponaria*, Family-Sapindaceae) -fruit used as shampoo. Jiga plant [*Lannea coromandelica*,] is a good producer of gum.Bamboo and Banana are the most important two plants in the daily life of Rajbanshi people. Branch of *Jatropa* sp. and *Ficus hispida* are used as toothbrush at morning. *Erythrina stricta Roxb*. (Mandar) wood used to make sinkers of fishing tackle.

Plants in treating soil

Numbers of grass species e.g. *Brachiaria* mutica are used in newly made roadside by them to check soil erosion. The moisture retaining capacity of *Polygonum hydropiper* is used to keep the soil cool and humid. Number of weeds belongs to Nutsedge (Juncus) have long root system to absorb nutrition deep down of the soil are uprooted and allowed to be decomposed in the same land before seeding crop plants. Presence of *Leucas aspera* as a natural vegetation on soil indicates the soil is good for tea plantation without testing the soil chemically.

Plants used as insects repellent:

They use burnt smock of *Vitex nigundo*, *Clerodendrum infortunatum* as good repellent of insects. *Polygonum sp*., *Ocimum sp*. are also used to repel insects. Root exudates of Tagetes sp. possess nematicidal effects, which helps better growth of rose plant when they grow simultaneously in the same garden. Production of large quantities of biomass which is being exploited for pest control are the water hyacinth (*Eichornia crassipes L*) which decreased populations of plant parasitic nematodes when incorporated into soil (*Siddiqi and Alam, 1989*). Lantana camara, also produces an antimicrobial compound, umuhengen (*Sharma and Sharma*, 1990). An alarming situation has been occurred of virtually weed-free monocropping over vast area in the TEA-growing areas of North Bengal wherever increasing numbers of sprays were required to control *Looper* as they rapidly became resistant to common insecticides. Pesticidal activities of *Clerodendron infortunatum* Leaves and succulent stem, Lantana camara Leaves over the tea pest *Helopeltis theivora* is also observed

Plants used as vegetable and medicine:

Out of the 20,000 medicinal plants listed by the WHO globally, India's contribution is 15-20%. (Nihar Ranjan Chakraborty* and Buddhadeb Duary).Rajbanshi people of the study area are very commonly used the following plants as vegetables and medicines in their day to day life.

SL.	LOCAL NAME	*SCIENTIFIC NAME*	FAMILY	USES
1.	AISTENI SHAK	*Houttuynia emeiensis* Z.Y. Zhu & S.L. Zhang	Saururaceae	USED TO EAT IN DYSENTRY
2.	AKANDA PATA	*Calotropis procera*	Apocynaceae	WITH OLD CLARIFIED BUTTER WARMED AND USED EX-TERNALLY ON CHEST IN RESPIRETORY TROUBLES
3.	ALANGI/ DUDH KACHU	*Colocasia* sp.	Araceae	USED AS VEGETABLE
4.	ALKUSHI	*Muluna pruriens* L.	Fabaceae	USED IN SKIN AND NERVE DESEASE
5.	AMRUL	*Oxalis corniculata*	Oxalidaceae	GAS/INDIGESTION
6.	ANARAS PATA	*Ananas comosus*	Bromeliaceae	DECOCTION OF TENDER LEAF IS GOOD WORM KILLER(PINWORM)
7.	APANG	*Achyranthes aspera*	Amaranthaceae	JAUNDICE
8.	ARSHARA FAL			DYSENTRY
9.	ATIA KOCHU	*Alocasia* sp.	Araceae	USED AS VEGETABLE
10.	ATIA MANA	*Malanga* sp.	Araceae	USED AS VEGETABLE
11.	BAK FUL	*Sesbania grandiflora*	Fabaceae	KRIMI NASAK
12.	BALATITA/GIMA	*Glinus oppositifolius* L	Molluginaceae	USED AS ANTI POX
13.	BANDHUNIA	*Oenanthe benghalensis* (DC.) Miq.	Apiaceae	USED IN HEART DISEASE
14.	BASAK PATA	*Justicia adhatoda* L.	Acanthaceae	FEVER,COUGH ETC.
15.	BATUA SHAK	*Chenopodium album* Linn.	Chenopodiaceae	USED AS VEGETABLE
16.	BHATI PATA	*Clerodendrum infortunatum* L.	Lamiaceae	KRIMI NASAK
17.	BHUCHAI SHAK			USED AS VEGETABLE
18.	BHUI KUMRA	*Tricosanthes cordata* Roxb	Cucurbitaceae	STOMACHACH
19.	BISHKUTULI	*Persicaria orientalis*	Polygonaceae	INSECT REPELLENT
20.	BON TULSI	*Croton bonplandianum* Baill	Euphorbiaceae	LEAF JUICE AND LATEX USED IN CLOTTING OF BLOOD, CURING OF WOUNDS
21.	BONUA SAJNA	*Oroxylum indicum* (L.) Kurz	Bignoniaceae	BARK IN BOILED WATER USED IN JAUNDICE
22.	BRAHMANI SHAK	*Bacopa monnieri* (Linn.)	Plantaginaceae	INCREASE MEMORY LEVEL
23.	CHAMGHAS	*Eleusine indica* (L.) Gaertn.	Poaceae	USED AS VEGETABLE ALONG WITH TEST INCREASER
24.	CHOTRA PATA	*Tragia involucrata* Linn.	Euphorbiaceae	ASTHMA/FRY IN OIL IN IRRITATION
25.	DARIDRA	Unidentified	Unidentified	APPETITE INCREASER
26.	DESI USANI	*Spilanthes acmella*	Asteraceae	JAUNDICE/ FOR SOUND SLEEP
27.	DEWA	*Artocarpus lacucha* buch-Ham.	Moraceae	FRUITS ARE EATEN
28.	DHEKIA	*Diplazium esculentum*	Athyriaceae	USED AS VEGETABLE
29.	DHUDH KOCHU	*Xanthosoma violaceum* Schott	Araceae	USED AS VEGETABLE
30.	DHULPI	*Leucas aspera* Willd.	Lamiaceae	USED IN BODY PAIN ,AND CHRONIC SUTIKA OF FEMALE
31.	DHUTARA FAL	*Datura metel* L	Solanaceae	REDUCE EARACHE, REMOVE SKIN DISEASE
32.	DURBA GHAS	*Cynodon dactylon* Pers	Poeceae	STOP BLEEDING
33.	FANIMANASA PATA	*Opuntia ficus-indica*. (l.)	Cactaceae	WORM SAP OF LEAF USED TO STOP YEARACH
34.	GADAL PATA	*Paederia foetida* L.	Rubiaceae	WITH MAGUR MACHH IN DYSENTRY
35.	GURMAR	*Gymnema sylvestris* R.Br.	Asclepiadaceae	LEAF USED IN DIABETIS
36.	HARJORA	*Cissus quadrangularis* L.	Vitaceae	WITH TURMERIC,GINGER, BHUTI MORICH IN BONE FRACTURE
37.	HELENCHA SHAK	*Enhydra fluctuans* Lour	Asteraceae	USED IN INDIGESTION
38.	HEM KACHA/PATHAR KUCHI	*Bryophyllum pinnatum* (Lam.) Oken.	Crassulaceae	USED IN BURNING WOUND
39.	HOGLA	*Typhy elephantine* Roxb.	Typhaceae	USED TO MANUFACTURE MAT
40.	ISWAR MUL	*Aristololochia indica* L.	Aristolochiaceae	SNAKE CANT TOLARATE ITS SMELL, ROOT USE FOR CHATCHING SNAKE
41.	JANG GACHH	*Callicarpa tomentosa* (L.) Murr.	Lamiaceae	ROOT JUICE IN IRREGULAR MENSTRUATION
42.	KABAK CHINI	*Piper cubeba*	Piparaceae	USED IN COUGH AND FEVER.
43.	KAGAJ FUL	*Bauganvilia spectabilis*	Nyctaginaceae	FRESH TENDER LEAF EXTRACT USED IN DIABETIS

44.	KALA KOCHU	*Colocasia* sp.	Araceae	USED IN VEGETABLE
45.	KALMI	*Ipomoea aquatic*	Convolvulaceae	USED IN EYE
46.	KALOMEGH	*Andrographis peniculata*	Acanthaceae	COUGH AND FEVER
47.	KANSISA	*Commelina benghalensis*	Commelinaceae	STOP BLEEDING THROUGH NOSE/YOUNG PLANT ROOT IN DYSENTRY
48.	KARIPATA/ NARAS-INGHA	*Murraya koenighi*	Rutaceae	GAS/INDIGESTION
49.	KATA KHURIA(WHITE)	*Amaranthus spinosus*	Amaranthaceae	ROOT PEST USED ON FOREHEAD REDUCE HEADACH
50.	KATA KHURIA(RED)	*Amaranthus* SP.	Amaranthaceae	ROOT EXTRACT USED IN BLOOD DYSENTRY
51.	KEYA KATA	*Pandanus foetidus* Roxb.	Pandanaceae	FRUITS ARE EATEN
52.	KHUDI JAM/ KAK JAM	*Syzygium fruticosum* (DC.) Roxb	Myrtaceae	FRUITS ARE EATEN
53.	KUCHLI	Unidentified	Unidentified	FRUITS ARE EATEN
54.	KULEKHARA	*Hygrophylla auriculata* (K. Schum.)	Acanthaceae	PLANT EXTRACT IN ANEAMEA
55.	KUMARI LATA/BAGJH-HAR	*Smilax zeylanica* Wight	Smilacaceae	IMPOTENCY/SNAKE USED ITS FLOWER
56.	LAFA	*Malva verticillata* L.	Malvaceae	USED AS VEGETABLE
57.	LALSHAK	*Amaranthus gangeticus* L.	Amaranthaceae	USED AS VEGETABLE
58.	MACHH ALOO	*Dioscorea alata* L.	Dioscoreaceae	USED AS VEGETABLE
59.	MAN KOCHU	*Alocasia indica* (Lour.) Spach	Araceae	USED AS VEGETABLE
60.	MANIMUNI SARU	*Hydrocotyle sibthorpioides* Lam.	Araliaceae	USED IN DYSENTERY AND INDIGESTION
61.	ARAHAR PATA	*Cajanas cajan* (L.) Huth	Fabaceae	LEAF USE IN TREATING JAUNDICE
62.	NAIOL JHOPA	Unidentified	Unidentified	CATARACT, FORCING OUT SNAIL FROM HOUSE HOLD AT MONSOON
63.	NISHINDA PATA	*Vitex nigunda* L.	Lamiaceae	USED IN BODY PAIN
64.	PANIAL FRUIT	*Flacourtia jangomas*(Lour.) Raeusch	Salicaceae	FRUITS ARE EATEN AFTER RUBBING IN PALM
65.	PAT SHAK	*Chorchorus capsularis* L.	Malvaceae	USED AS VEGETABLE,WORM KILLER(Pinworm)
66.	PATHARKUCHI	*Kalanchoe pinnata* (Lam.) Pers.	Crassulaceae	DYSENTRY
67.	PODUNA/PUDINA	*Menthe speculate* L.	Lamiaceae	USED IN INDIGESTION
68.	PUI SHAK	*Basella rubra* L.	Basellaceae	USED AS VEGETABLE
69.	ROP GACHH	*Lygodium flexuosum* (Linn) Sw.	Lygodiaceae	INNER WOODY THREAD BOUND TO THE BODY, REDUCE PAIN
70.	RAM TULSI	Ocimum gratissimum L.	Lamiaceae	LEAF EXTRACT WITH SALT USED IN COUGH AND FEVER
71.	SARU MANIMUNI	*Hydrocotyle rotundifolia* Roxb.	Apiaceae	DYSENTRY
72.	SHAPLA	*Nymphaea noucheli*	Nymphaeaceae	USED AS VEGETABLE
73.	SHEALKATA	*Argemon Mexicana* L.	Papaveraceae	USE IN PARALYSIS
74.	SHEFALI PATA	*Nyctanthes arbour-tristis* L.	Oleaceae	LEAF EXTRACT USED IN LIVER AILMENT
75.	SHEORA	*Streblus asper* Lour	Moraceae	STEM BARK USED IN PILES
76.	SHIMOOL MUL	*Bonbax ceiba* L.	Malvaceae	DUST INCREASE SPERM
77.	SHOTI	*Curcuma zedoaria* Rosc.	Zingiberaceae	USED AS BABY FOOD
78.	SHUSHNI SAK	*Marsilia quadrifolia* L.	Marsileaceae	USED FOR SOUND SLEEP.
79.	SONA PATA	*Oroxilum indicum* Linn.	Bignonaceae	CLEARING STOMACH
80.	TAGAR	*Tabernaemontana divaricata* (L.)	Apocynaceae	LATEX ARE USED IN CONJUNCTIVITIS EXTERNALLY
81.	TAURI KALAI	*Vigna mungo* (L.) Hepper	Fabaceae	USED AS VEGETABLE
82.	TEZBAL TREE	*Zanthoxylum aramatum*	Rutaceae	USED IN MENTAL DISORDER
83.	TEJ PATA	*Cinnamomum tamala* (Buch.-Ham.)	Lauraceae	FRESH LEAVES BOILED IN WATER USED IN DIABETIS
84.	TELAKUCHO	*Coccinia indica* L. (Voigt)	Cucurbitaceae	USED AS VEGETABLE AS WELL AS IN DIABETIS
85.	TIT KARALA	*Momordica charantia* L.	Cucurbitaceae	USED IN DIABETIS
86.	ULAT KAMBAL	*Abroma augusta* L.	Malvaceae	USED IN WOMEN MENSTRUATION PAIN

87.	USANI	*Spilanthus acmella*	Asteraceae	PALATABLE DISH WITH MAGUR MACHH
88.	VERENDA	*Jatropha curcas* L.	Euphorbiaceae	LATEX USED TO STOP BLEEDING
89.	VOG MANA	*Malanga coco*	Araceae	USED AS VEGETABLE
90.	YANGYA DUMUR	*Ficus glomerata* Linn.	Moraceae	FRUIT USED IN SKIN DISEASE /DANDRUFF

Figure 1: Rajbanshi people eat the fruit in the last day of Bengali calendar known as brihati

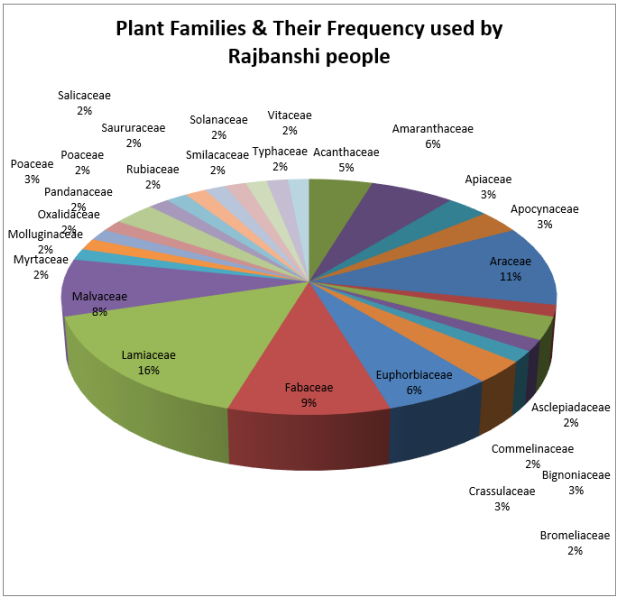
Figure 2: Marriage between *Fcas benghalensis* and Ficas religiosa

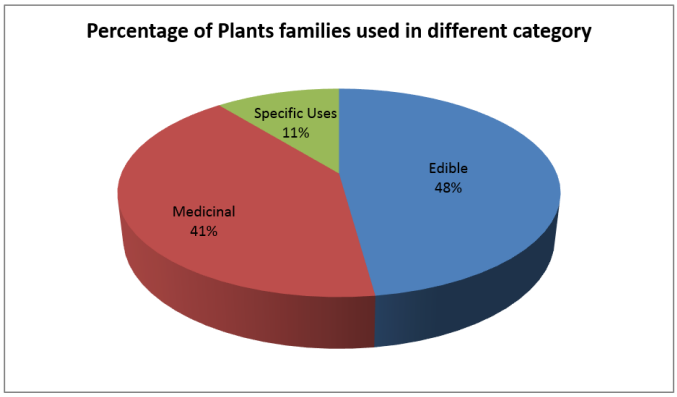
Figure 3: One informant name Godda Barman

Figure 4: KUCHLI- wild edible fruit plant of Cooch behar now rare.

RESULT AND DISCUSSION

Rajbangshi community has a long and significant past record that can be traced from the age of Mahabharata. They have an age-old tradition to make their living from the crude nature. Besides so called crop plants a large number of plants are playing an important role in the life of Rajbanshi community people. Those are important to their religious occasion to day-to-day life. Still now, few plants such as *Azadirachta indica, Ficas benghalensis, F. Religiosa, Lannea coromandelica, Shorea robusta, Ocimum sanctum, Cynodon dactailon* are worshipped as God and few as demon dweller such as Streblus asper Lour, Tamarindus tamala etc.. Besides allopathic and homeopathy kabirajas, ojhhas are still playing an important role in their life and uses a large number of weeds in their medicine. Rajbanshi people are using different weeds for treating their common disease. A number of kabirajs can tackle bone fracture of human being along with domestic animals here; they are endowed with knowledge of a very effective indigenous way of bone setting by using a number of weeds like *Cissus quadrangularis* Carcuma,ginger, Bhuti Morich with mustard oil. Piles. Sutika, Jaundice is totally recoverable with the help of few plants as *Lucas sativa* root, *Azadirachta indica* bark and Cat fish used in the treatment of Sutika and Jaundice recoverable with the help of *Oroxylum indicum* bark with local sour card, with the leaf decoction of *Cajanus cajan*. Numbers of weeds are used as vegetable. Commonly weeds are known as famine food (R. J. Hillocks 1998). The people of this community also take a numbers of weeds as delicious food. Weeds are still the main ingredients of veterinary medicine. In some cases, weeds such as Clerodendrum infortunatum L. *Vitex nugunda*, *Persicaria orientalis* are natural destroyer of insects and also act as alternative host for them, and thereby decrease the loss of production. Weeds are also essential for keeping normal soil health. Modern agriculture system requires immediate returns, it treat all the weeds as natural enemy. Therefore, weeds have to pay their life for the benefits of crop plants. Markets are flourished with herbicides such as Glyphoset, Paraquate number of which can penetrate up to one foot deep into the soil to destroy the root system of weeds. Potato, tea plantation in this area makes this problem more acute now. Number of weeds play a very crucial role in their rituals is a common matter.





CONCLUSION

- Immediate measure should be taken to formulize the indigenous knowledge of medicinal role of weeds, the people of this area have.
- Weeds, relatives of crop species may remain as a reservoir of genes and should be conserved as they may be needed in the future (Harlan, 1965).
- Our attitude towards weeds should be changed. Weeds should be managed more scientifically.
- Eradication of weeds is not the only way to make the crop plants more productive.
- Proper knowledge of weeds and their role of behaving as alternative host to the pest and their potentiality to play better role towards soil health and fertility is to be realized more scientifically.

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