

**“STUDY AND DOCUMENTATION OF INDIGENOUS
TRADITIONAL EQUIPMENTS AND IMPLEMENTS USED IN
AGRICULTURE IN TRIPURA”**

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Introduction

The advent of the concept of sustainable agriculture in late eighties in Indian agricultural scenario has evoked interest on indigenous technical knowledge (ITK) that has the element of use of natural products to solve the problems pertaining to agriculture and allied activities. Indian farmers, over centuries, have learnt to grow food and to survive in difficult environments, where the rich tradition of ITK has been interwoven with the agricultural practices followed by them.

Indigenous technology knowledge (ITK) can be defined as any information originated out of farmers experience which has practical utility in solving farmers problems which is feasible, profitable and socially acceptable and adopted farmers own conditions which moves from one generation to another by word of mouth (Sabarathnam, 1990). Indigenous technology knowledge (ITK) refers to the unique, traditional, local knowledge existing within and developed around the specific conditions of women and men indigenous to a particular geographical area (Grenier, 1998). Indigenous Technology Knowledge (ITK) is based on the experiences that gathered momentum through generation and are being developed and standardized through innumerable experimentation and practices to enhance the life of the people who greatly depend on agriculture production system.

Characteristics of ITK:

- I. ITK is not static but dynamic
- II. Exogenous knowledge and endogenous creativity brings change to ITK
- III. ITK is intuitive in its mode of thinking
- IV. ITK is mainly qualitative in nature
- V. ITK study needs a holistic approach
- VI. ITK, if properly tapped, can provide valuable insights into resources, processes, possibilities and problems in particular area
- VII. ITK is recorded and transferred through oral tradition
- VIII. ITK is learned through observation and hands-on experience
- IX. ITK forms an information base for variety
- X. ITK reflects local tradition

Roles of ITK

- I. ITK can aid development efforts
- II. ITK can facilitate local people's participation
- III. ITK is a valuable source of developing appropriate technologies

Scope of ITK analysis

- I. New biological and ecological insight
- II. Resource management
- III. Protected areas and conservation education
- IV. Development planning
- V. Environment assessment

Advantages of ITK

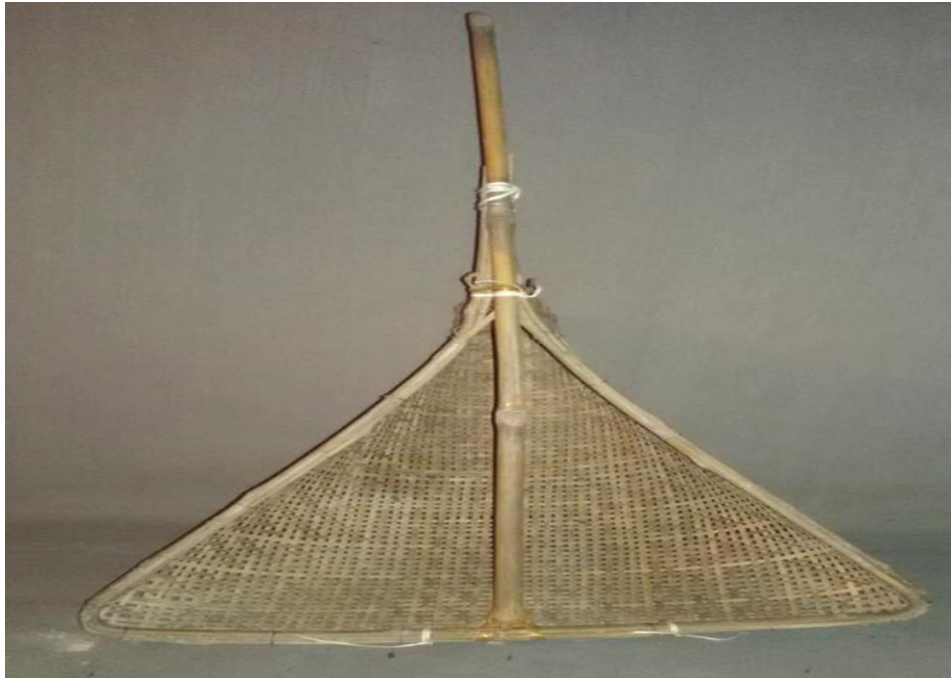
- ❖ It has low cost and is readily available.
- ❖ ITK is found to be socially desirable, economically affordable, sustainable, environmentally safe and minimum risk to research users and widely believed to conserve resources.
- ❖ ITK provides basis for problem solving strategies for local communities.
- ❖ Use of ITK assures that the end user of specific development projects are involved in developing technologies appropriate to their needs.

Survey Work:

Survey works were conducted in Belonia, Rajnagar agri Sub-division, South Tripura; Bamutia, West Tripura; Killa village, Gomati ; Khowai, in Khowai district. For present survey work, use of local resource persons and In-depth interview of farmers survey methods were used. Notes, Photos, Audio-recordings and Video-recordings were used for documenting the ITK in different parts of Tripura by present investigator.

Different Indigenous Technical Knowledge observed during survey work in Tripura:

There is a lot of indigenous agricultural know-how available with the farming communities specially the tribals. These traditional farming systems are products of centuries of accumulated experiences. Farmers all over the world have developed their own indigenous systems of farming with local inputs. Some of the ITKs are herewith documented with photographs and description.



[1]

Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Sudam (Kokborok language) or Fishing Trap	It is mainly used by Traditional or Indigenous people. It is used as a fishing trap to catch the fishes in pond, lake, river or in any water bodies.	It is made up of bamboo by the local people	Mandira Debbarma	Hari kanto para, Gabordi



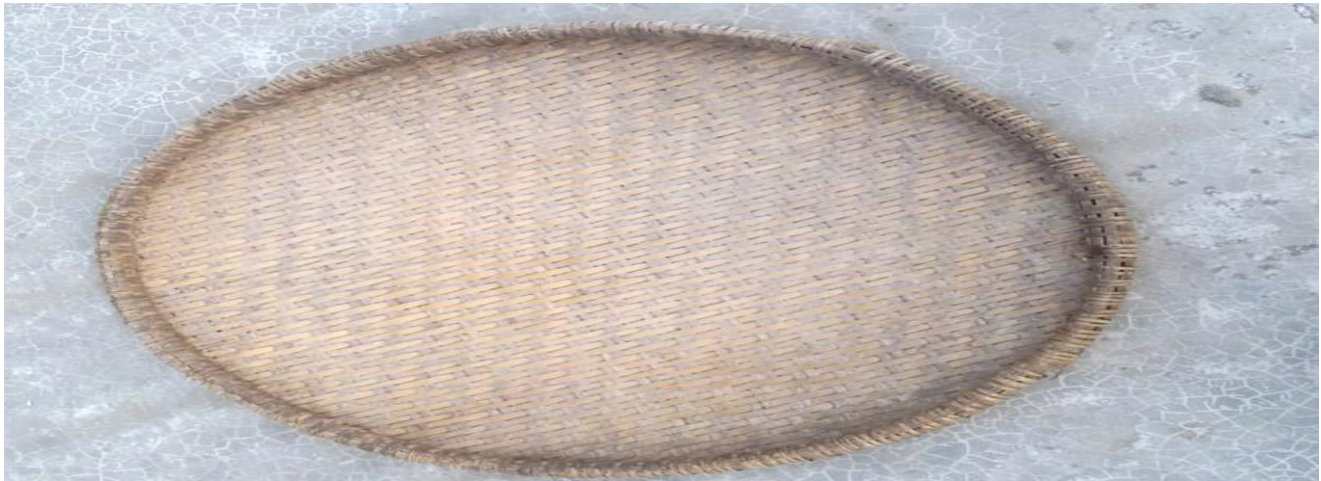
Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Rusham & Romo (Kokborok language)	It is mainly used for making flour specially from paddy grain and sometime other grains are also placed for making flour.	It is made up of wood by the local people. Instead of mechanical grinder in market, the local people use it for making ground of paddy/ rice or other materials. It consists of one rod shaped woody hard structured and one round shaped which is concaved in the middle.	Tiyari Debbarma	Hari kanto para, Gabordi



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Sishing (Kokborok language)	It is mainly used for Fish trapping	It is made up of bamboo by the local people with a trap to captured the fishes.	Tiyari Debbarma	Gobardi



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Dengki	It is mainly used for milling of rice. Earlier days when milling machine was not available, it was being used by the people.	It is made up of wood. It consists of long woody structure which is fixed at one end with two stalks fixed with earth where pressure is given by the legs to pull the other end like a lever and one relatively narrow peg is fixed at right angle at the other end which strikes the paddy grains kept in the container. The container is remained fixed with the earth.	Nakul Debnath	Salema



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Bailwng (Kokborok language)	It is mainly used for winnowing of paddy.	It is made up of "bet". It is round shaped thin matter.	Tiyari Debbarma	Gabordi



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Kuniya (Kokborok language)	It is used for Grinding purpose		Khakuwchang Debbarma	Patni para, Killa Gomati



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Mutari (Kokborok language)	It is used for Grinding purpose		Khakuwchang Debbarna	Patni para, Killa Gomati



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Ura or Tukri	It is used for Storage purpose or carrying materials from one place to another.	Bamboo made structured. It looks like a container with round shaped.	Suchitra mohan Jamatia	Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Takhuk (kok-borok language)	It is mainly used for Rearing of poultry .	Bamboo made structured. It looks like a bag having small door at one side of the structure.	Khakuwchang Debbarma	Patni Para Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Dol (kokborok language) or grannery	It is used for store the paddy grain for long time use.	Bamboo made plastered with mud.	Suchitra mohan Jamatia	Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Jangini (kok-borok language)	It is used as a object in which other material are kept and let them for drying in sun.	It is made off of bamboo and looks like sieve.	Suchitra mohan Jamatia	Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Indigenous plough	It is used for the ploughing soil.	It is a wood structured.	Durga Manik Jamatia	Noabari, Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Jowal (kokborok language)	It is used for attaching two bullocks during ploughing by indigenous plough.	Wood or bamboo made material.	Durga Manik Jamatia	Noabari, Killa



Waksha nok or Piglet house (kokborok language)

Owner:-Suchitra mohan Jamatia

Location:-Killa

Function or used :-

It is used for keeping piglet.



Chakhui khok (kokborok language)

Owner:- Durga Manik Jamatia

Location:-Noabari,Killa

Function or used :-

It is used for making soda by keeping ash

Sorok (kokborok language)

Owner:- Durga Manik Jamatia

Location:-Noabari,Killa

Function or used :-

It is used as covering material of food .it is made by soil.



Hatrai (kokborok language)

Owner:- Durga Manik Jamatia

Location:-Noabari,Killa

Function or used :-

It is used for keeping hot cooking material

Chokra (kokborok language)

Owner:- Durga Manik Jamatia

Location:-Noabari,Killa

Function or used :-

It is used for storage kitchen material



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Khupa (kok-borok language)	It is used for closing of cattle mouth during ploughing.	It is prepared by bamboo or nylon net with rope which is used to close the mouth of cattle during ploughing so that they will not eat any grasses and do not waste any time.	Durga Manik Jamatia	Noabari, Killa



Ruwang Dajaknai (kokborok language)

Owner:- Durga Manik Jamatia

Location:-Noabari,Killa

Function or used :-

It is used for during pushra making

Homemade water tank

Owner:- Kuphu Jamatia

Location:-Noabari,Killa

Function or used :-

It is used for storing of water



Langha(kokborok language)

Owner:- Durga Manik Jamatia

Location:-Noabari,Killa

Function or used :-

It is used for carrying material.



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Dapa (kokborok language)	It is used for smoking purpose.	It is normally made of bamboo used for smoking of hookah, cheroot etc.	Durga Manik Jamatia	Noabari, Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Washung Gudak (Kokborok language)	It is used for making gudak or dry fish.	It is made by bamboo with two nodes and one internodes. One side of bamboo is open and other side is remaining closed with node. Fishes are put inside the internodal portion of the bamboo and pressed it after which it is smoked in fire.	Subhash Dayal Jamatia	Twirupa Bari, Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Janta	It is mainly used to crush sesame, pulses for preparation of “Dal” and oilseeds like mustard etc to make oil.	It is made up of stone or cement. It consists of two round shaped cemented structure of equal sizes. These two parts are connected with iron rod which is fixed with one cemented part. The non fixed part has an hole where through pulses or any other material which need to be grinded are placed.	Mr. Manish Roy	Chandrapur, Agartala



Name of the ITK: Muilak
Collected Place: Killa
Purpose: Seed storage and spices container.

Name of the ITK: Land leveler (Moi)
Collected Place: South Brajendra nagar
Purpose: For leveling land for cultivation.



Name of the ITK: Man weaving machine
Collected Place: Killa
Purpose: For pachra making purpose.



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Natai Or charki	Thread is prepared and separated from cotton by spinning the thread with this.	It is made by wood.		Noabari



Name of the ITK	Function	Preparation method	Place of collection
Baati bokhrok and patini	It is used for preparation of local alcoholic beverages or wine by the tribal people by boiling the rice which is kept for soaking for 2-3 days.	It consists of one aluminum container, three earthen pots and two long channels made off of bamboo or wood. Ricce is boiled in earthen pot with the help of hot steam which is evaporated from the aluminum container by applying stem at the bottom of the container. The steam evaporated from the boiled riec is collected in other two earthen pots through the bamboo made channels and the earthen pots are cooled with cold water so that it becomes liquid which is the ultimat product.	Joying Bari, Killa



Name of the ITK	Function	Preparation method	Name of the farmers from whom collected	Place of collection
Da	used for sowing in Jhum	It is iron made with sharp edge at one end and wooden handle at other end.		Chittamara, South Tripura