

Ethnoscience and Traditional Technology in **INDIA**



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Ethnoscience and Traditional Technology in India

[Volume 1]

Editors

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AAYU PUBLICATIONS
New Delhi 110086

Published by:



AAYU PUBLICATIONS

D-134, Agar Nagar, Prem Nagar-III

New Delhi-110086

Tel: 09910728725, 09654504227

Email: aayupublication@gmail.com

www.aayupublications.com

Ethnoscience and Traditional Technology in India

© Publisher

First Edition 2016

ISBN: 978-93-85161-27-8 (Set)

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PRINTED IN INDIA

Printed at Unitech Graphic Point, Delhi

CONTENTS

VOLUME 1

<i>Foreword</i>	ix
<i>Preface</i>	xiii
<i>List of Contributors</i>	xix
<i>List of Tables</i>	xxvii
<i>List of Maps & Diagrams</i>	xxx
<i>List of Plates</i>	xxxix
1. Ethnoscience, Traditional Knowledge and Inclusive Tribal Development <i>Kamal K. Misra</i>	1
2. Tribes and Their Indigenous Agricultural Knowledge: Dimensions and Relevance <i>K. Anil Kumar</i>	16
3. Resource Utilization Through Indigenous Tools and Technology: A Case from the Baiga Village of Central India <i>D.V. Prasad</i>	48
4. Ethno-science Muddled: Changing Indigenous Knowledge and Technology of the Nomadic Pastoral Van Gujjar <i>Alok Pandey</i>	66
5. Ethnoscience of Indigenous Iron Making in Central-Eastern India <i>Basanta Kumar Mohanta</i>	81

- | | | |
|-----|--|-----|
| 6. | Antiquity of Iron Technology in Central India: Some Ethno-Archaeological Evidences among the Tribes of Central India
<i>Vinay Kumar and Sulekha Banerjee</i> | 109 |
| 7. | Iron-Metal Craft: Agaria Economy
<i>Amit Soni</i> | 118 |
| 8. | Environmental Factors Influencing Technology of the Tribes in Central India with Special Reference to Baigas of Madhya Pradesh
<i>Pinki Purkayastha and Pulak Das</i> | 125 |
| 9. | A Note on the Traditional Technology of the Tai-Khamtis of North-East India
<i>Chow Chandra Mantche</i> | 132 |
| 10. | Changes in Traditional Knowledge of Rope Making among the Birhor of Jharkhand
<i>Gango Nath Jha, Nishat Ashrafi and Divya Bharati</i> | 149 |
| 11. | Traditional Pot Making Method of the Tangkhuls and its Significance
<i>H. Shimreingam</i> | 156 |
| 12. | Traditional Technology of the Akas of Arunachal Pradesh
<i>Dusu Sambyo</i> | 165 |
| 13. | Distillation of Rice Beer among the Hmars
<i>Ruolkhumzo</i> | 175 |
| 14. | Revisiting Indigenous Knowledge of Cloth Manufacturing in the Maras Society in Mizoram During the Pre-Colonial and Colonial Times
<i>Priyadarshni M. Gangte</i> | 180 |
| 15. | The Manufacturing Techniques of Tribal Coins in Ancient India
<i>Devendra Kumar Singh</i> | 191 |
| 16. | Role of Endangered Languages in Preservation and Conservation of Traditional Technology
<i>V. Muttinama Tha</i> | 197 |

TRADITIONAL TECHNOLOGY OF THE AKAS OF ARUNACHAL PRADESH

Dusu Sambyo

Introduction

The Akas¹ a minor tribe of Arunachal Pradesh were one of the most significant tribe during the Ahom² and the colonial days as recipient of *posa*. They reside in East Kameng and West Kameng districts of Arunachal Pradesh who are known as *Koro*³ and *Hrusso*⁴ respectively belonging. Elements of Vaianavism cult is reflected in *Aka* religious life and influence of Buddhism have faded amongst them. Their village council is *Meilley/Raiz*⁵. Institution of Friendship *Thumonna*⁶ reveals their great hospitality towards their guest. The concept of *Rani* system has evolved after the demise of the *Aka* chief *Thagi Raja*⁷ and is hereditary. As per the 2001 census, their population was only 3531.⁸

In this paper an humble attempt is being made to project the traditional technology of the *Akas* of Arunachal Pradesh.

Art and Design

The advent of modernity, indeed has bought a change in the everyday lifestyle of their tribals yet the basic arts and crafts and their technique of production has not changed much.⁹ In context of Arunachal Pradesh, all the tribe has the form of making various art and crafts with the utility of traditional technology which they have imbibed from their parents and the community people since generation to generation. The *Akas* too are no exception in this regard. The most common form of the *Akas* art is their drawings on wood in their houses.

At the entrance of a house in *Karangnia* village, there are found some crude and simple drawings on wooden sticks. The figures and lines in these drawings are drawn usually with the liquid of *lingchang* (pine-resin), the essence of which gives black dye. Also the designs are beautifully scribed and curved in the comb and the fine weaving sticks with knives. The *Akas* manufacture indigenous tobacco pipes and comb made out of bamboo with porkes-work design.¹⁰ The *Akas* however possess considerable proficiency in the art of basketry in which particularly the men folk engage during their leisure hours. The *Akas* make baskets of different shapes and sizes with bamboo which is plentiful in this region.¹¹ Wood carving is almost absent among the *Akas* but they have to make designs and simple stylized drawings on wooden frames, combs and tobacco pipes. It appears that symbolic drawings having socio-religious imparts are executed on special occasions on wooden frames at the entrance of a house. Yak tail is used for the strings of bamboo. Cowries are often used; the *Akas* use them as their sashes.¹² The *Aka* fiddle in a curious kind of instruments, hairs from *mithun's*¹³ tail serve as strings for the bow and piece of skin, well stretched, covers the bamboo cup which is used for the bowl; the resin with which the bow is occasionally rubbed is attached in the most convenient manner to the side of the bowl.¹⁴ The arrows, some of which have iron barbs, are usually poisoned with aconite; the aconite is mixed up with some kind of adhesive substance, and struck on to the arrow head.¹⁵ The *Akas* make bamboo bangles and earrings, which are occasionally decorated with various designs.¹⁶

Cane Bridges

These are two kinds, of which bridges noticed in the *Aka* hills viz, the cradle suspension and the *hako*. The former, which is used when the river is very deep and rapid, is formed by more long bank; they attach at either end a kind of scaffolding of bamboo, which is kept securely in position by the aid of large stones pitched around it. If there is a convenient tree, one end of the cane is attached to it. Round the thick cane, three or four thin cane loops are attached, and to this, is fastened another cane which is used as a pulley; the voyagers seats himself in the cane loops, throws head well back, grasps the cane above him, throws his legs over the cane, and allows himself to slide down the cane. The width of the river *Maj-Bhorali* where the *Akas* cradle bridge is constructed is about 65 yards. The roadway is made of bamboos and the whole structure, which is rather infirm, is tied together by cane lashing and creepers.¹⁷

Cane and Bamboo Carpentry

Bamboo is obtained from the grooves which are quite abundant in these parts. After being cut into thin pieces, they are woven in different ways to give shape to various types of baskets. A common type is the man's basket. Another variety is the rice basket, used by women for storing corn or seed when they go for a... a third type of basket, useful for keeping the fish-catch, is known as *gizu*. Baskets of cane are also made, the most common being basket used for carrying food while on the move from one place to another.¹⁹ They are able to carve only a few jars out of bamboo for their daily use.²⁰ Apart from it fish traps, baskets to keep fowls are also made. Various crafts out of cane and bamboo are manufactured locally by the Akas. Different size of bamboo baskets for different purpose prepared are a common type basket (*Mou*) another variety (*biu*) and dish catching basket *gizu*. Cane basket (*Schri*) for carrying food while on the move from one place to another. The cockade with spikes projecting is a privileged decoration for a hunter who has killed tiger.²¹ On special occasion, men wear a kind of ring-cap of bamboo called *Musgera*.²² Aka men have their ear-lobe pierced and generally bamboo tubes are inserted into the holes.²³

Weaving

Knowledge of weaving is very limited among the Akas, who can only produce colourful bags as they depended on plains for cloth.²⁴ Elwin remarks that in the Aka region there is very little tradition of weaving.²⁵ It is interesting to learn that the two, of the villages Jamiri and Hussigoan, did most of the weaving in this area. Howsoever, the reference made above is confined to *Jamiri* and *Buragoan* villages. The Akas did not have any cult of weaving and hence largely depended on neighbouring of (the *Monpas* and the *Sherdukpens*) and Assam plains for the supply of their cloths.²⁶ Rather, they have bamboo and wooden equipments for weaving. The stick used for their weaving is beautifully designed. These are, however, neither cotton, nor hemp and flax plantation to meet with the only fiber used by them and the ... as well as all the other hill tribes, is that derived from the kind of a tree known in Assam by the name *Odal* and use for nets and ropes. The consequence is that, the women of the Akas neither spin nor weave, but rely for their cotton cloth from the plains. Nor do they breed the silkworms known to the Assamese. Though they covet the *Erica Bor-Kapore* of Assam, and the finer silk *dhuties*, yet they never took trouble of introducing the silkworm into their hills.²⁷ In fact, the weaving was found in scanty of the *Koro Akas* who knew dyeing process used in the jackets, the women wear.

Blacksmithy

Most of the major tribes developed blacksmithy and produced their own weapons, implements and other household tools. Tribal smiths worked in iron rods which are brought from Assam plains and Tibet as well. The *Akas* usually manufactured their own arms and other implements.²⁸ They prepared small knife, *dao* (sharp iron sword) both small and big, spear-head and arrow-head with the irons. The skill was inherited from generations' together.²⁹

Grain Grinding

The *Akas* for pounding grains used the wooden grinder known as *Mulibo Grullu*. The base is made out of the big trees wherein it is curved and hollowed to store the grains. The pole stick is smoothly prepared to hold it with the hand to pound the grains. Mostly the grinding is made by these grinders. It is told that Thagi Raga during his visit to the Sherdukpen area have brought stone grinder from there to Buragoan village in the first half of 19th century.

Alcohol Distillation

The alcohols such as *Laopani* and *Mingri* are prepared, but apart from it *Arah* is also made. *Arah* is a distilled drink and therefore, more expensive. There is no separate or common distillery in the *Aka* village. Among the *Akas*, each house prepares drinks for the same alcoholic drinks for its own use. The above three alcoholic drinks are prepared from the same corn, maize or millet. The varieties are dependent upon the alcoholic content. *Laopani*, which is a wild brew and the most popular drink of the *Akas*, is prepared by a simple method. The corn (maize or millet) is first bailed in adequate quantity of water, and is then allowed to cool. A herb known by the local name of *Ta* is added to the liquid. After the day of two, the liquid ferments can be taken for drink. *Mingri*, the second variety is obtained from *laopani*. *Laopani* is further heated and allowed for fermentation for more days (7-15) which yields *Mingri*. *Arah*, the highly distilled drink, requires an elaborate process for its preparation. *Laopani* is first boiled in a closed vessel over which another pot, containing water is placed. And empty pot is kept in the vessel to collect the vapour, which is then condensed and the condensate is collected in the pot. After adequate fermentation, it can be used as a drink.³⁰ It is believed by the *Akas* that during the process of distillation, during the festivals, the priest chants hymns of the concerned deity to make it more intoxicated.³¹

Hunting and Fishing

The Akas resort to hunting for the wild animals' meat, hides, bones and their organ for the purpose of their traditional economy. L. A. Waddel mentions about that the *Hrusso* use the cross-bow and poison arrow.³² A light spear for the purpose of training, and a narrow sword, about feet long is the common implements. They manufacture their own arms; the iron and steel, however, they buy from Assam.³³ These weapons are not only used in war but also utilized in hunting to kill the animal. Various traps are made to trap the animals, birds and fishes. A subsidiary occupation is fishing which is executed either by the individual or community groups are involved. As such, no specification of seasons is resorted for fishing. Women's participation are also found in this aspect. Places where small stream exist, they lay conical hallowed trap made out of bamboo which on the either side is piled with stones, so that it won't be flown away by the river current. Fish gets trapped on the narrow end portion of the trap usually facing current of the water.³⁴

Traditional Household Articles

The different articles used as household articles are:

1. Food storage container, bamboo mug, jar, pots.
2. Bamboo vessel to drink local brew
3. Earthen pots, forks, spoons,
4. Bamboo and wooden sticks of various sizes and shapes for weaving
5. Weapons of war and chase

Bow (*Tkeri*), arrow (*moo*), bamboo made poison at arrowhead (aconite poison), quiver (*thawan*), Dao (*Wetz*), Shield (*Wofu*) made of animal skin.

6. Basketry: a common type basket (*mau*) another variety (*Biu*) storing corn. Cane basket (*Schri*) for carrying food while on the move from one place to another.
7. Fish trapping basket (*gizu*)

Hutubo: A wine container made out of dried gourd.

House Construction

The *Aka* house is an stilt bamboo and wooden houses with banana leaves for roofs constructed at the slope with considerable distance to their neighboring house in the village. The *Aka* house is a long structured raised on a platform about six feet above the ground and divided into two compartments by a partitioned wall. The space between the platform and the ground serves as a shed for pigs and goats of the household.³⁵ Erection of the foundation of house is 3 to 5 feet or may vary as per the location of the area if it is a slope. The base is constructed with wooden poles/planks by digging the soil and leveled vertically of same height. It is tied with wooden poles with cane ropes horizontally so that over it splitted bamboo sheets can be laid and is tied with ropes, perfectly. The ceiling is cross partitioned with the bamboo or wooden poles. Most of the ceilings enable the visibility of inside roof. The roof is usually thatched, and often supported by bamboo sheets.³⁶ It is mostly made out of Banana leaves meticulously. The poles of the ceilings supplement for keeping meat, wine and other articles etc. The room inside has only two chambers bigger chamber accommodates the fire hearth in the middle region and floor at the four corners wherein they can sit and sleep. The inner smaller chamber is meant for sheltering the menstruated women or lady. They know hygiene of it and those women are not allowed to touch the cooking pots during their menstruation period. Even the food is also supplied inside.³⁷ The four walls of the house are usually high. The main entrance to the house is from the front though; there are inlets both in the front and at the rear of house. Just behind the front door, there is the first and small compartment called *Thumona* and built specially for guests. As a part of the social tradition, guests from even distant villager visit their friends and relatives from time to time. Hence the special provision for their lodging in every *Aka* house with a view to ensure every possible comfort to them. Even when, there is no guest staying, the *Thumona* is left unoccupied. Next to this compartment for the guests, is a small enclosure called *Nemkhowri* which serves as the main entrance to the inner big hall.

Such a *nemkhowri* is usually made also at the rear of the house. The main hall, known as *Uluri*, is a big compartment standing behind the above enclosure. It is the main and the only hall, practically for all purposes for the occupants of the house. Where the families of two brothers have to live together (which in fact is not common as the people do not favour joint family system), they may occupy two different sides of the same main hall, and there being no

provision for a partition wall inside the *uluri*.³⁸ In such a case, what may be required is not a separate room but only a separate hearth for each of the families. Almost every compartment in the house has at least one hearth with an iron hearth stands known as *Aeschiperi* are made from the plains and are considered a valuable part of the household property. On one side of the house, there is a small cell to serve the purpose of store-room where the articles of the household or any other belongings of the owner may be kept. This is known as *Rin*. A small granary is built usually near the house and food supplies for the year are kept here. This is called *Nechi*.³⁹ The houses in *Aka* villages are not compact, they are generally scattered throughout the village. The house is built with the joint labour of the members of the village who help one another in building a house for every household of the community. No remuneration in cash or a kind is required to be paid for the labour. Feasts with rice, rice beer, vegetables and meat are offered by the house owner.⁴⁰

Granary (*Mechi*)

The granary is constructed at the raise of three to five feet based on the slopes of the land. Poles of wood are placed after digging holes on the earth. These poles are tied with bamboo poles with cane ropes. At the base splitted bamboos are arranged in such a way flat to make the bed. The four sides are covered with the splitted bamboo walls. At the roof, banana leaves are meticulously tied in row and column on the bamboo sticks. A small door is made to make inlets to store their crops either maize, millet, paddy, corns, pumpkin, potatoes, beans etc. Also rat trap is kept to safeguard the stored edible items.⁴¹

Conclusion

Traditional technology of the *Akas* of Arunachal Pradesh reflects their skills and innovative ideas what they had developed and learnt from their forefathers and passed this knowledge to their generation. The topography and natural resources have made these tribe to shape up their culture. For instance, preparation of conical basket is the outcome of their hilly, slopes mountainous region and availability of natural resources like bamboos and cane in abundant. The tools for war, chase and hunting is another factor for the hostile life in jungle area that they live. Sitting mats are woven out of wild leaves, small bamboo spices. Various craft, construction and work are carried out with

cane, bamboo, stone and bamboo work the houses, suspension bridge, granary, mugs, baskets of various size and shape meant for different purposes, war and chase weapons, agricultural implements, fishing traps, rope, bamboo and cane rings to adorn ceremonial structure are testimonial of their traditional technology.

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