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## Eri Silk Worm Rearing of the Bodos: An Overview

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## Abstract:

The art of Rearing Eri silkworm is a traditional culture of Bodo's. It also related with the socioeconomic life of the community. Farming Eri worm they produce both the pupa and cocoon. Pupa is used to eat as delicious food and source of protein and by spinning cocoon they prepare yarn for the weaving clothes. Both the pupa and cocoon has market demand which helps the family in the development of economic condition. The works of farming are carried out by the women. As a result, the women of the family do hard labour for rearing the worm. They do not grow the host plant at home but collect it from field that naturally grown. So, goes out in far place searching it and carry off them which increase their workload. In case of spinning cocoon, they use handmade drop spindle which is consume much time. Still today the farming and spinning process is done in traditional way in village area. The government should take necessary steps for further development in order to increase the production to assist economic condition of poor farmers. In this paper tried to explain the Eri silkworm farming culture of the Bodos, problems face by the care takers and remedial measures for it.

Keywords: Bodo's Eri industry, prospects, problems and measures.

#### 1.0 Introduction:

The Eri silk worm rearing is one of the traditional practices of the Bodos. It is done to produce cocoon, an essential raw material of clothing. The Bodos regard it as a type of cultivation which assists them in their economic system. In ancient time almost every family of the village area involved in this work is production of cultivation. In order to strengthen their economic system, they are being practiced animal husbandry like keeping of cow, buffalo, pig, goat, poultry etc. besides cropping. Their rites, rituals and festivals are always related to cultivation. In observation of various festivals like spring time festival "Bwsagu" and religious festival "Kherai", people of the community wear colorful clothes. In early period, the Eri silkworm rearing was considered as a source of such beautiful clothes. That is, the necessity of all clothes of the family were tried to fulfill by rearing the Eri silkworm and cultivating the cotton plant. Though they cultivated cotton plant for yarn,

rearing of Eri silkworm was given much important and regarded as primary sources of raw materials for clothing.

The art of rearing Eri silkworm for manufacture of variety clothes have been prevailing in Assam since ancient time. The Indo-Mongoloid Bodos are one of the dominant tribes in Assam and have been credited to introduce agriculture, sericulture and weaving in the country. The mentioning of such farming practice by them can be found in the book like "Kirata Jana Kriti" by renowned historian Sunity Kumar Chatterji. In "The Kocharis", Rev. S. Endle also mentioned about the Eri silkworm rearing of the Bodos for manufacturing of Eri clothes. The practice of rearing Eri silkworm among the Bodos is traditional but has high quality and great value which assists in the uplift of family income.

### 1.1 Objectives of the Study:

The main objective of the study is as follows-

- 1. To explore the Eri silk worm rearing culture of the Bodos and its economy contribution to family.
- 2. To find out the problems that faced in rearing of it.
- 3. To find out the remedial measures.

## 1.2 Methodology:

In writing this paper both the descriptive and analytical method is used. Required data is collected both from the Primary and secondary sources. For the best report the primary data is collected approaching to reared person and adopted questioning and interviewing method. The books, journals, souvenir, relevant web pages etc. are used as secondary sources of data.

## 1.3 Rearing of Eri Silk Worm:

The Eri silkworm is like a caterpillar which is reared by people at home in order to product cocoon. The life cycle of Eri silkworm is alike butterfly where four stages are included. These stages are egg, larva, chrysalis and adult. Its complete life cycle may take varieties days depending on season. In summer it takes 50 to 85 days to complete the life cycle while in winter, it may take 81 to 90 or more days. Its first stage of life is very small and rounded egg. In this stage, tiny silkworm grows inside the egg. When the egg hatches, the silkworm starts to eat tender leaf. As the egg hatches, caretaker hosts plant's leaf. They eat and grow quickly. The silkworm grows by moulting (shedding the outgrown skin) for several times and reaches to adult stage. That means the exoskeleton (skin) does not stretch or grow by growing of worm. By reaching full length/ weight, they form themselves into a chrysalis. At this stage, the worm stops to eat and works for cocooning.

The climate condition of Assam is suitable for rearing of Eri and alike silk worm. The areas of Assam are endowed with natural forest having numerous flora and fauna. The Eri silk worm rearing is one of the traditional cultures of the Bodos. They are practicing this culture since the time immemorial. It is regarded as poor man occupation living at remote area. The Eri silkworm can be reared four to five times in a year according to availability of primary food plants. The rearing of Eri silkworm is very simple and easy in comparison to other silk worm. The said silk worm is feed castor (Ricinus communis), which is primary food plant followed by Kesseru (Heterpanax fragrans) and Tapioca (Manihot esculelenta). It also feeds on payam, Borpat, Borkesseru, Sankru etc. These are known as secondary food plants.

The Eri silkworm is reared inside of the house. The Bodo women folk adopt traditional method for rearing the said worm. They conduct bunch rearing method. About 15 to 20 leaves of castor or branches of Kesseru are tied together to make a bunch and is hung vertically on a horizontal bamboo pole or wire support. Then worms are allowed to eat the leaves. This method is very simple and easy but large number of worms cannot be accommodated on a bunch. So, more bunches have to prepare and more space is required for hanging bunches. Hence, only limited worms can be rear in a time depending on space.

For the rearing of Eri silkworm, minimum man power is required for cleaning the bed and to replace the feeds. Requires strict maintenance and timely supply of food is mandatory. The ripen worm (When become chrysalis by stopping to eat) are picked up and placed on montage for cocooning. It completes the cocooning by 6 to 7 days. When the cocooning is completed, the pupa is extracted without killing by opening the cocoon.

The rearing of Eri silkworm does not requires any capital, but needs labour and time. In the rearing of Eri silkworm, mainly women folk are engaged, but close support from the men is needed.

### 1.4 Eri Cocoon and Bodo People:

The Eri silkworm rearing and spinning of varn from the cocoon then weaving of clothes is like heart and soul of Bodo women. In early period, it was regarded as art of the life where sheer happiness of the heart is concerned. To spin the cocoon, tool of bamboo called 'Thaokri', a conventional drop spindle spinning device is used. Traditionally, cocoon is spun by this device. Today spinning machine are applied to spin the cocoon. For spinning the cocoon in traditional method, firstly the cocoon is boiled and fermented which needed about twenty to twenty-five days. But, in spinning with machine, this process is not required. The spinning by traditional method consumes more time. A worker can spin 150 to 200 cocoons if she engaged whole the day.

The yarn produced from the cocoon is called 'Eri thread'. The Bodos use it mainly to woven 'hisima' (big cloth uses in winter season) and 'sadri' (scarf). Besides these, general clothes like dhokhona, gamsa, shirts, begs, hanker ship etc. are also made from Eri thread. The clothes prepared from the Eri thread are called Eri cloth, which is very soft, warm, strong, and durable. So, clothes and dresses made from Eri thread is very costly, and has high demand and great value in market.

## 1.5 Problems of Eri Industry:

Though the cultivation of Eri silkworm can be done with zero investment, it is not an easy task. It is surrounded with several problems. It has been mentioned in the above that for rearing the said worm, man power is firstly required. A man engaged in rearing of Eri worm; do not get time for other work. He/she should remain busy whole the day in care taking of the worm. The caretaker has to work off time hour job spreading the service 16 to 18 hours in a day. But due to lack of proper market and lack of commercial knowledge, they deprive and do not get real value against hard labour.

Another mentionable problem of rearing the said worm is lack of host plants. The poor people who have no land for cultivation other crop are basically engaged in rearing the worm. As they do not have crop field, cannot cultivate the host plant. The land holding people who rear the worm are also not think about cultivation of host plant. They mainly depend on naturally available of host plants. Hence, they face in problem of feeding, so cannot rear large numbers of worm which limits their production and income. As do not cultivate the host plant, they have to go out for searching the feed leaves in far places or jungle and have to carry heavy load to home. Such situation brings boring to rear the worm. Besides, due to some reasons such as urbanization, deforestation, being rare of open fields where the host plants grow by themselves, finding of feed leaves is being difficult. So, rearing the Eri worm is abolishing.

The Eri worm is reared inside of the house. It is indoor rearing worm. To practice this cultivation, extra house or separate room is required. But the Eri rearing work is practiced by the poor farmers and they cannot prepare extra room or house.

The production of cocoon by rearing Eri worm consumes enough time. But there is no cocoon or yarn bank to store the varieties rich silk found in different places in order to find best market price. So, farmers deprive from right price for their labour. They are exploited by the middleman traders. The farmers offered very low price. These are some causes of raring the rearing of Eri worm.

## 1.6 Measures of Development:

The Eri worm rearing cultivation is covered by so many problems and difficulties. To enrich the industry and to make it profitable source of income for welfare of farmers, both the Government and farmers themselves should adopt some measures. It is mentioned in the above that the rearing of Eri worm is regarded as poor man cultivation. It is reared by poorest of the poor strata of the society. Due to enough organized marketing system and cocoon or yarn bank, the farmers could not get remunerative price. The Government and department of sericulture can take initiative measures for assured marketing system and to establish cocoon or yarn bank in different places of Assam as well as in BTC area. It should mention that the Government of BTC established "Vanya Silk Cocoon Bank" at Udalguri District with the financial assistance Central Silk Board and Council". It was done for the welfare of farmers so that they could get remunerative price. This was good step from BTC Government towards poor farmers, but not enough. More and more such steps should be taken by the government.

Besides, the Government can arrange financial assistant through the sericulture department for construction the rearing house to those farmers who wants to rear the Eri worm. Conversion of cocoon into yarn for value addition, the traditional method and system is not sufficient. For good quality and speedy of work, each and every farmer should have application knowledge of modern technique and devices. To solve such problems, besides supplying modern motorized reeling and spinning machine, department can organize training, group demonstration and workshop.

On the other hand, the farmers should cultivate the host plants. To cultivate the Castrol plant for feed production, no requires of more land. It can be cultivated in the house premises. Such steps will help to overcome the shortage of feed leaves and would encourage for rearing more and more silkworm. Besides, the rearing room should be arranged by themselves without waiting the Government aid. Making arrangement of an ordinary room for rearing the Eri worm is not so hard task. There only requires willing power of the man mindset should the clear. So, the farmers should take initiative to solve such problems. They should participate in Government organized training, group demonstration, workshop etc. to make themselves expert and qualified in said field. The more production assists more financial benefits to the family.

## 1.7 Finding:

Assam enjoys unique distinction in production of all three varieties of commercially exploited natural silks like Eri, Muga and Mulberry. Report says that in Assam the largest number of raw silks is produced in BTC area and Karbi Anglong Autonomous Council occupied the second place. There exists considerable scope for increasing the production enlarging job opportunities and income through labour intensive and remunerative enterprises like sericulture. The rearing of silk worm can be taken as one of the major sources to alleviate the rural poverty increasing the participation rate in sericulture. The sericulture is one of the best ways for economic activity through self-employment of unemployment person. The silk worm rearing culture was practiced and still practicing by unemployment women of Bodo family to strengthen their economic. To practice this cultivation, no many lands and money as capital is needed. Uneducated people also can engage in this work to gain profit and self- reliance and enable to provide contribution to the family's economic condition.

The Eri silkworm rearing is practiced more in present BTC area than other part of the Assam. At present, the sericulture department of BTC Government taking initiative measure to improve the industry by providing financial assistant and training to the farmers. As a result, the production of Eri raw silk showed an increasing trend during last few years.

The Bodos rears the Eri silkworm for multipurpose. Besides producing cocoon to spun yarn for weaving the clothed in order to fulfill the family needs or to sell them, the pupa is consumed as delicious food. Today, the pupa also has demand in market and sold it in good price, i.e. Rs. 400 to 500 per Kg.

#### 1.8 Conclusion:

The Eri silkworm rearing in Bodo Society is one of the traditional cultures. They reared it to fulfillment the needs of clothes. As the Eri cloth is soft, warm, strong and durable, it has marketing demand. But, still today, the most of the Bodo people rears it in traditional way. For more benefit and income, this cultivation should be practiced adopting modern technique and method. Today Government has introduced various schemes for modernization of handloom, to motivate the rear person and weavers. For development of the industry along with enriching their economic condition, the farmers also should come forward. The State Government, Central Government and Central Silk Board also has responsible to take more and more initiative for further development of the said industry encouraging the farmers. Besides, some other societies of the state concerned in this field also have to do a little more work to survive and continue the culture that existing Among the Bodo society. In striving of all, it can be metamorphosed into modern industry. For this courage and enterprise, imagination and guidance are required.

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