

Interrelationship Between Potato Cultivation and Sal-Leaf Collection: A Case Study From Chandrakona Road, Midnapore¹

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KEY WORDS Industrialisation. Urbanization. Urban. Market.

ABSTRACT The four-point crossing at Chandrakona Road of Midnapore District has been witnessing rapid socio-economic changes during the last two decades due to the introduction of potato as a cash crop. Large tracts of agricultural land have been employed for potato cultivation by the local rich agricultural entrepreneurs. Linked with this cultivation of potato a flourishing business of huge cold stores as well as transport have grown up over the period. All these developments have connected this region with the wider economic network crossing the boundaries of the district and the state. Some fifteen years ago the traditional collection of Sal (*Shorea robusta*) leaves from the adjoining forests by the local tribals and backward caste peoples met the local demands only. But nowadays truck-loads of Sal leaves are being transported by a group of non-local businessmen to distant regions of the country. This has not only led to an unprecedented increase in the volume of business relating to Sal leave plates, but it has also given rise to wanton exploitation of Sal plants in the forests.

INTRODUCTION

The district of Midnapore possesses a considerable proportion of the forests in West Bengal. The western part of this district specially abounds with forest, of which Sal (*Shorea robusta*) is the principal tree. Owing to the high economic value as well as usefulness of Sal-logs, indiscriminate felling of Sal trees has continued for a long time and may be traced back to the British period. Indiscriminate felling and overexploitation of the forest covers in this region for about two centuries have resulted in large scale deforestation as well as denudation

and erosion of soil. This is not an isolated picture of Midnapore alone but it has been an all-India phenomenon. The importance of forest and the awareness to preserve forest is relatively a recent phenomenon. Several measures have been taken by the Government as well as by some voluntary organizations to protect the forests. With a view to protecting and regenerating the degraded forest lands, and ensuring a sustainable increase in productivity in tune with the National Forest Policy, the State Forest Department launched a set of community forest management programmes as early as 1970. Several rules, both prescriptive and prohibitory, have also been deployed in order to resist further forest degradation and enhance forest regeneration (Malhotra and Poffenberger, 1989). Whether the laws to this effect may have flaws or not is a debatable issue. But the intention to protect the existing forest area and to promote measures to increase the forest base is beyond question.

It is now well known that the protection and regeneration of forest are not phenomena isolated from their milieu. A large number of socioeconomic issues are involved in the protection of forests, particularly when a rural economy manifests both local and regional features. In this paper an attempt has been made to analyze one such rural economic situation in which the collection of Sal leaves by the villagers have undergone a radical transformation in terms of its higher sale value over the period of a decade or more. This transformation could be attributed to the development of cash cropping which has led to the interlinking of a rural economy with wider inter-district and inter-state network of economic interest groups and business.

1. The paper was read in a National Workshop on "Ecological Impacts of Joint Forest Management" organized jointly by the R.N.L.K.W. College, Midnapore and IBRAD, Calcutta at Midnapore during August 18-20, 1995.

OBJECTIVES

The objective of the present study is to identify the process of relationship between the cultivation of a cash crop in a forest-based area and increasing exploitation of the forest. Apparently, these two phenomena could be treated separately but a closer look has revealed a connection between the two. This sort of study, involving an ethnographic rather than mathematical approach and quantification, can bring into sharp focus the crucial characteristics of the situation before making a plan relating to the protection of forest.

METHODS AND MATERIALS

Observations through participation and scanning of literature as well as some records and documentary survey are the primary methods applied in the present study. A detailed interview of the persons associated with activities pertaining to the problem was undertaken to cross check the data. Some available literature relating to the problem and working papers have also been consulted. The study is being undertaken as a case study and therefore no attempt towards generalization has been made.

THE CASE

Chandrakona Road is originally the name of the four-way crossing. The metal roads from Midnapore to Bankura and from Ghatal to Sarenga meet and bifurcate one another at this crossing. There is a town called Chandrakona, which lies *en route* from Sarenga to Ghatal. Chandrakona town is one among the oldest municipal towns of the district. As the road leads to Chandrakona, the popular name of the four-way crossing is "Chandrakona Road". The original name of the place is Sat-Bankura. The four-point crossing is some 35 km away from Midnapore town, 37 km from Sarenga, 43 km from Ghatal and about 70 km from Bankura (District Census Handbook, 1961).

The present Chandrakona Road is a recently

developed area about to attain the dimension of a town. About thirty years ago the place was typically rural. A tuberculosis sanatorium and two high schools in the vicinity were the only public institutions worth naming. What is important about the place is that the whole area is covered with agricultural lands on the one side and dense Sal-forest on the other. The factor behind the spurt in the growth of the area in a period of not more than thirty years is the extensive cultivation of potato in the adjoining areas. Not that potato cultivation was unknown before. But the installation of cold storage plants providing facilities of keeping potato fresh round the year has gradually changed the scenario. To understand the matter, one has to know about the spurt in the business of potato in this area.

SPURT IN POTATO CULTIVATION

At present West Bengal ranks second in India in the amount of potato cultivated per year. In 1960-61 West Bengal produced some 6 lakh tonnes of potato. During that period, cultivators were reluctant in investing in the cultivation of this crop owing to the fluctuation in the price of potato every year and lack of storing facilities. But the situation started changing after mid-1960s. One after another, large cold stores were established. Anticipating profit in it, the ever alert farmers of Midnapore, Burdwan and Hooghly districts started large-scale potato cultivation. Gradually, the nature of potato cultivation also changed. Farmers in large number utilized the advantage of high yielding seeds and chemical fertilizers along with the expansion of cold stores. The lands which were previously used for wheat and then jute cultivation were earmarked for potato cultivation, to earn more profit. There are also other reasons behind this. Wheat requires 130 days to ripe and get harvested, whereas, potato needs some 110 days. Not only that, wheat cannot be harvested before it is fully grown and ripe but potato can be harvested even before the normal maturity period; only the size and amount of the crop would be reduced. Also, the manure employed for potato

cultivation is not completely utilized and a proportion of it is left in the field for the next cultivation. And the most advantageous point is that because potato grows underground, the harvesting operation of potato automatically makes the land tilled and ready for the next cultivation.

Formerly, the only disadvantage was insufficient cold storage facilities. Increase in the number of cold stores after mid-1960s changed the scenario. The cold stores enabled the farmers to store potato for a considerable period of time and prevented it from decomposition which made them feel safe in investing in it.

Naturally, installation of cold stores one after another encouraged the farmers toward potato cultivation. Since 1970s nearly 20 cold stores have been established in the adjoining areas. The total production of potato in West Bengal in the year 1970-71 has increased to 9.5 lakh tons. In 1980-81 it was 20 lakh tons, in 1983-84, 31 lakh tons and in the year 1991-92 it has reached a record amount of 50 lakh tons (Ananda Bazar Patrika, 1993). During the last three decades the total number of cold stores in this area has risen to 273, including 104 in Hooghly and 68 in Burdwan districts. The decade-wise production clearly reflects the momentum gained by the cultivation of potato within this period of time.

Now the increase in the amount of potato cultivation and number of cold stores has given rise to a flourishing transport business. A huge number of vehicles were required to transport the bags of potato from the field to the cold store for storing and then from the cold store to the consumer market for selling. Naturally, the local well-to-do persons as well as people from adjoining areas invested in this business and a good number of trucks and lorries were purchased. But these new investors, *i.e.* the owners of the trucks and lorries were faced with a problem. The demand of the vehicles was maximum at the time of bringing the product from the field to the store and distributing them from the store to the different consumers markets. Except during the two peak seasons, they sel-

dom got orders to carry goods. Thus they were searching for some form of steadily-flowing orders which, even if offered at a reduced rate, would help them overcome the sluggishness of lean seasons.

SAL-LEAF PLATES

Chandrakona Road is encircled with a wide area of Sal forest. For seventy-five years or more, the local tribal people as well as other people from the low income group have collected Sal leaves from the forest and sold them in the local market. It appears that this process had been in operation for more than three generations. The Sal leaf has a two-fold necessity in the modern consumer market. The green leaves are used generally in sweet shops, meat shops and betel shops for wrapping or covering purposes; disposable plates are made of matured leaves by stitching. These plates are widely used in community feasts, and in road side eating places as well as in selected places in the urban and rural areas.

About 10 years ago two days in a week were fixed for selling Sal leaves: Thursday and Sunday. People from adjoining villages, *viz.* Kiamacha, Aamargora, Kusumasoli, Mahatopara, Pingmali used to come to this weekly hat collecting Sal leaves from the forest. Some came with green leaves and some with stitched plates. The market site is a spot named Kendtala, lying about three hundred metres away from the four-point crossing on the Ghatal-Sarenga metalled road. The place is suitable as there are four large shady trees (including a 'kend' tree) having a wide area under the shade. The sellers from distant and nearby places with their head-load or bicycle-load products used to come here and took rest beneath the trees and waited for the buyers. Previously, the customers were only local shop owners and some interested parties from the adjoining towns. During those days, there was a limited demand for the plates as well as green leaves and in case one brought more than the average bundles of leaves or plates

might have had to take their products back.

The leaf plates are made by the people of low income groups. Those being daily labourers and having no other alternative means of subsistence used to be engaged in this pursuit. Usually the women folk used to go to the forest to collect fire wood and leaves. Only the matured leaves were collected for making plates and the leaves preferred were not very old, not very small and without any hole. They thus were quite selective when they plucked the leaves from the trees or collected them from ground. The leaves were then brought home and allowed to sun-dry for a day and then stitched by pieces of stalk of locally grown grass (called "kharang") or thin sticks of Neem (*Azadirachta indica*). On an average, a woman can prepare more than 750 plates a day in addition to performing all her other usual daily activities. About 10 years ago approximately 40 to 50 thousand plates were usually brought on the market day at Kendtala by the people from the nearby villages. The price then was Rs. 2.50 to 4.00 per thousand plates.

INTRODUCTION OF MIDDLEMEN

The green Sal leaves still hold a good market. Single leaves are used as makeshift disposable receptacles and as packing materials for indigenous 'fast foods' at roadside snacks stalls in the cities and towns and in market places. But, of late, there has been a growing demand for the stitched leaves specially after the introduction of the plate-making machines. The machine works in two phases : melting a scrap of polyethylene by the application of heat between two hand-stitched leaf-plates and then sandwiching them together in a circular mould to make the resulting plate leak-proof and shapely. The uneven margin over the rim is then scissored off. The scissored edges are again used to make bowls of different shapes by the same method making full use of the raw material. Initially, the leaves collected for making hand-made leaf-plates were of the following type : (i) leaves which were slightly matured having at least 6

inches length and 4 inches breadth, (ii) leaves which were without any hole, and (iii) leaves which were not damaged or insect-eaten. But the introduction of the machine allowed them to accept leaves of almost any nature because two plates with a polyethylene scrap sandwiched inside make the poor quality leaves no less important. This in turn minimises the bias of the primary producers in choosing leaves of quality and encourages random leaf plucking.

The usefulness as well as cosmetic value of the machine-made plates make the product extensively used, and thereby increase its demand in the market. The urban/metropolitan markets readily appreciated the usefulness of this plate. Also, the low price and easily biodegradable nature of this plate were the added advantages. Steadily, a vast market for this commodity was created which generated a huge demand for this low-priced cottage industry.

It has been pointed out that plenty of vehicles in Chandrakona Road were in search of assignments throughout the year. In this situation, keeping pace with the fast growing demand of the Sal leaf plates a group of middlemen made their appearance. These people started purchasing the leaf plates from the primary producers directly. They stored the plates in their godowns and supplied truck-loads of plates according to requisitions from within the state initially, and outside the state afterwards. They also enjoyed the 'all time available' and 'cheap rate' facilities of the vehicle which also helped the vehicle owners in the sense that they could get other business deals all round the year on the same terms.

Anticipating handsome profit in it many people started this business and worked as middlemen. The growing demand very quickly induced the installation of more plate-making machines and ultimately promoted the demand for the raw material, *i.e.* the hand-stitched leaf-plates were increasingly in demand.

FOREST IS THE LOSER

The family which brought about two thou-

sand leaves in two weekly market days earlier, now bring more than two thousand plates daily. The weekly market concept has disappeared and almost everyday the primary producers bring plates to the Kendtala. The middlemen, almost all of whom are non-local, specifically residents of Bihar, gather at Kendtala everyday morning. Whatever quality and quantity comes each and every day are purchased by them, obviously after bargaining and rate-cutting, depending on the quality of the plates. The plates are stored in the godowns and sold later.

Many families from the nearby settlements have accepted making of Sal leaf plates as a means of primary subsistence. All the members of the family are engaged in this pursuit. Presently these people are collecting and plucking leaves indiscriminately. In this process the most-affected trees are those which are newborn and have attained only a short height. Plucking of leaves without any prejudice by countless persons daily retard the growth of the trees drastically, thus leading them towards degeneration. Deb (1990) has pointed out some obvious biases operating among the primary producers while plucking the leaves. To mention here some of the direct biases that are perceived as most prevalent while collecting Sal leaves in terms of their suitability for making plates are (a) reddish, over-mature leaves are avoided, (b) green leaves that are too young are avoided, (c) green leaves that are relatively soft are avoided, (d) green leaves that are too thick or coarse are avoided, (e) green mature leaves that are small in size are usually not collected, (f) green, mature, large leaf blades that are damaged in the middle by insects are not collected, and (g) green, mature, large leaf-blades that are insect-eaten at both the margins so as to make stitching difficult are avoided. But the present study has revealed that the great demand for a huge number of leaves everyday has almost nullified those biases. The benefits derived by the producers at the primary level are far from encouraging. The primary producers get about Rs. 8.00 to 12.00 per 1000 plates, whereas the fin-

ished products sell at Rs. 25.00 to 30.00 per 100 plates.

CONCLUSION

The present study is an example of how socio-economic events are interrelated and have serious consequences in the long run. Had there been proper vigilance over the forest area to resist indiscriminate plucking of leaves or had there been a co-operative to purchase the products from the primary producers and to arrange to sell it, the situation would have been different. On the one hand, the forest would not have been facing such threats from unscrupulous human elements, and on the other, the primary producers would have been better paid. However, at present the middlemen are the real beneficiaries and they are deriving profits at the cost of forest exploitation as well as the exploitation of the labours of the local poor.

ACKNOWLEDGEMENTS

This work was done as a part of an ongoing doctoral research funded by the University Grants Commission. The present author is indebted to Dr. Animesh Kanti Paul, Dr. R.K. Das and Shri Abhijit Guha for their useful guidance. The immense help and cooperation offered by the local people of the study area, without which the work could not have been done, is gratefully acknowledged.

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