

Collection and Sale of Minor Forest Produce Among the Tribes of Orissa

A Socio-Structural and Economic Analysis

SCHEDULED CASTES AND SCHEDULED TRIBES RESEARCH AND TRAINING INSTITUTE (SCSTRTI) BHUBANESWAR

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PROLOGUE

Tribals love to live very close to the forest. Good life and happy life to them lies in their performing regular journey to the forest. The forester's forest is the tribal's farmhouse. Forest is their homeland; forest nourishes their life and living. Tree produces are very valuable for the tribal people; trees are the poor people's savings banks. Qualitatively, the harmony of nature and culture is best exemplified in the forest based tribal communities.

The present volume Collection and sale of Minor Forest Produces among the Tribes of Orissa : A Socio structural and Economic Analysis is based on an emperical study conducted primarily among two primitive tribes of Orissa, namely, the Kutia Kondh of Belghar region of Phulbani district and the Hill Kharia of Jashipur area of Mayurbhanj district.

The study explores into the complex bases of relationship that exists between the tribes and forests. The broad aspects of the study are: kinds of Minor Forest Produce available in the study area and their modes of collection, seasonal variation in the availability and collection of Minor Forest Produce, marketing of the produce, man days invested for collection of the forest produce, income generated from such forest collections, and above all, collection of forest produce as a the gender based pursuit. The study also highlights the indigenous skills of the people and their methods and modes of forest management and conservation vis-à-vis the forward-looking forest policy of the government. Suggestions and recommendations have been discussed at the end to ensure effective participation of tribal people in procurement of forest produce and conservation of the forest.

The varieties of forest produce add to the subsistence of the tribal people to a substantial degree. Sale of these produces adds to their income. In the wake of the new forest policy, empirical understanding of collection and sale of minor forest produces by the tribal people assume greater significance.

It is hoped that the book will serve the needs of academics, social scientists and development practitioners interested in understanding the intimate relationship that exists between the tribes and forest. It will help the development practitioners in particular to evolve suitable mechanisms and adopt sustainable measures for conservation and management of forest resources in tribal areas keeping the economic interests of the tribal people at the top.

> P.K. Nayak Director

January 29, 2004

FOREWORD

In a nutshell, the collection and sale of Minor Forest Produce (MFP) nexus circumscribes both socio-structural network and the economic sub-system of tribal societies. In consonance with the eco-cultural niche of tribal habitat, the minor forest produce par excellence plays a significant role in the contextual frame of the assurance, although in a limited scale, for the basic sustenance, amidst their struggle for survival.

The current study although is empirical and synchronic with micro-level orientation raises certain important dimensions concerning especially policy issues and options. The outcome of the study i.e. the suggestions for bettering the operational strategies, thereby triggering goal-attainment will, I hope, help the planners and policy-makers, besides its academic utility for research scholars.

Bhubaneswar The 23rd Marcg1998 G. N. PEGU, I.A.S. Commissioner, Tribal and Harijan Welfare and *Ex-officio* Commissioner-*cum*-Secretary to Government of Orissa, Welfare Department, Bhubaneswar.

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PREFACE

From time immemorial, tribal people and forests have continually remained inseparable. The social, economic, political and religious life of the tribal people have been influenced a great deal by the natural envionrment. For centuries, the continuous dependence of tribal people on forests has helped maintaining an eco-cultural balance between man and nature. The sylvan surroundings has provided them with inspirations for development of their creative art and aesthetic abilities. The symbiotic relationship between the tribal people and forests has often been disturbed due to depletion of forests.

The forest denizens have fulfilled their basic needs for survival from forests. They collect food materials, fodder, fuel, building materials and medicinal herbs and plants from forests. The policy makers, planners, administrators, environmentalists and social scientists are deeply concerned with the modes of collection and sale of Minor Forest Produce (MFP) which accounts for a substantial part of the subsistence economy of tribal people.

The tribal people continued to utilize forest resources freely till the turn of the current century. The Britishers for the first time introduced a forest policy in 1894 with a view to regulating the use of forests. During the post independence period the National Forest Policy was redefined in 1952, and the traditional rights of the tribes were curtailed and converted into concessions. A market-oriented policy regulating minor forest produce continued without going in for commensurated investment for forest generation. Whatever meagre investment was made was wholly intended for the development of commercial forestry. There was no investment in order to ensure the availability of forest produce like fuel, fodder and building materials needed basically for the forest-dwelling communities. Besides, the areas of reserve forest in the country, were extended. The National Forest Policy, 1993 envisages the new strategy for forest conservation which *inter alia* includes preservation, maintenance, utilization, restoration and enhancement of the natural environment with rights and concessions from forests to the tribes. Moreover, biosphere reserve policy has come up under the Man and Biosphere (MAB) programme.

The population explosion and increasing multiple use of forests especially for commercial purposes exert considerable pressure on forests. Consequently, the forest-dwelling tribes were compelled to depend less and less on forest resources for earning their livelihood.

It is necessary to develop viable social forestry programmes in an extensive scale, and high priority will have to be given to the development of minor forest produce keeping in view the need and requirement of tribal people. The minor forest produce varies from place to place and their commercial exploitation is tribe-specific and forest-specific. Therefore, through several forestry programmes, the tribal people need enhancement of employment opportunities and engagement in the collection and sale of minor forest produce.

The marketing norms of the minor forest produce opens another significant dimention keeping in view the magnitude of suffering of tribal people through exploitation of middlemen. Currently although the TDCC as apex maketing organization along with LAMPs and other co-operative societies are playing vital role in the procurement and marketing of minor forest produce, the interference of unscrupulous traders with profit making propensities have not been fully eschewed.

The present volume is based on descriptive-analytical study conducted by the Scheduled Castes and Scheduled Tribes Research and Training Institute, Bhubaneswar under the title, "The Collection and Sale of Minor Forest Produce among the Tribes of Orissa : a Socio-Structural and Economic Analysis". It is aimed at exploring multi-facetted aspects of the forest-tribal interface for rethinking forest policy with a greater humane approach.

The study reveals that Government initiatives coupled with involvement of the tribal people in forest management can be fractuous in its goal-attainment. The recommendations given in the report need appropriate consideration. I hope the study will be of interest to the policymakers, managers of forests, development practitioners and academicians. I am extremely thankful to the authors of this volume Shri A. K. Maharana and Shri H. S. Mishra, Research Officers of this Institute for their painstaking field work and for preparation of the draft report.1 also record my thanks for Shri H. Dharua, former P. A., I.T.D.A., Balliguda and Shri T. Sahoo, former Special Officer, H.K.M.D.A., Jashipur for their unstincted co-operation. I thank Shri P. C. Das, Shri D. G. Mallick, Shri N. Dakua and Shri H. B. Barad, Investigators of this Institute for rendering necessary help during the field work and also for processing and tabulating the field data. My special thanks are due to Shri J. P. Rout, Research Officer and Shri C. K. Konhar, Primary Investigator for preparing the locational map for this volume. I record my sincere thanks to Shri B. Choudhury, Deputy Director and Shri S. C. Biswal, Statistician in charge of publication section for their help.

Bhubaneswar Dated the 10th February 1998.

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INTRODUCTION

TRIBES OF ORISSA IN THE FOREST ECO-SYSTEM

The tribal population of India, according to 1991 census is estimated at 67,758,380 and is distributed among 283 tribes (Census : 1971) having distinct socio-cultural patterns. They constitute nearly eight per cent of the country's total poulation. About 75 per cent of the country's tribal population represented by 202 tribal communities are concentrated in Central or Middle zone of the country consisting the States of Bihar, Orissa, Madhya Pradesh and Maharashtra. The important tribes of the zone are the Santal, the Munda, the Oraon, the Gond, the Bhumij, the Bhil, the Kandha, the Juang, the Bhuinya, the Bathudi, the Gadaba, the Saora, the Kisan, the Maria, etc.. Most of these tribes have sub-sections and lead primitive way of life amidst relative inaccessibility and strict adherance to age-old beliefs and practices.

1.1.2. The tribal scenario of the State of Orissa is very unique by itself. It provides habitat to 62 tribes and 1991 census records the tribal population as over 7 million (70,32,214) constituting 22.21 per cent of the total population of the State. Almost all the tribal communities are found in so called interior regions of the State with characteristic physiographic features, like extreme of climates, mountains, hills, plateaus as well as gully and gorge bearing valleys covered with dense vegetative growth. The tribes of the State are rightly called the hill tribes or the forest tribes because they are found living harmoneously near the hills and forests or deep inside the forests or on hilltops. They thrive on highly localised subsistence economy centred round the forest. They keep their life style afloat with limited wants and with adoption of traditional and indigenous technology. The Orissan tribes whether the 'producers'-settled agriculturists or shifting cultivators, the 'collectors'-the food gatherers or the gatherers of non-edible biomass, the 'processors'-the artisans or the practitioners of arts and crafts, or the wage earners depend heavily on the forests for their very existence. However, a tribe fitted to one of the above subsistence groups stray into other sources of subsistence for supplementing their income. The developed tribes, like the Gond, the Bathudi, the Kisan, the Santal and the Desia Kandha are the culturers of plants yielding different cereals and pulses. They till plain lands near river banks, in valley bottoms and on table lands. Culturing of rudimentary type is practised by primitive tribes, like the Kutia Kandha, the Juang, the Paudi Bhuinya etc. Shifting cultivation as it is known, is not only an economic persuit but also a way of life for them. Shifting cultivation and forest according to them, are so synonymous that they add the names of the crops raised on forest land to that of the items of Minor Forest Produce (MFP) collected by them. The 'collectors' usually possess nomadic and semi-nomadic characteristic features and have usually small family size. They prefer to collect MFP inside the forest in small groups. They possess very little inexpensive and light weight assets pertinent to their occupation and do not go for extensive 'value addition' to their collected items. The Birhor, the Hill Khadia and the Mankirdia living in the deep woods of Northern Orissa represent the food gathering communities. Some tribes have different arts and crafts to pursue and are usually landless or marginal farmers. They possess a few light weight and inexpensive tools and implements and are known as the 'processors' of items collected from forest. The Mahali-the bamboo worker, the Sita Kandha-the loomhandler, the Kol-Lohara and the Kandha Bindhani-the blacksmith people, and the Mankirdia-the ropemaker, are the processors and are found in forest tracts where the raw materials useful to their subsistence are found in plenty.

1.2. Tribes and Forest Symbiosis

Ecologically the vegetation of Orissa forest is classified as either closed or open. It spreads over three of the five geographical regions of the State. They are, (a) the middle mountainous regions, (b) the rolling uplands and (c) the subdued plateaus. The forest is the aglomeration of a wide variety of vegetative growths with predominance of woody plants of more than five metres tall. Incidentally most of the tribal communities are found in these geographical regions. The symbiotic relationship between the tribe and the tree is vital for mutual growth. The vegetative growth-the producer of the forest, provides the tribal people with timber for construction of house, small timber for making agricultural tools, fruit, root, seed and nut for nourishment; bamboo, cane and grass for making household effects and for thatching. It supplies medicinal plants for curing various ailments. The forest also gives shelter to primary consumers-the herbivores and the predators-the carnivores. The herbivores come into the food chain of the tribals and the carnivores. Both of them cheekmate the growth of the population of the former to save the standing crops of the ethnic groups. The carnivores also arrest the adventure of the tribal people deep into woods in pursuance of economic activities for sustenance. The tribes, on the other hand, help the forest to proliferate with their role as the terminator of the food chain. Their domestic animals graze upon the undergrowth of the forest land and make sunlight available to the seedlings. The droppings of the animals enrich the soil with necessary biomass.

1.2.2. The forests of Orissa predominantly include Sal and bamboo. The teak occur naturally in the districts of Koraput, Kalahandi and in some parts of Bolangir. South Orissa is the meeting place of two giant species of Indian forests, namely Sal and teak. Being situated in the northern hemisphere and within the tropics, the forests of Orissa belong to the Northern-Tropical Forest types (Padhi 1984 : 7). The closed type of forests are teemed with Sal, Arjun, Asan, mango, Champa, Neem, Bandhan, Kusum, teak, Kochila, Simili, etc., belonging to Semi-evergreen, Moist-deciduous and Dry-deciduous type. The open type of forests at the vicinity of valley bottoms and river-banks are identifiable by trees, like, Mohul, Karanj, jack-fruit with patches of Sal, Sisoo and Bija. The land owning tribes are more dependent on these types of trees. The nomadic tribes get maximum benefit from trees of the closed type of forests. The open type of forests harbour ethnic groups with horticultural and pastoral activities. The tree species regulate social and cultural life of the tribal communities. The symbiotic relationship between the tribal communities and the biotic world has crept into their rituals, beliefs and practices. However population explosion, changed life style and heavy demand for forest produce-major or minor, for non-traditional uses have given serious impact on the very existance of forest. The ethical relationship is being corroded by over exploitation of forest wealth. In the changed circumstances the forest, which in the recent past was a renewable source of wealth, find any time for regeneration now. Creation of forest will amount to creation of weath which will have no depreciation as opposed to other schemes of development (Tiwary 1983:9).

1.3. Growth and Genesis of National Forest Policy

Since times immemorial the forest is considered as a source of sustenance to the consumers—the herbivores, the carnivores and the omnivores. It is an ideal place for initiating and terminating the food chain. Man who always stands at the terminating end of the food chain was once pursuing after food (hunting and fishing). In the later stage for a greater food security, man cleared a piece of land and tended some selective plants on it to meet his food needs. This preferential treatment to some plants over natural prolifiration of a wide variety of plants led to practice of agriculture. This culturing activity ushered in the set!led way of life which on the other hand made the man to harness more and more natural resources—land and the vegetative growth on it.

1.3.2. Exploitation of forest for human existence took an ugly turn with the expansion of human wants. The inhabitants of the 'Janapadas' of vedic time felt the need of forests for grwoth and prosperity. They laid down certain restrictions and fortified it with taboos to bring the forest conservancy steps into their socio-cultural system. In the medieaval period the Hindu and the Muslim rulers agreed upon the State intervention in forest management. Restrictions were made to check wanton destruction of trees and killing of birds and animals. The forest communities were however allowed to exploit the forest in a limited manner for their subsistence. They in turn, were required to give free labour to the rulers and to the State.

1.3.3. In India, the forestry as a science, was recognised by the Brithsh Administration. In order to establish and run the State-owned enterprises and to be ready to face the contingent situations, like war and natural disaster, several steps were taken up for conservation of forest and in the year 1840 areas under British domain were brought under one loosly woven forest law. In 1864 the practice of scientific forestry was introduced by creating Forest Departments in several British Provinces with an intention to demarcate the tree clad lands and hilly tracts as Reserve or Protected forests. The Indian Forest Act, 1865–an outcome of the works of the Provincial Forest Departments, laid the foundation stone of the Forest Policy of the present day. The Government of British India sensed the interdependence of agriculture with forest and invited Dr. Voeloker to examine the condition of Indian Agriculture and explore the scopes for its improvement. Dr. Voeloker in his report submitted in 1893 highlighted, the role of forests *vis-a-vis* agriculture and stressed the need for formulating a forest policy with a definite basis for serving agricultural interest more directly than before. Basing on his report, the Government declared its forest policy on 19th October 1894. The basic principles of the policy documents were –

(i) the sole object with which State forests are administered is public benefit and therefore the constitution and preservation of forests involves regulation of rights and restriction of privileges of user in the forest by the neighbouring populations;

(ii) forests situated on hilltops should be protected to preserve the climate and physical conditions of the land and to protect the cultivated plains against erosion ;

(iii) forests are to be managed on commercial lines as a resource of revenue to the State;

(iv) if a demand for cultivable land arises and can be met from forest also, it should be exercised without hesitation, provided that honey-combing of forests should be discouraged and permanent cultivation encouraged within limits;

(v) forests containing inferior timber, or where used as grazing grounds, should be managed mainly in the interest of local population.

1.3.4. The independent India formulated her first forest policy in 1952 by conceding the principle of total subordination of forest dwellers' interest to the wider needs of national interest. The policy also laid down that it would be the duty of the forester to awaken the interest of the people in the development, extension and establishment of treelands whenever possible and to make them treeminded. The policy laid stress on (a) weaning the tribal people, by persuasion, away from the harmful practice of shifting cultivation, (b) increasing the efficiency of forest administration by having adequate forest laws, (c) giving requisite training to the staff of all ranks, (d) providing adequate facilities for the management of the forests and for conducting research in forestry and forest products utilisation, (e) controlling grazing in the forest and

(f) the need for promoting the welfare of the people (Report of the National Commission on Agriculture, 1976 : 18).

1.3.5. The major lacunum of Forest Policy of 1952 was its failure in all the State to spell out the alternatives that were being offered where the rights of the tribals had to be abridged or cancelled in the larger public interest. To safe guard the interest of the tribals the Government of Orissa appointed a Committee (Forest Enquiry Committee) under the chairmanship of Radhanath Rath in 1957 to advise the Government on the improvement of forest management in the State and on certain important aspects such as Nistar rights, reclamation of forest lands, Podu prevention, new demarcation, forest legislation, transit rules, survey and afforestation, staffing pattern, Kendu leaf trade, grazing rules and control on Minor Forest Produce (MFP). The Committee in its report submitted in 1959 recommended inter alia to allow (1) free removal of all classes of trees up to $3\frac{1}{3}$ girth by tribal from Protected Forests and 'B' class Reserve Forests, (2) provision of 250 number of bamboos free of cost per tribal family per year, (3) colonisation of shifting cultivators (tribals) at well selected sites near their present habitat, (4) permission of controlled Podu on hill slopes up to 1in 10 slope and retention of higher slopes under forest cover, (5) undertaking of employment oriented schemes such as raising of cash crops like cashew, wattle, coffee and bamboo in Podu ravaged lands and (6) formation of co-operatives and granting them leases of Minor Forest produce on preferential basis.

1.3.6 At the national level the Central Board of Forestry and the Estimates Committee of Lok Sabha (1968-69), in its 76th report, recommended a reappraisal of the National Forest Policy of 1952 and execution of agri-silvicultural measures for benefit of tribals and provision of alternative means of livelihood to shifting cultivators. The Dhebar Commission instituted in 28th April 1960 also observed the right of the tribals to use forest for economic upliftment. The findings of the Dhebar Commission got a strong support from the findings of Hari Sing Committee. The report of the task force of the Planning Commission regarding measures for tribal development in forest areas contained antidotes like diversion of employment opportunities to tribal areas through forest based industries and exploitation of forest coupes through labour co-operatives and promotion of cottage and processing units for different items of MFP.

1.3.7. The National Commission on Agriculture (NCA) referred to the interelationship of forest economy with rural and tribal economy. The report brought out in 1976 strongly viewed for a new forest policy based on (i) satiating the needs of rural community for wood, small timber, fuel, fodder etc. and (ii) satisfying the present and future demands for protective and recreation functions of the forests. NCA recommended the classification of forest as (a) Production Forest (b) Protection Forest and (c) Social Forest. Thus the tribes depending on uncultured natural vegetative growth exposed to some sorts of regimentation and were made 'disciplined' not only for their own long range benefits but also for the human population living elsewhere.

1.3.8. The translation of multifacet Forest Policy into meaningful action became tougher due to non-acceptability of the end results by the tribal people. So the working group on tribal development during mid-term plan (1978-83) recommended the execution of forest based programmes that subserve the tribal economy and creat a sense of belongingness by granting *usufruct* rights in plantation and horticultural groves (man made forests) and by granting rights to collect MFP (from natural forests) without significantly burdening them with royalties. The National Forest Policy envisaged in 1988 gives more stress on conservation of forest with fruitful steps for preservation, maintenance, sustainable utilisation, restoration and enhancement of the natural environment. The basic objectives of the policy are –

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(i) Maintenance of environmental stability through preservation and where necessary, creating a massive people's movement with the involvement of women for achieving these objectives and to minimise pressure on existing forest.

(ii) The Principal aim of Forest Policy is to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which are vital for sustenance of all life forms-human, animal and plant. The derivation of direct economic benefit must be sub-ordinated to this principal aim.

1.3.9. The strategy outlined by the National Forest Policy, 1988 to realise the objectives are to have a minimum of one-third of the total area of the country under forest or tree cover and two-third of hills and mountainous regions under such cover to prevent soil erosion and land degradation, involvement of tribal people in protection and development of forests, substitution of wood by other suitable alternatives in industrial and domestic uses, issue of rights and concessions with due consideration to the carrying capacity of the forests, wild life conservation, restriction of diversion of forest lands for non-forest use, forest based industries to raise their own forest, provision of alternative subsistence to shifting cultivators and forest extension with weightage to forestry education and forestry research.

1.3.10. The evolution of National Forest Policy is in accordance with time and situation. The birth right of the tribals in using forest wealth became the rights and concession during the fifties and gradually watered down to conditional 'concession' during the seventies.

1.4. Forest Resource of the State

The total forest land of the State is estimated at 55,111 Sq. Kms. (The Statistical Abstract 91-92). It comprises 35-39 per cent of the total geographical area of the State. Out of the 13 undivided districts of the State, seven, namely, Dhenkanal, Ganjam, Kalahandi, Mayurbhanj, Phulbani, Sambalpur and Sundargarh reported to have forest area extending to one-third of their total geographical areas respectively (Tab-.1.1). More than 30 per cent but less than 33.33 per cent of the total landmass of the districts of Keonjhar, Korapur and Puri are declared as forest land whereas less than 25 per cent of the total area of the districts of Bolangir, Balasore and Cuttack are identified as forest land. The districts of Bolangir, Balasore, Keonjhar, Phulbani, Mayurbhanj and Sundargarh have reserved forest to the extent of more than 70 per cent of their total forest areas, respectively. The coastal districts of Puri and Ganjam as well as the interior district of Kalahandi have unclassified forests to the tune of more than 25 per cent of their total forest areas. More than 50 per cent of the total forest area of Cuttack and Koraput is classified as 'Protected Forest'. The Table-1.1 also reveals the existence of 'Reserved Forest' to the tune of 28015 Sq. Kms. (50.83%), 'Protected Forest' to the tune of 19457 Sq. Kms.(35.31%) and other forest to the tune of 7639 Sq. Kms. (13.86%) respectively. It clearly indicates that the forest dwellers-the tribal people in particular of all the distrcts, are forced to carry out their collecting pursuit in limited areas dejure. For conservation of forests collection of bark, resin and gum is banned conditionally or totally. Creation of biospheres, reserved forest and wildlife sanctuaries have forbidden human activities inside the primary forests. As a result the tribal people are wriggling hard to get out of the poverty and deprivation through the dubious means of honey combing the forest - both overtly and covertly.

Table 1.1

SI.	Name of the	Forest area by legal status (in Sq. Kms.)						
No.	District	Reserved	Protected	Others	Total	Total area of the district		
1	2	3	4	5	6	7		
1	Balasore	208	46		254	6311		
		(81.89)	(18.11)		(4.02) (100.00)	(100.00)		
2	Bolangir	1594	31	536	2161	8913		
		(73.76)	(1.44)	(24.80)	(24.25) (100.00)	(100.00)		
3	Cuttack	428	880	178	1486	11142		
	2.1	(28.80)	(59.22)	(11.98)	(13.34) (100.00)	(100.00)		
4	Dhenkanal	2877	1552	139	4568	10827		
		(62.98)	(33.98)	(3.04)	(42.19) (100.00)	(100.00)		
5	Ganjam	1886	3126	1870	6882	12531		
		(27.41)	(45.42)	(27.17)	(54.92) (100.00)	(100.00)		
6	Kalahandi	1448	2528	1685	5661	11772		
_		(25.58)	(44.66)	(29.76)	(48.09) (100.00)	(100.00)		
7	Keonjhar	1833	648	13	2494	8303		
		(73.50)	(25.98)	(0.52)	(30.04) (100.00)	(100.00)		
8	Koraput	2144	5948	775	8867	26961		
240		(24.18)	(67.08)	(8.74)	(32.89) (100.00)	(100.00)		
9	Mayurbhanj	3388	466	356	4210	10418		
		(80.47)	(11.07)	(8.46)	(40.41) (100.00)	(100.00)		
10	Phulbani	4551	755	127	5433	11119		
		(83.76)	(13.90)	(2.34)	(48.86) (100.00)	(100.00)		
11	Puri	1532	665	920	3117	10182		
		(49.15)	(21.33)	(29.52)	(30.61) (100.00)	(100.00)		
12	Sambalpur	3474	1957	801	6232	17516		
	×	(55.75)	(31.40)	(12.85)	(35.58) (100.00)	(100.00)		
13	Sundargarh	2652	855	239	3746	9712		
		(70.80)	(22.82)	(6.38)	(38.57) (100.00)	(100.00)		
		28015	19457	7639	55111	155707		
		(50.83)	(35.31)	(13.86)	(35.39) (100.00)	(100.00)		

Classification of Forest Area by Legal status in Orissa (Year 1989-90)

Statistical Abstract—1991 Directorate of Economics & Statistics, Orissa, Bhubaneswar. *Percentage within parentheses

Classification of forest area by legal status in Orissa (year 1989-90)



1.4.2. Forest is still considered as the companion of mankind. Despite poverty people try to manage this natural resource with solminity and gaity. Weaning away of the right item of MFP of right quantity and at the right time is still the ethical password of the tribal communities. Forest and the trees are interlaced with the culture and tradition of the tribals and regulate their socioeconomic life (Bhowmick, 1990 : 95). However acculturisation and social interaction has its negative impact on agrarian and artisan tribes. With increase of wants and widening of world views, they depend more on vegetational growths around their habitats and agricultural fields. Their pressure has phased certain MFP yielding plants out of their localities. The cleavage and widening of economy of the so called accultured tribes and the collecting tribes has much bearing on mismanagement of this renewable natural resource. The mobilisation of human population as well as goods and services to further the importance of forest resources have definite impact on tribal people with collection and sale of MFP either as a primary or secondary source of income.

1.5. Utility and Choice

The tribal belt of the State with little arable plain land to practise agriculture and with more areas under the cover of natural vegetative growth puts two choices before the 'sons of soil' for ekeing out a living. The utility of agriculture land is felt by those who own it but the utility of forest tract is felt by all sections of the tribal groups. For the primitive tribes and landless tribal households forest is the basic resource-base to rely upon for a living. Thus, in tribal belts the 'culture grounds'— the agricultural lands, possess utility for some but the 'collection grounds'—the forest, possess utility for all. The decision to rely on any of the two choices or both is unrelated to the socio-economic condition of the tribal groups. The land owning forest tribes, seasonally feel the utility of forest as a subsidiary source of income and decide to go for it without jeopardizing their agricultural activities.

1.6. Methodological Perspective

STATES AND

Forest is a good source of revenue and supplements the receipt head of the State exchequer substantially. The forest area of the State is almost coterminous with the areas under the Tribal Sub-plan (TSP), where the tribes are found in large concentration and where special programmes are taken up for their socio-economic development. It can be argued that the tribal areas are the lone source of forest related revenue. The quantum of revenue collected can be judged from the data given in Tab-1.2. It furnished Rs. 59.05 crores to State in 1988-89. The tribal people of the State contributed to this revenue directly in shape of cesses/fees and indirectly in shape of pawning their labour with the Government Agencies and the leasees authorised by the Government to handle different items of MFP. The MFP including Kendu leaf but excluding timber, bamboo, fire-wood and charcoal generated Rs. 26.05 crores which contributed 44.12 per cent of the total earning from forest sector.

1.6.2. Due to population explosion more and more forest dwelling people depend on lesser and lesser forest areas for the livelihood. Forests support the industrial, mining and transport activities. Modern technology has given scope for horizontal and vertical exploitation of forests leading to ecological hazards and disappearance of many sensitive plant species from the surface of earth. The man made forests raised under the social forestry programme to meet the demand for fuelwood, fodder and food are not adequate alternative to natural forests. It has failed to realise its desired results. It is said that the middlemen take advantage of the tribal economy and drain out the maximum benefit from MFP while leaving only the residue for the tribes to satisfy with. In order to improve the situation, appropriate strategy should be taken for the optimum utilisation of the forest wealth by the tribal people without impairing the ecological balance and for phasing the middlemen out of tribal economic scene.

SI. Items	Year				
	84-85	85-86	86-87	87-88	88-89
1 2	3	4	5	6	7
I Sale of Timber and other Forest Produce					
A) From the forest by Government Agency					
1. Timber	444	662	240	410	367
2. Firewood & Charcoal	74	38	32	38	66
3. Grass & other minor produce	20	81	1	3	2
4. Kendu leaves	1700	1300	1570	2748	2364
5. Departmental working of Bamboo	6	46	47	16	76
Total (A)	2244	2127	1890	3215	2875
(B) From forest by Consumers & Purchasers					
6. Timber	1446	1393	1676	1787	1660
7. Firewood & Charcoal	479	398	439	549	401
8. Bamboo	374	384	288	272	572
9. Grazing & Fodder Grass	2	2	1	2	2
10. Other Minor Produce	338	377	456	363	237
11. Commutation Fees	5	5	6	3	۵
Total (B)	2644	2559	2866	2976	2876
(C) Drift & Waif wood land & confiscated	50	70	38	48	69
Total Sale of Timber & Other	a contece				
Forest Produce (A+B+C)	4938	4756	4794	6239	5820
II - Other Receipt	85	73	185	102	85
III - Refunds	2.1844	S	S	2	5
Grand Total Revenue from Forertry (I+II+III)	5024	4829	4979	6343	5905

Table-1.2 Details of Revenue earned from Forestry in Orissa (Rs. in lakh)

S-Negligible

Source-Statistical Abstract 1991, Directorate of Economics & Statistics, Orissa.



Revenue earned from forestry and from Minor Forest Produce (MFP) in Orissa (Rs. in lakhs)

SC&ST 4

1.6.3. A fresh attempt has been made by the State Government to know the whole gamut of the collection and sale of Minor Forest Produce by the tribal people of the State and its bearing on their socio-structural as well as the economic life style. The Tribal and Harijan Research-*cum*-Training Institute has been entrusted with the task of conducting the indepth study for making necessary policy decisions. The objectives of the study are :

- 1. To delineate the forest-dwelling tribal communities who are depending upon various types of Minor Forest Produce for their basic subsistence and/or for supplementing their household economy.
- To assess the adequacy/inadequacy of the collection of Minor Forest Produce in the contextual frame-work of changing command of beneficiary communities over forest resources.
- 3. To determine the approximate quantity of various types of Minor Forest Produce per annum, showing seasonal variations with thick and thin availability.
- 4. To highlight people's indigenous skill for resource management with special reference to forest.
- 5. To locate the efficacy of the community based forestry programmes implemented through development intervention and the socio-cultural capacity of the unit of social organisation to carry forward such programmes.
- 6. To find out the indigenous methods of forest conservation followed by the forest based tribal population groups.
- 7. To analyse the forester-beneficiary relationship in social forestry and such other related schemes.
- 8. To determine the efficacy and adequacy of the marketing mechanism, with special reference to TDCC and Co-operative network for marketing Minor Forest Produce in tribal areas and to suggest renovative and innovative measures, and
- 9. To examine the role of non-tribal intermediaries in the marketing nexus existent in the process.
- 1.6.4. The study has also the scope to test the following hypotheses -
- 1. The evolving national forest policy is congenial to the overall forest conservation effort.
- 2. The management of forests is not prefectly in tune with the socio-cultural interests of the forest dwelling tribal communities.
- 3. In the context of changing scenerio of tribal economy, the attitudes of tribal communities are undergoing transformation with regard to resource management and forest conservation.
- 4. It is pernicious to totally alienate the tribal communities from the forest.
- 5. An appropriate marketing mechanism is essential to eleminate middlemen and to boost tribal economy.

1.7. The Universe and the Sample

The study is fact-finding in nature and is to cover all the tribal communities with pursuit of 'collecton' as the main or subsidiary occupation. Two almost identical vegetative regions with

differed geographical set up have been choosen for the study. They are the Belghar region situated at the northern end of the Eastern Ghat mountain range and the Jashipur region located at the southern end of the Chhotnagpur plateau. The former has little arable land and is inhabited by the Kutia Kandha — a tribe practicing shifting cultivation. The latter has hill ranges separated by large stretches of plain land and is inhabited by land owning tribes like the Santal, the Gond, the Munda and the Kolha as well as the 'collecting tribes' like the Hill Khadia, the Mankirdia and the Birhor. The cultivating tribes, though economically well off, go for collection of MFP from 'felled areas' where they practise shifting cultivation.

1.7.2. In each region the study was taken up in two villages — one with location closer to the place with basic amenities and facilities for socio-economic growth (A-category village) and the other which is away from such facilities and amenities (B-category village). Tuakela and Podagada belong to the former category and located in Belghar and Jashipur regions respectively and their counterparts Rangaparu and Ramjodi belonging to latter category and located in Belghar and Jashipur regions are selected as the study villages. The present report is based on the findings of the said four villages. The amenities and facilities available in the study villages or the distance of such places from the study villages are given in Annexure -I.

1.8. Technique of Data Collection

The data relating to the areas and the people were collected by two types of schedules, namely (a) Village Schedule and (b) Household Schedule. The former was used for recording 'area' information through group discussion whereas the latter was administered to each of the families residing in the villages. Care was taken to canvass the household schedules to the heads of the households with no scope for interference from the onlookers.

1.9. Tools of Analysis and Conceptual Framework

The data obtained by two types of schedules were complementary to each other. The village data were analysed for its impact on the socio-structural as well as the economic life of the inhabitants. The household data on the other hand, throw light on the socio-economic condition of the families, role of MFP in their family economy and scope for the elevation of tribal economic status through collection and sale of MFP. Apart from the field data of the above two categories, official data were also collected from various Departments and Agencies having direct or indirect links with collection and sale of MFP.



Partial view of a Kutia Kandha village.



Danla

Preparation for hunting- Hopeful for a game.

The Study Areas

The choice of the field study was undertaken only after considering some factors. It was decided to take two tribal pockets of Orissa inhabited by two different tribal communities—one chiefly depending on shifting cultivation and the other on forest collection. Accordingly two primitive tribal communities were selected for the study. They were the Kutia Kandha of Belghar area in Phulbani district and the Hill Khadia of Jashipur area in Mayurbhanj district. Again two villages in each pocket, one located nearer and the other away from the central place, were selected for the study. In Belghar area the villages selected were Tuakela and Rangaparu and in Jashipur area they were Podagada and Ramjodi.

2.2. Location

The study area Belghar lies in the Tumudibandh Block of Phulbani district between 19°.45' N and 20°.5' N latitude and between 83°.30' E and 83°.45' E longitude. It is situated at about 2500' above the sea level and located in the western part of the Tumudibandh Block along the borders of Rayagada and Kalahandi district. Belghar is about 30 Kms. from the Block Headquarters and 140 Kms. from the District Headquarters. The 30 Kms. road from Tumudibandh to Belghar is made blacktop up to 22 Kms. and rest 8 Kms. is metalled. The study village Rangaparu is about 6 Kms. and Tuakela is about 3 Kms. in two different directions from the Central Place i.e. Belghar. Both the study villages come under Belghar Grama Panchayat.

2.2.2. The other study area Jashipur lies between 21°.6' N and 22°.3' N latitude and between 86°.2' E and 86°.5' E longitude. Jashipur is the Block Headquarters and comes under Karanjia Sub-division of Mayurbhanj district. It is about 15 Kms. away from the Sub-divisional Headquarters and 70 Kms. from the District Headquarters, Baripada. The N. H. No. 6 runs through Jashipur. The study villages in Jashipur area are Podagada and Ramjodi. Podagada is the Grama Panchayat Headquarters and Ramjodi comes under Dudhiani Grama Panchayat. Podagada is about 11 Kms. and Ramjodi is about 40 Kms. away from Jashipur. Both the study villages are located inside the Similipal forest region and there is a Jeepable kutcha road from the Block Headquarters to these study villages.

2.3. Area

Belghar covers an area of about 300 Sq. Kms. out of which cultivable area comes to 1550.50 hectares. About 80% of the total geographical area of Belghar is covered by forest. The total estimated forest area is 23628.51 hectares. The forest of Belghar area is divided into three categories, such as (1) Reserved forest (35%), (2) Proposed Reserved forest (14.8%) and (3) Revenue land with forest (28.7%). The rest (21.5%) of the total forest land is found tree less.

2.3.2. The large mass of hills and its vegetation in Jashipur area stretches over an area of 1481 Sq. miles constituting the Similipal forest. The entire Similipal forest region is declared as Reserved forest.

2.3.3. The forest of Belghar area is classified as Sub-tropical wet hill type or Northern Tropical ever-green forest. A large number of commercially valuable wood species, like Sal (Shorea robusta), Piasal (Patora carous marsupium), Kurum (Adina cordifolia), Palas (*Cicistantnus colinus*), Siali (*Boswelia sorrata*), Mohua (*Basia latifolia*), Dharua, Kumbi, Jamun, Asan etc. are found in this area. Besides these, a number of fruit-bearing trees like, mango, jack-fruit, tamarind, Harida, Bahada, Amla etc. are also found in this forest area. Bamboo and cane bushes are commonly seen in this forest. The continuous practice of shifting cultivation (*podu* cultivation) is a threat to the forests of this area.

2.3.4. The Similipal forest is classified as mixed deciduous and Northern tropical semievergreen forest. In this forest mainly Sal, Piasal, Kurum, Kusum, Dhaura, Arjuna, Karanja, Sisu, Kendu, Jamun, Ashoka, Siali, Mahul etc. are found in plenty.

2.3.5. Though there is no practice of shifting cultivation in Similipal forest region, the inflow of tribal people (Kolha and Munda) from the neighbouring State (Bihar) has caused great threat to the vegetation of Similipal forest. The local villagers inside Similipal forest region have already cleared many forest patches for cultivation and new patches are still being cleared by the immigrant tribal people (Kolha and Munda) for settlement and cultivation. Besides these, setting of fire by the local people in the end of winter season has become a great threat to the forest of this area. The local people set fire the fallen dried leaves so that the underneath of the trees will be cleared and it will be easier for them to collect the seeds of Sal, Karanja and other seeds in the month of March and April. The setting of fire not only checks the fertility of the soil but also destroys the new and small plants.

2.3.6. In the forests of both the study areas, different species of wild animals and birds are found. The rivers of Similipal forest are inhabited by crocodiles.

2.3.7. A number of hill streams flow in Belghar area. Rivers, like Utei and Chauldhua have originated from this place and finally merge with Tel river in Kalahandi district.

2.3.8. The Similipal forest region is intersected with a network of perennial streams and rivers flowing in all directions. The major rivers which flow in this forest region are Baitarani, Khairi, Salandi, Subarnarekha, Budhabalanga, Bandhan and Deo.

2.3.9. The forest constitutes an important source of livelihood for the tribal people of the study areas. A number of items are collected from the forest which are either sold or consumed. The forest provides food in form of fruits, seeds, green leaves, tubers, roots, mushrooms etc. during the months of scarcity. Besides the house building materials varieties of medicinal herbs, plants, mushrooms and roots are collected from these forests for indigenous treatment of diseases and for preparation of modern allopathic medicines.

2.4. Soil

The soil of Belghar area varies from place to place. In general, the soil of this area is classified as loamy brown to red soil and dark greyish brown to dark cotton soil. The soil is slightly acidic in nature. The humus content of the soil is less. The soil is porous with little water holding capacity.

2.4.2. In Similipal area (Jashipur) the soil is mostly red lateritic, rocky and gravelly. In some areas of Similipal forest black-cotton soil is also found.

2.5. Climate

The climate of Belghar area is sub-tropic but the high altitude of the area has made the climate cool and pleasant. In summer it is not that hot but the winter is extremely cold and dry. The maximum temperature recorded is 32°.3C in May which goes down to 6°C in December. At the approach of the south-west monsoon wind, the area receives frequent thunder storms followed by continuous heavy rain. The average rainfall received in this area is calculated at 1680 mm. The rain, in this area, starts from April and the peak period of rain fall is from June to August. The winter continues from October to February.

2.5.2. The climate of Similipal area is sub-tropical. The climate and rainfall is moderate. The maximum temperature in Similipal region is recorded at 30° C and the minimum at 9° C. The summer is mild and pleasant in the forest region with an average temperature of 26° C. The average annual rainfall in this area is 709.7 mm.

2.6. People

As pointed out earlier, it was decided to conduct the study among two tribal communities, one mainly depending on shifting cultivation and other on forest collection. Accordingly, the study was conducted among the Kutia Kandha of Belghar area who practise shifting cultivation and the Hill Khadia of Jashipur area. The latter mainly depends on collection of minor forest produce.

2.7. Kutia Kandha

Kutia Kandhas are found in Belghar, Gumma, Lankagada and Jhiripani Grama Panchayats of Tumudibandh Block and in Subarnagiri areas of Kotagarh Block of Phulbani distrct. This tribe is also found in the Lanjigarh Block of Kalahandi district.

2.7.2. The population figures of Kutia Kandha inhabiting in Subarnagiri area of Kotagarh Block; Jhiripani and Lankagarh Grama Panchayats of Tumudibandh Block and Lanjigarh Block of Kalahandi district are not available. But the Kutia Kandha population of the study area comprising Belghar Grama Panchayat and Gumma Grama Panchayat of Tumudibandh Block shows that out of the total Kutia Kandha population of 4013, the females constitute 52.10 per cent (2091) and the males constitute 47.90 per cent (1922) which indicates the predominance of female population over the male population.

2.7.3. The Kutia Kandha is one of the major and primitive section of the Kandha Tribe. The origin of Kutia Kandha dates as far back as the day on which the human beings came into the earth. A place called 'Sapangada' is venerated as sacred by Kutia Kandhas because they believe that it was the place from where the first human being emerged out of the earth. According to the local term 'Sapang' means birth and 'Gada' means a hole in the earth. A legend about the origin of Kutia Kandha says that a man called 'Sona Adu' and a woman called "Rani Adu" emerged out of the hole Sapangada through a fountain called 'Gunji Nulha'. From them the Kutia descendants were born. According to the Kui (Kandha) language, a big hole in the earth is called 'Kuti'. The generation which came out from the hole was known as Kutia. So the tribe is known as the Kutia Kandha.

2.7.4. The settlement pattern of the Kutia Kandha villages is linear type. It stands at the foot hill on the plain land. The houses are built close to each other in two rows separated by a broad street. Each row of houses gives the impression of having a common roof. Each house has its common partitioning wall. Traditionally one particular clan group settles in a particular village. But during the study it was observed that two or three different clans have settled in one village. There are some single ethnic villages inhabited only by the Kutia Kandha. But in some villages Panos have settled together with the Kutia Kandha. The Pano houses are located a little away towards the back side of the main settlement. In each village two separate houses are found-one used as a girls' dormitory (Kudi) and the other as a boys' dormitory (Kude), where the unmarried girls and boys of the village spend the night. In the centre of the village street, the Dharani Penu (Earth Goddess) is present with seats of stone slabs earmarked for the meeting of the traditional village council.

2.7.5. The house design of the Kutia Kandha is rectangular. The walls of the houses are made of broad Sal logs plastered with mud and the roofs are thatched with jungle grass (*wikka*) or date-palm leaf (*sindiaka*). Now-a-days the jungle grass and date-palm leaf are replaced by Khappar (*Kapaari*).

2.7.6. The house consists of single room with the front and back verandah. The room is used for living, cooking and storage. A portion of rear verandah is enclosed with two partitions. One portion of the verandah serves as goat pen or pig sty and the other one is called 'Jaka' which is used as living room for the ladies during the pollution period of menstruation and child birth. The cowshed is separately built towards the backside of the hutment.

2.7.7. The Kutia Kandha speaks Kui language which belongs to the Dravidian family. It some what differs from Malia Kandha Kui language. The majority male folk of the area and the females in the vicinity of Belghar can understand and speak Oriya.

2..7.8. The traditional dress of Kutia Kandha male is a lenguti (Loin cloth). Except winter, they keep the upper part of the body naked. But now-a-days they have started wearing dhotis, trousers and shirts. The traditional dress of the women is 'Reta' and 'Urami'. Reta is a piece of cloth which covers the body from naval to the knees and Urami covers only the front portion of the upper chest to the abdomen. Now-a-days young girls wear sarees and blouses.

2.7.9. Both the Kutia Kandha male and female adorn themselves with ornaments made out of iron, silver, gold and beads. The older generation of Kutia Kandha males are used to keep long hair and knot the hair like females.

2.7.10. The Kutia Kandha, generally takes three principal meals, one in the morning at about 6 to 7 A.M., the next at midday at about 1 P.M. and the last in the evening at about 7 P.M. Their staple food is rice, ragi and Kueri (A type of millet). The morning meal is known as 'Basi Bidi'. The rice or Kueri which is cooked in the previous night and taken in the morning with chilly and onion is called Basi Bidi. The mid day meal is known as 'Mosa Simba' or 'Mande Simba' prepared out of Kueri or Mandia only. Evening meal is known as 'Mosa Bidi' or 'Kuli Bidi' prepared out of paddy rice or Kueri rice. In the evening only Mosa Bidi or Kuli Bidi is taken with vegetable curry or fried green leaves or meat. Fish is occasionally taken whenever available from nearby stream or river. Meat of buffalo, goat, pig or chicken is taken during festive occasions. Roots and tubers, mushrooms, mango kernel and dried sago-palm tree (sap) collected from the forest are also a major part of their food items.

2.7.11. They are addicted to three types of liquor, i.e. Katuli, Mahuli and Salap. Katuli is a kind of liquor prepared by fermenting Kueri (A kind of millet) rice. Mahuli is a distilled liquor prepared from Mohua flower. Salap is the juice of sago-palm tree. Pika (*Topari*), Bidi and Nasa (*Dua*) are the main narcotics of the Kutia Kandha.

2.7.12. In Kutia Kandha society family is the basic social unit. It controls the social behaviour of its members and the use of land in its own possession. They have nuclear type of family consisting of parents and their unmarried children. The eldest male of the household has authority over all other members of the household. He recognises the individual rights and desires of each individual members. The head of the household takes economic as well as socio-cultural decisions in consultation with the other adult members of the household. He is the formal representative of the household. The Kutia Kandha family is patrilineal, patriarchal, virilocal and patripotestal.

2.7.13. Next to the family, the larger social unit of the Kutia Kandha is the lineage. A group who has a common ancestor combines together for socio-religious purposes forms a lineage. The lineage among the Kutia Kandha is a corporate group. In general, the Kutia Kandha remembers the names of their ancestors up to the grand father or grand mother's generation. Beyond the extended family in the village, a lineage may include a few other nuclear families living in other villages. The lineage in the Kutia Kandha society plays an important role in their social functions.



Kumbha- the traditional dwelling of the Mankadia.



A collective endeavour for forest collection by the Khadia.

2.7.14. The larger social unit of the Kutia Kandha is the clan organization which is known as Gochhi. The Gochhi is a larger kinship group. The whole tribe is divided into a number of social groups. The Gochhi (clan) generally includes all persons unilineally descended from a common ancestor of fictitive origin. Every Kutia Kandha is a member of his patrilineal exogamous clan. Each clan is given a distinct name which further emphasizes their distinct identity. The clan (Gochhi) distinction serves an important aspect of mate selection. In keeping with the belief that all members of a clan are brothers and sisters, clan exogamy is strictly enforced by them. The Kutia Kandha is divided in to a number of clans, such as Sukubicha, Sona madika, Adanga, Saraka, Padamudsia, Banguraka, Gundsibicha, Urleka, Tidika, Duluka, Timika, Pruaka, Bandaka, Pedemeka etc.

2.7.15. In marriage, Kutia Kandhas observe clan exogamy. They seek spouses outside the clan but they do not go outside the tribe which is an endogamous unit. They are monogamous but several cases of polygynous marriages were detected during the study. Adult marriage is the rule. There are mainly three types of marriages in Kutia Kandha community. They are (1) arranged marriage, (2) marriage by capture and (3) marriage by elopment. In arranged and eloped marriage, the marriage takes place in bride's place whereas in capture marriage the marriage takes place in bride's place whereas in capture marriage the marriage takes place.

2.7.16. In all forms of marriages except marriage by capture the bride price is compulsory. The usual bride price consists of a buffalo, one pig, one goat, seven arrows, 10 to 15 Kgs. of rice, two Chadars, two bell metal vessels, one vessel of Katuli liquor and about 10 bottles of Mohua liquor. The bride price is offered by the groom or groom's father to the bride's father. The bride price is locally known as *Luganga Karang*.

2.7.17. At the time of child birth the woman is attended in her confinement inside the 'Jaka' by an elderly woman and the mother-in-law. The umbilical cord is cut by the mother of the infant. In case of a male child the umbilical cord is placed on a cold charcoal and severed with the sharp edge of an arrow. But in case of a female child the umbilical cord is separated by a scythe. The pollution period is observed for three months. During the pollution period the movement of the mother is restricted inside 'Jaka' and 'Padagiri' (backyard of the house), and she is not allowed to do any other work except nourishment of the new born. Just after three months the purificatory rite is performed and a few chicken are sacrificed at the 'Jaka' for the souls of the dead ancestors.

2.7.18. The Kutia Kandha religion is animistic in nature. They believe that mountains, rivers, streams, trees, stones are the abodes of spirits. They believe in the existence of ancestral spirits and their intervention in the earthly affairs. The divine powers have been identified by the Kutia Kandha as a group of powerful deities and spirits which control and influence the happenings of the individuals as well as in the community. They believe that the deities and spirits live in native hills, forests, streams and inside the dwellings and multiply with the spirits of the ancestors.

2.7.19. The sacerdotal head of the Kutia Kandha is known as Jani. The Jani officiates all the rituals of the village. The sorcerer is called Kutaka who performs magico-religious rites to cure illness.

2.7.20. The Kutia Kandha believes and worships a number of deities such as Dharani Penu, Soru Penu, Pijuri Penu, Mamli Penu, Jaka Penu, Kuti Penu, Bhima Penu, Baburai Penu, Linga Penu, Timba Dedi and Deo Penu. Dharani Penu is considered the Supreme Goddess in Kutia Kandha pantheism. She is installed at the centre of each Kutia Kandha village and is represented by three stones vertically posted on the ground. At the back of these three stones stands the 'Meriah' post.

2.7.21. They observe a number of festivals. The biggest festival observed by them is Korubiha Dakina. This festival falls once in every five years and is observed in the first Sunday which falls after Phaguna Punei (full-moon between February-March). In the past, Kutia Kandhas were sacrificing human beings before Dharani Penu in this festival. But now-a-days buffalo is substituted for a human being. Dedusina Dakina is observed on the new patch of a hill slope selected for shifting cultivation. Bicha Dakina is observed in every year for ceremoniously sowing of seeds in plain as well as in shifting cultivation land. Takukalu Dakina is observed for ceremoniously eating of mango kernel, Gurjee, Kunda dhan (small paddy) and three varieties of wild roots and tubers. Before this festival Kutia Kandhas are restricted to take mango kernel, Gurjee, Kunda Dhan and three varieties of roots. Punikalu Dakina is also the biggest festival among the Kutia Kandha. This festival is observed every year during December-January. In this festival all types of Kanda (wild roots and tubers), Katuli (a local brew), Jhata (bean), Kandula (Achar), Anaka (a type of vegetable) are ceremoniously eaten for the first time. Bada Bina Dakina is also observed every year in the month of Chaitra (March-April) to cure serious diseases. Jani officiates in all festivals except the Bada Bina Dakina and performs the rituals. In Bada Bina Dakina the Kutaka performs the rituals.

2.7.22. The economic life of Kutia Kandha predominantly revolves round agriculture. Side by side they profess forest collection, domestication of animals and wage earning to eke out their subsistence.

2.7.23. The cultivable land in Kutia Kandha high land is divided into five categories, i.e. (I) *Padagiri* (kitchen garden), (2) *Bada* (land in the vicinity of the village), (3) *Bata* or *padar* (up land), (4) *Mera* (low land), (5) *Nella* (shifting cultivation land). In *Padagiri* (kitchen garden) they grow bean, cow-pea, chilly, pumpkin and tobacco. In *Bada* land they cultivate oil seeds (mustard) and tobacco. In up land oil seed and pulse are cultivated. In low land only paddy is cultivated.

2.7.24. For shifting cultivation, a patch in the hill slope is earmarked as a family plot for cultivation. A few trees, like mango, Mahua, jack-fruit, tamarind are spared. Towards the middle of March to April they set fire the cleared patch. Just after the first shower the soil is dug over with small hoe and digging stick. At the second shower of the monsoon they sow varieties of seeds by the method of dibbling or broadcasting. They cultivate the same patch consecutively for three years and then abandon the patch for 5 to 6 years. This practice is known as shifting cultivation. They grow 30 varieties of crops at a time in shifting cultivation land.

2.7.25. The Kutia Kandha have traditional village organization to deal with the socio-religious matters of the village. All the Kutia Kandha villages have a set of traditional village leaders, such as *Majhi, Dakua* or *Ganda, Jani* and *Kutaka*. In the present context, the tribal leaders may be classified as traditional and modern. The present political organization of the Kutia Kandha is an admixture of the traditional and modern set up.

2.7.26. The heirarchy of traditional village officials is led by the headman called *Majhi*. The office of the *Majhi* is hereditary and based on clan and lineage. He is the representative of the village at Mandala Sabha. Now-a-days the chief function of the *Majhi* is to settle minor criminal offences, violation of social norms, settlement of marriage disputes etc.. Besides having judicial powers, he also plays an important role in the socio-religious rituals. He is the formal head of the village council.

2.7.27. Jani is the spiritual head of the Kutia Kandha. His position is next to *Majhi* in the village. The post of *Jani* is hereditary. He performs all the rituals in the festive occasions and is an active member in the village council.

2.7.28. *Kutaka* is the sorcerer. This post is also hereditary in nature. *Kutaka* finds out the cause and the spirit responsible for the disease of the patient and treats the patient by means of magical rites. *Kutaka* is also an active member in village council.

2.7.29. The village messenger is called *Ganda* or *Dakua*. He is the chief assistant of *Majhi*. *Ganda* is always from the Pano community. He is the chief negotiator in arranged marriages. He is also an active member in the village council.

2.7.30. In a Kutia Kandha village the ward member is usually unanimously selected in the village council meeting. The selected one is declared elected uncontested. In most of the villages the office of Ward Member is vested with the *Majhi*—the traditional headman of the village.

2.7.31. The traditional village council is still active among the Kutia Kandha but mostly in the form of elders' council. Usually the village council sits to decide conflicts relating to inheritance of property, personal litigation, marriage or divorce dispute, breach of social norms etc. *Majhi* summons and presides over the village council meeting. The meeting is attended by *Majhi*/Ward Member, *Jani, Kutaka, Ganda,* some village elderly persons and the concerned parties to the case. The females are prohibited to attend the village council meeting. The unanimous decision is the base for the final judgment of the village council.

2.7.32. In olden days under the feudal system, the entire Kutia Kandha area of Belghar was divided into three administrative units, each called a Mutha. Now-a-days the traditional intervillage organization is completely defunct. In case of inter-village conflict, the traditional village leaders, ward members and some village elders of the concerned villages sit together in a common place to take a decision. Some times the traditional *Mandal Majhi* or the Sarpanch presides over the inter-village council meeting. Here the unanimous opinion is honoured.

2.8. Hill Khadia

Khadias are found throughout the State. In Jashipur area they are known as Hill Khadia who depend mostly on forest collection. The other nighbouring ethnic groups of the area also depend on forest collection.

2.8.2. The total population of the Khadia in the State comes to 1,44,276 out of which 72,637 (50.35%) are female and 71,639 (49.65%) are male (1981 census). The ratio of male and female population among them is almost balanced. The district wise population figures (1981 census) of the Khadia are given below :-

the triadia are given below :					
SI. No.	Name of the District	Male Population	Female Population	Total	
1	Mayurbhanj	7,591	 7,396	14,987	
2	Keonjhar	450	553	1,003	
3	Kalahandi	337	393	730	
4	Phulbani	408	453	861	
5	Dhenkanal	1,474	1,500	2,974	
6	Balangir	302	325	627	
7	Ganjam	9	2	11	
8	Koraput	131	127	258	
9	Cuttack	423	395	818	
10	Puri	560	575	1,135	
11	Balasore	243	245	488	
12	Sambalpur	15,572	15,518	31,090	
13	Sundargarh	44,139	45,155	89,294	
.0	Total	71,639 (49.65)	72,637 (50.35)	14,4276 (100.00)	

The total Hill Khadia population of the State, however, is not known

2.8.3. Like the Kutia Kandha, the Hill Khadia of Jashipur area do not inhabit in uni-ethnic villages. They reside in multi-ethnic villages alongwith the Kolha, the Santal, the Munda, the Bhumij, the Gauda etc.. The housing pattern of the Hill Khadia is not identical. Some houseds are built adjacent to one another in rows while some houses are located here and there. Thus a Hill Khadia village may be taken as a dispersed settlement.

2.8.4. The Hill Khadia houses have rectangular ground plan with gable-shaped roofs. The houses have very little plinth which rises 8" to 10" from the ground. The walls of the house are first framed with vertically posted Sal log. The wall frames are plastered with beaten earth. In most of the houses the side and back walls, exposed to outside, are not plastered. The roof is thatched with jungle grasss or straw. Their houses consist of two rooms--one meant for living and the other for kitchen and store. Many Hill Khadia houses are also single roomed. Every house has a front verandah. The cow shed is built at a little distance by the side of the house. The houses have no windows. The rooms are very dark even in the day time due to the lack of windows and the small sized doors.

2.8.5. Hill Khadias of Jasipur have no language of their own and have accepted Oriya as their mother tongue. Most of the Khadias in this area can speak and understand Santali language for their long association with the Santal - the major neighbouring tribe.

2.8.6. Hill Khadias have no special dress of their own. They dress themselves like the neighbouring caste Hindu communities. The males wear dhoti and shirt and the females wear saree, saya and blouse.

2.8.7. The male Hill Khadias do not adorn themselves with ornaments. The females wear limited ornaments, mostly made out of aluminium and glas beads. A few of them wear gold and silver ornaments.

2.8.8. The staple food of the Hill Khadia is rice. Majority of Hill Khadias do not grow rice as they possess very little cultivable land. They procure rice through barter system or purchase it from the nearby weekly market. With the rice, they consume different kinds of edible green leaves, roots and fruits collected from the forest and some common vegetables, like pumpkin, Ramkali (a kind of bean) and brinjal which they grow in their land. They take three principal meals in a day, one in the morning at 7 to 7.30 A.M., other in the afternoon at about 1 to 2 P.M. and last at about 8 P.M. Meat is taken if the game is captured or killed from the forest or during socio-religious functions. Sometimes they catch fish from nearby streams and rivers.

2.8.9. Like other tribal communities, family is the basic unit among the Hill Khadia. The family is patrilocal, patriarchal and patrileneal. They have also a nuclear family system consisting of parents and their unmarried children. Among the Hill Khadias monogamous type of family is the social profile but occasionally polygamous type of families are also found in their society.

2.8.10. The primary social grouping of individuals among Hill Khadias rests on the family but it is extended to larger groupings called 'Bansa'. The Bansa structure of Hill Khadias is the combination of a few lineages and its members are related to one another in a belief that they descend from a common mythical ancestor, who may be animal, plant or in-animate objects. Every Hill Khadia is a member of his patrilineal exogamous Bansa. So it is the exogamous character of the Bansa that makes a distinctive group.

2.8.11. Hill Khadias are divided into a number of Bansa, such as Hati, Saralia, Angarpoda, Duarabandhia, Langulia, Pattara Bichha, Sankhial, Pinchhilia, Sal Machhia, Jamdia, Dhuli, Damudia, Nag, Kachhima, Giri etc. . Thus the Bansas are totemistic and occupation based. The

members of the totemistic clans observe certain taboos in respect of the totems and refrain from causing injuries, killing or eating the totemic objects or animals. Hill Khadias do not observe any rituals in honour of these totems.

2.8.12. In Hill Khadia community the most common form of marriage is through negotiation. But there are instances of marriage by elopment. In marriage they observe Bansa exogamy. The abult marriage is the rule. In both the forms of marriage bride-price is compulsory. The brideprice is known as 'Pana' consisting of 40 Kgs. of rice, clothes for the parents, brothers and sisters of the bride and the cash amount ranging from Rs. 100 to Rs. 500. The groom also gets gifts from bride's father in shape of one Gara (bell-metal water container), three bell-metal utensils and two bell metal dishes. Besides these traditional gifts, now-a-days the groom demands a bicycle, or a wristwatch or a transister redio from bride's father. In their society levirate and sororate types of marriages are also prevalent.

2.8.13. The Hill Khadia religious beliefs and practices are based on animism and polytheism. Their religious practices also show adoption of a few Hindu festivals. Generally there are two places of worship in each Hill Khadia village. These places are called Thakura Sala and Thakurani Sala. In some villages Thakurani Sala is called Bhandara. There is no image of any deity in the shrine (Sala). The females are strictly prohibited to participate in the rituals or festivals observed in Thakura Sala.

2.8.14. The supreme deity of the Hill Khadia is Basukimata (Earth Goddess) and Dharama (Sun God). Besides these they worship a number of deities, such as Pajan Kanar, Ganasara, Devi Pachhimala, Gunthi Barei, Jautuka Sundari, Dalkuti Thakurani, Kali Thakurani etc.. The names of their deities differ from area to area in the Hill Khadia settlements. Besides these deities, they also believe in the presence of spirits in nearby hills and forests. Among all the hill spirits Badam Bada Raja is estemeed as the highest deity. They also believe in the influence of the souls of their ancestors in their day to day life.

2.8.15. The Hill Khadia observes a number of festivals. Dehuri - the sacerdotal head of Khadia religion, presides over all the religious festivals. He declares the time and day for the observance of the religious festivals. The Bahuka performs sacrifices in the Sala (Shrine) during the rituals of the religious festivals. The Hill Khadia religious festivals are mostly connected with forest collection. They observe Magha Parba in the month of Magha (Jan.-Feb.). This festival is observed in Thakura Sala. The other ethnic groups who reside in the village also participate in this festival. This festival is observed with the belief to have better fruiting of Bela, Siali and Panasa (jackfruit). Before this festival, it is tabooed to take Bela, Panasa and Siali fruit. This festival is followed by a common feast in which the females do not participate. In the month of Chaitra (March-April) Hill Khadias observe Nuakhai festival. This festival is observed in Thakura Sala. Females are not allowed to participate in this festival. But other ethnic groups of the village participate in this festival. In this festival Sal flower, Mohua flower and mango are ceremonially eaten for the first time. This festival is not followed with music and dance. In the month of Jestha (May-June) Akhaya Trutiya is observed. In this festival all the ethnic groups of the village (except the females) participate. This festival is also not followed with dance and music. After this festival they sow paddy, Gurjee (a kind of millet) or Gudli and maize. In the month of Jestha (May-June) Desua Puja is observed. The rituals for this festival are done in Thakurani Sala (bhandara). This festival is observed exclusively by the Hill Khadias. Both Hill Khadia males and females participate in this festival. This festival is oberved with the belief to have better collection of forest produce. After the rituals in Thakurani Sala (bhandara) this fesstival ends with music, dance and a heavy communal feast. In the month of Jestha (May-June) Hill Khadias oberve their greatest festival relating to forest collection. This festival is known as Banabhujuni which is observed exclusively by the Hill Khadia. The calendar for forest collection, among the Hill Khadia starts after this Banabhujuni festival. The chief forest spirit Badambadaraja along with other deities are worshipped in Desua Puja and Banabhujuni. Both sex of the community participate in this festival. This festival is followed by music, dance and communal feast. Bhandara puja is observed twice in a year, one in the month of Kartika (October-November) and the other in Jestha (May-June). Bhandara puja festival is performed exclusively by the Hill Khadia for a better collection of honey from the forest. In this festival the rituals are performed in Bhandara (Thakurani Sala) in which all Hill Khadia males and females participate. The Hill Khadia boys and girls sing songs and dance in this festival. Lastly a communal feast is arranged for this occasion. In the month of Asadha (June-July) the Ashadhi Puja is observed. This festival is observed in Thakura Sala and no females are allowed to participate in this festival. Along with Hill Khadia, other ethnic groups of the village also participate in this festival. This festival is observed with the belief to have a better crop of paddy, maize and Guduli (a kind of millet). Lastly in the month of Aswina (September-October), the Hill Khadia along with other ethnic groups observe Dhan Nua Khia. This festival is also observed in Thakura Sala. No female members are allowed to participate in this festival. In all these festivals deities are worshipped and cocks and he-goats are sacrificed to appease the deities.

2.8.16. Hill Khadias possess very little land in which they grow paddy, Guduli (a kind of millet), niger and maize. The produce from the land is not sufficient to sustain their livelihood. Many Hill Khadias of this region are landless so they principally depend on the forest surroundings of the Similipal region for their economy. The young (16 years above) and grown-up men go deep into the forest for collection of different kinds of forest produce whereas women and children up to 15 years collect roots, green leaves, fruits, and flowers within 2 Kms. in radius from their habitats. Generally from October to June (the peak period for forest collection) the Hill Khadia able bodied male members leave their habitats in groups and go deep into the Similipal forest for collection of different forest produce. They stay inside the forest for 5 to 6 days and return back to their village just one day before commencement of the nearby weekly market. In rainy season they collect different kinds of leaves, barks and mushrooms. They collect the forest produce in areas–8 to 10 Kms. in radius from their habitat and collect about 47 varieties of forest produce. Honey and resin are the two important items of forest collection. The details on items of forest collection, months of availbility and their utilisation has been explained in separate chapter.

2.8.17. The traditional village organisations of the Hill Khadia villagers largely follow the same pattern as other tribal communities of Orissa. Hill Khadias also have a set of traditional village officials known as Pradhan, Dehuri and Dakua. Pradhan is the traditional head and Dehuri is the spiritual headman. In some villages Dehuri acts as the secular as well as the spiritual headman of the Hill Khadia. The Dakua is the village messenger. The secular headman of the Hill Khadia is in-charge of all the affairs concerning his tribe. He is also the head and spokesman of the traditional village council. All the posts of traditional village council are hereditary in character.

2.818. Each Hill Khadia village is a political unit. The traditional and statutory leaders, such as Pradhan, Dehuri, Dakua, ward member and a few village elders form the village council. Hill Khadias live in multi-ethnic villages. In case of dispute/quarrel among the persons of different ethnic groups the village council with the traditional secular, religious heads, some elders of different communities of the village and the village messenger sit for the hearing. For the violation of social norms like killing a cow or having maggot in sore, the traditional council is called for. The matter is freely discussed among the members of the council and finally Dehuri or Pradhan sums up the consensus of the majority. The guilty is fined in shape of cash and kind. The fine amount is spent after liquor and communal feast.

2.8.19. In case of inter-village disputes the traditional office bearers, ward members, and some village elders of the concerned villages sit together for taking decision. The Sarpanch of the area is called for to preside over the meeting. Here the final unanimous decision is declared. In case the matter is not decided in inter-village council meeting, the Police is informed. Generally divorce, adultery, breach of social norms are decided in the inter-village council meeting.

2.9. Village and community-wise distribution of population according to the age and sex

Four villages were covered for the purpose of the study. Out of these four villages, two namely Rangaparu and Tuakela come under Belghar area and other two i.e. Podagada and Ramjodi come under Jashipur area. The total households of the four villages are 233. Out of 233 households, 121 belong to Belghar area and 112 to Jashipur area. The entire 121 households of Belghar area belong to Kutia Kandha community whereas 112 households of Jashipur area belong to different communities, such as Kolha (46 H. Hs.), Hill Khadia (50 H. Hs.), Santal (6 H. Hs.), Bhumij (2 H. Hs.), Munda (2 H. Hs.), Lohara (2 H. Hs.), Gauda (1 H. H.) and Ganda (3 H. Hs.). The population of two villages of Belghar area comes to 510 out of which male and female population constitute 51.18 per cent (261) and 48.82 per cent (249) respectively. Likewise the total population constitutes 51.24 per cent (248) and 48.76 per cent (236) respectively. It shows the preponderance of the male population over female population.

2.9.2. The population has been divided into three board age groups, such as up to14 years, 15-59 years, and 60 years and above. The distribution of population among the board age-groups shows that the maximum number of persons belong to the age-group of 15–59 years in both the study areas-Belghar and Jashipur. The population under this segment constitutes 66 per cent of the total surveyed population. There is a sharp decline in population belonging to the last age-group i.e. 60 years and above.

The village and community-wise distribution of population according to the age-groups and sex is shown in Table-2.1.

2.10. Ethnic group - wise literacy and educational standard

The ethnic group-wise literacy and educational standard is given in Table-2.2 (A) and Table-2.2 (B)

The percentage of literacy in Belghar area (Rangaparu and Tuakela) is only 7.06. The literacy rates among male and female were 13.41 per cent and 0.40 per cent respectively. The village Tuakela has a higher rate of literacy. It is 13.04 per cent. Rangaparu has only 5.32 per cent of literacy.

2.10.2 Jashipur area (Podagada and Ramjodi) has a higher percentage of literacy (26.86) compared to the Belghar area (7.06). In both villages the males register higher literacy rate.

2.10.3. When the literacy among different ethnic groups of four study villages are compared, the Lohara stands at the top position with the literacy rate of 62.50 per cent. Next to the Lohara comes the Santal with 50 per cent. Among all the surveyed communities, Bhumiji has the lowest rate of literacy of only 9.09 per cent.

2.10.4. As regards the highest educated persons among the total surveyed population, only two male persons of the Kutia Kandha community have gone up to High School standard whereas two Santals have gone up to above Secondary standard.

2.11. Occupational Distribution of Working Population :

The occupational distribution of the working population has been reflected in four tables, i.e. Table-2.3, Table-2.3-A, Table-2.3-B and Table-2.3-C. Table-2.3 shows the villagewise working
population and their main occupation, whereas Table-2.3-A shows community wise working population and their main occupation. Table-2.3-B shows villagewise working population and their subsidiary occupation and lastly Table-2.9-C shows communitywise working population and their subsidiary occupations.

2.11.2 While studying the occupational pattern, it is necessary to highlight the working force of the population of the study areas. According to the census criteria, the work force is defined as "All persons capable of participating in the production of goods and services". Thus the work force constitutes those belonging to age-group of 15-59 years of age.

2.11.3. The total work force among the surveyed population is 669. It constitutes 67.30 per cent of the total population. Males and Females constitute 50.07 and 49.93 per cent of the total woring population respectively. The proportion of work force in Belghar area (Rangaparu and Tuakela) is 77.65 per cent. In Belghar area the percentage for Female work force (50.89 per cent) exceeds the Male work force (49.11 per cent). This shows that the proportion of Female work force is higher than the male work force among the Kutia Kandha. In Jashipur area (Podagada and Ramjodi), the percentage for Male work force (91:46 per cent) exceeds the Female work force (48.54 per cent).

2.11.4. The village-wise classification of the working population, according to their main occupation, has also been shown in Table-2.3. The different main occupations pursued are cultivation, collection of minor forest produce, wage, service, cottage industry and craft. The distribution of work force in different occupational categories (main) shows that both in Belghar (Rangaparu and Tuakela) and Jushipur (Podagada and Ramjodi) area the maximum number of workers are engaged in cultivation. In Belghar area 98.23 per cent of the working population have accepted cultivation as their main occupation. Next to cultivation comes wage earning with 1.27 per cent, service with 0.25 per cent and art and craft with 0.25 per cent of the working population. In Jashipur area 54.01 per cent of the working population have declared cultivation as their main occupation comes collection of forest produce with 29.92 per cent, wage earning with 10.21 per cent, cottage industry with 3.64 per cent, service with 1.45 per cent and art and craft with 0.78 per cent of the working population respectively.

2.11.5. Table 2.3-A shows the community-wise working population and their main occupation. The Kutia Kandha, was studied in Belghar area. In Jasipur area, eight different communities, namely Kolha, Khadia, Santal, Bhumij, Munda, Lohara, Gond and Gauda, were studied. Except Khadia all other seven communities have declared cultivation as their major occupation. In case of Hill Khadias, 61.74 per cent of their total working population are mainly engaged in collection and sale of minor forest produce. But the male Hill Khadia workers (49 persons) go for collection and sale of minor forest produces. It exceeds the female work force (22 persons). It is just *vice-versa* in case of workers engaged in cultivation. Only 8 Khadia males and 24 females are mainly engaged in cultivation. Among the Kolhas and the Santals, next main occupation is wage earning with 14.68 and 19.04 per cent of their total working population engaged in it respectively. The Bhumij, the Munda and the Gond are mainly cultivators. One person each belonging to a Lohara and a Gauda household pursue the traditional occupation as the main occupation.

2.11.6. Table-2.3 B and 2.3 C show the village and community-wise working population and their subsidiary occupations. The tribals practise different kinds of occupations to sustain themselves. Besides the main occupation the tribal people of the study area also have some subsidiary occupations. In Belghar area (Rangaparu and Tuakela) 50.89 per cent of the Kutia Kandha working population depend upon the collection and sale of minor forest produce as their subsidiary occupation. Next to it comes wage earning which engages 20 per cent of their working population. Only 1.27 per cent of the Kutia Kandha working population depend on Livestock

rearing as their subsidiary occupation. In Jashipur area (Podagada and Ramjodi) the subsidiary occupations of the working population are collection and sale of minor forest produce, wage earning and cultivation which engage 48.54, 31.38 and 28.46 per cent of its total working population respectively.

2.11.7. In Jashipur area (Podagada and Ramjodi) Hill Khadias who mostly depend upon collection and sale of minor forest produce (61.74 per cent) as their principal occupation, have cultivation (66.09 per cent) as their favourite subsidiary occupation. But all other communities except Hill Khadias of Jashipur area (Podagada and Ramjodi) have collection and sale of minor forest produce and wage earning as their subsidiary occupations.

2.12. Community-wise classification of households according to the size of land holding :

The community-wise classification of households according to the size of land holding, is given in Table-2.4. The data on this table relates to the own land possessed by the households. Here the cultivating households are divided into three categoties on the basis of their operational holdings. These categories are marginal farmers, small farmers and big farmers.

2.12.2. The analysis of this table shows that out of 233 total surveyed households 150 (64.38%) are land owning and 83 (35.62%) are landless households. Out of the total 150 cultivating households, the maximum number of 96 (64%) are marginal farmers. The average land holding per marginal farmers is calculated at 1.30 acres. There are 47 (31.33%) cultivating households which belong to the small farmer category with an average area of 3.64 acres of land per household. The remaining 7 (4.67%) households belong to the big farmer group and their average land holding size per household 7.43 acres. The average size of land holding of the total surveyed households comes to 1.49 acres whereas the average size of land holding per cultivating households comes to 2.32 acres.

2.12.3. Form among the nine different communities studied, the maximum of 56 per cent of Hill Khadia households are landless. Next to Hill Khadia stands Kutia Kandha with40.50per cent landless households. All the Bhumij, the Munda and the Gond households are land owning households. Next to these communities stand the Kolha and the Santal with 91.30 per cent and 83.33 per cent land owning households respectively. The average size of land holding per Hill Khadia land owning household is the minimum with 0.74 acre, whereas the Lohara has the maximum area per land owning household which comes to 7.00 acres. Next to the Lohara stands the Santal with 4.10 acres of area per land owning household.

2.13. Households engaged in share cropping

The classification of households engaged in share cropping is shown in Table-2.5. This Table shows that from among the Kutia Kandha none has either taken land on lease or has given land on lease for share cropping. In Jashipur area (Podagada and Ramjodi) a very negligible portion of land, i.e. 4.00 acres are given on lease for share cropping. Among five share cropping households, two belong to Kolha community with one acre, one belong to Santal community with 1.50 acre, one to Bhumij community with 0.50 acre and one belongs to Hill Khadia community with 1 acre have taken land on lease for share cropping. Each of one Santal and one Lohara household has given 2 acres of land for share cropping.

2.14. Households possessing different technical skills

The Table-2.6 shows the number of households knowing various technical skills. From among the Kutia Kandha ,13 persons (10.74 per cent) have acquired technical skills. Out of it 4 persons (3.30 per cent) have acquired skill in carpentry, 4 (3.30 per cent) in tailoring and 5 (4.13 per cent) in cane work. In Jashipur area (Podagada and Ramjodi) only one Hill Khadia (2 per cent) has aquired skill in tailoring and two Loharas have acquired skill in their traditional craft, blacksmithy.

2.15. Ownership of house and house-site

1. A.S. 1 .

The Table-2.7 shows the ownership of house and house-site by the surveyed households. This Table reveals that all Kutia Kandha households of Belghar area (Rangaparu and Tuakela) possess both house and house-site. In Jashipur area (Podagada and Ramjodi) out of 112 studied households, 12 (5.15 per cent) household possess house but no house-site, 2(0.86 per cent) households possess only house-site and 4 households (2 Kolha and 2 Hill Khadia) possess neither house and nor house-site. These four Kolha and Hill Khadia households have recently migrated from other villages and staying temporarily in the houses of relatives.

12-SC&ST



Resin extraction by a Khadia youth.



Peeling of the castor nuts, a swiden produce.

 Table-2.1
 Village and Ethnic group-wise distribution of population according to the age and sex

Si. Name of Name of Total No. of Mine field Up to 14 years. Is to 59 years. Is to 59 years. Field Mine field Is to 59 years. Field Mine field Is to 50 years. Field Mine fie				llage and	Village and Etnnic group-wise dis	M-dnoul					,			ł		10
N. Wand of the first of the fi	0		Alama of	Tatol	1011	0 14 VP:	ars	15 tc	o 59 year	S	60 ye	ears & ab	ove	IOTAL	populatio	% 10
village community house 1 2 3 4 5 6 7 8 9 7 11 13 14 15 1 2 3 4 5 6 7 8 9 7 11 138 197 1 2 3 45 37 82 7 1 50.12 (4988) (1 2 Tuakela Kuita 21 18 15 33 45 37 82 7 130 139 (55.2) (49.52) (15.15) (49.82) (15.15) (49.82) (15.15) (49.82) (15.15) (49.82) (15.15) (49.82) (15.15) (49.82) (15.16) (49.82) (15.16) (49.82) (15.16) (49.82) (15.16) (49.65) (15.16) (49.65) (15.16) (49.65) (15.16) (49.65) (55.0) (56.0) (56.0) (56.0) (56.0) (56.0) (56.0)	N N		name of the	No. of	ΔN	р т ц	Total	Σ	ц		Σ	ш	Total	Σ	LL.	Total
1 2 3 4 5 6 7 8 9 1 195 13 14 15 1 Rangaparu Kundna 21 15 130 139 269 4 7 1 198 197 2 Tuakela Kundna 21 18 15 33 45 37 85 45 37 85 45 130 139 269 4 7 11 198 135 14 150 139 148 175 136 135 14 150 138 355 14 15 249 17 14 31 44 42 86 1 3 83 355 14 14 465 5337 14 14 14 14 14 14 14 14 14 14 12 86 14 14 14 14 14 14 14 14 14 <t< td=""><td></td><td>village</td><td>community</td><td>house</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		village	community	house												
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						¢	r	ά	σ	10	11	12	13	14	15	16
Rangaparu Kundha 100 64 51 115 130 135 37 82 2 20.12 (39.88) (1 26.12) (39.88) (1 26.12) (39.88) (1 26.13) (35.22) (12.22) (31.88) (13.82) (13.22) (31.88) (13.82) (13.27) (13.88) (13.82) (13.27) (13.88) (13.82) (13.27) (13.82) (13.27) (13.82) (13.27) (13.82) (13.27) (13.82) (13.27) (14.82) (15.27) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.87.6) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.76) (14.	-	2	Э	4	5	٥		0	001	260	4	7	11	198	197	395
Tukkela Kandha 21 18 15 33 45 37 82 63 52 1 54.79 45.22 1 54.79 45.22 1 54.79 45.22 1 54.79 45.22 1 56.19 45.22 1 56.19 45.22 53.37 1 56.19 45.22 53.37 1 56.19 45.22 53.37 1 26.19 45.22 53.37 1 26.19 45.22 53.37 1 26.1 35.37 1 26.1 35.37 1 26.1 35.37 1 26.1 35.37 1 26.1 35.37 1 26.1 36.35 53.37 1 26.1 36.35 53.37 1 26.1 36.35 35.37 1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1	-	Rangaparı		100	64	51	115	051	52	607	r.			(50.12)	(49.88)	(100%
Underta Kancha E1 E2 66 148 175 176 351 4 7 11 251 349 146 533 549 110 1 2 3 863 353 549 110 1 2 3 46.63 353 7 11 2611 3 349 14 349 14 261 3 46.63 353 57 1 251 3 353 57 1 261 333 7 14 382 353 56 110 1 2 3 46.63 13 533 7 51 17 14 44 42 86 1 3 4 62 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 33 <	C		Kandha	21	18	15	33	45	37	82	:	:	•	63	52	115
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V		Kandha	J	2	2								(24./8)	(77.04)	100%
Podagada Kolha 38 28 37 65 -54 56 110 1 2 3 823 553 Hill Khadia 32 17 14 31 44 42 86 1 3 4 653 5337 1 Santal 6 14 5 19 12 9 21 65 5 3 55.00 (55.00) (55.00) (55.00) (55.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.20) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00)			Total	121	82	99	148	175	176	351	4	2	11	261 (51.18)	249 (48.82)	(100%)
Podagada Kolha 38 28 31 44 42 86 1 3 46.63 (53) (53) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (145.76) (155.76) (145.76) (155.76) (145.76) (155.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76) (125.76					00	27	C.C.		56	110	-	2	e	83	95	178
Hill Khadia 32 17 14 31 44 42 86 1 3 4 62 5 55 55 14 65.00 (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.00) (55.14) (10.11) (55.14) <th< td=""><td>က</td><td></td><td></td><td>85</td><td>87</td><td>10</td><td>ß</td><td></td><td>S</td><td>) -</td><td>•</td><td></td><td></td><td>(46.63)</td><td>(53.37)</td><td>(100%</td></th<>	က			85	87	10	ß		S) -	•			(46.63)	(53.37)	(100%
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			Hill Khadi		17	14	31	44	42	86	-	ი	4	62 (51.24)	59 (48.76)	121 (100%)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			Santal	9	14	5	19	12	0	21	:	*	•	26 (65.00)	14 (35.00)	40 (100%)
Bhumul 2 4 2 9 5 45.45 (54.55) (45.45) (15.455) (45.45) (15.455) (45.45) (15.455) (45.45) (15.455) (15.455) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00) (50.00)			:	(c	G	c	c	ſ		:		9	ß	11
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			Bhumij	N	4	N	D	J	0	>				(54.55)	(45.45)	(100%)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			Munda	2	-	F	2	N	2	4	:	:	•	3 (50.00)	3 (50.00)	(100%)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			-	c	C	Ŧ	V	0	0	4	:	:	•	5	3	80
Gauda111112 \dots \dots 2^2 \dots 1^2 2^2 1^3 RamjodiKolha87310111122 \dots 16 13 333 Hill Khadia1815924202343 \dots 1 1 35 333 Gond336924202343 \dots 1 1 35 333 Gond3378171153152305268 248 236 Total1129378171153152305268 248 236 Grand Total1129378171153152305268 248 236 Grand Total1129378171153152305268 248 236 Addit 4 study villages) $\frac{1}{(1.91)}$ 233 175 144 319 328 328 656 6 13 19 509 485 Addit 4 study villages) $\frac{1}{(1.91)}$ (1.91) (1.91) (51.21) (48.79) (7.91)			Lonara	V	0	-	t	1	J					(62.50)	(37.50)	(100%)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			Gauda	-	-	•	-	4 100	-	2	;	:	*	2 (66,67)	1 (33.33)	3 (100%)
Ramjodi Kolna 0 7 0 76.25) (43.75) (13.75) Hill Khadia 18 15 9 24 20 23 43 1 1 35 33 Gond 3 3 6 9 5 3 8 8 9 fond 3 3 6 9 5 3 8 8 9 fond 3 3 6 9 5 3 8 8 9 9 fond 3 78 171 153 152 305 2 6 8 248 236 full 4 study villages) 233 175 144 319 328 328 656 6 13 19 509 485 (All 4 study villages) 233 175 144 319 328 666.00) (1.91) (1.91) (51.21) (48.75) (48.75) (48.75) (48.75) (48.75) (48.75) (48.75) (48.75) (48.75)				o	2	¢	10	Ŧ	11	22	:	:	:	18	14	32
nadia 18 15 9 24 20 23 43 1 1 35 33 3 3 6 9 5 3 8 1 1 153 148.53) (3 3 6 9 5 3 8 1 1 35 33 112 93 78 171 153 152 305 2 6 8 248 236 233 175 144 319 328 328 656 6 13 19 509 485 233 175 144 319 328 328 656 6 13 19 509 485 (32.09) (66.00) (66.00) (1091) (51.21) (48.79)	7		Kolna	0	-	0	2							(56.25)	(43.75)	(100%)
3 3 6 9 5 3 8 8 9 112 93 78 171 153 152 305 2 6 8 248 236 233 175 144 319 328 328 656 6 13 19 509 485 (32.09) (32.09) (66.00) (1.91) (51.21) (48.76) (1.91) (51.21) (48.79)			Hill Khad		15	თ	24	20	23	43	:		-	35	33	(1000/)
3 3 3 5 0 3 0 3 6 17.06) (52.94) (47.06) (52.94) (52.94) (51.24) (47.06) (52.94) (51.24) (48.76) (51.24) (48.76) (48.76) (51.24) (48.76) (48.76) (32.09) 175 144 319 328 328 556 6 13 19 509 485 485 (1.91) (51.21) (48.79) (1.48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (51.21) (48.79) (1.91) (1.91) (51.21) (48.79) (1.91) (1.91) (1.91) (1.91) (1.91) (1.91) (1.91) (1.91) (1.91) (1.91) (1.91) (1.91)<					C	C	c	u	c	a				(74.1c) 8	(48.53) 9	
112 93 78 171 153 152 305 2 6 8 248 236 233 175 144 319 328 328 566 6 13 19 509 485 233 175 144 319 328 328 656 6 13 19 509 485 (32.09) (32.09) (66.00) (66.00) (1.91) (51.21) (48.79)			Gond	n	n,	٥	ກ່	0	0	D	:	*	:	(47.06)	(52.94)	(100%)
233 175 144 319 328 328 656 6 13 19 509 485 (32.09) (66.00) (1.91) (51.21) (48.79) (Total	112	93	78	171	153	152	305	0	9	ω	248 (51.24)	236 (48.76)	484 (100%
(32.09) (50.01) (50.00)	ł	Grand Tot	tal	233	175	144	319	328	328	656	Q	13	19	509	485 (48 79)	994 (100%)
		(All 4 stuc	dy villages)				(32.09)			(00.00)			(10.1)	(13.10)	(s rot)	-1

			Ethn	ic Grou	Ethnic Group-wise literacy and Educational Standard	Filteracy and Educ	ational Star	ndard			
Name of the	Name of the		Total	Total population			Illiterate		Literati	Literate without any level	y level
village	community	ĮΣ		ц	L	M	Ľ.	T	M	Ĺ	T
-	2	3	2	4	5	9	7	8	6	10	11
Rangaparu	Kutia Kandha	• 15	198	197	395	178 (89.90)	196 (99.49)	374 (94.68)	Ŷ	:	S
Tuakela	Kutia Kandha		63	52	115	48 (76.19)	52 (100.00)	100 (86.96)	2	:	5
£	Total	51	261	249	510	226 (84.59)	248 (99.60)	474 (92.34)	7	:	2
					Table	Table-2.2 (A)					
IntoP	I In to Primary	Middle	0		High School		Above	Above Secondary	•[Total literates	
M CP CP	F T M	Ľ.	T	M	ц.	L	M	FT	M	ц	T
	13 14 15	16	17	18	19	20	21	22 23	24	25	26
14	1 15 1	:	-	:			:	:	20	1	21
									(10.10)	(0.5)	(5.32)
~	. 8 3	:	ж	5	:	2		:	15	4	15
									(23.81)		(13.04)
22	1 23 4	:	4	2	:	2	:	:	35	1	36
									(13.41)	(0.40)	(1.06)

Table-2.2 (A)

| 26

Ethnic Group-wise literacy and Education Standard Table-2.2 (B)

36 II Literate without any level 10 • 10 0 -IT. -26 Σ 00 6 141 (79.21) 94 (77.69) 20 (50.00) 10 (90.31) 4 4 (66.67) 3 (37.50) 2 (66.67) 2 (66.67) 2 (66.67) 4 1 (66.29) (73.14)(76.37)13 354 ∞ F 88 54 54 (92.63) 9 (91.53) 9 (64.29) 5 5 (100.00) 3 3 (100.00) 1 1 (100.00) 1 1 (100.00) 1 1 (100.00) 1 2 (85.71) 26 (77.78) 7 7 (77.78) Illiterate (88.14) 208 11 ~ (50.00) 15 (42.84) (75.00)146 (48.87) 14 (77.78) 53 (63.86) 40 (64.52) 11 (42.31) 5 (63.33) 1 1 (33.33) -9 : (Jashipur area) Σ 9 17 484 68 32 178 40 121 5 F Total population 236 33 6 4 95 59 4 5 L. 4 248 35 ∞ 18 62 26 0 83 Σ 3 Hill Khadia Hill Khadia Name of the community Bhumij Munda Lohara Gauda Kolha Santal Kolha Gond Total 2 Podagada Name of the Ramjodi village

Upt	Up to Primary	ary			Middle				High ?	High School		Abo	Above Secondary	ary	L	Total literate	e
Σ	щ			X	Ц	Ľ		Σ		L	l ^E	M	Н	T	W	ш	F
12	13	14	11 - M	15	16	17		18	-	19	20	21	22	23	24	25	26
13	3	16		4	:	4		S			5	1	:	1	30	L	37
															(36.14)	(7.37)	(20.79
10	"	1		7	-	~		:			:	:	:	:	22	5	
	•					9									(35.48)	(8.47)	(22.31)
~	<i>c</i>	10		2	2	4		e		I	4	2		2	15	2	20
)	I			20	I										(57.67)	(35.75)	(50.00)
-	1	_											:	•	I	:	-
- -	*	4		:	:	:			E.						(16.67)	•	(60.6)
													:	:	2		2
:	:	13) 1		:	:	:		:		:	:	:			(66.67)	÷.	(33.33
c		(÷	:	:		2		:	7	:	:	:	5	;	S
1	:	1			:	:									(100.00)	*	(62.50)
					:	Ţ	2	:	•	:	:	:	:	:	1	•	
:	:	:		r -											(50.00)	•	(33.3.
-		-	121	:		:		:		:	:	:	:	:	4	2	9
4															(22.22)	(14.29)	(18.7:
1	4	16		:	:	:				:	:	:	:	:	20	2	27
2															(57.14)	(21.21)	(39.71)
1	0	"		_	:	T		:		:	:	:		;	0	2	4
-	1	2		5 S			22								(25.00)	(22.22)	(23.53)
48	14	62		15	3	18		10	1.1.1	-	11	3	:	3	102	28	130
2															101 117	111 001	120 201

Table-2.2 (B) (Contd.)

 Table-2.3
 Village-wise working population and their main occupation

No.		Name of the	IOUAL	WOL	working population	lation	-	Cultivation		MINC	Minor Forest produce	oquce
	village	community	population	Male	Female	Total	Male	Female	Total	Male	Female	Total
-	2	6	4	S	9	7	8	6	10	11	12	13
T	Rangaparu	Kutia	395	146	161	307	144	159	303	•	*	:
7	Tuakela	Kandha Kutia	115	48	40	(77.72) 88 (76.57)	46	39	(98.70) 85 (96.59)	:	:	*
	Total	Mailuid	510	194 (11)	201	395 (77.45)	190	198	388 (98.23)		:	*
ŝ	Podagada	Kolha	178	45	44	89	31	26	57	3	9	6
		Hill Khadia	121	30	24	(50.00) 54 (44.62)	9	6	(04.04) 15 (27.78)	23		(11.01) 30 (55 56)
		Santal	40	11	10	(c0. 11 21 (52 50)	8	9	(66.67)	*	7	(9.52)
		Bhumij	П	4	5	6 6 6	4	5	6	*	6 9	
		Munda	9	5	ຕ	(20.10) 5 5	2	б	(100.00) 5 100.00)	:	* *	
		Lohara	8	7	Τ	(cc.co) 2 (03 75)	1	I	(100.00) 2 (66.67)	:	•	:
		Gauda	3	1	1	(0C.1C) 2 (AA AA)	1	:	(20.00) 1 (50.00)	:	*	•
4	Ramjodi	Kolha	32	10	10	(00.00) 20 (62 50)	6	6	(00.00) 18	÷	*	
3		Hill Khadia	68	30	31	(0C.20) 19 (17.08)	3	15	(00.07) [7] (78.77)	26	15	41 (12 21)
		Gond	17	9	4	(07.71) 10 (58.82)	9	4	(100.00)	÷	:	
	Total		484	141 (51.46)	133 (48.54)	274 (56.61)	70	78	148 (54.01)	52	30 (82 (29.92)
	Grand Total (All 4 study villages)	(es)	994	335 (50.07)	334 (49.93)	669 (67.30)	260	276	536 (80.12)	52	30	82 (12.26)

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10		Maga			Service			ں ا	Cottage Industry			Y	ri anu cia	111
	Male	Female	Total	Male	Female	Total		Male	Female	Total	2	Male	Female	Total
1	14	15	16	17	18	19	International	20	21	22		23	24	25
1		2	3			:	i.	:	:	:		1	:	1 (0.32)
5	I	1	(0.20) 2 (2.27)	-	:	1 (1.13)		:	:			:	:	:
Total	2	3	5 (1.27)	-	:	1 (0.25)		:	:	: 2		-	:	1 (0.25)
3	7	6	14 (15.73)	2	•	2 (2.25)		1	S	6 (6.74)		-	:	1 (1.12)
	:	5	5 (9.26)	:		:		1	ю	4 (7.40)		:	:	:
	5	2	4 (19.04)	1	:	1 (4.76)		:	:	:		:	:	*
	•	:	•	:	:	:		:	: :	: :		: :	: :	: :
	: :	: :	: :	: :	: 2	: :		: :	:	:		I	:	1 (33.33)
	:	1	ا دون مون	:	;	:		:	:	:		:	:	:
4	1	I	2 · · · · · · · · · · · · · · · · · · ·	:	:	:		:	:	:		:	*	:
	1	1	(10.00) 2 (3.28)	-	:	1 (1.63)		:	:	:		:	*	:
	:	•	:	:	.:	:		:		:		:	:	÷
Total	11	17	28 (10.21)	4	:	4 (1:45)	S. 1 *	0	8	10 (3.64)		2	:	2 (0.72)
G. Total (All 4 study	G. Total 13 (All 4 study villages)	20	33 (4.93)	S	:	5 (0.75)		2	8	10 (1.49)		3	8	3 (0.44)

community Population Male Female Total Male Female 2 3 4 5 6 7 8 8 2 3 4 5 6 7 8 8 Kutia Kandha 510 194 201 395 190 198 Kutia Kandha 510 55 54 109 40 35 Kolha 210 55 54 109 40 35 Hill Khadia 189 60 55 115 8 24 Santal 40 11 10 (51.90) 40 35 Bhumij 11 4 5 9 4 5 Munda 6 2 3 5 3 3 1 1 Lohara 8 2 4 10 6 4 5 3 Lohara 8 2 1 33	SI	Name of the		WOI	Working population	ion		Cultivation		Minc	Minor Forest produce	oduce
2 3 4 5 6 7 8 Kutia Kandha 510 194 201 395 190 198 Kutia Kandha 510 194 201 395 190 198 Kolha 210 55 54 109 40 35 Hill Khadia 189 60 55 115 8 24 Bhumij 11 10 21 8 24 Kolha 6 55 115 8 66 Bhumij 11 10 21 8 24 Kunda 6 2 3 53.33 1 1 Lohara 8 2 1 35.33 1 1 1 Cond 17 6 4 66.33.33 1 1 1 Cond 17 6 4 1 37.50 2 3 3 Cond 1 1<	7		Population	Male	Female	Total	Male	Female	Total	Male	Female	Total
Kutia Kandha510194201395190198Kutia Kandha21055541094035Kolha21055541094035Hill Khadia1896055115824Bhumij111021824Munda6511102185Munda62363.33)23Lohara821311Gond17641064Gond17641064Total94335334669260276			3	4	5	6	L	∞	6	10	11	12
Kolha2105554109 (51.90)4035Hill Khadia1896055115824Bhunij11102186Bhunij11102186Bhunij1145945Cantal623594Bhunij1145945Bhunij111062186Bhunij11110645Ganda1762364Cond17641064Cond17641064Total94335334669260276Total994335334669260276	_	Kutia Kandha	510	194	201	395	190	198	388	:	:	*
Kolha 210 55 54 109 40 35 Hill Khadia 189 60 55 115 8 24 Santal 10 60 55 115 8 24 Santal 40 11 10 21 8 6 Bhumij 11 4 5 9 4 5 Munda 6 2 3 5 2 3 Munda 6 2 3 6 4 5 Munda 6 2 3 6 33.33 1 1 Lohara 8 2 1 3 5 2 3 Gond 17 6 4 10 6 4 4 Gouda 3 1 1 1 2 3 3 Total 994 335 334 669 260 276						(77.45)			(98.22)			
Hill Khadia1896055115824Santal401110 21 86Bhumij1145945Bhumij1145945Bhumij1145945Bhumij1145945Bhumij11453 33.33 11Lohara821 $3,333$ 111Lohara821 $3,750$ 64Gond1764 10 64Guda311 $2,882$ 1Total994335 334 669 260 276	(1		210	55	54	109 (51.90)	40	35	75 (68.80)	ю	9	9 (8.26)
Santal401110 21 86Bhumij1145945Bhumida623 (52.50) 45Munda623 (31.82) 45Munda623 (31.82) 45Lohara821 (37.50) 45Gond1764 (37.50) 64Gond311 (58.82) 1Total994335 334 669 260 276	(.)		189	60	55	115 (60.84)	8	24	32 (27.83)	49	22	71 (61.74)
Bhumij1145945Munda623523Munda623 (81.82) 23Lohara623 (33.33) 23Lohara821 (37.50) 64Gond1764 (37.50) 64Gond1764 (37.50) 64Gouda311 (58.82) 1 (66.66) Total994335 334 (69) 260 276	4		40	11	10	21 (52.50)	8	9	14 (66.67)	:	7	2 (9.52)
Munda623523Lohara821311Lohara821311Gond17641064Gauda31121:Total994335334 (66) 260 276	41		11	4	S	9 (81.82)	4	Ś	9 (100.00)	:	:	*
Lohara821311Gond17641064Gouda311211Gauda31121Total994335334 669 260 276	-		9	2	ε	5 (83.33)	13	(n	5 (100.00)	:	:	*
Gond17641064Gauda31121Gauda31121Total994335334 669 260 276	1.7		8	7	-	3 (37.50)	Ι	1	2 (66.67)	:	÷	:
Gauda 3 1 1 2 1 Total 994 335 334 669 260 276	~		17	9	4	10 (58.82)	9	4	10 (100.00)	:	:	:
994 335 334 669 260 276 (67.30)	<u> </u>		3	_	1	2 (66.66)	-	:	1 (50.00)	-	3	:
	11212	Total	994	335	334	669 (67.30)	260	276	536 (80.12)	52	30	82 (12.26)

Table-2.3 (A)

2-SC&ST 7

SI.	Name of the		Wage			Service		Ŭ	Cottage Industry	stry		Art and Craft	raft
No.		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
-	2	13	14	15	16	17	18	19	20	21	22	23	24
-	Kutia Kandha	5	3	5 (1.26)	-	:	l (0.25)	:	:	:	-	•	1 (0.25)
3	Kolha	∞	8	16 (14.68)	5		2 (1.83)	-	S	6 (5.50)	-	:	1 (0.92)
3	Hill Khadia	I	9	7 (6.10)	_		1 (0.87)	1	б	4 (3.48)	*		:
4	Santal	0	7	4 (19.04)	-	:	l (4.79)	:	:	:	:	•	:
S	Bhumij	:	•		:	:	:	:	;	:	:		:
9	Munda	:	:	:	:	•	:	:	:	•	:	:	:
2	Lohara	:	:	e e	1		: •	:	:	:	-	:	1 (33.33)
∞	Gond	:	:	:	:	:	:	:	:	:	:	:	:
6	Gauda	:		1 (50.00)	:	:	:	:	:	:	:	:	:
	Total	13	20	33 (4.93)	5		5 (0.75)	2	~	10 (1.49)	3	:	3 (0.44)

Table-2.3 (A) (Contd.)

 Table-2.3 (B)

 Village-wise working population and their subsidiary occupation

(0.75) (0.98)2 (2.27)1.27) 6] 3 Livestock n n -8 12 0 Σ 17 (24.66)(40.00) 12 (19.67) (31.38) 10.00)(00.00)33.33) 79 (20.00) 33.33) (16.93) 27 (30.86) 29.62) 38.10) 165 35 39.32) 86 16 8 52 16 F Wage 83 4 20 39 24 5 [1. 15 82 42 28 2 40 5 4 Σ $13 \\ (65.00) \\ 28 \\ 28 \\ (45.90) \\ 4$ (40.00) 133 (48.54) 334 (49.92) (100.00)(100.00)(46.10) 19 (35.20) 13(33.33)(61.90) 9 (52.44) 40 (45.45) 201 (50.89) 161 13 41 F Minor Forest Produce 312 40 201 12 Щ 161 31 22 22 : 10 Σ : : (100.00)36 (59.01) 78 (28.46) 78 (11.66) 40 (74.07) : : 0 : : : F : • Cultivation 35 35 : : 6 43 20 43 22 Σ : 8 669 (67.30) (62:50) 61 (89.71) 10 (58.82) (56.61) (50.00)66.66) (44.63) .50) (52.50)83.33) 76.52) (77.72) 77.45) (81.82) 274 20 395 54 307 88 68 5 5 Working population 334 33 27 40 4 201 161 [1 9 335 30 9 141 2 48 30 395 146 510 194 45 Σ 5 population 994 484 32 68 115 17 Total 178 121 40 4 Hill Khadia Hill Khadia Kandha Kutia Kandha Bhumij Munda Lohara Gauda community Santal Kolha Gond Kolha Total **Fotal** of the Kutia Name Grand Total (All 4 study villages) 3 Rangaparu Podagada Ramjodi Tuakela village Name of the 2 No. SI. 2

 Table-2.3 (C)

 Community-wise working population and their subsidiary occupation

Live-(0.75) (127) S L 20 5 ĽL. 3 Σ 5 2 0 Wage (24.66)8 (38.09) 3 (33.33) 2 (40.00) 1 (33.33) (20.00) (39.45) (24.35) 1 (10.00) 8 43 8 165 F 5 39 LT. 4 8 83 Minor Forest Produce Σ 40 8 9 82 2 B (61.90) 9 (100.00) 1 1 (33.33) 4 (49.54) 47 201 (50.89) 54 40.00) (49.93) 334 L 0 (40.87)Q 4 312 R 4 LT. 22 Σ B Q 76 (66.09) (11.66) 78 F 6 Cultivation N <u>ل</u>ل 35 8 7 Σ 43 4 5 Working population (67.30) (51.90) Ib (60.84) 2 2 2 (52.50) 9 .9 (81.82) 5 5 3 3 395 (77.45) 109 33.50) (00) (58.82) 669 Q 2 F 9 Ц 201 2 334 S 5 Σ 2 33 60 335 4 N 9 population Total 510 210 8 40 994 3 Sl. Name of the Hill Khadia Total Nacommunity 2 Kandha Santal Lohara Bhumij Kolha Kutia Munda Gauda Gond stock 6 5 9 3 2 ∞

Table-2.4

Community-wise Classification of households according to the size of land holding (Exclusive of shifting cultivation land)

SI.	. Name of	Total	Landless	Land	Marg	Marginal Farmers	Small	Small Farmers	Big Farmers	mers	Average land holding	d holding
Ž	a the tribe	No. of	house-	owning	No. of	Average	No. of	Average	No. of	Average	Per Per	Per land owning
		house- holds	holds	house- holds	house	area per household	house- holds	area per household	holds	area per household	house-hold (in ac.)	household (in ac.)
	2	3	4	5	9	7	8	6	D	-	Б	В
	kutia Kandha	Ð	49 (40.50)	72 (59 <i>5</i> 0)	33 (45.83)	1:46	34 (47 <i>2</i> 2)	3.88	5 (695)	6.40	1.74	293
2	Kolha	46	4 (8.70)	42 (9130)	32 (7619)	133	1) (2781)	3.00	·		172	8
ŝ	Hill Khadia	50	28 (56.00)	22 (44.00)	22 (100.00)	0.74		ŀ.		8	0.33	0.74
4	Santal	Q	ا (افھر)	5 (83.33)	3 (60.00)	150	1 (20:00)	3.00	1 (20.00)	13.00	341	4.10
S	Bhumij	6		2 (100.00)	2 (100.00)	130	•		•		150	130
9	Munda	61	1	2 (100.00)	1 (50.00)	150	1 (50.00)	3.00			225	225
L	7 Gond	с,		(100.00)	2 (66667)	0.25	1 (33.33)	3.00	•	•	91	91
00	3 Lohara	2	1 (50.00)	1 (50.00)	·	•	·	•s g = 2 nfraz	1 (50.00)	7.00	350	7.00
6	Gauda	_		(100.00)	1 (100.00)	2.00			- - G		2.00	2.00
	Total	233	83 (35.62)	LSO (64.38)	96 (64.00)	13)	47 (31.33)	3.64	7 (4.67)	. 7.43	1.49	225

i				Hou	Insehol	lds engé	aged in St	Households engaged in Share Cropping	bu			
S. So.	Name of the village	Name of the community	Tot	Total No. of households		ľ	Land taken on lease (leased-in land)	on lease land)		Land given on lease (leased-out land)	n on lease but land)	
5					1	Household	p	Area (in ac.)	•	Household	Area (in ac.)	
-	2	в	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4		5		9		7	8	
- T	Rangaparu	Kutia Kandha		100		:	4	:		:	:	-
2	Tuakela	Kutia Kandha		21		:		:			•	
3	Podagada	Kolha		38		2		1.00		:		
		Hill Khadia		32		:		•		:	:	
		Santal		9		-		1.50		-	2.00	
	and the second sec	Bhumij		2		-		0.50		:	:	
		Munda		8		:				:	đ	
		Lohara		2		•		*		-	2.00	
		Gauda		-		:		:		:		
4	Ramjodi	Kolha		80		:		1.00		:	:	
		Hill Khadia		18		-		:		:	1	
		Gond		ю		:		:		:	:	
		Total	(100	233 (100.00)	100	5 (2.15)		4.00		2 (0.86)	4.00	

Table-2.5

		Total	8	13	(10.74)		1	(2.17)	+ ((2.00)	:	:	:	:	2	(100.00)	:	17 (7.30)
al skills		Others (Cane work)	7	Q	(4.13)		:		:		:	:	:	:	:		:	5 .(2.15)
Table-2.6 possessing different technical skills	Technical Skill	Blacksmithy	9	, in the second s	:		:		:		:	•	:	:	2	(100.00)	:	2 (0.85)
	F	Tailoring	5	V	(3.30)		:		-	(2.00)	•	•	:	:	:		:	5 (2.15)
Households		Carpentry	4	~	(3.30)		-	(2.17)	:		:	:	:	:	:	e el fano		5 (2.15)
	Total No. of	Households	З	FC F	171		46		50		9	5	2	ო	с,	e metrici	-	233
	Sl. Ethnic aroup	b	2	Beighar area		Jashipur area	Kolha		Hill Khadia		Santal	Bhumij	Munda	Gond	Lohara		Gauda	Total
	SI.	No.	-	-	-		2	ł	3		4	S	9	2	8		6	

ł

				5							
1	Name of the village	Name of the community	No. of house- holds	Posse Hoi no h	Possession of House but no housesite		Possession of Only housesite		Possession of Both house & housesite	Neither house nor housesite	
1	2	Э	4		5		9	-	7	8	
1	Rangaparu	Kutia Kandha	100	1a	:	24	:		100	:	
	Tuakela	Kutia	21		:		:		21	:	
1		Total	121		:		: .		121		
1	Podagada	Kolha	38 38		7		-		28	N	
		Hill Khadia	32		:		-		29	2	
		Santal	9	e sa	-		:		5	:	
		Bhumij	2		:		:		5	:	
		Munda	N		:		:		0	:	
		Lohara	2		-		:		-	:	
		Gauda	-		:		:		~	:	
	Ramjodi	Kolha	8		2		:		9	1	
		Hill Khadia	18		*		• :		17	:	
		Gond	က		:		:		e		
		Total	112	~	12		5		94	4	
1		Grand Total	233 (100.00)	104	12 (5.15)		2 (0.86)		215 (92.27)	4 (1.72)	
- 1											

 Table-2.7

 Ownership of house and housesite

Minor Forest Produce

Vis-a-vis Economy, Ecology and Development-An Emic View

Forest as the Renewable Source of Subsistence

The dry matters of a plant-- the root, the bark, the wood, the leaf, the flower, the fruit and the seed; are the outcome of the photo-chemical reaction that takes place in green leaves in presence of the sunlight. The photo-chemical reaction converts the mineral solutions and other water soluable organic as wells as inorganic nutrients that reach the leaves by the process of osmosis into food to sustain the plant. Forests being the harbour of a wide variety of plant species, have the amazing capacity for tapping the solar energy and yielding the dry matters that satiate various needs of the consumers-- the man and other animals, of the animal kingdom. This source of subsistence is renewable in nature as the annihilation of the plant kingdom as a whole and the sun from the solar system is not possible at present.

3.2. Types of Minor Forest Produce

Forest is a source of not only the dry matters of various kinds but also of the remnants of different zoological species, minerals and precious stones. For the general purpose only the dry matters obtainable from plants are termed as forest produce. The forest produce, according to availability, utility and unit cost, is also classified as Major Forest Produce and Minor Forest Produce. The National Commission on Agriculture (NCA) has defined the latter as all products obtainable from forests other than wood (Rep. of the NCA, 1976 : 229). All the Minor Forest Produces (MFPs) obtained from the forest can be categorised under, (i) Fibre and flosses, (ii) Grasses, bamboos, reeds and canes, (iii) Essential oils, (iv) Oil seeds, (v) Tans and dyes, (vi) Gums, resins and oleresins, (vii) Drugs, spices, poisons and insecticides, (viii) Leaves, (ix) Edible products, (x) Lac and its products and (xi) Other products (Ibid : 230). Much of the above MFPs are allowed to be removed free or at a concessional rate by the tribal people (Ibid : 230).

3.2.2. The people living near forest collect MFP for (a) own consumption, (b) own consumption and sale without value addition, (c) own consumption and sale after value addition, (d) sale without value addition and (e) sale with value addition. The perishable items of MFP, like fruits, green leaves and mushrooms are collected by the tribal people for own consumption. In case of surplus, fruits like mango, jackfruit, tamarind and non-edible MFP, like bamboo and cane are sold to others either with or without value addition. MFP of industrial importance like Kendu leaf, Sal seed, Pulang seed etc. are collected by the forest communities for the purpose of sale only. They do not put additives and preservatives to raise the value of highly perishable items due to ignorance of the techniques involved. Certain MFP itmes like arrowroot, mango pulp are always put on sale after value addition. The method of value addition is purely mechanical in nature.

3.2.3. The forest areas of the country reported to have 21,000 botanical species and out of it only 3000 species have been identified yielding MFP of some commercial importance. In the study areas the inhabitants collect quite a wide varieties of MFP either for own use or for cash. The items of MFP collected and period of their collection is appended in Annexure-2. According to it the varieties of MFP collected in Jashipur area are more than those collected in Belghar area. Though both the areas have almost similar vegetative growth; supportive features, like existence of villages inhabited by the collecting tribes, good network of feeder roads and nearness

3.3. Modes of Collection

The collection and sale of MFP from the forest basically lies in the tribal / rural sector where the inhabitants, irrespective of age and sex, are found engaged in the collection of Nature's gift. The collection is a time consuming but easy process for those dry matters which fall on ground in ripen condition. Mohua flower, Sal seed, ripen fruits etc. are collected from the tree bottoms. The simple method followed to collect these MFP items is to sweep the ground clean and wait leisurely for the bounty to fall. No labour is incorporated in this operation. Certain MFP items like leaves of Sal, Kendu and Siali are plucked when they are green. These items are then dried under the sun to expel the moisture and then processed for different uses. No tools or implements are necessary in both the cases. A few bamboo baskets are only required. The knife and axe is required for felling and debarking the tree for dry matters like bark and sap etc.. For collection of resin, gum and honey much labour is necessary. The usual knife, axe and the climbing rope accompany a collector of these items. It is always noticed that collected items are removed from the forest either by carrying poles or by headloads. In the study areas this work is done by both sex. However, among the Hill Khadia, due to the distance of the collection ground, the males are mostly found engaged in this job. MFPs are collected mostly from common lands (Ibid : 87,90).

3.3.2. It is logical to assume that tribes/ communities with collection of MFP as a subsidiary occupation give less time on it whereas the tribe with collection of MFP as the principal occupation give more time on it. A greater period of their life span indeed, is spent after this activity. It is also found that the modes of collection of MFP are more scientific but arduous in case of the collecting tribes but are less scientific and arduous in case of the agrarian tribes.

	a sector a sector as	The distance	and nature	of collec	tion fields					
SI. No.	Name of the tribe	Distance (in km.) fr		Nature						
1		Habitat	Plane/ shifting land	Felled area	Village forest	P.F.	R.F.	Others		
Be	lghar area	2	1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 -	2.16.0	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	11 11 12		50		
1	Kutia Kandha (Shifting	2-6	0-1	1	1	1	1			
	cultivator).	The States		nista Alino						
Ja	shipur area									
2	Hill Khadia	2-10 &	2-4 &	1	- See	1	1			
	(Collectors of MFP).	more.	more.	ang kalang sa sa Manang kalang sa		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
3	Kolha	0-2	0-2	e sanci	,					
	(Settled cultivator	s).		Samper.	~	-	-			
4	Santal "	1-3	1-2 .							
5	Gond "	0-1	0-1				 Image: A set of the set of the			
6	Bhumij "	0-1	0-1					1		
7	Munda "	0-2	0-2	tar gere	1	1	1	1.		
8	Lohara	0-1	0-1	en Anne	1	1	1			
23	(Cottage Industry)). e meb esqua			1	1	1			
9	Gauda	0-4	1-2	a interes				0.0.1.159		
	(Cattle herdsmen)).	sternin silji		1	1	1			

Table-3.1

(The principle avocation of the tribe/ community is mentioned in the bracket.)



Collection of Mohua flower.



Drying up of Mohua flower- Ready for sale.

3.3.3. The distance covered by the collectors for collecting the MFP varies from tribe to tribe. The distance and the nature of the collection field of MFP is given in Table-3.1. Collection in bulk quantities and a wide variety of it require greater foraging. The nomadic/ semi-nomadic tribes cover greater distance in their pursuit. Agrarian tribes collect MFP near their village or agricultural land. In the study villages their area of foraging operation is within 2 Kms. from their habitats. For the shifting cultivators the 'felled areas'-generally the hill slopes located two to six kilometres away from their habitats, are the collection grounds. Their collection activity is within the area of their agricultural activity or within one kilometre from their shifting cultivation fields (the felled areas). For the collecting tribes the sphere of collecting activity lies deep inside the forest and away from the collection areas of the agrarian tribes. In the study villages of Belghar area the Kutia Kandha-the shifting cultivators, usually collect MFP from the areas cleared for shifting cultivation or within one kilometre from the 'felled areas'. The table also shows that the agrarian tribes of Jashipur area, such as the Gond, the Bhumij, the Kolha and the Santal collect MFP near their habitats or agricultural fields. They do not go deep into the forest. Their agricultural fields are located near the protected or reserve forests. They also exploit the roadside and riverside woodlots where tree species, like Mohua, Karanja, Kusum, Polang, jackfruit, mango and Kochila are found. Loharas of Podagada located in Jashipur area are highly 'village centric' by nature. At leisure hours their womenfolk collect wind-blown MFP items from areas around the village. The semi-nomadic Hill Khadia usually go deep into the forests-sometimes more than 10 Kms. in groups and collect a variety of MFPs and return to village a day before the commencement of the local weekly market to dispose of their collected MFP. During group collection they spend several nights inside the forest.

3.3.4 In general the pursuit of collection of MFP is not as ritualistic as agriculture. It is not limited to any age or sex. Persons belonging to both the sex and of various age-groups are found involved in this avocation. Age and gender sensitivity is however noticed in case of collection of certain items of MFP and the method of their collection. Certain activities, like climbing a tree, honey collection, tapping of gum and resin etc. are not suited to women. Core areas of the forests, abound with a variety of MFP, are not foraged by the old, infirm and female for reason of personal security. The Table-3.2 gives a vivid picture of gender-wise and age-groupwise preference shown by MFP collectors of the study areas. According to it females and the workforce belonging to tender age-group (Up to 14 years) and advanced age-group (above 60 years) prefer to collect the fallen or wind-blown MFP items. Males usually go deep into the forest for bigger collection. The processing of MFP engages elderly persons of both sex. Processing of edible items, however, is usually done by elderly women (60 years and above). The males of this age-group usually do not go into the forest but spend their time in processing non-edible items, like bark, bamboo and leaves.

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Table-3.2

Sex	•	Age-gro	up	
	10-15	16-45	46-60	60 & above
Male	Collection of fallen dry matters from tree bottoms, plucking of dry matters from bushes, shrubs, digging roots and tubers from near- by forests.	Felling trees for MFP, climbing rocks and trees for MFP, carrying heavier items of MFP in bulk quantities to village, digging roots and tubers in deep woods, tapping of gum & resin etc.	Selection of areas for collection of MFP in deep woods, tapping of gum, resin & collection of honey, collec- tion of Lac and Tassar cocoon.	Collection of fallen dry matters from tree bottoms, processing of non-edible MFF items.
Female	Same as above	Collection of MFP from felled areas, carrying of lighter MFP items in bulk quantities from nearby forest, proce- ssing of MFP.	Collection of fallen dry matters, processing of both edible and non-edible items of MFP.	Same as above & processing of edible MFP items.

Age-groupwise and sexwise preference shown to different types of jobs relating to the collection of MFP

3. 3. 5. The inhabitants of the study villages collect as many as 64 varieties of MFP (Annexure-2). Out of it 55 items are collected by Hill Khadias to sustain themselves throughout the year. The shifting cultivators-Kutia Kandhas, collect as many as 37 items of MFP. The agrarian tribes of Jashipur area such as the Kolha, the Santal, the Munda, the Bhumij and the Gond have similar choices for the items of MFP and they collect 18 varieties of MFP. They collect oil seeds of tree origin, Siali bark and grass. They also collect Madika root (an intoxicant), Mohua flower, edible leaves and fruits for own consumption. They occasionally collect resin in small quantities. The non-tribal families of Podagada (Jashipur area), like their non-Khadia tribal counterparts, collect MFP from nearby forests. These ethnic groups collect the dry matters from the trees that are found around the villages. The women and persons belonging to tender and advanced age-group of these communities usually go for collection of MFP leaving their able-bodied males to earn bread from their traditional occupations. In case of the Gauda the males also collect MFP seasonally in small quantities while tending cattles inside the forest.

3. 3. 6. The quantity of MFP collected by different ethnic groups varies significantly. The collecting tribes, such as the Hill Khadia collect MFP in greater quantities than their other counterparts. The landowning tribes are satisfied with lesser volume of MFP. In order to know the quantity of MFP collected by different ethnic groups of the study areas relevant data in respect of 14 different major items of MFP are presented in Table-3.3. According to the data the collection of listed items per one Hill Khadia family is more compared to other ethnic groups. Gravimatrically per household per annum MFP items collected comes to 17.58 Kgs. of honey, 59.5 Kgs. of resin, 40.00 Kgs. of Mohua flower, 62.00 Kgs. of Kusum seed, 50.00 Kgs. of Mohua seed, 85.00 Kgs. of Sal seed, 2.75 Kgs. of arrowroot, 30.50 Kgs: of gum, 100 bundles of Siali bark, 90.00 Kgs. of Paja bark and 1.97 Kgs. of Patalgaruda (R. Serpentina). The amount of Karanja seed (derived from village woodlots) is however less in case of this tribe. It is only 4.5 Kgs. compared to 12.00 Kgs. or more than that in case of the landowning tribes. Except tamarind the landowning tribes collect more quantities of listed items of MFP than the shifting cultivators.

Ū,		Kutia	Kutia Kandha		Kolha	Hill Khadia	adia	Santal	1	Bhumij	nij	Munda	nda	Lohara	ra	Gond	DU	Cauda	Ca
Q	No Items	Ð	(121)		(46)	(20)		(9)		(2)		. (2)		(2)		(3)		E	
ż		c	HH/O	0	HH/O	0	HH/D	σ	O/HH	σ	A/HH	σ	HH/O	σ	HH/D	0	HH/O	0	HH/D
-	~	6	4	ۍ ا	9	(1)	8	<u>б</u> .	10	11	12	13	14	15	16	17	18	19	20
		00 90	0.30		1.0	879.00	17.58		:	:			- - -			8.00	2.67		:
			20.00	: 07 a	: 070	2975.00	59 50	3.00	0.50	1.00	0.50	1.50	0.75		:	7.50	2.50	3.00	3.00
	Mobua	3025.00		-	35.00	2000.00	40.00	180.0	30.0	64.00	32.00	60.00	30.00	50.00	25.00	105.00	35.00	25.00	25.00
	Flower.											31.		•					
~ 4	Kusum	3025.00		25.00 1380.00 30.00	30.00	3100.00	62.00	62.00 150.00	25.00	56.00	28.00	50.00	25.00	40.00	20.00	150.00	50.00	25.00	25.00
	Seed.						r i i r			1. 1. 1.					00.00	00 10,	00 90	0000	30.00
5	Mohua	3630.00 30.00 1610.00 35.00	30.00	1610.00	0 35.00	2500.00	50.00	50.00 168.00	28.00	60.00	30.00	50.00	25.00	20.00	00.62	nn chi	20.00	00.00	00.00
– ۲۰ ۵۷	Seed. Karania	968.00	18.00	18.00 690.00 15.00	15.00	225.00	4.50	90.00	15.00	24.00	12.00	24.00	12.00	1		30.0	10.00	10.00	10.00
	Seed.	-0 -5															1		
2	Sal Seed	Sal Seed 3630.00		30.00 1380.00 30.00	0 30.00	4250.00	85.00	210.00	35.00	60.00	30.00	64.00	32.00	30.00	15.00	165.00	55.00	15.00	00.61
8	Arrowroot	t 2.42	0.20		:	137.50	2.75	:	:		:	1	:	:	÷	:	:	:	:
	Gum	1.21		0.10 13.80	0.30	1525.00	30.50	1.50	0.25	:	:		:	:	1	:	:	0.15	0.15
	Siali Barl	Siali Bark 1452	12	460	10	5000	100	108	18	30	15	20	10	30	15	06	30	25	25
11	Pajabark		:	;	:	4500.00	90.06	•	r	:	r	:	:	:	: .	1	:	F	- Ma
12	Tamarinc	Tamarind 1452.00	12.00	:	2 2			50.00	8.33	÷	:	:	:	30.00	15.00	;	:	:	3
13	Patal Ga	Patal Garud 67.00	0.55	- 6	:	98.50	1.97		:		:	1.50	0.75	:	:	:	:	:	1
14	Hill Broo	Hill Broom 140.00	1.16		:	120.00	2.40	-		•	:	6.00	3.00	-	£	:	:	:	:

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Table-3.3

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3.4. Seasonal Variation in Collection

The availability of most of the items of MFP is seasonal in nature. During the appropriate season the tribal communities search the underground with digging sticks or crowbars for roots and tubers and collect windblown dry matters. The gathering tribes like the Hill Khadia climb on the trees and scrap the trunks and branches for resin and gum. They also collect Lac. For a steady and bulk supply of the items they incise vulnerable spots of the trunk without harming the tree (sap) for oozing of gum or resin. Similarly they tend worms in certain trees like Kusum for Lac. They have a greater command over the so called 'forest trees'–the trees found in forest proper, while the agrarian tribes depend more on 'village trees', like Karanja, Pulang, Mohua and jackfruit which are found in plain land near the village. The agrarian tribes or the artisan tribes do not climb up the trees to get the dry matters. They do not hesitate to cut the trees for a bulk collection of MFP. The collection season of these tribes are shorter than their collecting activities throughout the year switching over their preference from one type of MFP to the other.

3.4.2. The period of collection of different items of MFP are almost identical in two study areas. It is shown in Annexure-3. According to the Annexure the collection period of MFPs of industrial applications as well as semiperishable MFP items varies from two to four monthswith peak period limited to one to two months (a traditional calendar month begins from the middle of a month of the roman calendar and stretches to end of the first half of the consecutive month). For medicinal plants, non-edible leaves and barks, the peak collection period is very long and consists of four to six months. MFPs, like Lac, Tassar cocoon, resin and gum have two collection seasons a year. Out of it, the pre-monsoon season yields lesser quantities and the postmonsoon season yields greater quantities of MFP.

3.4.3. The tribal communities as well as other weaker sections living near the forest also dispose of the biproducts derived from the rudimentary processing of certain kinds of MFP. The seeds of tamarind, jackfruit and mango kernel etc. are obtained as the biproducts. They are further processed after the expiry of collection season of the original MFP for self consumption. Processing of MFP is primarily women's work. The only exception is liquor-making from Mohua flower. It is done exclusively by men (Ibid : 89).

3.5. Taboos, Rituals and Prescriptions

3.5.1. Taboos are the restrictions that have enjoined the human race from time immemorial to check the abuse of the social, cultural and economic rights and concessions. In a complex stratified society the taboos are many and are the forces to reckon with but in an unstratified tribal society taboos are a few in number. The rituals observed to ride over the taboos are simple. The tribal communities observe the taboos and rituals with much reverence. In case of lapses no prescriptions are followed. The accultured tribes in general and the agricultural tribes in particular, because of vertical use of natural resources, observe more taboos and rituals than their primitive counterparts. They have effectively blended the rituals relating to their culturing activities to that of their collecting activities. In general, these tribes observe 'Nuakhai', an agriculture oriented ritual prior to the exploitation of the forest for MFP. This helps to guard both the agricultural interest (harvesting and consumption of ripen crops) as well as the interests relating to the collection of MFP (right time to collect dry matters in bulk quantities). These tribes also do not go for MFP collection during Raja festival for fear of inflicting injury to both soil and plant. Tribes practising different arts and crafts see to it that no tools and implements are pressed into the act of collection and process of MFP from the eighth to the tenth day of moon in the month of Aswina. This restriction is not in vogue among the tribes with non-agricultural avocations to pursue with.

3.5.2. In primitive tribal societies like the Kutia Kandha, perhaps due to practice of rudimentary agriculture, taboos are followed to save certain MFP yielding plants, like hill broomstick and plants yielding wild roots and tubers from extinction. They do not collect prior to the observance of '*Puni Kalu Dakina*'-a ritual in which the gourd shells collected from the shifting cultivation fields, are ceremoniously inducted into the daily uses. The 'Puja' is performed in the month of January. By this time the broomstick ripens and the creepers above the ground wither away hiding the mature roots and tubers under the ground. The harvest of these items do not hamper the regeneration of fresh plants from the roots.

3.5.3. Both the Hill Khadia and the Mankirdia observe taboos and rituals to various degrees. It is a taboo for the Hill Khadia to collect MFP during the pollution periods, like the birth of a child and death of a family member. After the observance of the purificatory rights the Hill Khadia is free to venture into the forests for the collection of the nature's bounty. The sphere of the collecting activity of these two tribes are very large. They collect a wide variety of MFP throughout the year. Members of these two tribes do not expect any one to call them from the back while venturing into the forest. Like their counterparts belonging to the acculturated / agricultural tribes, females of these two tribes do not collect MFP during their menstruation period. Females of these tribes are not allowed to climb trees, collect honey and inflict injuries to the trees for resin or gum. They can collect the dry matters found within the reach of their hands. The semi-nomadic Hill Khadia gives much importance to his avocation by performing certain rituals, like 'Bana Bhujuni Puja' in the month of May and June for a good harvest of all sorts of MFP, 'Bhandar Puja' in the month of January-February for better fruiting of Siali, jackfruit and Bel etc..

3.6. Collection versus maintenance of Eco-balance

The tribes of 'culturing' type go for exhaustive collection in a limited area and strain the vegetative surroundings greatly than the collecting tribes. The latter forage in a greater area and give scope to the MFP yielding plants for regeneration and growth. As they are depending greatly on the forests and the trees, they give much importance to maintain the eco-balance. Their collecting activities are intended for the maintenance of a balanced relationship between ecology and economy. Their economic activities are in tune with the statement of Ingold. According to him, 'Ecological production refers to the thermodynamic process whereby energy from the sun fuels the creation of organic material in nature. Economic production, on the other hand, refers to the expenditure of labour, whether by animals or men, in order to obtain from nature the means of subsistence' (Ingold, 1979).

3. 6. 2. The households of the study areas opined four methods of maintaining the ecobalance vis-a-vis the collection of MFP. Their opinions are given in Table-3.4. According to it almost half of the Kutia Kandha households (61 out of 121) are of the opinion that collection of MFP for self and not for sale can maintain the eco-balance. The other ways for maintaining the eco-balance, according to them, are partly destruction of trees/forests (32 households), collecting MFP in area of bounty (17 households) and collection with scope for regeneration of plants (11 households). In Jashipur area 40 out of 46 Kolha households opined for partly destroying trees/ forests for collecting MFP to maintain eco-balance. Almost all the Hill Khadia households (48 out of 50) are of the opinion that eco-balance can be maintained by giving the MFP yielding plants the scope for regeneration and by stripping the plants within their yielding points. Thus the table shows that the collecting tribes like the Hill Khadia are more concerned about the maintenance of eco-blance. The non-tribal communities, like the Gauda and the Lohara usally favour the controlled destruction of trees or forests to keep alive their collection activities and maintain the eco-balance.

Table-3.4

SI.	Name of	Total No. of		View	S	
No.	the Tribe / Community	HHs.	Collection with scope for regene- tion of plants	Collection by destroying trees/ forests	Collection in areas of bounty	Collection for self & not for sale
1	2	3	4	5	6	7
Belg	ghar area					
1	Kutia Kandha	121	11	32	17	61
Jasl	hipur area					
2	Kolha	46	3	40	2	1
3	Hill Khadia	50	48	T = 0	2	
4	Santal	6	1	5		••
5	Bhumij	2	n ja "nie –	a	2	
6	Munda	2	12 1946 1 1946			2
7	Gond	3			3	
8	Lohara	2		2		
9	Gouda	1		1.00	- 355	· · · · · ·

Views of the informants regarding maintenance of eco-balance

3.7. Forest Management

Forest management, in modern concept, deals with the minimum exploitation of the forest wealth to get the optimum benefit. It must be founded on the science and on the skill of geology, pedology, botany, ecology, silviculture and economics in the selection and treatment of vegetation and on engineering and marketing in the harvesting, extraction and preparation of crops (Bresnett 1953 : 14). Management also covers protection and bulk supply of some forms of produce to a distant manufacturing centre to give benefits to the local population.

3.7.2. The forest management, according to a tribe, is collection without confrontation. The forest area is divided among the nearby villages. Collection of MFP in protected and reserved forest is done by different ethnic groups. The ethnic groups never cross sword with each other while collecting MFP. It is observed that the ethic of non-interference is lossing ground at present. The 'culturing' tribes encroach upon the plain forest lands and are 'honey combing' the deep forests with human settlements. They, in turn, forbid the collecting tribes to collect resin, gum etc. from near the encroached lands. The other way of forest management by tribal groups is the recognition of collection rights over certain items of MFP by certain tribes. In Similipal area the Hill Khadia is synonymous with collection of gum, resin and honey and no other ethnic groups collect the same from the forests except a few who do so near their habitats.

3.8. Economic Viability

The economic viability of the avocation of collection and sale of MFP is judged from data given in Table-3.5(A) and Table-3.5(B). According to the former only 6 out of 233 households under study pursue after single occupation for earning their livelihood. Out of 6 households with single occupation, 5 Hill Khadia households have the occupation of collection and sale of MFP. On the other hand one Kutia Kandha household is pursuing after the Government services as an NMR in the Office of Kutia Kandha Development Agency (KKDA) at Belghar. The majority of 227 households earn their bread from multiple occupations.

Table-3.5(A)

SI.	Name of	Total No. of			Av	ocation		
No.	the Tribe/ Community	Households	Agriculture	Wage earr	ning	Arts/Crafts	Collection of MFP	Others (Service)
1	2	3	4	5	. 1	6	7	8
	Belghar area							
1	Kutia Kandha	121	••					1
	Jashipur area	l .						
2	Kolha	46	••	• •			3 J.	••
3	Hill Khadia	50	••			••	5	÷ ••
4	Santal	6		••			••	••
5	Bhumij	2	·* ·••				••	••
6	Munda	2						••
7	Gond	3	•••;					••
8	Lohara	2		••			3	• ••
9	Gouda	1						
•	Total	233		•			5	1

Households with single avocation as the source of subsistence

3.8.2. The Table-3.5(B) reveals the means of livelihood of 227 households with multiple avocations. It reveals that the avocation of forest collection is coupled with other occupations ranging from agriculture to wage earning and salary earning. Due to vast areas and existence of a wide variety of plants it still has the potentiality to accommodate more and more families into its fold. The only shortfall of this economic pursuit is the longer gestation period of the MFP yielding plants and their destruction for meeting the domestic and personal needs. Research and development in the field of forestry is opening new vista for industrial application of traditional and non-traditional items of MFP. If agriculture do not compete with forestry for the common resource—the land, the collection and sale of MFP can change the economic scenario of the tribal world.

3.8.3. Both Government and the individuals recognise forest as the source of revenue. Nothing tangible has been done by the individuals to plough back a fraction of their income for the management of forest. Similarly only a fraction of the revenue of the Government has been kept for the conservation of forest. The future of human society is not only based on agriculture alone but also on forestry. Table-3.5(B)

Households with multiple avocations as the sources of subsistence

	Cultivation Cultivation + Collection + Others of MFP + Others	9 10		. 16		: 8	:	:		:	:	:		Ľ
	Cultivation + Wage + Livestock	8		20		6	4	5	-	:	:	:	:	00
upations	Wage + Collection of MFP	2		41		:	:	:	:	:			1	01
Multiple occupations	MFP collection + Livestock	9	•	12			:	:	: : :	;	:	52 - 20 2 - 31 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4	:	C T
	Cultivation + Wage	5		-			:	:	:	:	2 1 1 1	:	:	c
- 1	Cultivation + Collection of MFP	4		0°		33	41	:	2. . :-	5	:	:	:	106
	No. of HHs.	3		120		46	45	9	0	2	3	2	-	100
Tribe/	No. Community	2	Belghar area	Kutia Kandha	Jashipur area	Kolha	Hill Khadia	Santal	Bhumij	Munda	Gond	Lohara	Gauda	1
SI.	No.	-		-		N	ო 48	4	S	9	7	00	6	



Digging edible roots and tubers.



Indigenous processing of Arrowroot.

Blackhaa



Leaf-plate stitching, a secondary occupation.



Siali rope making-the primary subsistence technique of the Mankadia.

3.9. Role of Governmental Efforts in Development Niche

After independence it was felt that the tribal communities of the country should not be left in isolation and be brought into mainstream of national culture through socio-economic development. It was also thought of to boost their forest-based economy by allowing them certain concessions in using the forest resources. Population explosion, influx of non-tribal population into the tribal domain and discovery of methods for industrial application of different kinds of MFP have compelled them for ruthless exploitation of forests and other natural resources. Rapid population growth and lack of economic opportunities have pushed even more people into 'marginal' areas-desert fringes, mountain slopes, rain forest lands not suited for farming, where resource destruction may be the only feasible way of eking out a living (Eckholm 1988 : 24).

3. 9. 2. The first and foremost characteristic of the tribal economy is the close relationship between the economic life and the natural environment of habitat which is, in general, the forest (Vidyarthi & Rai, 1976 : 99). This forest-based economy responds critically to social tradition and price-system. The tribal economy is primitive where the individual family is considered as a unit of production and where all the members of the family, irrespective of age or sex, contribute their labour to satiate the familial needs. A family acts as an autonomous unit for extraction of natural resources and procurement of the consumable goods for sustainment.

3. 9. 3. Forest policy must fulfil three sets of needs, namely (a) ecological security, (b) food security and (c) supply of raw materials to cottage, small, medium and large industries as well as to Departments of Defence and Communication. The Union as well as the State Governments have taken up plans at both micro and macro level to conserve forest and the tribal culture by meeting the above said needs.

3. 9. 4. At the State level, forestry activities have been fragmantised for realising greater output and for implementation of Government policies acceptable to tribal people. For the management of forest wealth and smooth realisation of forest revenue the Government has created 27 Forest Divisions (FDs). For harvesting and marketing of Kendu leaf a separate Kendu Leaf Division has been formed. An autonomous body named The Orissa Forest Development Corporation (OFDC), has been created in late eighties by amalgamating the erstwhile Similipal Forest Development Corporation and Orissa Forest Corporation for harvest of major forest produces, like timber and bamboo. The Government patronised agencies, like Tribal Development Co-operative Corporation (TDCC) have been authorised to procure the MFP from the tribal hinterland. The Annexure-4 shows the activities of different procuring agents / leasees in different FDs. It is found from the annexure that OFDC functions as a procurer of MFP in five of the 27 FDs., namely Dhenkanal, Angul, Athamallik, Athagarh and Nayagarh. The TDCC has its branches spread over all the FDs whereas the Agency Marketing Co-operative Society (AMCS) of Tikabali, District Phulbani, has its procuring activities confined to the FDs. of Phulbani, Balliguda and Boudh. There is yet another Co-operative Society under the name OST & SC Society in Karanjia Forest Division. It functions within the area of Karanjia Forest Division. Apart from these Corporation / Agencies a public limited company, namely, M/s. Utkal Forest Products Ltd. has made its presence felt in 19 FDs. It is authorised to collect almost all varieties of non-traditional MFP and some commercially important MFPs from areas leased out to it.

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3. 9. 5. These procuring bodies are unable to safeguard the interests of the MFP collectors of remote areas where the items are not available in quantities right enough for their establishments to handle with. The horizontal spread of these establishments into geophysically fringe areas is not found remunerative. In order to sustain the people of these areas some private parties have also been authorised to procure MFP at rates fixed by the Pricing Committee

of the district in which they are allowed to work. The names of the leasees, items of MFP to be collected by them and their areas of operation are shown in Annexure-5. The Annexure-5 reveals that TDCC, vide Government Order No. 28403, dated 6-121989, has the exclusive right for collection of tamarind, hill broom, Mohua flower and honey in all the 27 FDs of the State. The OFDC has the right to collect all MFP items except tamarind, hill broom, Mohua flower and honey in FDs of Nayagarh, Dhenkanal, Angul, Athamallik and Athagarh. These FDs are almost contiguous to each other. The activity of OFDC is confined to the central part of Orissa inhabited by accultured tribes. The OST & SC Society with area of operation within Karanjia FD has been given right to collect Tassar cocoon for a period of three years and five months i.e. from 1-4-1991 to 31-8-1994. Similarly another small company-OTDC Ltd. by name, has been given right by G. O. No. 5080, dated 13-3-1991, to collect honey and arrowroot from Similipal Forest region. The AMCS, Tikabali is authorised to handle all items of MFP except 29 items that are handled by M/s. Utkal Forest Products Ltd. and four items handled by TDCC Ltd., in the FDs of Balliguda, Phulbani and Boudh. M/s. Utkal Forest Products has been given the lease right to procure 29 non-traditional MFP items for two years from 1-10-1990 to 30-9-1992. About 13 persons have also been given right to collect certain kinds of MFP from the FDs of Sundargarh, Bolangir, Khariar, Nawarangpur, Deogarh, Bamara, Angul and Rairakhole for the periods ranging from one to three years. It can be mentioned that their activities are primarily confined to the tribal. belts of the State and the tribals are said to be the first hand beneficiaries of their activities. The tribal people, however, are not included in the policy making bodies of the Corporations or Societies and the procuring companies either at the field level or at the Headquarters level to safeguard their interests.

3.10. The Tribal Development Co-operative Corporation Ltd. (TDCC)

The Tribal Development Co-operative Corporation Ltd. (TDCC) is the outcome of the recommendations of different expert groups for the socio-economic development of the tribals with locally available resources. It is the apex body of the Large-size Multipurpose Societies (LAMPS) that are established in Sub-Plan area with the aim to purchase the SAP and MFP at a fixed remunerative price and supply the essential consumer items at fair price. The role of the TDCC in the economic development of the tribal people can be judged from the data given in the Table-3.6. According to the table, the TDCC has made business to the tune of Rs. 473.34 lakh in 1986-87. The business rose to Rs. 582.58 lakh in 1987-88 and to Rs. 737.23 lakh in 1988-89. However, it slumped to Rs. 361.50 lakh in 1989-90. In 1990-91 it made business worth Rs. 1063.49 lakh. It can be inferred that when there was higher quantum (Cost-wise) of MFP procured, there was lower quantum (Cost-wise) of procurement of SAP (As in 1988-89) and when there was higher procurement (Cost-wise) of SAP there was lower quantum (Cost-wise) of business in the segment of consumer goods (As in the year 1990-91). The business in MFP was less in 1986-87, 87-88 and 89-90 whereas the business in SAP was lesser in 1988-89. There is a gradual decrease in the quantum (cost-wise) of consumer product business from 1986-87 to 1990-91 except a sudden increase from 25.14% in the year 1988-89 to 37.02% in 1989-90. The business done by it showed rise and fall in cost of MFP handled in alternate years.

3. 10. 2. The TDCC has remained as a good source of royalty to the State Exchequer. The royalty paid from the year 1986-87 to 1990-91 is shown in Annexure-6. The Annexure also shows the royalty paid for different kinds of MFP individually. As many as 22 different kinds of MFP were handled by TDCC during the above mentioned five year period with omission of one or two items in certain years. The maximum royalty amounting to Rs. 39,44,076.00 has been paid in the year 1988-89. The royalty for collection of Sal seed was also the maximum in the said

Procurement of different items (Non-MFP and MFP) by TDCC







year. In general, the decrease or increase in royalty amount is directly related to the royalty paid for procurement of Sal seed. During the year 1989-90 and 1990-91 the royalty paid by TDCC to the State Government was Rs. 12,18,752.00 and Rs. 12,12,705.00 respectively. It was due to the fact that the royalty given for procurement of Sal seed was only Rs. 76,913.00 in 1989-90 and non-involvement of TDCC in collection of Sal seed during 1990-91. Tamarind and hillbroom grass were the other two major items for which a handsome amount of royalty was paid to the Government. If the royalty amount given for any item of MFP is an indicator to the quantum of MFP procured then the achievement made by TDCC in doing justice to the tribal MFP collectors is not in consonance with the capital involved and the possession of a chain of procuring centres, godowns, a fleet of transporting trucks as well as the processing centres located in far and wide in the State. The TDCC, it seems, has not been successful in its objective of procuring the lion's share of MFPs collected annually. This lapse has left the tribal people with no choice but to sell the MFP to the unauthorised traders.

SI. No.	Year	SAP		MFP	Consumer business	Total
1	2	3		4	5	6
1	1986-87	151.88 (32.10)		120.52 (25.48)	200.65 (42.42)	473.05 (100.00)
2	1987-88	256.42 (44.02)	١	135.41 (23.24)	190.75 (32.74)	582.58 (100.00)
3	1988-89	. 134.02 . (18.18)		417.88 (56.68)	185.33 (25.14)	737.23 (100.00)
4	1989-90	163.39 (45.20)		64.28 (17.78)	133.83 (37.02)	361.50 (100.00)
5	1990-91	513.08 (48.24)		361.23 (33.97)	189.18 (17.79)	1063.49 (100.00)

Table-3.6

Procurement of MFP by TDCC from 1986-87 to 1990-91 (Rs. in lakh)

3.11. Social Forestry

The wanton destruction of forest not only ushered in ecological imbalance but also other socio-economic problems. The tribal people in general and the 'Sukhabasis'-the landless families in particular, are affected by the scarcity of the drymatters of the plants for construction of houses and agricultural implements, fodder for cattle, fuel for cooking their daily meals and to exchange for other goods and services. In order to create a steady source of these drymatters the social forestry project started functioning in Orissa from 1983-84. This project, assisted by Swidish International Development Authority(SIDA), completed its first phase in 1987-88. During the period, nine out of the 13 undivided districts of the State were covered. The second phase of the programme starting from 1988-89 was operated in all the districts of the State. It ended in 1992-1993. Till the end of 1992-93 a sum of Rs. 84 crore was spent for creating manmade forest in 101,923.4 Hects. of land classified as village forests areas, barren hills, degraded forests and land not covered under reserve or protected forests. Some 11,72.14 lakh seedlings were distributed by the project for plantation in areas mentioned above. Till end of 1990-91 a total of 363.67 lakh mandays were generated to give employment to the forest living ethnic groups. The physical achievements of the Social Forestry Programme up to 1991-92 is given in Tab.-3.7.
Table-3.7

SI. No.	Name of the Scheme	Achieveme Ph.		Achieveme Ph	
1041		Physical	Financial	Physical	Financial
1	2	3	4	5	6
- 11. 	(a) Establishment of community plantation	n n Nafa - Nijili	n a Maran Maran		
1	Creation of Village wood lots	18346.00 hec.	in and ¹ Shine pa	32791.10 hec.	
li	Plantation in degraded Barren Hills	3.4-3.04		1315.50 hec.	
111	Strip plantation	- Ale safet service	$(a_i + \eta)^2 = B_i$	320.50 hec.	2
N	Reforestation of degraded forests	13737.00 hec.	Rs. 271.00 million	6917.30 hec.	Rs. 569.00 Million
V	Rehabilitation of depleted forests	14184.00 hec.		8650.00 hec.	
M	Institutional plantation			213.00 hec.	1.00
	(b) Establishment of priv	ate plantation			
l.	Forest farming for rural poor (Agrl.)	1509.00 hec.		3950.00 hec.	
0	Farm forestry (seedling distribution)	349.37 lakhs		822.87 lakhs	
11	Total mandays generated	143.33 lakhs		160.35 lakhs (up to end of 1990-1991)	

Physical and Financial achievements made by Social Forestry

Source : Office of Social Forestry Project, Orissa, Bhubaneswar.

3.11.2. Social Forestry is in favour of regeneration of forests by massive plantation of a variety of fruit bearing trees and other trees of daily use. It has wedded to the principale of creation of forest resources and distribution of the same among the villagers. The project also reflects the interests of the community as a whole and of individuals for cash income from sale proceeds of dry matters. At present, the project takes interest in plantation of trees for fuel wood or of industrial importance, like acacia, cassia, Gulmohur, Kadamb, Kusum, rosewood, Sirish, Subabul, teak, Kasi, Sisoo, Arjun, bamboo, Karanj etc. and fruit bearing trees like mango, jackfruit and tamarind.

3.12. The Khadi and Village Industries Commission (KVIC)

The Khadi and Village Industries Commission (KVIC) is a statutory body created by an Act of Parliament (No. 61 of 1956 and amended by Act No. 12 of 1987). The objectives of the Commission is to plan, promote, organise and implement different programmes for the

development of Khadi and other village industries in rural areas with population less than 10,000. The KVIC-sponsored industries are environment friendly and consume little or no energy (coal, oil and electricity). These industries can be started with the fixed capital investment not exceeding Rs. 15,000 per head of an artisan or a worker engaged in it. The forest-based village industries under the purview of KVIC are (1) Hand made paper, (2) Manufacturing of katha, gum, resin, shellac, fireworks, agarbatties, paper cups, plates and toys, (3) Cottage match industries, (4) Bamboo and cane work, (5) Khas tattis and broom making, (6) Manufacture of stationery articles based on paper, (7) Manufacture of jute products and (8) Collection, processing and packing of forest products.

3.12.2. In the State in general and in the study area of Belghar in particular, the KVIC are more prominent in bee-keeping industries. The bee-keeping fieldmen are appointed by KVIC but they get salary from the sponsorer of the scheme (ITDA). They are imparting training on methods of taming the bees, extraction of honey and other related matters. This scheme is far from yielding the expected results. The bee-boxes given to the beneficiaries in both the study areas are either destroyed due to mishandling or kept at the backyard with no swarm of bees inside. The other forest-based industries with the help of KVIC are not coming up in the study areas either due to lack of interest in netting these highly labour intensive activities or due to lack of follow-up action by the sponsoring authorities. There is a great potentiality at Jashipur area to start units basing on resin, gum and fruit pulp. Units basing on hillbroom grass, cane, bark and mango pulp can also be started in Belghar area. It is high time to start these industries on cooperative basis. Women and elderly persons can be engaged by such units. The male folk may also find themselves engaged in these units in non-agricultural seasons.

3.13. Role of Non-Government Organisations

The Non-Government Organisations are found engaged in activities relating to human resource development. With a group of dedicated workers and sound financial support they made their presence felt by the tribal communities and the weaker sections of the society. Of late several voluntary organisations have entered into the tribal belts with multifarious activities in hand. Their need-based programmes are both popular and populist in nature. The plus point with them is their ability to work under disadvantage conditions with the least infrastructural facilities at command. The Central Government and the State Governments have decided to involve them in nation building. The successive Five Year Plans have laid stress on the need to encourage the Non-Government Organisations (NGOs) / Voluntary Organisations with the expectation that they would serve as an excellent catalyst for socio-economic development of the tribal people.

3.13.2. Most of the NGOs receive financial assistance from Government, both at the Centre and the State level. While the State Government gives Grant-in-aid to registered NGOs through different Departments the Central Government pumps funds under special Central Sponsored Schemes.

3.13.3. The NGOs have played very limited role in eradicating economic maladies. In fact their role in safeguarding the economic interests of the tribals vis-a-vis collection and sale of MFP is yet to be recognised by the tribals. The NGOs, like AWARE, Seva Bharati are active in Belghar area. But they have not come forward to organise the MFP collectors to realise better returns from their toil. The Similipal forest areas of Jashipu® are not served by any NGOs of repute and their field offices are not found in study villages or areas nearby. A probe regarding the NGOs and their activity involving forest management drew a negative reply from the informants of the study villages.

3.13.4. The NGOs with active and first hand financial and advisory assistance from Government have made inroad into the tribal hinterland to achieve a better forest-based economic goal. The Marketing Societies under the aegis of Co-operative Society Act have done something for the economic improvement of the tribals. In Belghar area, the Agency Marketing Co-operative Society (AMCS), Tikabali is helping the tribals with disbursement of right remunerative price for the MFP procured. But financial crunch has made it impossible to handle all the MFPs collected by the tribals. Lack of infrastructural facilities like godown also disuade this procuring body to go for a bigger procurement. The study area of Similipal forest range near Jashipur is not even served by any Co-operative Society. LAMPS working in the areas are satisfied with handling some essential items under Public Distribution (PD) Scheme but never come forward helping the tribals by procuring the MFP collected by them. In short, the whole of the study areas of both the zones are away from the reach of active NGOs.

3.13.5. The data collected from the two areas reveal that the Hill Khadia and the Mankirdia of Similipal region of Jashipur area are fully dependent on MFP and take keen interest on conserving forest but the Kolha, the Santal, the Bathudi and the Munda do.not hesitate to cut trees or comb the trees for dry-matters and do not take care for regeneration of MFP yielding plants. This very activity paves the way for practice of agriculture in cleared areas. The lust for land is very great among these tribes. As a result, they deprive the Hill Khadia or the Mankirdia of their only source of livelihood. In Belghar area the Kutia Kandha cut the trees not for MFP but for practice of agriculture. In the process of doing so they collect MFP in addition to agriculture. In other than the 'felled areas' they collect MFP with strict adherence to the principle of forest conservancy. In both the areas the NGOs have an important roles to play. They can check the wanton destruction of forests with their grassroot level workers and establishments. They can mould the shifting cultivators to adopt some other means of subsistence and the settled cultivators for adopting 'vertical' agricultural practices. Most of the informants of the study areas, as per the data given below (Table-3.8) opined for the conservation of forest but replied negatively to the question of taking collective steps for the same. About half of the respondents of both the areas, it seems, have not heard about the efforts taken up in other areas towards forest conservation. The NGOs should come forward to aware them about conservation of forest.

SI. No.	Areas	Total respondents (HHs)		ken for forest servation	Knowledge about forest conser-
			Individualy	Communally	vation elsewhere
(1)	(2)	(3)	(4)	(5)	(6)
1	Belghar	121	76	· · ·	61
2	Jashipur	.112	69		52

Table-3.8

Awareness regarding steps taken for conservation of forest

3.14. Exploitation through intermediaries

The tribal communities rely heavily on intermediaries to tide over the normal as well as contingent situations. These intermediaries mostly belong to non-tribal communities. They have infiltrated into the tribal hinterland in guise of traders, shop owners and medicinemen. Taking the full advantage of poverty, spendthriftness and ignorance of the tribal people, they begin to sell the items of daily use from their makeshift shops in exchange of agricultural produce or MFP. They also float loans with high interest rates and coerce the tribals to repay the amount in kind.

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They are the force behind the indiscriminate exploitation of forest. These intermediaries, instead of being the agent of socio-economic change for attaining the better living condition, have created wants among the tribals for low priority but high profitability goods. They also have inducted costlier alternatives to the goods available for daily use. The crave to saliate induced wants has left no alternative before the tribal people but to exploit the forest for immediate gains. The agrarian tribes or those households whose principal avocation is not forest collection are exploiting the forest after being exploited by the intermediaries. The collecting tribes with limited wants and nature of their avocation, are exploited by the intermediaries only at the time of transaction of MFP. It is obvious that where there is more social and economic contact, the intermediaries are more vigorous in action. Absence of Government intermediaries has lead the situation to such an extent that the tribal communities perching on the various economic strata, at times, go for distress sale of their wares and get the price far less than the per head minimum daily wage. These intermediaries scrupulously locate their shops in forest belts, grease the palm of the lower to the middle level Government officials and run their activities with the sole aim of personal gains. Their presence is felt in every aspect of tribal life. The tribal people with no alternative at hand join their hands with them to deprive themselves of the wage for their labour. In the study areas the affluent tribal people are also acting as the intermediaries. Overtly or covertly they exploit their tribal brethren for material gains. The intermediaries working in tribal belts are mostly the individuals. To add to their woos some Government officials who are supposed to see the welfare of the forest communities and protect the forest have indulged themselves in exploitation. They spring upon the tribals for small slips and demand cash and kind or both for own benefit. The tribes with no financial or social background become the easy victim of the Government Officials. The Hill Khadia of Similipal area and Kutia Kandha of Belghar area are always exploited by these categories of people. A picture of the exploiting intermediaries is given in the following chapter.

AND A REPORT OF

Sale of Minor Forest Produce

4.1. Modes of Exchange

In a broad sense, the tribal economy is synonymous with the forest economy. It is based on five 'Fs'-food, fuel, fodder, fruits and fair return to the collector [B. N. Pal in M. L. Patel (ed) 1972 : 19]. The tribal people find the forest as the only source of above mentioned first four 'Fs' but fail to enhance their economic status due to the absence of the fifth 'F'. The fair return for different kinds of MFP is affected by various jobs ranging from grading, storing and processing to selling the produce in a buyers' market. The forest communities exchange the collected MFP after following certain practices, like drying it under the sun and removing the non-edible /foreign particles etc.. They do not grade the items and exchange the same in three different purposes, namely, (a) to repay outstanding loans without converting it to cash, (b) to barter to get other utility goods and services and (c) to exchange for cash.

4.1.2. Poverty, illiteracy and non-existence of the habit of saving for the future usually compel the forest dwellers to adopt the first two modes of exchange. The socio-economic interaction, expansion of the sphere of wants and scope for greater mobility of goods and its users have given the scope to the MFP collectors living near urban centres or areas with certain basic amenities to go for exchange the MFP for cash. At times the modes of exchange also depend on the nature of the MFP. It is observed that non-traditional MFP like bark, lac and medicinal plants and some traditional MFP like resin, oil seed etc. in small volumes are bartered for salt or tobacco and even for dry-fish. This practice is in vogue throughout the tribal belts of the State. Some MFP having high unit cost are also bartered in remote settlements for cloth, umbrella and luxury goods. Lac, resin and honey are thus bartered to pedlars or provision stores of the interior villages. Moderately valued bulk goods, like oil seeds of forest origin are used by the tribals to repay back the old debts. It is the general practice of the tribal people to exchange MFP with high to medium unit cost in bulk quantities to the traders and the procurers for cash. Thus, the oil seed, bark, resin, gum, leaves, fibre, cane and the likes in bulk quantities are the cash earners for the tribal communities. Industrially important MFP like Kendu leaf, Sabai grass etc. in general, have restricted trade. So these items are exchanged for cash only. A qualitative assessment of the modes of exchange of certain selective items of MFP explained above is represented in (Table-4.1).

4.1.3. The quantitative assessment of the modes of exchange of different items of MFP in two study areas can be had from the data appended in Annexure-7. The quantity of different kinds of MFP disposed of by three broad ways differ from tribes to tribes but the ratio of quantity of different items disposed of to the total quantity collected has maintained almost similar trend. For this quantitative analysis some of the important items of MFP available in the study areas are taken into account. The annexure reflects that the tribal people keep very little portion of the collected MFP for own use and for repayment of loans. The Mohua seed and flower are used in Belghar area for the latter purpose but in Jasipur area along with oil seeds; items like Sal resin, honey, Mohua flower as well as arrowroot are also used for repayment of loans. Quite a number of items are bartered for procuring essential items. But in both the areas the larger portions of MFP items are exchanged for cash. Though the bartered goods are small in volume they have high market value. The goods they receive in return are of high market value too.

Table-4.1

SI.		N	lodes of exchange	
No.	Ethnic group	Repayment of loans	Barter	Cash
1	2	3	4	5
	Belghar area			
1	Kutia Kandha	Kusum seed, Mohua seed etc.	Non-traditional MFP such as Char seed, tamarind seed etc.	Honey, arrowroot, resin, Lac, hill- broomstic, cane etc.
	Jashipur area			
2	Kolha		Non-traditional MFP such as Mohua seed	Mohua flower, oil seeds etc.
3	Hill Khadia	Honey, arrow- root, oil seeds etc.		Honey, arrowroot, resin, Lac, barks etc
4	Santal	Oil seeds	Non-traditional MFP in smaller quantity	Medicinal plants etc. Mohua flower oil seeds etc.
5	Bhumij			••
6	Munda	the second second	n sji e	••
7	Gond		••	
8	Lohara	N 3759		· · ·
9	Gauda			

Modes of exchange of different kinds of MFP

4.2. Market and Exchange

From among the different definitions of market, one that propounded by Professor Jevous appears to be very significant. According to him market means any body of persons who are in intimate business relations and carry on extensive transactions in any commodity. His definition fits hands in gloves with the markets of the tribal regions of the State. These markets locally known as Bazar, Hat, Pithia, Shandies etc. are widely spread in tribal areas specially in Bihar, Orissa, Madhya Pradesh and Andhra Pradesh (Vidyarthi and Ray, 1976 : 108). They are seasonal in character and are named after the main item of SAP or MFP put on sale. So a honey market in autumn around the Similipal hill region becomes a Kusum seed market in pre-monsoon season and a tamarind market of summer in Belghar region changes to broomstick market in early spring. A market, in so called inaccessible and remote region, is an arrangement mostly made by the inhabitants with very little or no State patronage but with active participation of outside non-tribals to provide an opportunity for exchange of goods. These markets in the spatial sense are small in size, offer very little varieties of goods to select with and mostly deal with the 'produce'-cultured or otherwise. It favours the buyers of bulk goods but does not side with the buyers of the 'product'-the ethnic groups, with subsistent economy to their boot.

4.2.2. In a tribal market the interests of two sides-the buyers consisting the local people, the outsiders acting as the grassroot agents of some authorised private big firms as well as the personnel of State procuring agencies and the sellers belonging to different ethnic groups interact. These markets are neither the tribal sellers' (of SAP and MFP) nor the tribal buyers' (of essential commodities and non-priority goods) markets. It is the outside traders' market which buys SAP and MFP and sells sundry items of daily use. In the study areas, the SAP and MFP are not only purchased/ procured at the weekly markets but also collected from door steps of the farmers/ MFP collectors or from the collection grounds itself (in case of MFP). Thus the tribal market is not consisting of localised procuring centres but also consisting of mobile pedlars who deal with low volume but high unit cost bearing SAP and MFP. In both the study areas the people sell their wares to private parties, co-operative bodies and to corporate bodies.

4.2.3. The quantities of different MFP items sold to different agencies/ bodies as observed in the study areas are given in Annexure-8. For a clear picture of the whole gamut, only some important items are taken into account. According to the annexure the private-parties procure the unclassified items in greater quantities but the Co-operative bodies and Government agencies have monopoly over the collection of certain items for which they have exclusive collection rights. In Jashipur area the oilseeds of tree origin, resin, bark for tanning industry etc. are procured by private parties in greater volume. They also procure non-traditional MFP such as medicinal plants and even honey. Prior to the merger of Similipal Forest Development Corporation (SFDC) with the then Orissa Forest Corporation (OFC) to form Orissa Forest Development Corporation (OFDC), the tribal people preferred to sell different kinds of MFP like honey, oilseed, resin etc., at the nearest procuring centre. After the intake capacity of the centre exhausts, the tribal people used to sell their MFP to the local traders or pedlars at rates almost coinciding with the rates fixed by the Government. However at present, due to lack of such Government intake facilities, the local people sell the MFP to the private parties. The existence of pluralism among private intake agencies helps the tribal people to get a reasonable and competitive price which according to them, should be more than prevailing prices. The merger of SFDA and OFC certainly has created 'vacuum areas' with no increase in institutional intake facilities resulting in the exploitation by the private procuring parties.

4. 2.4. The tribal belts of the State are rich in natural resources but fail to deliver a stable economy to its inhabitants. At present, there are no other economic activities except agriculture and collection of MFP in the tribal hinterland. The increasing cash need has compelled the ethnic groups of the area to dispose of their goods with the mobile procurers at doorsteps and at makeshift procuring centres mushrooming up along the roads to the weekly markets. The traders, during the season, almost snatch away the items of MFP carried by the local people and weigh it with a faulty balance and before the utterance of any word by the tribal people, put the freshly weighed items on the heap of the MFP stored nearby. The tribal people feel it embarassing to take away the goods and instead receive the cash which is tucked into the hands by the buyers. This practice is followed more by the outside traders. The tribal people at times, feel it good to dispose of their goods at doorsteps than to take the pain of carrying the same to the established market where the presence of different kinds of people and Government agencies make the procurer to pay the price which may be low but not far below the price fixed by the Government. The data on available market facilities and disposal points of MFP is given in the Table-4.2.

Table-4.2

SI.	Area	Name	Distance	Total		Selling	Point	
No.		of village	of the weekly market (In Kms.)	No. of H. Hs.	Door- step	Collec- tion ground	Halfway to the market	Market proper
1	Belghar	01		100	4	9 •• c	24	92
		Tuakela	a 3	21	3	1.1	3	18
2	Jashipur	Ramjoc	di 5	29	7	. 1	2	27
		Podaga	ida 1	83	13	2	8	81

Distance of weekly markets from the study villages and households using different selling points

The data reveals that the majority of the households of each village have exchanged MFP items at the local market. In Jashipur area three households-one of Ramjodi and two of Podagada, have turned the collection ground to market ground. Sudden illness has forced these households to sell their portion of collected items to other fellow members of the team at the collection site with a promise to get the cost price at home. Forced exchange of goods on the way to the market is more prevalent in Belghar area compared to that in Jashipur area. In Belghar area the distance of the market forced some households of remote villages to sell the goods at doorsteps but their number is not far more than those of the households belonging to villages with infrastructural facilities. In Jashipur area the distance of the market donot have a direct bearing on the number of households that disposed of the collected forest goods at doorsteps. It is to be noted that the same households might have sold its goods at doorstep, on the way to the market and even at the collection ground. The same households might have sold MFP at the market proper also. Needless to say that the tribal markets do not have storage facilities, except in case of the Government or Co-operative orgnisations. The private traders/ procurers take more risk on storage and transportation, that is why they want to earn more profit by undervaluing the goods.

4.2.5. The exchange, in a tribal market, implies the transfer of SAP and MFP in bulk quantities for cash, kind or both. It brings about the change in the ownership of seasonal perishable or nonperishable goods either in original or semi-processed form. The completely processed MFP with longer storage period are not placed in bulk quantities in the market for sale. The tribal people come to the market to sell most of their goods and buy other essential commodities. But these two separate but supportive activities-selling and buying, are not necessarily performed with the same person or organisation. The grassroot procurers of MFP with business links with the leasees at the macro-level are permanently stationed in the area. They have provision stores where the tribal people or other ethnic groups with subsistence economy, spend their earnings after goods of daily use. In Tribal Development Co-operative Corporation (TDCC) centres and Large Sized Multipurpose Society (LAMPS) stores the exchange does take place in both ways. Here the people sell and buy goods under one roof. The data also reveals that the nearness of the market centres from the study villages in both the study areas failed to attract all the MFP collectors to enter into business. The unscrupulous and almost coercive practices of the mercenary traders have put barriers to easy flow of MFP in bulk quantities to the market where more eyes watch the smooth running of exchange methods.

4.2.6. The inhabitants of the study villages are well aware of the Government fixed rates for different important items of MFP. It is found that 74 households of 'B' category village–Rangaparu, and 17 of 'A' category village–Tuakela, of Belghar area as well as 21 household of 'B' category village–Ramjodi, and 76 households of 'A' category village–Podagada, of Jashipur area comprising 74.00 per cent, 80.95 per cent, 72.41per cent and 91.57 per cent respectively are well aware of the rates fixed by Government for different kinds of MFP. It is due to the fact that the market is the most powerful channel of communication in the tribal region (Vidyarthi & Ray 1976 : 108). From the data given below it is found that more households of 'A' category villages know about the Government rates than its counterpart belonging to 'B' category villages. When asked about the nature of the market -- the buyer's market or the seller's market, the majority of the households of the study villages opined the existence of the former (88.00%, 85.71%, 93.10% and 95.12% for Rangaparu, Tuakela, Ramjodi and Podagada respectively).

Table-4.3

		KINGS OF W	i F and hature of th	ie market	
SI. No.	Name of the village	Total No. of H. H.	Awareness about Govt. rate	Buyer's market	Seller's market
1	2	3	4	5	6
1	Rangaparu	100	74 (74.00%)	88 (88.00%)	12 (12.00%)
2	Tuakela	21	17 (80.95%)	18 (85.71%)	3 (14.29%)
3	Ramjodi	29	21 (72.41%)	27 (93.10%)	2 (6.90%)
4	Podagada	83	76 (91.57%)	78 (95.12%)	5 (4.88%)

Consciousness about the support price for different kinds of MFP and nature of the market

4.3. Pricing Mechanism

The price of a commodity usually depends on its demand and supply. Other factors, like interaction of buyers and sellers, existence of homogeneous products, free entry and free exit for firms (traders), perfect knowledge on the part of the buyers and sellers, perfect mobility of factors of production and non-existence of transport costs also determine the price of a commodity. In perfect competition which is hypothetical in nature, all the above factors co-exist. Samuelson has rightly confessed that it has never been tried. In the imperfect competition the monopolistic forces work overtly or covertly and both the buyers and the sellers are limited in number. They vie with each other for a few commodities that are homogeneous in nature.

4.3.2. The MFP as a commodity is the free gift of nature and is collected as a 'produce' and disposed of also as a 'produce' with no scope for 'element of time' to exercise considerable influence on price determination. The equilibrium between demand and supply as propounded by Dr. Marshall is confined to the 'Market Period' only in the tribal belts where a large number of sellers interact with a limited number of non-tribal buyers. The entry of procures are restricted by giving lease rights to a few agencies for a greater monitoring of their activities and easy realisation of royalty. It can also be noted that only the buyers have the perfect knowledge about

the storage and utilisation of the non-traditional MFP items whereas the sellers do not know much about its end use and cash value. The organised market practices are at the hands of the buyers. The tribal people as sellers, have some say in disorganised market practices where they bring their processed 'products' - small in volume, to get the right price. Leaving aside the so called 'processed MFP, the unprocessed MFP with low unit cost but bulk in quantity, usually command a price which fall below the actual price fixed by the Government or the Price Fixation Committee. In order to safeguard the interest of the tribal people as well as the ethnic groups living near the forest, the pricing mechanism has been given a socialistic hue. It is significant to note that the Government interference - direct or indirect in this line, has helped the elevation of unit price of important traditional MFP items and has benefited the tribal people.

4.3.3. The first salvo fired by Government for mooring the pricing mechanism for the benefit of the forest dwellers is in shape of the monopolisation in collection of Kendu leaf. Sal seed and bamboo. The unit prices of the above said items are fixed by a High Power Committee appointed by the Government for each crop year. The prices for other items are not fixed by Government. The agencies authorised to collect such MFP items decide their own fixed procurement prices in consultation with Price Fixation Committe under the Chairmanship of District Collector. The Committee fixes price for different items of MFP according to availability, local condition and market demand. In order to give justice to the labour of the forest dwellers throughout the State, the Government has established the Tribal Development Co-operative Corporation (TDCC) and encouraged the establishment of Co-operative bodies and Public limited companies for handling MFP. However, all these establishments are required to abide by the price fixed by the districtwise Price Fixation Committees. It can be seen that the premier Government business organisation-the TDCC, fixes the collection price of different MFP items keeping in view the previous year's collection price, sale price and current year's crop condition. In this connection it also takes into consideration the price recommended by the Price Fixation Committees chaired by the Collectors in their respective districts. The TDCC is giving emphasis on giving better rates to the tribal collectors year by year (Annexure-9). The private company M/S Utkal Forest Products Ltd. also procures the MFP at rates fixed by the above Committees of different districts. However, the benefit is not percolating to the tribal collectors. The price offered by different procuring agencies for different items of MFP is shown in Annexure-10. It is a compilation of rate charts provided by the procuring agencies. It seems that the prices fixed by the procuring agents are almost same for most of the items. The tribal collectors of both the areas conceded that the procurers pay lower rate on bulk arrival of different kinds of MFP. The difference, it seems, is pocketed by the middlemen and the persons manning the procuring centres.

4.4. Storage

The marketing of a commodity begins with storage. The ethnic groups living near forest and depending on it for their subsistance are yet to develop the habit of attaining the economic stability and security through the storage of the collected or the cultured bio-goods. Poverty, absence of plurality of agencies that procure MFP and ignorance about the tecniques of storage are the reasons for immediate disposal of the collected MFP items. Oil seeds of tree origin, barks used in dyeing and tanning industries and Mohua flowers are usually collected in bulk quantities. The seasonal gathering of the grass-root procurers as well as the seasonal diversification of the marketing activities of the existing provision stores give no chance to these items for a longer stay at the house of the collector. The small volume, non perishable and high priced items of MFP, like honey, resin and arrowroot are stored by the collectors for a period ranging from a week to a month for accumulation to a suitable volume for disposal and for the arrival of a suitable buyer. Some other forest items, like bark (non-medicinal) for non-tanning purposes, mango stone and cane are stored for still longer period for processing in lean agricultural season. Initially all the MFP collected are not disposed of as such. Rudimentary processing is always done. But soon after this, the items are put on sale. Edibles, like green leaves, mushroom, roots and tubers are immediately disposed of not necessarily for cash but for petty kinds. From the Table-4.4 the types of storage and the time interval from collection to the end uses of the MFP can be judged.

4.4.2. In the study areas the oil seeds of tree origin and barks (both for tanning or nontanning purposes) are heaped at one corner of the house or spread in backyard till its disposal on the next weekly market (Hat) day. High priority and high profitability items, like honey, arrowroot and resin are stored in suitable containers for one to four weeks and then disposed of. Lac and Tassar cocoons are stored for a little larger period of two to six weeks and after a sizable collection, they are put on sale. In all the cases the storage is not attributed to the holding of price line or to value addition but to increase the volume of the MFP by daily addition to build up a marketable stock.

SI. No.	Minor forest produce	Type of storage	Period of storage	Remarks
1	2	3	4	5
1	Edible greenleaves, roots and tubers & fruits	No	No	Cousmed immediately. Surplus fruits are processed for extraction of pulp as in Belghar area.
2	Oilseeds of tree origin	Spread or heaped on open ground	About 7 days	Disposed of soon after shelling or decorticating.
3	Bark	n, 1997 an single States 2017 - The global of States and the	2–3 months	Usually inducted by the outsiders to collect for ready cash.
4	Honey, resin & arrowroot	Honey in wide mouthed pots or buckets and arrowroot in bamboo flat baskets.	1–4 weeks	In Jashipur area the Hill Khadia do not keep anything for own use but in Belghar area the Kutia Kandha keep aside a little for own use.
5	Lac and Tassar cocoon	Lac in earthen pots, cocoons are boiled in water, dried and tied into bundles.	2–6 weeks.	Hill Khadias sell all but affluent tribes keep a portion for own use.

Table-4.4

Type and period of storage of MFP in study areas

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4.4.3. After procurement at the grassroot level the leasees-either the co-operative bodies or the private firms, pack the items in gunny bags and store in makeshift godowns. No scientific method is followed to check the deterioration of the quality of the items. While the private parties remove MFP quickly to the central processing units, the co-operative bodies wait for the decision of the higherups. Thus, the items are stored for a longer period in co-operative godowns without quick end-use.

4.5. Processing of raw materials and biproducts

Most of the items of MFP are processed and then put to sale. The methods adotped are simple and inexpensive. It consists of drying, decorticating wherever necessary and cleaning the MFP of foreign materials. At no stage chemical additives, emulsifing agents and flavouring agents are added. The Semi-Procesed Minor Forest Produce (SPMFP) are the economic goods, that are derived out of the nature given goods by the ethnic groups living near the forest. Certain MFP items, like Lac, resin and honey are sold without any processing at all as they require no processing at collectors' level. Durable items of MFP like fibres, barks, flosses etc. are sold both as SPMFP and as 'Virgin/Original Minor Forest Produce' (V/OMFP). Medicinal plants are always sold as V/ OMFP. In the tribal belt, the ethnic groups subject certain kinds of MFP to some sort of processing resulting in metamorphic change to the V/ OMFP. Arrowroot is one such item which after collection is subjected to washing for several times, drying and then washing and rubbing against rough surface to make a paste. The paste is then soaked in water and kept undisturbed. After some time the clear water standing above is decanted. The process is repeated several times and finally the white sticky substance is dried and made to irregular cubes. This is the only process by which arrowroot is made fit for consumption. A good harvest of mango also force the tribal people of Southern Orissa to extract the pulp and dry it under the sun and sell in the market in form of sheet. Except these two, no other MFP is reported to undergo a metamorphic change. In both the cases, the tribal people donot add additives of any kind and without consuming, they sell the products. These Completly Processed Minor Forest Produce (CPMFP) need scientific processing for wider acceptance in market.

4.5.2. The processing techniques adopted by the tribal people for different MFP is given in the Table-4.5. It shows that in both the areas the techniques adopted are the same.

4.5.3. The biproducts obtained from preliminary processing are the seeds in case of tamarind and kernel in case of mango. While the former is sold by South Orissa tribes the latter is further processed and are relished by them. It is reported that since last five years the mango kernel is also sold at weekly markets to the grass-root level procurers of M/S Utkal Forest Products. This causes the deficiency of carbohydrate in food items during rainy season and in other lean months.

4.6. Weights and Measures

It is alleged that the tribal people are often cheated by the traders by undervaluing the items of MFP and also by use of faulty weights and measures. Till recent past the forest communities preferred to sell their wares by volume. Not only any liquid items but also the MFP items in solid state-edibles or otherwise, were sold or purchased by measures because it was easy for the tribal people to understand the quantity of items sold or purchased. This practice is still in vogue in remote villages and in case of barter of different items of MFP and SAP for other essential items. The earlier practice of volumetric transaction has been replaced by use of weighing pans and weights due to steps taken up by the Government sponsored procurement centres and the co-operative bodies. The Non-Government Organisations (NGOs) too have contributed their mite for silence switch over of the tribal market system from volumetric to gravimetric transaction. The standard weights used however are tampered with by the procurers-*cum*-traders.

Table-4.5

I.

Processing te	cniques adopted	by ethnic	groups
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SI. 1 No.	Гуре of MFP	Processing techniques	Type of the product	Remarks
1	2	3	4	5
1	Oilseeds of tree origin	Drying, decortcating, removal of non-edible/ non-usable foreign materials, etc.	SPMFP	
2	Barks, fibres and flosses	-do-	SPMFP	
3	Non-traditional MFP	-do-	SPMFP	
4 (a)	Grass, bamboo, cane etc.	Not processed	V/OMFP	Sold as such to others
(b)	do	Grass is twisted to make ropes, splits are made from bamboo and cane	CPMFP	Ropes and mats are made and baskets are made
5	Medicinal plants	Different portions are collected and sold as such to local medicine- man	V/OMFP	Small in quantity and suitable processing is done by the purchasers
6	Resin etc.	Not processed	V/OMFP	
7	Lac	-do-	V/OMFP	a chun
8	Perishable edibles	-do-	V/OMFP	1. 1. ¹¹ 1. 11
9	Other edibles like turmeric, Mohua flower etc.	Drying, removal of foreign materials and decortication, if necessary	SPMFP	n de la composición d La composición de la c
10 (a)	Arrowroot	Drying, washing, grinding and drying of the paste	CPMFP	Never stored for own consumption
(b)	Mango	Extraction of pulp and drying the same	CPMFP	-do-
11	Tans & dyes	Drying and bundling	SPMFP	-do-
12	Fruits	Donot undergo processing	V/OMFP	Usually consumed by the collector

4.6.2. In the study areas, it is observed that MFPs with low unit cost but available in small quantities are still sold by volume rather than by weight where as items, like honey, arrowroot, resin,lac, gum and medicinal root such as Patalgaruda (Rawalfia Serpentina) are sold by weight. The non-traditional MFP items are usually exchanged through barter volumetrically to provision stores or grassroot procurers. The leasee, however, collects it by gravimetric measures at their procuring centres. Different methods of selling of MFP by the forest communities are given in Table-4.6 (A). In Belghar area, according to the table, the non-traditional items of MFP (those that are available in large quantities and are collected since long) in small volume are sold volumetrically where as in Jashipur area the non-traditional items of MFP are sold both by volumetric and by gravimetric measures. In villages with greater socio-economic facilities (Tuakela and Podagada) exchange of MFP by weight is more in force.

Table-4.6(A)

SI. Study	Categories of MFP		Sale	e by
No. villages		Vol.	Weight	Both by vol. & weight
1.Belghar area				
1. Rangaparu	(a) Traditional (Liquid)	1	••	
	(b) Traditional (Solid)		**	v
	(c) Non-Traditional (Solid)	化化 第二		••
2. Tuakela	(a) Traditional (Liquid)			
	(b) Traditional (Solid)(c) Non-Traditional (Solid)	7	•	····
2. Jashipur area				
1. Ramjodi	(a) Traditional (Liquid)			
	(b) Traditional (Solid)			
	(c) Non-Traditional (Solid)			
2. Podagada	(a) Traditional (Liquid)	· · ·		····
	(b) Traditional (Solid)	••		and the second second
	(c) Non-Traditional (Solid)			~

Different methods of selling the items of MFP

4. 6. 3. The tribal people know it pretty well that they are cheated both by faulty weights and measures but with no alternative to dispose of their MFP, they go to the same errand procurers. In the study areas when the households are asked about the correctness of the weights, scales and measures; shocking replies were heard. The answers recorded in Tab-4.6(B) show that majority of the study households-131 in number (56.22%), know that the weights and measures of the procurers are faulty and 87 households (37.34%) expressed their ignorance about the correctness or otherwise of the weights and measures. Only 15 households (6.44%) opined that the weights and measures used by the traders are correct. The opinion given by each ethnic group is similar to the general opinion prevailing in the area. In case of procurment of leaf-plates and cups, bark and cane the traders have novel ways to cheat. They declare the above listed items as substandard and of low quality and fix the price accordingly. There is no common acceptable standard for any item listed as MFP. Quality Control (QC) measures are available neither at collection centres nor at godowns located at growth centres. The absence of the two make the tribal people helpless against any economic expolitation and accept the price offered by the persons who purchase the MFP.

Table 4.6 (B)

Opinion of the MFP collectors regarding weights & measures adopted by the procurers/ traders

SI. No.	Name of the ethnic group	No. of H. H.	Faulty weights and measures	Correct weights and measures	Cannot say
1	Kutia Kandha	121 (100.00)	66 (54.55)	8 (6.61)	47 (38.89)
2	Kolha	46 (100.00)	26 (56.52)	4 (8.70)	16 (34.78)
3	Hill Khadia	50 (100.00)	32 (64.00)	1 (2.00)	17 (34.00)
4	Santal	6 (100.00)	3 (50.00)	1 (16.67)	2 (33.33)
5	Bhumij	2 (100.00)	1 (50.00)	oga haconador	1 (50.00)
6	Munda	2 (100.00)	1 (50.00)	19 ₂₆)	1 (50.00)
7	Gond	3 (100.00)	1 (33.33)	1 (33.33)	1 (33.33)
8	Lohara	2 (100.00)	1 (50.00)		1 (50.00)
9	Gauda	1 (100.00)	one bland	·	1 (100.00)
	6	233 (100.00)	131 (56.22)	15 (6.44)	87 (37.34)

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4.7. Income

The tribal economy revolves round goods obtained from the natural environment. The service sector has insignificant role to play in transaction of goods and services in highly localised and unstratified nature of the tribal way of life. Rendering services, according to the tribal custom, is reciprocal in nature. It ushers in more belongingness than the income to the family. The flexibility of the tribal economy is attributed to the accommodation of whole lot of 'goods' and very little of 'services' in to its fold.

4.7.2. Income derived by the ethnic groups residing near the forest shows many similarities but the quantum of income derived out of each avenue varies according to their socio-economic life patterns. A tribe with greater scope for adopting different economic activities has the stronger economic impulses to override the contingent situations. The economy of the forest based ethnic groups can be studied from the data furnished in Table-4.7. In general the people living near a forest derive income from (a) agriculture, (b) collection of Minor Forest Produce (MFP), (c) wage earning, (b) live-stock rearing, (e) salary earning and (f) other miscellaneous sources. According to the table, agriculture stands as the main source of livelihood for the agrarian tribesthe settled cultivating tribes such as the Kolha, the Santal, the Bhumij, the Munda and the Gond as well as the shifting cultivating tribe, such as the Kutia Kandha. Wage earning is mostly confined to the landless families-the 'Sukhbasis', belonging to all the ethnic groups living in the study villages. The collection and sale of MFP remains as the main source of income for the Hill Khadia. As high as 90.33 per cent of total income of this ethnic group is derived from the collection and sale of MFP. It is the only pursuit which provides means to the underaged and overaged population to contribute to the family income. The table also reveals that the non-tribal communities, like the Lohara and the Gauda earn the lion's share of their total income from their traditional

Opinion of MFP collectors regarding weights and measures adopted by the procurers/traders



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Table-4.7

Income derived from different sources (in Rs.)

SI.	Ethnic group	Total			Sou	Sources of income	a			
No.	-	No. of study H.H.	Agriculture	Collection & sale of MFP	Wage earning	Livestock rearing	Salary	Others	Total	Average annual income per household
-	2	e	4	5	9	7	ω	6	10	11
	Belghar area									
-	Kutia Kandha	121	4,88,150.00 (77.67)	67,815.00 (10.79)	10,270.00 (1.63)	40,981.00 (6.52)	18,000.00 (2.86)	3,300.00 (0.53)	6,28,516.00 (100.00)	5,194.35
	Jashipur area							э. П		
2	Kolha	46	1,33,641.00 (60.33)	13,202.00 (5.96)	10,899.00 (4.92)	38,300.00 (17.29)	22,484.00 (10.15)	2,991.00 (1.35)	2,21,517.00 (100.00)	4,815.58
С	Hill Khadia	50	10,525.00 (6.00)	1,60,030.00 (90.33)	480.00 (0.27)	5,750.00 (3.24)	: :	385.00 (0.22)	1,77,170.00 (100.00)	3,543.40
4	Santal	9	18,583.00 (68.44)	1,920.00 (7.07)	1,922.00 (7.08)	3,405.00 (12.54)	: :	1,322.00 (4.87)	27,152.00 (100.00)	4,525.33
2	Bhumij	2	7,176.00 (66.83)	921.00 (8.70)	626.00 (5.91)	1,654.00 (15.62)	: :	311.00 (2.94)	10,688.00 (100.00)	5,344.00
9	Munda	N	5,145.00 (58.76)	799.00 (9.13)	887.00 (10.13)	1,862.00 (21.27)	: :	62.00 (0.71)	8,755.00 (100.00)	4,377.50
2	Gond	ю	11,456.00 (64.47)	2,045.00 (11.51)	379.00 (2.13)	2,012.00 (11.32)	: :	1,878.00 (10.57)	17,770.00 (100.00)	5,923.33
8	Lohara	5	8,400.00 (49.60)	285.00 (1.68)	590.00 (3.48)	1,687.00 (9.96)	: :	5,972.00 (35.28)	16,934.00 (100.00)	8,467.00
6	Gauda	-	2,500.00 (39.25)	665.00 (10.44)	2,890.00 (45.37)	315.00 (4.94))÷ 	:	6,370.00 (100.00)	6,370.00



Percentage of income from agril. & MFP collection and exp. incurred on food, assets and rituals & festivals occupations-blacksmithy in case of the former and cattle herding in case of the latter. Both these non-tribal communities earn substantially from agriculture also (49.60% by the former and 39.25% by the latter). Apart from the Hill Khadia the pursuit of collection of MFP contributes appreciably to the economy of the Kutia Kandha (10.79%), the Gond (11.51%), the Munda (9.13%), the Bhumij (8.70%), the Santal (7.07%) and the Kolha (5.96%). 10.44 per cent of the total income of the Gauda is derived from collection of MFP. Thus, the collection and sale of MFP stands as one of the important economic pursuits of the forest dwellers to derive the family income.

4.7.3. The average annual income per household stands at Rs. 5,923.33 for the Gond, Rs. 5,344.00 for the Bhumij, Rs. 5,194.35 for the Kutia Kandha, Rs. 4,815.58 for the Kolha, Rs. 4,525.33 for the Santal and Rs. 4,377.50 for the Munda. These tribes are the agrarian tribes. The semi-nomadic Hill Khadia reported Rs. 3,543.40 as the average annual income per family. According to the table the Lohara has the highest average annual income of Rs. 8,467.00. The Gauda on the otherhand, has reported the per family average annual income as Rs. 6,370.00. Both the communities are non-tribal and depend heavily on traditional occupation for their livelihood. The table reveals that in the study areas the community with the highest percentage of income from collection of MFP has the lowest average annual income. It is interesting to find that ethnic groups with high percentage of income from collection and sale of MFP report lesser amount of income from livestock rearing. Thus, Hill Khadias have derived only 3.18 per cent of their total income from sale proceeds of the livestocks and its products. Loharas, according to the table, get the substantial share (35.98%) of their income from 'Other' sources. It is due to the fact that their traditional occupation-blacksmithy, is accommodated in this sector.

4.7.4. The forestry activity is the main income source of the Hill Khadia but it contributes substantially to the economy of other communities like the Lohara and the Gauda. It is the main source of income of the tribal communities. It is an 'open avenue' where every community has its free access. It also accommodates the family members of all age groups.

4.8. Expenditure

The expenditure pattern of the communities residing near the forest has much similarity with that of any other rural communities. The largest chunk of their income is diverted for purchase of food items. The ethnic groups with more primitiveness and less socio-cultural contact with outsiders spend more on food but the expenditure on food by the landowning and accultured tribe is less but never lesser than half of the total income. In the study areas, according to the Table-4.8, the major item of expenditure is food. The Hill Khadia, the Kolha and the Kutia Kandha spend as much as 85.47 per cent, 77.94 per cent and 73.76 per cent of their total expenditure on food only. The percentage of expenditure is less for the tribes, like the Bhumij, the Munda and the community, like the Gauda. They, according to the table, have spent 53.10 per cent, 51.54 per cent and 55.25 per cent of their total expenditure on food respectively. It is an interesting finding that the communities earning low percentage of their total income from the collection of MFP also spend less percentage of their total expenditure on food. However, this hypothesis does not hold good for the Lohara-the blacksmith people, who derive only 1.68 per cent of their total income from collection and sale of MFP but spend as much as 67.38 per cent of their total expenditure on food. This leads to infer that the community is engaged in arduous occupation of blacksmithy and eat more food to derive more energy. After food the purchase of clothings claims the next higher percentage of expenditure. The Hill Khadia and the Kutia Kandha almost spend the similar portion of their total expenditure on clothings. The acculturated tribes and the working communities spend more on clothings than the Hill Khadia, the Kutia Kandha and the Table-4.8

Item-wise expenditure incurred by different ethnic groups

	SI.	Name of the				Items of	Items of expenditure (in Rs.)	in Rs.)			
2	No.	Ethnic group	Food	Clothing	Ag. & other	Health	Purchase	Rituals &	Travel	Others	Total
					inputs		of assets	festivals			
	-	5	m	4	ъ	9	7	8	6	10	11
		Belghar area									
	-	Kutia Kandha	463587.00	68860.00	56000.00	5203.00	11961.00	17627.00	4967.00	311.00	628516.00
			(73.76)	(10.96)	(8.91)	(0.83)	(1.90)	(2.80)	(0.79)	(0.05)	(100.00)
		Jashipur area						•			
	2	Kolha	172651.00 (77.94)	19890.00 (8.98)	10000.00 (4.51)	2914.00 (1.32)	5204.00 (2.35)	4992.00 (2.25)	5666.00 (2.56)	200.00 (0.09)	221517.00 (100.00)
69	С	Hill Khadia	151435.00 (85.47)	17950.00 (10.13)	860.00 (0.49)	1150.00 (0.65)	988.00 (0.56)	750.00 (0.42)	3900.00 (2.20)	137.00 (0.08)	177170.00 (100.00)
	4	Santal	17018.00 (62.68)	3780.00 (13.92)	855.00 (3.15)	288.00 (1.06)	2701.00 (9.95)	956.00 (3.52)	1074.00 (3.96)	480.00 (1.76)	27152.00 (100.00)
	5	Bhumij	5622.00 (52.60)	1510.00 (14.13)	315.00 (2.95)	139.00 (1.30)	1810.00 (16.93)	700.00 (6.55)	277.00 (2.59)	315.00 (2.95)	10688.00 (100.00)
	9	Munda	4512.00 (51.54)	1474.00 (16.83)	160.00 (1.83)	171.00 (1.95)	1282.00 (14.64)	611.00 (6.98)	356.00 (4.07)	189.00 (2.16)	8755.00 (100.00)
	7	Gond	12688.00 (71.40)	2160.00 (12.16)	550.00 (3.10)	189.00 (1.06)	614.00 (3.45)	464.00 (2.61)	834.00 (4.69)	271.00 (1.53)	17770.00 (100.00)
	ω	Lohara	11410.00 (67.38)	2480.00 (14.65)	840.00 (4.96)	138.00 (0.82)	597.00 (3.52)	465.00 (2.75)	641.00 (3.78)	363.00 (2.14)	16934.00 (100.00)
	6	Gauda	3516.00 (55.20)	985.00 (15.46)	306.00 (4.80)	53.00 (0.83)	492.00 (7.72)	379.00 (5.95)	354.00 (5.56)	285.00 (4.47)	6370.00 (100.00)

Kolha. The other important items of expenditures are purchase of inputs, assets and observance of rituals and festivals. For the Kutia Kandha, the Kolha and the Lohara, the third major item of expenditure is purchase of agricultural and other inputs. It is 8.91 per cent, 4.51 per cent and 4.96 per cent of their total expenditure respectively. The purchase of assets has covered the third major portion of income of the Santal (9.95%), the Bhumij (17.09%), the Munda (14.64%) and the Gauda (7.72%). From the table it is found that landowning communities spend more on purchase of assets. They also spend substantially on purchase of inputs. Apart from the Hill Khadia the other ethnic groups have diverted quite a good portion of their total expenditure on rituals and festivals. The advanced tribes, like the Munda, the Bhumija, the Kolla, the Gond and the Santal have spent more after health care. The primitive tribes, like the Hill Khadia and the Kutia Kandha have spent less than one per cent of their total expenditure after health care alongwith non-tribal communities such as the Lohara and the Gauda.

4.9. Savings/ Loans

Lack of purchasing power for acquiring commodities for consumption and for diversification or expansion of existing economic activities usually allures a person to incur loan. The tribal people, though live amidst the bounty of the nature, find it difficult to escape from indebtedness. Most of them incur loans for consumption purposes and to meet the heavy expenditure for the observance of the rituals and festivals. For these non-economic events they go to the private moneylenders for loan. The private moneylenders release the loan amount at a short notice against mortgage. They, in turn, bind the loanees with a promise to repay the loan amount in kinds, such as MFP of commercial importance and cash crops. The proximity of financial institutions allures a few tribal individuals to go for fatter loans. From among the financial institutions the tribals prefer to avail loans from the Co-operative Societies than from the banks. The reason being the management of the former is by the locals. Loans incurred by households belonging to different ethnic groups and the sources as well as the size of loans are presented in Table-4.9.

		1	Private	Sources	(Co-op. Soc	ieties	•	Bank	
SI. No.	Ethnic Group	No. of H.Hs	Loan amount	Loan amount H.H.	No. / of H.Hs	Loan - amount	Loan amount/ H.H.	No. of H.Hs.	Loan amount	Loan amount/ H.H.
B	elghar area	8.10								
1	Kutia Kandha	8	1,250/-	156.25	4	1,800/-	450/-			·
J	ashipur are	а								
2	Kolha	14	1,882/-	134.43	2	1,400/-	700/-			••
3	Hill Khadia	2	155/-	77.5	3	5,100/-	1,700/-	3	7,000/-	2,333.33
4	Santal	4	2,900/-	725/-					<u>د</u>	**
5	Bhumij	1	50/-	50/-		••		!	••	•
6	Munda	••						••		••
7	Gond		••	••	•••		.,			
8	Lohara			••	•••			1	1,200/-	1,200/-
9	Gauda	1	1,200/-	1,200/-	••					

Table-4.9

Loan incurred by study households from different sources (1990-91)

4.9.2. In the study villages of Belghar area, only 12 among the 121 Kutia Kandha households have incurred loans. From among the 12, only four households have incurred loan from Cooperative Societies. The average loan amount from the source comes to Rs. 450/- which is almost three times the per head loan amount incurred from private sources. Though a branch of Kalahandi Anchalika Gramya Bank (KAGB) exists at Belghar which is two and five Kms. away from the study villages; the Loanees preferred to avail loans from the non-tribal private moneylenders stationed at Belghar. In Jashipur area the small loans are floated by the private parties and the fat loans by the financing institutions. Both the agrarian tribes as well as the seminomadic Hill Khadia have availed loans of both types. It is interesting to note that a fatter loan from a private party has been cornered by the Ione Gauda family of Podagada. The size of this Ioan is Rs. 1,200/-. From among the two Lohara households, one has cornered a loan amounting to Rs. 1,200/- from the bank to boost his traditional occupation. From among the 46 Kolha households, nearly one-third (16 Nos.) have incurred loans. From among them 14 have gone to private moneylenders. Their loan size is Rs. 134.43 per head. Two Kolha households have opted for society loans with the loan size of Rs. 700/- per head. From among the 50 Khadia households only eight have gone for loans. It is commendable on the part of the financial institutions because three households of this tribe are provided with institutional loan with an average size of Rs. 1,700/- per household and another three have bank loans with an average size of Rs. 2,333.33 per household. Four Santal households and one Bhumij household have also received loans from private parties. In general small loans are floated by private parties and the production linked fat loans by the banks.

4.9.3. Repayment of loans regularly, as per terms, is a healthy sign of economic growth. It also shows that the loanees are utilising the loan amount for clearing outstanding debts with interest. The Table-4.10 shows the repayment made by the loanees of the study villages. From the table it is evident that seven Kutia Kandha loanees have paid a sum of Rs. 1,200/- towards the principal and the interest to the private moneylenders. Rs. 1,850/- still remains as the loan against these loanees. In Jashipur area only three Kolha loanees have repaid a total of Rs. 500/- to the private parties and 11 households have not repaid anything to clear the debts amounting to Rs. 2782/- (inclusive of interest). The Hill, Khadia loanees are yet to clear the private loans but one household of this community has cleared the loan with interest amounting to Rs. 900/- and removed his name from the debt register of the private moneylender. None of the three Hill Khadia households indebted to the banks have started repaying the loan amount. It is strange to find that none of the four Santal loanees indebted to the private parties have started repaying the loans. The single loanee of both the Lohara and the Gauda community are found to be defaulters. Though the loan amount is very small–only Rs. 50/-, the lone Bhumij loanee is yet to clear his debt.

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					Repa	yment				Loan
SI. No.	Ethnic Group	No. of	Loan amount		vate mo- y-lenders		perative cieties	Ba	ink	out- standing
	21	loanees		No. of loanees	Amount	No. of loanees	Amount	No. of loanees	Amou	int
	Belghar ar	ea			2					
1	Kutia Kandha	12	3,050/-	7	1,200/-	×				1,850/-
	Jashipur a	rea								
2	Kolha	16	3,282/-	3	500/-		• •			2,782/-
З	Hill Khadia	8	12,255/-			1	900/-		• •	11,355/-
4	Bhumij	1	50/-					a		50/-
5	Munda	• •		•••	••		•••	••		
6	Gond	•••			·	••		181 0		
7	Lohara	1	1,200/-				2.1			1,200/-
8	Gauda	1	1,200/-		-ð 1.	S	·	1.1		1,200/-

Table-4.10Repayment of loan amount by loanees (1990-91)

4.9.4. It is evident from the table that the fatter bank loans as well as the fatter private loans are not cleared either partly or fully. On the other hand smaller private loans are cleared by some households either partly or fully. It also shows that the so called advanced tribes like the Kolha, the Santal and the Bhumij are not serious enough to clear the debts but tribes remaining at substantive level such as the Kutia kandha and the Hill Khadia are serious about clearing the loans incurred.

4. 10. The Tribal People & Co-operative Movement

Co-operative movement-an armour against any economic exploitation, has made little inroad into the tribal belt. The tribal people under the forest backdrop, lead a community life and their activities regarding the exploitation of nature is regulated by opinion of the mass. However, due to the lapse on the part of the authority and the scepticism that looms into the minds of the tribal people, the drive for enrolling them into the Co-operative Societies is failing largely. As a result, non-tribal moneylenders have a good scope to reap sizeable dividend from the capital invested in moneylending business.

4. 10. 2. In the study villages very small number of households are covered under Cooperative Societies (Tab-4.11). In Belghar area only 10 out of 121 households are covered under Agency Marketing Co-operative Society(AMCS). These households, at times, dispose of the collected MFP with the Agency and get fair return in cash. In Jashipur area the nearest Cooperative Society is situated only one Kilometer away from the study village Podagada and 18 Kms. away from the study village Ramjodi. In the former five out of 38 Kolha households, four out of 32 Hill Khadia, three out of six Santal, one out of two Bhumij and one out of two Munda households are found to be the members of Co-operative Societies(LAMPCS). In the latter only 3 out of 18 Hill Khadia households are enrolled in Co-operative Societies. As usual the Lohara and the Gauda households are not covered under LAMPCS. It is necessary on the part of the Government to see that all households of the tribal villages are coverd under Co-operative Societies. The Non-Government Organisations should chalk out plans to form Co-operative bodies to do justice to the natural resources and the human resources of the tribal hinterland too.

SI.	Village	Ethnic	No. of		Co-oper	ative Soc	ieties	
No.		Group	House		LAMPCS	Others	Total	
	Belghar area							
1	Rangaparu	Kutia Kandha	100		1 X - 2	8	8	
2.	Tuakela	ac a la constante - :	21			2	2	
	Jashipur area							
3.	Podagada	Kolha	38		5		5	
		Hill Khadia	32		4	••	4	
		Santal	6		3	• •	3	
		Bhumij	2		1		1	
		Munda	2		1	· · · ·	1	
-		Lohara	2					
		Gauda	11		•••		· •	
4.	Ramjodi	Khadia	18		3	- 19 di 1	3	
	en el regione da el	Kolha	8			· · · · ·		
		Gond	3	24.9	C Products in	i	alt 14 .	-
5.03.	s le lie true in hor a tractice in hor	Total	233 (100.00)		17 (7.3)	10 (4.3)	(11.6)	

Photo Republic Control of the second state of the state of the second state of the

Table-4.11Membership in Co-operative Societies

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Summary and Concluding Suggestions

Summary of Findings

The total forest area of the State of Orissa is 55,111 Sq. Kms. It provides subsistance to the tribal people of the State. Apart from them other ethnic groups living near the forest supplement their income by collecting and selling the MFP seasonally. Forest is one of the principal sources of revenue of the State Government. In 1988-89 the State earned Rs. 59.05 crores from forestry. Out of the said amount Rs. 37.20 crores was derived from forestry operation relating to the Minor Forest Produce (MFP).

5.1.2. In order to maintain the symbiotic relationship between the forest and the tribal people many Forest Acts and Laws have been enacted during the pre and post independence period. The act of collection and sale of MFP is interweaven with tribal way of life. Tribal people of every walk of life go for it irrespective of age, sex and socio-economic status.

5. 1. 3. The pursuit of collection and sale of MFP comes under unorganised rural sector and engages, either fully or partly, almost all the forest dwellers belonging to both the sex and to all the age-groups above ten years. The landowning tribes, like the Kolha, the Santal, the Gond etc. as well as the shifting cultivators, like the Kutia Kandha of the study areas have adopted the collection of MFP as a subsidiary economic pursuit and the semi-nomadic Hill Khadias–generally landless by nature, have reported the 'collection activity' as the principal source of sustenance. The former two types of tribal communities usually collect the drymatters from the trees that are found near their habitats or agricultural fields. The latter, on the other hand, collect MFP from dense forest away from their habitats. The agrarian tribes go for collection of MFP within an area with a radious of 3 Kms. The sphere of operation of shifting cultivators usually has a radius of up to 6 Kms. In case of foodgathering tribes, like the Hill Khadia, the area of the collecting activity has the radius of more than 10 Kms.

5. 1. 4. The division of labour on the basis of sex is noticed in the act of collection of certain MFP, like honey, resin and gum. Women do not collect the above items of MFP. Age-groupwise division of labour for collection of MFP is noticed in tribal belts. Both the male and female members of age group 10-15 years collect MFP from tree bottoms in nearby forest but males belonging to the age group of16–60 years of age do the harder work such as climbing the trees, felling the trees, collection of honey and transportation of bulk quantity of collected items to the village. The females of this age group collect wind blown MFP, dig the roots and tubers and process the MFP. Women of above 60 years of age, usually process both edible and non-edible items of MFP.

5. 1. 5. While collecting the MFP the forest dwelling tribes / communities try to maintain the eco-balance in their own way. The adherance to the ethic of conservation of forest differs from tribe to tribe. Majority of the cultivating tribal households of Jashipur area-45 out of 59, favoured controlled destruction of forests to keep both the tribal economy and the eco-balance on an even keel. From among the shifting cultivating households the majority (61 out of 121 Kutia Kandha households) favoured the collection of MFP for sale to safeguard the economic interest and the forest. The Hill Khadia of Jashipur area overwhelmingly supported the idea of exploiting the forest wealth up to its sustainable level. From among 50 Hill Khadia households, 48 are in favour of foraging the forest within its tolerable limit.

5. 1. 6. Forest dwelling tribes / communities usually go for multiple occupations to eke out a living. In the study areas Hill Khadias pursue the collection of MFP as the chief source of income while the landowning tribes as well as the shifting cultivators (the Kutia Kandha) have the 'grass culture' as the principal occupation. The traditional occupation is the main income source for the non-tribal forest dwellers. From among the 233 study households five belonging to the semi-nomadic Hill Khadia tribe have single occupation to pursue with. The occupation being the collection of MFP. From among the 233 study households as many as 218 (93.6%) have declared the collection of MFP as their economic pursuit–either primary or secondary.

5. 1. 7. The collection of MFP is highly seasonal in nature. Soon after preliminary processing the collected items are disposed of for (a) clearing the old debts, (b) bartering for other goods and services and (c) obtaining cash. The first two are in vogue among the collecting tribes living in remote villages of the study areas. Items in bulk quantities are always exchanged for cash. Small quantities of MFP of 'high unit cost' are bartered to mobile vendors or small provision stores for cloth, umbrella and rice. The procurers of MFP are the non-tribal shop owners or the mobile vendors who act as the agents of the leasees authorised to handle MFP.

5.1.8. The tribal people seldom get the remunerative price for their collected goods. It is the usual practice of the tribal people to carry the MFP in bulk quantities to the market but dispose of the same at doorsteps in small quantities to the mobile vendors. Lack of storage space, communication facilities, knowledge of use of preservatives, additives etc. and immediate cash need compel the forest people to part with the MFP for whatever little they get in return.

5. 1. 9. Majority of the tribal people are aware of the procurement rates fixed by the Government for different types of MFP. As many as 211 out of the total 233 study households (93.2%) opined that they are underpaid by procuring bodies-both Private and Government. Volumetric transaction of MFP is in vogue in tribal belts. Gravimetric transaction of MFP by use of balance and weights is a new concept for them. The units of measurement are never checked by the personnel of the Weights and Measures Department. Due to the absence of quality control facilities and standards, most of the goods brought by the forest people are branded as sub-standard and the tribals are paid accordingly. Another reason for non-realisation of reasonable price for MFP is the absence of 'value addition' activity at the gatherers' level. At present no easily adoptable and cheap technology is available to the tribal people to utilise the biproducts of different kinds of MFP. Only a few biproducts, like mango kernel and jackfruit seed are consumed locally during the lean season in tribal belts of Belghar area. The Kutia Kandha barters tamarind seed for salt. In the study areas there is no processing unit to do justice to the bulk arrival of MFP.

5. 1. 10. The importance of MFP in tribal economic life can be assessed from the fact that in the study area nearly 90 per cent of the total annual income of the semi-nomadic Hill Khadia is derived from forest collection. Nearly 6 to 11 per cent of the total income of the landowning tribes, like the Kolha, the Santal and the Kutia Kandha are obtained from the sale proceeds of MFP. It is also found that tribal people earning less from MFP collection spend less on food items. The communities with more income from forest spend less on purchase of assets and inputs. They also spend less in rituals and festivals. It is also observed that collecting tribes are less vulnerable to private loans. Only 4 per cent of the Hill Khadia households have incurred loan from moneylenders whereas this percentage is 6.6 for shifting cultivators, 30.4 for the Kolha and 66.66 for the Santal.

5.1.11. The forest people are not interested to take the benefit of Co-operative movement. Despite several steps taken by the Government only 27 out of 233 families (11.6%) are the members of the Co-operative Societies.

5.1.12. The socio-economic standard of the forest people is to be developed not only by efforts of the Government but also by the active involvement of the Non-Government Organisations (NGOs). Two most important steps taken up by the Government to develop the above are (a) Conservation and regeneration of forest to maintain the eco-balance and for greater forest revenue and (b) Management of MFP with an aim to elevate the economic status of tribal people. For that purpose many forests have been declared as Reserve Forest, Protected Forest and Wildlife Sanctuaries. The Social Forestry Project started in 1983-84 with assistance from Swidish International Development Agency (SIDA), at present has 96474.40 hectares of forest to its credit. Attempts have been made to involve the tribal people in this programme to create belongingness among them. The only fault with the project is its choice of plant species. It prefers 'quickies' over the traditional slow growing plant species.

5.1.13. In the front of making the pursuit remunerative, the Government has set up the Tribal Development Co-operative Corporation Ltd. (TDCC). It procures MFP at Government approved rates. A few private parties have also been given rights to handle certain kinds of MFP. However, pluralism of procuring agents is absent in tribal hinterland. As a result, the tribal people are underpaid for their wares. The TDCC and other Government agencies have failed to play the fair role due to resource crunch–both human and financial. At places these bodies/ agencies act more as the agents of economic exploitation. The NGOs are more in number in South Orissa than in the Northern part of the State. They usually take up programmes on non-controversial issues. In the study areas they have not taken up any forest based programmes.

5.2. Concluding Suggestions

The following suggestions may be taken into consideration for development of the forest and the tribal people living in the forest.

(1) The forest administration may be democratised and be made broadbased. Both power and accountability be bestowed upon the grassroot forest personnel, like Forest Guard (FG). The 'Forest Beats' (FB) be restructured according to vegetative type. A 'History Card' be made for each such Forest Beat. Information regarding the human habitations, their demographic and economic features, non-biotic natural resources, the types of MFP yielding plants and their density as well as 'environment friendly' motivating forces/ agents of the beat may be recorded in the 'History Card'. Provision may be made in 'History Card' for recording the annual harvest of different kinds of MFP by volume or by weight. In each beat a Committee named Forest Conservation and Utilisation Committee (FCUC) may be constituted with at least one 'Resource Person' from each village as member and FG as the convenor. The FCUC may collect royalty or fee from the collecting agents on behalf of the Department of Forest. The location of procuring centres within a beat will be selected by such committee.

(2) Processing or semi-processing activities should be carried out during the collection season-preferably at the residence of the gatherer. Chemical additives, flavouring agents and preservatives may be added at the collection-*cum*-packing centres located at nearby sub or service centres. Off-season procurement affects the forest growth. The local traders may be asked not to accumulate a certain quantity of a perticular MFP in off-season period. An expert Committee may be constituted with personnel from Forest Department to decide upon the quantity

of a particular MFP to be hoarded in off-season period. If a private godown is found storing objectionable quantities and items of MFP, the stock may be confiscated.

(3) Pluralism in procuring methods through Government or private parties should be encouraged. This helps a healthy competition among the procurers leading to better payment of price to the tribal collectors.

(4) Monitoring should be ensured to see that the items of MFP put on sale during the season is listed in the 'History Card'. Unlisted MFP of the region should not be allowed to cross the border of the Forest Beat. This will help the plants occurring in low density to thrive. The FCUC shall monitor the flow of MFP.

(5) There should not be any restriction for collection of oil seeds of tree origin, flosses, fibres, honey and arrowroot from the core of the forest or from sanctuaries and wildlife reserves. But no outside traders and tribal individuals with records of abuse of forest and poaching of wild animals be allowed to enter into these areas. This will help the forest loving semi-nomadic tribes to eke out a living throughout the year. Identity cards may be issued to such collectors. The FCUCs may issue the identity cards for a paltry sum of say, rupees five per head per year.

(6) The Forest Department should encourage the restricted collection of resin, gum and bark from forest. In each Forest Beat, collection of such items may be made at the interval of 3 to 4 years. As the 'collecting tribes' have a wider area of collection, they may be allowed to go for 'inter-beat' collection. Restriction of free movement of MFP originating from tree species like Karanj, Pulang, Mohua, mango, jackfruit, tamarind etc. should also be abolished.

(7) The Department of Weights and Measures should make their presence felt in the tribal belt during the procurement season. Heavy fine should be imposed on traders using tampered weights and measures.

(8) There sholud be at least one Government/ Co-operative Procuring Agency in each Forest Beat. Sufficient funds may be placed with them much ahead of the procurement season. They may be given a free hand to collect MFP.

(9) At present no standard has been fixed to grade and process different kinds of MFP. The processing units, collection and forwarding centres do not have quality control facilities. The resource persons of each beat be trained to standardize the collected MFP. They will grade the stock put on sale by the tribal people.

(10) Too many middlemen should be prohibited from entering into commercial transaction of forest product. Overcrowding of such middlemen will erode peace and tranquility of the area. For better results, collection and sale of MFP may be done by Co-operative Societies. For this purpose efforts may be made to enrol the tribal people in Multipurpose Co-operative Societies.

(11) The Non-Government Organisations (NGOs) should be given all sorts of assistance to start Pilot Projects for establishing Production-*cum*-Training Centres based on locally available MFP.

(12) Harassment by low level forest officials to the gatherers of MFP be stopped. For this purpose the 'Tribal Friendly' officials of lower order may be posted in Sub-Plan areas and their services may be reflected in their Service Books for future promotion.

(13) The tribal people and the tribal women in particular, may be trained in processing the MFP scientifically. They should also be trained to process the bi-products for commercial gain.

For this purpose training may be arranged at the Block level under Training for Rural Youth for Selfemployment (TRYSEM) and Self Employment of Educated Unemployed Youth (SEEUY). To establish the processing units 'seed capital' at a low interest rate, may be provided to the tribal trainees on long term basis. The Khadi and Village Industries Commission (KVIC) has a major role in imparting training to the tribal youths for starting different forest based industries. The Micro-Projects functioning in the State for the development of the Primitive Tribes may be involved in such training programmes.

(14) Silvicultural programmes in tribal areas, should give emphasis on tree species that are useful to the tribal people. At no cost a natural forest be replaced with a 'man made' forest with alien plant species. A combination of silviculture and horticultural practices can ensure the involvement of tribal people in forestry programmes.

(15) In order to get better unit price for the MFP, steps may be taken to market the same either in semi or completely processed form under certain brand names. Banani-I and II and Khairi-I & II may be choosen as brand names of MFP processed and packed in South and North Orissa respectively. The category-I may stand for the processed items where as category-II may stand for the semi-processed items of MFP.

(16) Collection of fuel wood is the responsibility of the female members of a family. As more and more women are expected to remain indoors for processing MFP, the fuel requirement of the family may be in short supply. To overcome this difficulty the tribal women may be trained to utilise the agricultural wastes and the wastes obtainable from the processing operation of MFP. These wastes emit smoke on burning. So they may be taught to construct modern hearths which emit little smoke on burning the wastes.

(17) In order to engage the tribal women and the elderly persons, the concept of 'Mahila Griha Udyog Lijjat Papad' may be introduced in tribal pockets. During the lean seasons the members of the Co-operative processing units may be given a certain quantity of a particular MFP for processing. After the interval of one or two days the processed items may be collected for packing and forwarding at the 'brand name owning units'. This will help the persons who are supposed to be the burden to the families with assured income.

(18) Forest Department may recruit local tribal youths as Forest Guards, Motivators and Watch and Ward personnel for their forestry activities.

(19) Members of the FCUC may be given training on forest plantation programmes and fire fighting.

(20) The women have the capacity to undertake labour intensive and time consuming jobs. They should be associated with afforestation programmes and collection of MFP departmentally.

(21) Further, the NGOs should be encouraged to train and induct the 'work culture' into the tribal society.

It is often observed that the forest rules and regulations are misinterpreted at the field level by the low level officials. In certain cases their highhandedness harden the tribal people to exploit the forest wealth ruthlessly. To sort out these problems the forest officials may be imparted in-service orientation training at regular intervals. The training on human-human and humanplant relationship may be conducted along with the forestry courses. This will make the forest officials well informed and more humane.

ANNEXURE-1

SI.	Types of amenities/				Distance	e (in Kms.)			
No.	facilities		Belgha	r area	in dy top	1.0	Ja	shipur area	
		Rangaparu	J	Т	uakela	Po	dagada		Ramjodi
(1)	(2)	(3)			(4)		(5)		(6)
1	Block Headquarters	28.0			25.0		11.0	-30 ⁽²⁾ i i i i	40.0
2	Gram Panchayat Headquarters	6.0			3.0		1.0		5.0
3	Primary School	0.0			3.0	iu il euros	0.0	ned over	5.0
4	Middle School	6.0	191		3.0		0.0	ang yan di	5.0
5	High School	6.0			3.0		1.0		25.0
6	Maternity Centre	6.0			3.0		0.0		5.0
7	Dispensary	6.0			3.0		1.0		12.0
8	Public Health Centre	6.0			3.0		11.0	$RC^{*} \alpha^{(i)} = 0$	35.0
9	Livestock Inspection Centre	6.0			3.0		0.0	an an Canada An Canada	7.0
10	Veterinary Hospital	6.0			3.0		11.0	Seece	35.0
11	Post Office	6.0			3.0		0.0		5.0
12	Telephone Office	6.0			3.0		1.0	0.0120	12.0
13	Bus Stop	6.0			3.0	~	2.0	$(-\hat{\gamma}_{i,k})_{i,k} \in [0,1]$	7.0
14	Pucca Road	12.0	21	1.00	9.0		2.0	1.188 41.1	12.0
15	Kacha Road	0.0			0.0		0.0	Bris No.5	5.0
16	Daily Market	6.0	51 1		3.0		11.0		35.0
17	Weekly Market	6.0			3.0		1.0	br. mars	5.0
18	P.D. Centre / LAMPCS	6.0			3.0		1.0	and Later	5.0/18
19	Bank	6.0			3.0		11.0		35.0
20	Procuring Centre	6.0			3.0		1.0	 Middler Middler	5.0
21	Revenue Inspector's Office	28.0			26.0		11.8		7.0
22	Forest Guard's Residence	6.0			3.0	2 ×	1.0		5.0

Level of development of study villages

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ANNEXURE-2

Types of MFP collected by different ethnic groups of the study villages

SI.	Minor Forest			30.62	Ethni	ic Groups		-1		
No.	Produce	Kutia Kandha	Kolha	Hill Khadia	Santal	Bhuiya	Munda	Gond	Lohara	Gauda
1	2	. 3	4	5	6	7	8	9	10	11
(i)	Fibres & Floss	ses								
1	Siali bark	~	••	~	~	~	~	~	~	~
2	Silk Cotton		~						s	
(ii)	Grasses, Bam	nboos, R	eeds &	Canes				100		
3	Thatching gras	s 🗸	~	~	~	~	~			
4	Hill broom	~		*		<i>Pa</i>	••		dige fa	6 ⁶ 197
5	Cane	¥	••			2	••	.2	1*	20.00
6	Bamboo	~		~			v =	~	с.Й	
(iii)	Essential Oil									
7	MFP containin	g	••					5 1. 1 0 10	h	
	essential oil	•								
(iv)	Oil Seeds									
8	Sal seed	~	•	,)	~	• 58	~	~	· · ·	
9	Kusum seed			 ✓ 1 < 	~	v	v	• • • • • •	a v .	~
10	Mohua seed	-	~	v 0.	~	•	× .	~	~	~
11	Kochila seed	10		·	~	• . 62	~	~	NA S. A.	-4»
12	Karanja seed	~	~	••		•				· · ·
13	Raicod seed			~			••	· · .		
14	Pingu seed			~				•		
15	Char seed	~	~	~					21	••
(v)	Tans & Dyes								antisco (†	51
16	Sunari Bark			~					· · · ·	
17	Babool bark	-Gao 		•		••		983 T.L. ••	1949 BU 194	••
18	Harida	•	~	-	~	× .	-	~	· ·	~
19	Bahada	~	~	*	~	~	v	~	~	~
20	Amla	~	~	~	~	~	~	~	~	~
(vi)	Gums, Resins	& Olere	sins	Same of the second second		-		n marina		
21	Resin (Jhuna)			~	•••		•• .			••
22				¥	••		••			

 \mathbf{U}^{\ast}

1	2	3	4	5	6	7	8	9	10	11
(vii)D	Drugs, Spices, Poisons & Ir	nsectio	cides							
23	Paja bark	*	• •	~		••		••		
24	Patal garuda	~	• •	~		• •			a 1	
25	Phanphania fruit		••	~		••	••	•••	• •	
26	Phanphania bark	•••		~	••	••	••		1 1	
27	Arrowroot	Y	* *	~	• •	••	••	• •	••	
28	Chitaparu			~	••			•••	5.e. F	• •
29	Ashoka bark	• •		~	• •		• •	- 1		
30	Arjuna bark	21		¥	* *	• •	* *	• •	(N	•••
31	Iswarajata	~		~	••	••	•••	• •		••
32	Madika root	~	~	~	~	•	•	~	Ais.	
33	Hatikena bark	••		~	••		8	1. 0 4	É	
34	Khetuna bark		••	~	1.1			••	11.1	••
35	Jadamari bark	·	ų.	¥ .		•••	••		4e 54	
36	Talamuli root	••		~	••	••				••
37	Agnijolia root	••		~		••	••		12	
38	Rutrutia root			•		••	••	••		
39	Mushroom (poison)			~	••		••	³¹		••
40	Sikakai	~		••	••			••		••
(viii)	Leaves									
41	Edible green leaves	¥	~	~	•	~	~	~	~	~
41	Kendu leaf	~	·	••			••			
43	Salleaf	~	•	~	ų	~	~	~	~	~
44	Siali leaf	~	~	~	~	~	~	~	~	~
(i x)	Edibles (Fruits etc.)									
45	Mango	~	~	~	•	v	v	*		
46	Jackfruit	~	~	~		•	*	•	•	
47	Tamarind	~			1	••	••••	•••	••	
48	Kendu	~	~	~		••	•••	••	~	•
49	Siali Seed	~		✓.		••		••	••	••
50	Date	~	•••			••		••	••	

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1	2	3	4	5	6	7	8	9	10	11
51	Mushroom (Edible)	~	~	~	~	~	4	~	~	
52	Roots & Tubers (Edible)	~	~	~	~	-	~	1	1	~
(x)	Lac & its products									
53	Lac		••	~	••			£N.,		
(xi)	Other Produce									
54	Honey	V	•••	~	••	••			<u>-</u>	
55	Tamarind seeds	~	- 	••		• •	••	12		••
56	Jackfruit seeds	~		~			••			• •
57	Mango Kernel	~	••		е. Снят		• •	• •		• •
58	Honeywax		••	~	••		•••	••<	• .LP	
59	Marking wax	<i>,</i>	(1. Y.)	~	- ⁻				171-1	
60	Bamboo Shoot	~		~					13. U	
61	Girli flower	••		~				••		••
62	Mohuaflower	~	~	~	~	•	~	~	-1	
63	Palas seed	••		~	••				• •	•••
64	Tassar Cocoon		••	v	· ·			••		

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(alother, Frints etc.)

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ANNEXURE-3

Month of Collection of Minor Forest Produce in Study Areas (The peak collection period is underlined)

SI.	Minor Forest	Month of col	the second se		
No.	Produce	Belghar area	Jashipur area		
1	2	3	4		
(i)	Fibres and Flosses				
1	Siali bark	April, May. June & July	Oct., Nov., Dec., Jan., Feb. March, April, May & June		
2	Silk Cotton	April, May, & June	April, May, & June		
(ii)	Grasses, Bamboos, Reeds & Canes				
3	Thatching grass	Nov., Dec. Jan. & Feb.	Nov., Dec., <u>Jan. & Feb.</u>		
4	Hill broom	Jan., Feb. & March	Dec., Jan. & Feb.		
5	Cane	April & May			
6	Bamboo	April, May, Oct. & Nov.	April, May, June, Sept. & Oct.		
(iii)	Essential Oil				
7	MFP containing essential oil				
(iv)	Oil Seeds				
8	Sal Seed	April & May	April & May		
9	Kusum seed	May & June	May & June		
10	Mohua seed	April & May	April & May		
11	Kochila seed	March. April & May	April, May & June		
12	Karanja seed	Feb. & March	Feb. & March		
13	Raicod seed		May & June		
14	Pingu seed		Oct. & <u>Nov.</u>		
15	Char seed	May & June	April, May & June		
(v)	Tans and Dyes				
16	Sunari bark	April, May & Oct.	May & June		
17	Babool bark		May. June, Oct. & Nov.		
18	Harida	Feb., March & April	Jan., Feb. & March		
19	Bahada	March, April & May	April & <u>May</u>		
20	Amla	Nov., <u>Dec.</u> & Jan.	Oct., <u>Nov.</u> & Dec.		
(vi)	Gums, Resins & Oleresins	dan adharan e	Stand Standard Willing		
21	Resin (Jhuna)	Jan. Feb. & March	Oct., Nov., Dec., Jan., Feb. & March.		
22	Genduli Gum	<u>Dec., Jan.</u> , Feb., March & April.	Nov., Dec., <u>Jan., Feb.</u> & March.		

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(1)	(2)
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(4)

(vii)	Drugs, Spices, Poisons & Insecticides	nan ti baharan si si santa santa sant santa santa sant	
23	Paja Bark/ Lutra bark	April & <u>May</u>	Feb., March, April, <u>May</u> Sept. & Oct.
24	Patal Garuda	Oct., Nov., Dec. & Jan.	Oct., Nov., Dec. & Jan.,
25	Phanphania fruit		Sept. & Oct.
26	Phanphania bark	and a state	(April, May & June)
27	Arrowroot	Dec., Jan., Feb. & March	Nov., Dec., Jan. & Feb.
28	Chitaparu	Sept., Oct. & Nov.	
29	Ashoka bark	·· Barriet 1948	Dec., J <u>an. &</u> Feb.
30	Arjuna bark		Dec., Jan. & Feb.
31	Iswarajata/ Satabari	Oct., Nov., Dec. & Jan.	Sept., Oct., Nov. & Dec.
32	Madika/ Nakudtalamot	Nov., Dec., Jan., Feb., March April, May & June.	Oct., Nov., Dec., Jan., Feb. & <u>March</u> .
33	Hati Kena	and the States of the States o	(March, April & May)
34	Khetuna bark		Sept., Oct. & Nov.,
35	Jadamari bark	••• (b) (b)	Dec., Jan., Feb. & March
36	Talmuli root	а, ¹ ез	March & April
37	Agnijalia root	"eM-2 may	Dec., Jan., Feb. & March
38	Rutrutia root	••	Sept. to Dec.
39	Mushroom (Poison)	÷.	September
40	Sikakai	Feb. & Mach	
(viii)	Leaves	the mail	
41	Edible green leaves	March, April, Aug. & Spt.,	Feb., March, April Aug., Sept. & Oct.
42	Kenduleaf	April & May	· · · · · · · · · · · · · · · · · · ·
43	Siali leaf	Oct., Nov., March & April	Aug., Sept. & Oct.
44	Salleaf	Oct. to Feb.	Sept. to March
(ix)	Edible products		$= (C_{i})_{i \in \mathbb{N}} \otimes (C_{i$
45	Mango	March, April & May	March, <u>April</u> & May
46	Jackfruit	March, April, May & June	March, April, May & June
47	Tamarind	Feb. & March	<u>et alvei</u> e <u>t</u>
48	Kendu	February	February
49	Siali seed	Feb. & March	(vi) Guma Research Ole
50	Date	April	April
51	Mushroom (Edible)	July & August	July & August
52	Roots & Tubers (Edible)	June, July, Aug. & Sept.	May, June, July & Aug.

(1)	(2)		(3)		(4)
(x)	Lac and its product				
53	Lac		·.		June, July. Nov. & Dec.
(xi)	Other Produce				
54	Honey		Dec., Jan.,	Feb. & Oct.	Oct., Nov., Dec., Jan. & Feb.
55	Tamarind seed		Feb. & Mar	ch	
56	Jackfruit seed		May & J <u>un</u>	<u>ə_</u>	May & J <u>une</u>
57	Mango Kernel		April & May	/	April & May
58	Honey wax		Dec., Jan.,	Feb. & Oct.	Oct., Nov., Dec., Jan. & Feb.
59	Marking wax		May		May
60	Bamboo Shoot		June & July	<u>/_</u>	June & July
61	Girli Flower		••		August & September
62	Mohua Flower		Feb. & Mar	rch	February & March
63	Palas seed				September & October
64	Tassar cocoon				November & December

N. B :-(i) Live animals and birds, their mortal remains as well as gem stones are not included in this list.

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(ii) The peak period of collection is shown either by underlining or by bracketing the month/ months of collection.

27
Areas of operation of different procurement Agencies/ Leasees

SI. No.	Forest Division	OFDC	TDCC	AMCS Tikabali	OST & S.C. Society	Utkal Forest Products Ltd.
1	2	3	4	5	6	7
1	Rayagada		~			~
2	Jeypur		~		• •	v
3	Nawarangpur	4.0	<i>•</i>			~
4	Parlakhemundi	18 V.	~		• •	4
5	Ghumusur (South)		~	•••	۰.	<i>y</i>
6	Ghumusur (North)		v		•	~
7	Kalahandi		~		••	~
8	Khariar		~			~
9	Sundergarh		~		• •	~
10	Bamara		~	•••		×
11	Bonai	••		1	the first of	
12	Deogarh		~	••	••	~
13	Dhenkanal	10120	×			
14	Angul	•	~	••	••	
15	Athamalik	•	~	. ·	••	
16	Phulbani		~	~		•
17	Balliguda		~	~		ý
18	Boudh	••	~	~		~
19	Bolangir		~			••
20	Rairkhola		v			
21	Redhakhol		×			
22	Athagarh	~				
23	Nayagarh	×.	~	4	•• .	· · · · · · · · · · · · · · · · · · ·
24	Sambalpur	сha с	~	5. a A	1 i= jo 21 *	a a de la com
25	Baripada		~	ve _ e **	· · ·	
26	Karanjia	1997 - 199 - - 1997 - 1997	e 🗸		and a local in a section of	in an
27	Keonjhar	1000 3. 1800	1.000	attine darie i an	and a state of a second	and the second second

' ' mark indicates the functioning of Agencies/ Leasees

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VIII

Organisations/ Corporations/ Private Parties approved by the Government to procure different kinds of MFP

SI. No.	Name	MFP . Items	Area of operation (Forest Divisions)
1	Orissa Forest Dev. Corporation Ltd.	All MFP items except tamarind,hill broom, honey & Mohua flower	Puri, Dhenkanal, Angul, Athagarh & Athamallik Teritorial Forest Division
2	TDCC Ltd., Orissa	tamarind, hill brooms, Mohua flowers & honey	Exclusive right in 27 Teritorial Forest Divisions of the State (G. O. No. 28403/ dated 6-12-1989)
3	AMCS, Tikabali	All MFP items except 29 items settled with M/S Utkal Forest Products & 4 items settled with TDCC Ltd.	Phulbani, Balliguda & Boudh Forest Division
4	M/S Utkal Forest Products	Seed of Kusum, Neem, Karanja, Mohua, Mango Kernel, Gaba, Palas, Sikakai, Madra, Nageswara, Siali, Indrajatra,	27 teritorial Forest Divisions (Collection Right for two years from 1-10-1988 to 30-9-1990)
		Gilo, Bena cher, Banahaldi, Bana kulthi, Chakunda, Bana Tulsi, Landabaguli, Baidanka, Babool seed, Chiranji, Dara, Suanta, Basil, Jute seed, Punang seed & Mekhana seed	
5	O. S. T. & S. C. Society	Tassar cocoon	Karanjia Forest Division (Collection Right from 1-4-1991 to 31-8-1994.)
6	O. T. D. Co. Ltd.	Honey & arrowroot	Karanjia Forest Division (Collection Right Vide G. O. No. 5000 dated 13-3-1991)
7	TDCC. Ltd., Orissa	Silk cotton, Jungle bela Ekriru fruit, Babulgum & Sunari bark	Keonjhar Division & Phulbani Division
8	AMCS. Tikabali	Matreed, Lac, thatch grass, Sabai Grass & cane	Balliguda Forest Division
9	Sujan Sahu	Sabar grass	Sundergarh Fore st Division (Collection Right from 9-3-1 990 to 30-9-1992)
10	P. K. Agarwalla	Siali leaf & fibre	Sundergarh Forest Division (Up to 30-9-1992)

IX

(1)	(2)	(3)		(4)	
11	B. L. Goyal	Genduli gum		Bolangir Fore (Up to 30-9-19	
12	R. P. Tiwari	Siali leaf & fibre			t Division (Collection 3-90 to 30-9-92)
13	M. Mukarh Dholakia	Dhatki flower			ditto
14	H. S. Agarwalla	Bhalia fruit			ditto
15	Digambar Joshi	Cleaning nut & arrowroot			ditto
16	K. M. Zfarullah	Siali leaf		Nowarangput (Collection R 9-3-90 to 30-9	
17	G. Biswas	Cashewnut & fruit			ditto
18	S. L. Tiwari	Siali leaf		9	est Division (Collection 9-90 to 91-92)
19	Dhanraj Agarwalla	Dhatki flower		Bamara Fore (Up to 30-9-9	
20	V. S. Gopal Krishna	Dhantari bark	logy	Angul Forest	Division (Up to 91-92)
21	A. Gobind Rao	Broomstick	16	Rairkhole Fo (Up to 30-9-9	

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Royalty paid by TDCC of Orissa Ltd. for different items of MFP (in Rs.)

SI.	Items			
No.	of MFP	1986-87	1987-88	1988-89
1	2	3	4	5
1	Tamarind	531863.00	531863.00	531863.00
2	Karanja	5389.00	3589.00	3589.00
З	Neem seed	29745.00	29745.00	29745.00
4	Hill broon	336816.00	336816.00	336816.00
5	Nuxvomica (Kochila seed)	34342.00	34342.00	34342.00
6	Kusum seed	68532.00	68532.00	68532.00
7	Mohua seed		in a starte	
8	Sikakai	3180.00	3180.00	3180.00
9	R. S. Root (Patalgaruda)	2800.00	2800.00	2800.00
10	Siali fibre	7500.00	7500.00	7500.00
11	Jungli jute	242.00	242.00	242.00
12	Siali leaf	12652.00	12652.00	12652.00
13	Marking & cleaning nut	Nolease	No lease	Nolease
14	Silk cotton (Simili cotton)	6400.00	6400.00	6400.00
15	Salleaf	No lease	Nolease	19 L.
16	Sunari bark	1650.00	1650.00	1650.00
17	Siali leaf & creepers	6600.00	6600.00	6600.00
18	Gum	64245.00	64245.00	64245.00
19	Lac	36406.00	36406.00	36406.00
20	Myrobolan nuts	66417.00	66417.00	66417.00
21	Sal seed	2392424.00	1270509.00	2731377.00
22	Honey/ wax			
	Total	3695129.00	2491214.00	3944076.00

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SI.	nems					
No.		1989-90 1990-91		Remarks		
	6	7	8	9		
1	Tamarind	444998.00	531863.00	In the year 1990-91 TDCC Ltd., Orissa did not collect Sal seed.		
2	Karanja	17390.00	3565.00			
3	Neem seed	15060.00	29745.00			
4	Hill broon	336816.00	336816.00			
5	Nuxvomica (Kochila seed)	34342.00	34342.00			
6	Kusum seed	53157.00	68532.00			
7	Mohua seed	60395.00	••			
8	Sikakai	3180.00	3180.00			
9	R.S.Root (Patalgaruda)	2800.00	2800.00	·		
10	Siali fibre		7500.00			
11	Jungli jute	242.00	242.00			
12	Siali leaf	12652.00	12652.00			
13	Marking & cleaning nut	No lease	No lease			
14	Silk cotton (Simili cotton)	6400.00	6400.00			
15	Sal leaf	••				
16	Sunari bark	1650.00	1650.00			
17	Siali leaf & creeper		6600.00			
18	Gum	42900.00	64245.00			
19	Lac	36406.00	36406.00			
20	Myrobolan nuts	56647.00	66147.00			
21	Sal seed	76913.00				
22	Honey/ wax	5204.00	Ea			
	Total	1218752.00	1212705.00			

(Continuation of Annexure-6)

Modes of exchange of MFP by the tribal collectors

SI.	Items	Quantity	Own		Mode of ex	change (in K	gs.)
No.	of MFP	Procured (in Kg.)	Use	Debt clearance	Bartar sale	Cash sale	Total
1	2	3	4	5	6	7	8
4	Belghar area	100.00	0.00			100.00	400.00
1	Hill broom	109.00	9.00	• •	100.00		100.00
	Tamarind	189.00	25.00	••		64.00	164.00
3	Sikakai	54.00	3.00	••	30.00	21.00	51.00
4 5	Salseed	429.00				429.00	429.00
	Char seed	3.50	75.00	•••	3.50		3.50
6	Mango kernel	483.00	75.00	••	18.00	390.00	408.00
7	Genduli gum	76.00	••	••	••	76.00	76.00
8	Paja bark	59.00	• •	••		59.00	59.00
9	R. S. root	62.00		••	20.00	42.00	62.00
10	Madika root	18.00	8.00	10 AL	10.00		10.00
11	Kendu leaf	1015		**	17	1015	1015
10	Ciali havi	kera				kera	kera
12	Siali bark	481 bundles	220	••	100	161	261
13	Siali/ Sal leaf	1713	bundles		bundles	bundles	bundles
10	Sidii/ Sdi ledi	chaki		••	500 chaki	1213 chaki	1713 chaki
14	Mohua flower	339.00	39.00	150.00	50.00	100.00	300.00
15	Mohua seed	271.00		100.00	71.00	100.00	271.00
10		271.00	••	100.00	71.00	100.00	271.00
4	Jashipur area Sal resin	452.00		50.00	05.00	000.00	150.00
1		453.00		50.00	35.00	368.00	453.00
2	Honey	119.00	7.00	20.00	30.00	62.00	112.00
3	Kusum seed	2390.00	140.00	200.00	350.00	1700.00	2250.00
4	Mohua flower	759.00	30.00	150.00	100.00	479.00	729.00
5	Mohua seed	806.00		••	100.00	706.00	806.00
6	Raicod seed	383.00	50.00	••	75.00	258.00	333.00
7	Genduli gum	171.00			••	171.00	171.00
8	Paja bark	1980.00			••	1980.00	1980.00
9	Arrowroot	59.00	4.00	7.00	12.00	36.00	55.00
10	Siali/ Sal leaf	2003	203		••	1800	1800
		chaki	chaki			chaki	chaki
11	Banahaldi	103.00	3.00		••	100.00	100.00
12	Lac	31.00	1.00			30.00	30.00
13	Tassar cocoon	241			••	241	241
		kahan		11-01-		kahan	kahan
14	R. S. root	134.00	••			134.00	134.00
15	Sunari bark	247.00				247.00	247.00

XIII

Quantity-wise sale of MFP to different kinds of buyers

SI.	Items	Quantity			Quantity so	td (in Kg.)	
No.	of MFP	Procured (in Kg.)	Private party	Co-op society	TDCC	Govt. Dept.	Total
1	2	3	4	5	6	7	8
	Belghar area						
1	Hill broom	109.00	10.00		90.00		100.00
2	Tamarind	189.00	14.00	150.00			164.00
3	Sikakai	54.00	5.00	46.00	* *	••	51.00
4	Sal seed	429.00	429.00	• •	• •		429.00
5	Char seed	3.50	3.50		• •	• •	3.50
6	Mango kernel	483.00	408.00	• •	• •		408.00
7	Genduli gum	76.00	76.00			• •	76.00
8	Paja bark	59.00	59.00				59.00
9	R. S. root	62.00	62.00	• •			62.00
10	Madika root	18.00	10.00			••	10.00
11	Kendu leaf	1015		111		1015	1015
		kera				kera	kera
12	Siali bark	481 bundles	261 bundles				261 bundles
13	Siali/ Sal leaf	1713 chaki		1713 chaki		**	1713 chaki
14	Mohua flower	339.00	50.00	••	250.00	••	300.00
15	Mohua seed	271.00	150.00	••	121.00	'	271.00
	Jashipur area						
1	Sal resin	453.00	433.00	20.00			453.00
2	Honey	119.00	112.00	19622 1		•• •	112.00
3	Kusum seed	2390.00	2000.00	100.00	150.00		2250.00
4	Mohua flower	759.00	629.00	50.00	50.00		729.00
5	Mohua seed	806.00	681.00	75.00	50.00	an 196	806.00
6	Raicod seed	383.00	333.00		••		333.00
7	Genduli gum	171.00	171.00	••			171.00
8	Paja bark	1980.00	1980.00			••	1980.00
9	Arrowroot	59.00	55.00			••	55.00
10	Siali/ Sal leaf	2003	1800	·	••	• •	1800
	Oldin Our load	chaki	chaki				chaki
11	Banahaldi	103.00	100.00			••	100.00
12	Lac	31.00	30.00	••		••	30.00
13	Tassar cocoon	241	31	210			241
15	125521 000001	kahan	kahan	kahan			kahan
14	R.S. root	134.00	134.00	••	1. 20		134.00
15		247.00	247.00		·	•••	247.00

XIV

Quantity-wise sale of MFP to different kinds of buyers

SI.	Items	Quantity			Quantity so	ld (in Kg.)	
No.	of MFP	Procured (in Kg.)	Private party	Co-op society	TDCC	Govt. Dept.	Total
1	2	3	4	5	6	7	8
	Belghar area						
1	Hill broom	109.00	10.00		90.00	144	100.00
2	Tamarind	189.00	14.00	150.00			164.00
3	Sikakai	54.00	5.00	46.00			51.00
4	Sal seed	429.00	429.00			•••	429.00
5	Char seed	3.50	3.50	• •	•••	• •	3.50
6	Mango kernel	483.00	408.00	••	•••		408.00
7	Genduli gum	76.00	76.00	• •			76.00
8	Paja bark	59.00	59.00	• •			59.00
9	R. S. root	62.00	62.00	••		••	62.00
10	Madika root	18.00	10.00	••	. .		10.00
11	Kendu leaf	1015 kera				1015 kera	1015 kera
12	Siali bark	481 bundles	261 bundles	••	134047		261 bundles
13	Siali/ Sal leaf	1713 chaki		1713 chaki		••	1713 chaki
14	Mohua flower	339.00	50.00	ar (f' 11	250.00	•••	300.00
15	Mohua seed	271.00	150.00		121.00		271.00
	Jashipur area						
1	Sal resin	453.00	433.00	20.00			453.00
2	Honey	119.00	112.00				112.00
3	Kusum seed	2390.00	2000.00	100.00	150.00	••	2250.00
4	Mohua flower	759.00	629.00	50.00	50.00		729.00
5	Mohua seed	806.00	681.00	75.00	50.00		806.00
6	Raicod seed	383.00	333.00		• •		333.00
7	Genduli gum	171.00	171.00	••	8		171.00
8	Paja bark	1980.00	1980.00		• •		1980.00
9	Arrowroot	59.00	55.00		••		55.00
10	Siali/ Sal leaf	2003	1800	· · · · ·	••		1800
		chaki	chaki				chaki
11	Banahaldi	103.00	100.00			••	100.00
12	Lac	31.00	30.00		824. * 2	••	30.00
13	Tassar cocoon	241	31	210		•••	24
10		kahan	kahan	kahan	- 136.		kahar
14	R. S. root	134.00	134.00	• •			134.00
15		247.00	247.00			••	247.00

XIV

Procurement rates of TDCC for different MFP items (Rs. / quintal)

SI.	Items of MFP		Pro	ocurement rate	!	
No.		1986-87	1987-88	1988-89	1989-90	1990-91
1	Tamarind (seeded)	119.00	164.00	200.00	220.00	222.10
2	Tamarind (deseeded)	205.00	255.00	300.00	302.00	334.15
3	Myrobolan	54.00	58.00	89.00	143.95	142.15
4	Mohua seed	356.00	639.50	470.80	469.50	479.25
5	Kusum seed	191.00	324.00	257.35	234.10	327.80
6	Karanja seed	145.00	226.00	214.40	200.00	257.40
7	Neem seed	113.00	212.00	180.00		••
8	Salseed	100.00	110.00	110.00	••	
9	Genduli gum	1000.00		• •	••	3068.00
10	Bahada gum	425.00	452.00	500.00		578.8
11	Chargum	76.00	70.00	71.00	69.90	85.7
12	Dhaura gum	596.00	650.00		599.20	577.2
13	Nux-vomica	121.00	132.00	181.35	181.00	214.3
14	Kusum lac	975.00	892.00	816.15	747.50	824.8
15	Hill broom	287.00	289.00	299.20	326.25	354.4
16	4	386.00	361.00	344.00	329.55	326.2
17		40.00	40.00	50.00	50.50	62.3
18		60.00	65.00	73.55	86.20	164.3
19		50.00	50.00	59.16	60.00	64.9
20			550.00		••	700.0
2			700.00	••		
2	2 Siali leaf	67.00	76.00	75.20	33.60	110.3
2	3 Siali leaf plate	1.20/ Chaki	1.40/ Chaki	1.65/ Chaki	2.00/ Chaki	2 5 C ia
2	4 Sal leaf plate	1.20/ Chaki	1.30/ Chaki	1.45/ Chaki	2.00/ Chaki	2.0 Cha
2	5 Mohua flower	••		150.75		150.
2		••			••	137.0
2				••		56.

хv

Procurement price of different agencies for different kinds of MFP (Rs. per quintal)

SI. No				Dept. & Age	encies		1	Actual pr in force	
		Forest OFDC Deptt.		TDCC	AMCS	M/s Utkal Forest Products Ltd.	Others	Belghar area	Jashipur area
1	2	3	4	5	6	7	8	9	10
1	Siali bark				500.00			600.00	620.00
2	Silk cotton	•••			1000.00	••		500.00	600.00
3	Thatching grass				50.00			••	
4	Hill broom grass			364.40				300.00	250.00
5	Cane		••		0.70/Pc.			0.60/Pc.	200.00
6	Bamboo(reed)						* •		
7	Salseed	• •	150.00	150.00		••		150.00	150.00
8	Kusum seed			327.80	220.00	210.00	••	150.00	150.00
9	Mohua seed			479.25				200.00	200.00
10	Kochila seed	••	 150.00		••	620.00	••	400.00	500.00
11	Karanj seed	• •		214.30		500.00	• •	••	450.00
12		••	••	257.40	••	210.00	••	200.00	200.00
13	Punang seed Raicod seed	••	• •	••	••	650.00	••	1.	650.00
		•••	• •	••	••	••	••	••	250.00
14	Pingu seed		••	••	••		••		
15	Char seed	••	••		••	515.00	• •	500.00	550.00
16	Siali seed	••	••	••		215.00		200.00	· · ·
17	Neem seed	••	••	••	••	157.00			
18	Chakunda seed	••	••	••		107.00			
19	Bana kulthi seed	1				132.00			
20	Bana tulsi seed	••	••	••		160.00			••
21	Goba seed	••				210.00			••
22	Indrajab seed		••	••	* •	307.00		14.17	
23	Palas seed	••	••	••	••	210.00	••		
24	Marda seed	••	••	••	••	415.00	• •		
25	Babool seed	••	••			57.00			
26	Auata seed	••	•••	••	••	315.00	••		
27	Tamarind	••		56.75	•••	••	••		
28	Mango Kernel	••	••	••	••	160.00		75.00	
29	Gilo	••	••		•••	160.00	••		
30	Jack fruit seed	••		••		••	••	1000	
31	Sunari bark		64.95	·	••	••		50.00	55.00
32	Babool bark	••		••			•••		
33	Harida							1000	···
34	Bahada			142.15			••••	120.00	100.00

XVI

36	Amla Amla seed less		• •	62.35				50.00	
36	Amla seed less			04.00	• •	• •		50.00	60.0
				164.85		• •	• •	150.00	150.0
	Sal resin	••	400.00		1300.00		۰.	1500.00	600.00 t
									1000.0
37	Genduli gum	•••		3068.00	1000.00			800.00	800.0
38	Paja/Ludra	• •	• •		* *	• •		24.00	35.0
39	Phanpania bark			••	• •			24.00	25.0
40	Asoka	مر ه	• •	••				• •	
41	Asoka bark			• •		* *		300.00	300.0
42	Arjun bark	• •				• •	• •		200.0
43	Hatikena bark	••	••	••		••	• •		100.0
44	Kheluna bark	••	• •						120.0
15	Jadamari bark	•••		• •				••	300.0
46	R. S. root	••		700.00				500.00	650.0
47	Arrowroot		400.00		•••			3000.00	2500.0
8	Chitaparu		• •					200.00	
19	Satarbari	••	• •		••	••		200.00	
50	Madika root			••	••	••		500.00	550.0
51	Talamuli root	• •	••	••				300.00	300.0
52	Agnijalia root		• •						250.0
	Sikakai				326.25	350.00	315.00	250.00	250.0
	Siali leaf				110.30			80.00	84.00
	Sal leaf			••	110.00	••	••	70.00	75.0
	Tamarind		••	••	222.10	* *	••	70.00	75.0
	Mango pulp	••	••	••		••	* *		
	Mushroom	••	••	••		•••	••	400.00	•
	Honey	••	••		••	••	••		
	Mohua flower	••	**			• •	••	2500.00	2000.00
		••	* *	300.00	300.00		· · ·	200.00	225.00
	Lac Broom groop	••	••	••	824.85	1000.00	••	3000.00	3000.00
	Broom grass	••	••	••	137.66		••	120.00	
	Bahada gum	••	••	••	518.85	500.00	••	••	450.00
64	Char gum	••	••	••	85.75	••	••	••	
65	Dhaura gum		••	••	577.25	••	••		•
66	Tamarind		••	••	334.15	••	••	125.00	
67	Siali leaf plate			••	2.50/			2.50/	2.50
	·				Chaki			Chaki	Chak
68	Sal leaf plate		s s		2.00/	• •		2.00/	2.00
	- TO			0	Chaki			Cinaki	Chaki
69	Kalamgudi		••	••		210.00			
70	Baidanka					215.00			
	Dhakti flower								• •
	Bhalia fruit		201	1.1	ofer a		28. 2		
	Cleaning nut		e . 1		••				• •
	Cashew & fruit	~					•••	••	
	Dhantari bark	<u>.</u>		0.000	a - 18	••		••	
	Tassar cocoon		••	-911	••			25.00/	20.00
0		••	-11-	· · · ·	2 ••	••		100 Nos	100.Nos
7	Babool gum								
	Mat reed	••	••	••			• •	••	•
U	maileeu	••	••		XVII	•••	••	••	

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