

# ETHNO MEDICAL AND RELIGIOUS PRACTICES AMONG THE TRIBAL COMMUNITY IN BENGAL WITH SPECIAL REFERENCE TO CANNING AREA IN SUNDARBAN

#### **Manasi Das**

PhD Research Scholer, Department Of Humanities Techno India University, Kolkata

Abstract: Ethno medicine is a field of medical anthropology that deals with the cultural interpretation of health disease and illness and also address the health care seeking process and healing. The knowledge and use of medicinal plant species by the traditional healers as well as the community members was investigated in a tribal village of Basanti, Canning block 1. On the basis of the ethnographic field work with the help of standard anthropological method, it has been related that all though the tribals concept of disease and treatment is centre on religious beliefs and practices. But they are regularly depend on herbal medicine along with modern allopathic treatment. The present paper is an attempt to explore the represent of herbal medicines used by the tribal community Sundarban. The paper also attempts to explore the source and method of collection medicinal plant by the villager from their surroundings environment. Tribal and their cultural context of illness and health is a broadar known fact. Tribals across the length and breath are following certain traditional norm related to their well being and illness irrespective of their religious. Traditional system of medicine and health care is diminishing among tribals and the morden health care systems yet to adopt.

#### Introduction

Ethno medical system or traditional medicine has two universal categorise of disease etiology natural and unnatural causes. Natural illness explains illness is impersonal systematic terms. Thus disease is thought to stem from natural forces or condition such as cold hit and possible by an imbalance in the body elements. Unnatural illness is caused by two major types of super natural forces. Occurred causes which are the result of the evil spirit or human agent using sorcery and spiritual causes which are the result of penal ties in ocured your. For sins breaking taboos or caused by God. In the scientific area ethno medical studies are generally characterized by a strong anthropological approach more than a biomedical one. Focus of this studies is that the perception and context of use of traditional medicines and not there bio-evaluation .ethno Medicine referred to study of traditional medicine practice. It can encompass method of diagnosis and treatment. In some cases it is associate with professional medicine man and women in other with layperson who have accurate knowledge from present or relatives.

Herbalism is traditional medicine or folk medicine practice based on the use of plant and plant extract. Herbalism is also known as botanical medicine. Medicinal botany, medical herbalism. Herbal medicine her biology, botanical medicine and phototherapy. Sometimes the scope of herbal medicine is extended included fungi and bee product, as well as minerals shell and certain animal part. Many plant synthesise substance that are useful to the

Website: <a href="https://www.societylanguageculture.org/">https://www.societylanguageculture.org/</a> Email us at: <a href="mailto:em



maintains of health in human and other animal. These include aromatic substance, most of which are phenols or there oxygen substitute derivatives such as tannis. Many are secondary metabolic of which at least 12000 have been isolated a number estimate to be less than 10% of the total. In many cases this substance serve as plant defence mechanics against predation by micro organism insect and herbivores. Many of herb and spices used by human to season food yield useful medicinal component. With only a few exception most herbal treatment have not been tested for safety and efficiency utilisation scientific studies or clinical trials. The scientific and medical communities state that herbal treatment may be the risk the well being or life of the patient when used in liquid of standard medical treatment.

Ethno -medicine is a sub field of medical anthropology and deal with the study of traditional medicines not only that have relivent written sources but especially those knowledge and practice which have been orally transmitted over the centuries. The term traditional medicine describe medicine knowledge system, which developed over centuries within various societies before the era of modern medicine. Traditional medicine included practice all over the the globe. In the scientific area ethnomedical studies are generally characterized by a strong anthropological approach more than biomedical one. The focus of this studies in the perception and contest of use traditional medicines and not there bio evaluation. In India the people specially tribal living forest or it's adjoining areas since long past maintained there health with the help of their ethno medical knowledge.

<u>History of Sundarban</u> —Sundarban is the world largest delta .Sundar bon means beautiful forest which is the name by dominant tree sundari. A part form providing home to an important number of rare and endangered flora and fauna, it is the only mangrove forest in the world in habitat by tiger. The history of the human settlement had been started during Khan John's period when he passed a Jagir in 1459 in in Sundarban. The actual land reclamation had been started during 1765 and 1770 by patronize of collector general cloud Russell. Canning is the gateway of Sundarban. Canning is the city of south 24 parganas district in West Bengal. It is situated on the matla river. The city is name after lord canning the former governor general of India from 1856 to 1858 and governor general and viceroy from 1858 to 1862.

According to census 2011 information the canning 1 block is 02420. Total area of canning 1 is is 214 km2 including 175 . 73 kilometre square Rural area and 37.81 kilometre square urban area. Canning 1 has a population of 3,04,724 peoples, there are 64 ,041 houses. There are 61 villages in canning 1 block. The highest growth of population was record in canning 1 CD block. my study area please canning 1 .block.

Tribal of Sundarban--- In Sundarban the migrants belong to scheduled caste (chandal namo shudra pods, bagdi) and schedule tribe People and lower status upper caste Hindu Muslim and others. Among the tribal people santal, Munda, kora, chero, Ho, biga, lodha and khond are in the majority. At the beginning tribal people where brought to Sundarban to work as a labour. After acquiring the agriculture land they involve into cultivation but a large numbers of households are still land Less labour as well as marginal land owners. Due to expensive educational system many welleducated new generation tribal People engage with government and Non government job also but they are very few according to census report (Gol,1991),35.80% tribal people in Sundarban where mean worker.59.17%were non worker and 5.03% where marginal worker. Through the tribal people who first enter into this virgin



land they are socially economically and politically marginalized in compare tu dominant Hindu and Muslim Bengali among the tribal people the Lodha tribes are very e less in numbers who spread into different hamlets in Sundarban.

Research site Sundarban spread over the area of 9630 square kilometre in the district of North 24 parganas and South 24 parganas of West Bengal India. Sundarban region is is located between 21031'\_22038'N lat and 8805\_90.028'E long covering a forest area of 4284 square kilometre which comprises,102 delta. Sundarban delta was formed by the deposited sediment from three major river Ganga Brahmaputra and Meghna. The maximum evaluation is only 10 metre above the main sea level. The western limited of of Indian Sundarban is demarcated Hooghly rivers and eastern boundary is Raimangal . river. My research area canning block it cover with 426 point 16 square kilometre. The average deptt of availability of ground water level is 16 fit canning subdivision has 6 police station . Four community development block 4 Panchayat samiti 46 gram Panchayat. The census towns are kalaroa, Gour Dhaka Rajapur ,Taldi ,Bayarsing, and Basanti 13.97%of the total population of south 24 parganas district live in canning subdivision.Basanti CD block consists of 13 gram Panchayat.

Unsanitary condition, ignorance , lack of personal hygiene and health education are the main causal factors for prevalence of health problemamong tribes. Common Diseases of Tribal are cough and cold, Malaria, Malnutrition, Skin Diseases, Tuberculosis, Hepatitis, Sexually Transmitted Diseases, Parasitic infection, Viral infection, HIV, AIDS, etc. Primitive Tribal community have special health problem particularly the genetic disorders like sickle cell anemia, G-6-PD. Sexually Transmitted Diseases are most prevalent and widespread health problems. The commonly found diseases among the children were fever, cold, skin problem, malnutrition, virginal discharge, swelling of feet, premature delivery and irregular vaginal bleeding were common among the tribal. Scarcity of safe drinking water and electricity are the main reasons for the poor health status of tribes. Tribal people health seeking behavior is also a result of their, traditions, and customs.

Religious and Health --- Tribal community believes in own religious and their rituals and there god or goddess related with forest. They also believe in Ojha village council. Tribal people Safar bye flu cold skin disease, stomach problem, they first go to the Badhy, Kabiraj etc, and snake biting they obviously come, Ojha. De do not go to hospital. Tribal people organised festival of new flower (Baha) every year full moon de in in the the month aap faagun. Prior to the Baha they obstained from collecting forest resources of 15 days. Health of tribal people mostly depends on ethnomedicine system. Ethno medicine is a subfield of medical anthropology and Deals with study of traditional medicines. In Sundarban the tribal people living in forest or it's adjoining area. Scenes long past maintained their health with the help of ethnomedical knowledge full stop the tribe of Sundarban have there on religious replied with the notion of supreme God maramGuru and they subsiding duties the spiritual forces.

Ethno Medical and Religious Practices --- the Santhal of Basanti are not only quite aware about the modern medicine. But they also frequently visit the nearby primary health centre and sub divisional hospital respectively 3 and 6 kilometre from there village. How ever owing to there virtual habit in a hills forest environment. Some of them have developed expert advice of treatment with the help of herbal medicine. In fact it is observed by the



Second Year I Third Issue I ISSN - 2583-0341 A Unit of Society, Language and Culture Trust

present research scholar. Santhal very often treat there co-villages with the the help of ethnomedicine. Not only all the male and female of village are more or less aware of ethnomedicinal practices but the children of village are also not far behind them regarding the knowledge about the medicinal plant and their uses. In the following of disease and symptoms and treatment as found among the tribal.

1)Chadrak/Baldness

Symptoms\_\_ This may attack adults. The hair falls of entirely.

Medicine Munga chal, the bark of moringa pterygosperma.

Process of use it is grinded and smeared on head daily.

2)Andhua or Ratkana/Night blindness

Symptoms - people are unable to see at all at night, but in the day time can do perfectly well.

Medicine - Nanha dudhi lota rehet the roots of in chnocarpus frutescens.

Process of use - it is grinded fine, wrop in cloth, squeeze and drop liquid in to eyes.

3) Lach haso/Pain in stomach

Medicine - 1)saoraj Jan, the seed of vernonia anthelmintic.

Process of use - Grinded and mixed with water and given to eat.

4) Allergy-

Medicine - Matkom Lore, resin of Bassia Latifalia.

- 2) Posolore, rasin of tetranthera monopetala
- 3) Kerosene oil

Process of use - Mixed the equal quantities all of these and anointed.

5) Cold of children -

Medicine - Tursi sakamros . juice of the ocimum sanctum.kalajira Nigella indica.

Adheros, zingiber officinalis. Nelerose, Honey.

Process of use - These Mixed with honey and given to drink babies 2-3 days only.

6) Hamus/Anaemia -

Symptoms - when one has suffered a long time from spleen, the blood in the body dries up causing the body to become pale.

Medicine - sabarom rehet, the root of nyctanthes Arbor tristis.

Process of use - Grinded with water and given drink.

Veterinary medicine -



The tribal of Basanti also treat there domestic animals (cow, goat) with the help of some indigenous medicine, which they prepare out of the variety of plants collected from the nearby forest.

Mouth swelling of cows -

Medicine - Mixture of Matured tamarind flesh ,salt and soot in poured on the mouth of the cow.

2) Lose motion of goat -

Medicine - The goat is fed with mixture prepare with the leaf of Nagarjun tree, malasses, termented froth of Boiled rice.

## **Chapter Review -**

## **Growth of population**

Sundarban region is the world largest delta. Till the first half of 20th century the population growth was very low in the region. But after that population has changed dramatically due to partition between India and Bangladesh and also independent movement in Bangladesh. This chapter attempt to revel the growth and spatiotemporal change of of human population in Sundarban has been taken from 1872 tu 2011 for the analysis. Census data 2001 and 2011 and different literature have been used as the database for spatial analysis of population growth in this region. The the result showing that population growth in 16 times in the last 140 years. There was doubling situation in population growth in 1921 for independence and 1981 after independence. Population density pattern is low density in coastal area and high density pattern word interior part from the coastal face . the male female population rural and urban population has also increased with time .the population growth means change into total population. It may be positive or negative. Population growth is the the indicator of economic and social development. The study of measurement of such change both temporal and spatial and composite. Study gives and Idea about changing and comparative study give and idea about changing characteristics of population of study region. Population data have gathered from district census handbook south 24 pargana and North 24 pargana district for 2001 2011, block level male female rural and urban population.

According to census report 2001 and 2011 the region speed across 4118.51sq.km. It cover 64.46% and 31.81% area of south 24 parganas respectively. The study area cover on 50.94% area of both district. Total population of this region 2011 census is 442 6259. According to census report Sundarban got increased 354 % in last 50 years population growth rate population density and sex ratio are

15. 11% .1074.72 persons/km2 and 954 female/1000 male respectively. Total male female population is 2262126 and 2162126. Total rural and urban population is 4172248 and 254011. As per census canning 1 c block had a total population of 304,724, of 304,724, of 181,508, were rural, and 123,215, were urban. There were 155.126(51%) males and 149598(49%) female. Population below 6 years was 44,344.scheduled casts number 144.906(47.55%) and schedule tribe number 3,710(1.22%).

As per 2001 census of India canning 1 CD block had a total population of 244,354 out of which 125, 216 war male and 119,138 were female. Canning 1 CD block register of



population growth of 24.48% during the 1991\_2001decade.decadal growth for south 24 parganas district was 20.89% schedule casts at 126.485 formed about one half the population. Schedule tribe number 6.731.

Name of Tribes	Year			
Bhumij	1872 660	1891 5306	1901 9568	1921 11015
Ditailing	000	3300	7500	11013
Garo	2			
kharria	7			22
kol	389	6253		
Santal	814	1499	2233	~()
Oraon	3362	663	5931	2045
Lodha		18		35
Munda		688	9229	5564
Kora		144		463
Mahilis		73		154
			70	

# Habits and practices among the tribal community

Tribal people in in Sundarban lives in forest environment. They believe in ethnomedical. They very much habitat with harbal plant and they practice with this plant. With the help of aged person of tribal people who informed that how they khud use the plant and its part when they are ill. They always depends on ethnomedicinal system. All together 25 ethnomedical plant have been recorded from the study area. Have usually the investigated taxa under 4 groups like tree shrubs herbs and climber. The numbers of spices in each group and their respective percentage have been defined as trees 8(32%) shrubs\_4(16%) herbs\_10(40%) and climber\_3(12%). The most dominant life from the spices used by tribal People.

The record it 25 plant spices are are used in in formulation of 40 types of ethnomedicinal preparations that cure 27 types of disease. The disease which occurred most frequently in the area are boil, scorpion sting, stomachache elephantiasis international worm, etc. This 27 types of disease why are grouped into 11 major categorise like dermatological disorder muscular skeletal system disordered digestive system disorder infection genitio urinary system disorder.

The leaf part of the plant (cpp value 0.33) was used by the tribal people very frequently information of the remedies as compare to other plant parts. Flower fruit and sit secured the CPP value of 0.29 followed by root and rhizome (0.24) stem bark (0.07), latex and gum(0.05) and whole plant 0.02. medicine men here in the study area preferred leaves most in preparation of their remedies because these part of plant is easily accessible then other part more efficacious and it's know to us that leaves are the sites for synthesis of bioactive secondary metabolites. Collection of plant paath specially leaves by the tribal people would support the sustainable method of hard faced because in most of the cases at least a number of leaves are left unplugged which allow the parent plant to survive normally.



Harvesting root ,shizome and seed pases more threat to survival of plant than collecting others part such as leaves, Bark and flower.

The tribal people use way off remedy preparation which depend on type of disease treated. The major mood off of remedy preparation paste (50%) ointment (12%) powder (7.5%) cooking juice,pill(15%) burning ash, decoction,gum,latex, mouth wash and plaster (2.5%) along with herbal ingredients different additive with be added. The fact that both fresh and direct forms are are used by tribal people. More than half (57.5%) of the remedies were applied externally on affected part of skin directly and (42.5%) of preparation where applied internally in the form of oral applications. To measuring unit such as teaspoon, cup fingers used by the people. Various alcoholic beverages used by tribal people. Like that rice beer (handia),plam wine (tadi) country liquor (chullu). In addition to to liquid people also consume various medicines and tonic with hi alcohol content. The most popular Amrita Sanjeevani Sura homoo50 and weak ginger tonic. That will be also used by local health Care providers. Tribal people worked hard so they need to the alcohol to be fit and charmed by work time.

# Scarcity of medical facilities of Tribal people in Sundarban

Sundarban is forest based area. They are lives in below poverty level PayPal and there jobs are fishing farming hunting. They often to ignore there basic health as because they Suffer from scarcity of medical facilities. Day you really depends on ethnomedical system and they believe on religious leader like Ojha, bhaidya, Kabiraj. They are socioeconomic situation was very painful because remote place of Sundarban had face drinking water problem. There are no hospital and village primary health centre. As because they did not go to block hospital that why travelling charges to communication was very high and poor people does not bear to charge. The child of remote area suffered form malnutrition women of this area suffered from very well known sexual disease and they also suffered from digestive problem.

mental health also big things of tribal community. They did not know the about mental health. Tribal people trouble in socio economic situation. So they involve in domestic violence suicide. Women status is very low and easily available of pesticides most women have been seeking solence in self destruction. And communities depends on fishing and collecting forest product. It is and secured against animal attack. They also believe in traditional faith Herbs. But now a days government and non government organisations true give the medical support two tribal people. In village many primary health centre aad established ant announced very much project by government.

## Gradual increase in ethnomedical and religious practices among the tribal community

Sundarban is habung forest and is having plenty of ethnomedical plants and forest produce. It is Bing agro climatic ezone and it is is best situated for the cultivation of ethnomedical plant. Due to side effects of ethnomedicine people are are turning towards ethnomedicine because sach medical plants are found in available amount in the state. Amazing are therapeutic values as the plants which all all look so simple and green carry wonderful results on the human health only after proper application.

The importance of of traditional medicine is that provides health service to 70\_80% of Sundarban. Due to lack of communication and medical facilities ethnomedicine service



from generation to generation. The primitive man started the use of medicinal plant tu to overcome various oil ments he suffered from.

Tribal people do not accept any other medicine accept the its medicine. The itne medicine please important role in in health service. Tribal people think that most of disease are caused by supernatural effects. This indicates the origin of scared incarnation, invocation, recitation, offerings, sacrifice amulets,or tailsman which are regarded as efficacious in the tribal faith. They believe that some spirit are mischievous spirits who impose their authority upon the people like bhuts, churun, dein bhut, jogni. They are closely related with the spiritual of the person who died in accident or is an unnatural death like snake bite. This spirits are unseen and travel through the air.

# Effects of its no medicine and religious practices

Tribal society its own set off of belief custom tradition knowledge and practice related to health and illness, tribal people have their system of health Care which is built upon their own belief tribal have a strong traditional system of medicine. Most of the thrive believes in in supernatural power and Magico religious system of health Care. Tribes live in harmony with the nature and their surroundings. Dove tribal people their dependency on 50 different types of herbal plant for curing the physical Ailments .most of the tribal people have the knowledge about this clients and uses is only restricted to traditional health practitioner. It was also reported that most of tribal paper depend on this herbal plant for the treatment. they are knowledge and belief in the herbal plant or nature or surroundings is being shared and transferred from one generation to another generation and so the ethno biological knowledge is maintained. There dependency on the herbal treatment is due to an ability of health care service in the village and nearby areas and their belief and conviction in the herbal treatment. Tribal people use the various plant for curing various disease. Disease like stomach and kidney stone where treated by using this friends. Tribal people reached the tradition and health care system They largely depend on the hearts and psycho matic lined of treatment for their various physical ailments. In there treatment plant flower seeds and animals and other natural available product or substances formed the major portion of their traditional health care system. Faith healing form the central part of traditional health Care. They largely depend and belief of Magico religious rites and custom for treatment of any ailments. There has always been a connection between the common beliefs customs values and practices related to health and disease. Tribal communities have a wealth of folklore associate VIT health believes which provide the appropriate health practices in a given ecosystem.

Tribal people are still far away from modern healthcare system due to unavailability or in accessibility. Tribes of Sundarban believes in benevolent and malevolent spirits which control their daily routine activities of life and this believes also affects their health practices. Tribal people belief and prefer to visit local religious magical practitioner's in case of any illness. This priced perform the ritual more preferably certified and animal to your or appeared to the god or any hill spirit. Health for santhals is when body works with out any defunct. De a believed that illness is caused by several agent for example supernatural powers physical and non supernatural sources are agent of illness. Santhal people still have the belief that if good or spirits of ancestors are an unpleased or evil eye is there,,, it causes the illness which can only be keyboard bye traditional healers. In another category of positive factors of illness is when there is a branch of natural laws that can also cause disease or illness. Santal



people also belief that touching of clothes or food of in person can also causes certain illness. Tribal people are adopting the allopathic treatment in parallel to their traditional system of medicine.

But tribal people have not proper knowledge of measurement of ethnomedicine in that case very often time bad effects of medicine the people go to death. But they cannot give up the belief of that medicine and ritual.

#### **Objective of study**

- 1) To provide a detailed understanding of the prevailing disease profile included,minor illness, hospitalization, situation of meternal and child health,non communicable disease and mental health.
- 2) To understand the health seeking behaviour of the inhabitants and to identify the barriers to access health care service encompass social, physical and economic aspects.

## **Methodology**

The study based on secondary data, It has been carried out from 1872\_2011 for regional analysis and 2001 to 2011 at cd block level analysis. secndary data collected from District census handbook, District statistical handbook, books and literature.

#### **Result and Conclusion**

WHO defined traditional medicine as the health practices approaches knowledge and belief in corporating plants animals and minerals besed medicines spiritual therapies manual techniques and exercises, applied singularly or in combination to treat, diagnosis and prevent illness. Basically this research is exploratory in nature where in a modest attempt has been made to collect some base line empirical information regarding the manifold strategies adopted by the tribal, in context to easy access to hill forest environment. In fact the very nature of the industrial level of technology and the character of the forest clad terrain have virtually encouraged the research to look into unique process of socio cultural adaptation which pervades almost every spear of of the life of the tribal while dealing with the ethnomedical aspects of santal of Sundarban the present researcher notice that the crux of tribal cure complex is its mysterical ritual character that influence tremendously the pre industrial tribal logic. The tribal rationality behind selecting different types and portion of medicinal plant, the role of village council in the management and distribution of the herbal medicine all work in union in sure not only the biological survival of this community but also its sociocultural existence.

## **Note and References**

- 1)Archer, W.G. 1942 The woman hunt. In; Mills, j, P, et at. Essays in Anthropology. Maxwell, Lucknow.
- 2 )Arora, G.S. 1991. Indian emigration. Puja Publishers (Regd) New Delhi
- 3)Ascoli, F.D. 1921. A revenue history of sundarbans from 1870 to 1920
- 4)An Environmental Assessment of the Bay of Bengal Region SWEDMAR BOIBPREPST P



- 5)Annual Action Plan. 1995 96, far Sundarban, South 24 Parganas District Govt of West Bengal. West Bengal
- 6) Cropiand and We Stand g problem amd prom of mgatin E s Press briefing Document L and Washington 1984
- 7) Technology Assessment, Washington DC. OTA-0.206,
- 8) Wastewater Treument A Natural and Artificial Marshes, U.S. Environment Protection Agency Report 60072-76-8207 Wetland Their Use and Regulation, US Congress, Office
- 9) Abernethy, Y. and Tomer, ARE, 1987. US. Forested wetlands: 1940 1980 Bioscience, 37, 721-7
- 10) Ahmad, N., 1966, "Fish and fisheries of Sundarbans" in Humid Tropies Research Scientific Problems of the Humid Tropileal Zone Deltas and Their Applications. Proceedings of the Dacca Symposium: pp. 271-275, UNESCO, Paris. Alexander, T.R. and GC Allen, 1973. Recent and long-term changes and patterns in south Florida Final report, Parti Mimeo Rep(EVER-N.SI) US Dept. Interior, Nat. park Sve. No. PB 231939
- 11) Ananymous 1983, National Wildlife Action Plan, Department of Environment, Government of India, New Delhi Anonymous, 1987, Proceedings of the Third Meeting of the Conference of Contracting Parties, Regina, Canada. Volume 1. Ramir
- 12) Convention Bureau, Gland, Switzerland Anonymous, 1990, Proceeding of the Fourth Meeting of the Conference of Contracting Paties. Montreux, Switzerland. Volume 1 Ramsar Convention Bureau, Gland, SwitzerlandESCAP 1988, Coastal evirmntai mangemm plan for Bangtadnah. val. 2. Bang Thailand
- 13) Report un Global atus of mangrove eoystens, RUCN WWF Gland Switzerland. 198
- 14) Reuters on Mangrove System af Sundarta Sundarban Devo Band of West Bengal. Calcutta, Went
- 15) Bengal South Flora E Re Plan South Florida W
- 16) Management Dim Went Palm Beach. FL Nov 1995

The Sundarhanu wilde mamagemen piam rvaton in the Bangladesh cotl, LCN Switeland 19RT

- 16) United Nations Development Programme Ragimal Projes Research and its Application to the Manager of Mangroves of Asia and the Pacific RADIO
- 17) US Crops of Engineer Report for US Fish and Wine Services Overview of Major Wetland Fans and Values FWS/OBS 84/IE Sept. 1984
- 18) Anonymous, 1993, Proceeding of the Fith Meeting of the Conference of Contracting Parties, Kushiro, Japan. Volume 1. Rama Convention Bureau, Gland, Switzerland
- 19) Ascoli, F.D., 1921: 4 Revenue History of the Sundarbare from 1870 to 1920. Calcutta: Bengal Secretariat
- 20) Austin, DF, 1976, Vegetation of southeaster Florida I. Pine Jog. Fla. Sel. 39(4). 230-235,



- 21) Bandyopadhyay, AK., 1986, Soil and Water Characterities of the Mangrove Forest of Sundarbans (India), The Foresters, vol. II. 112
- 22) Bhattacharyya, Jananabrata: 1987. "Notes on Agro-Industry in the Sundarbans" Smithsonian Institution Workshop: The Commons in South Asia, Washington, DC
- 23) Bhattacharyya, S., 1998: "Sundarban Dying a slow death, in The Hindu, Survey of the Environment 98, Chennai.
- 24) Blower, JH., 1985, Sundarbans Forest Inventory Project, Bangladesh Wildlife Conservation in the Sundarbans, ODA Project Report 151. Land Resources Development Centre, Surbiton, Surrey, U.K.
- 25) Bose AK, and De N.K., 1989, "Forest Ecology of Sundarbans and Forest Resources of Sundarbans problem of Waste land and Forest ecology of India; Ed. Promod Singh, Ashish Publishing House, New Delhi, D.C. pp. 405-415.
- 26) Brown, A.H., 1948, Haunting Heart of the Everglades. National Geographic, February, p. 145-173.
- 27) Chaffey, D.R., F.R. Miller, and J.H. Sandom, 1985, A Forest Inventory of the Sundarbans, Bangladesh. Main Report, S Vol. ODA Project Report 140, Land Resources Centre, Surbiton, Surrey, UK Mandal, AK, and RK. Cho 1, the. Bookland Calcutta Sandarten com b
- 28) Mandal, .B. 1975. Are tribal tatoes in Dhur to be called Passant Man in India 5: 355-2.
- 29) Maula, SE7. The Orao of Manchi some population aspect. ation of the Anthropical Sy af l 15 19-32.
- 30) Mccall, GJ.d1 Siemens (ed) s i 2amigos s te teater, Reading, Mass Adion-Wesies.
- 31) Mukerjee, 1973, Kinship serminolegs loutna uf the Indian Atheo 2 loa Success B4-45
- 32) Makherje, S I4. The Sundarban shylock in the tribal. lletin sf the Satu Bentare T-14
- 33) Mukherjee, S 1565. Allure of the Sundarban tribe l lasia of the Cultural Research tinut : 9-100.
- 34) Mukhopadhyay, s. 1876. A Particle of Sentaran Tribes Firma K.L. M a tky, Calcutta
- 35) Munda, M.. The jharkhand movement retrospect and pexpect. Social Change IN 28-42.
- 36) Manda, R.D. and B.P. Kester 1992. Recent developments in the Jharkhand movement International Centre 15. TINul, T. 1947. Je rele pas in India 27: 250-266. Nair, P.T. 147, bachelor's barracks Van Vajatt 15: 12-14