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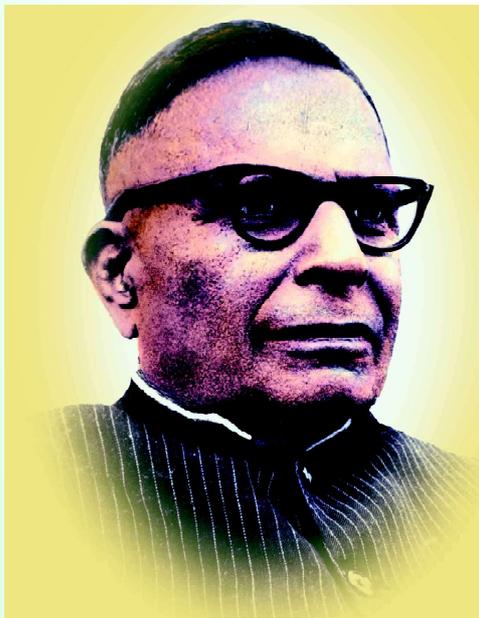
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BIRTHDAY TRIBUTES



Pandit Jawaharlal Nehru



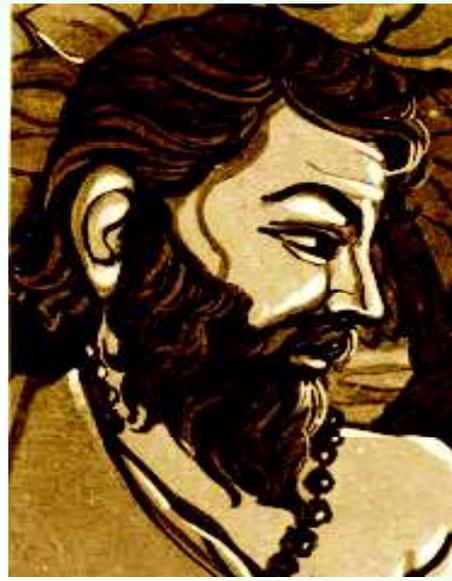
Dr. Harekrushna Mahtab



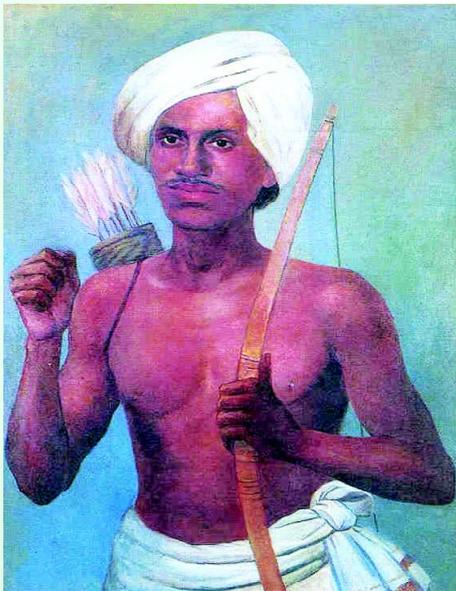
BIRTHDAY TRIBUTES



Laxman Naik



Jayee Rajguru



Birsa Munda

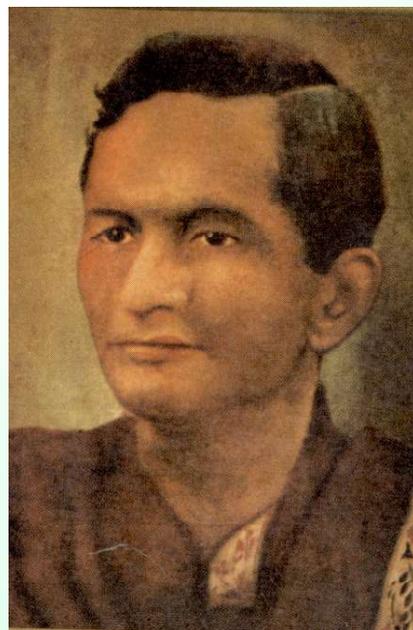


Nabakrushna Choudhuri

Our Sincere Obeisance

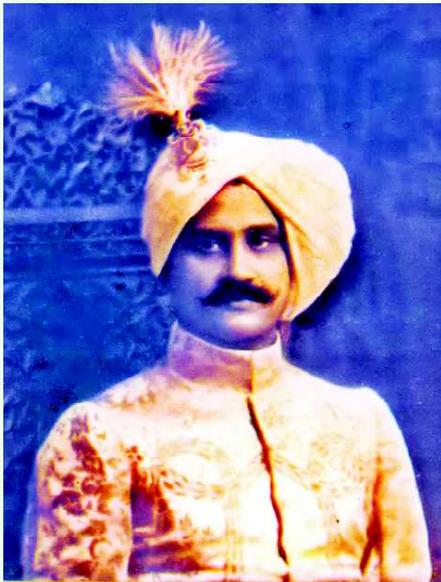


Pathani Samanta

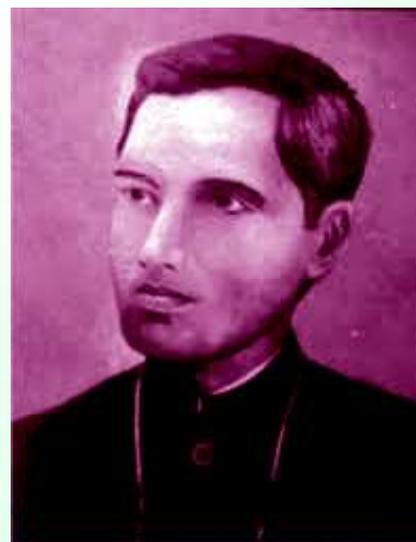


Kantakabi Laxmikanta Mohapatra

Our Sincere Obeisance



Maharaja Shriram Chandra Bhanja Deo



Pandit Nilamani Vidyaratna



Rituals being performed for laying of the foundation stone of the Shree Mandir Parikrama Project.

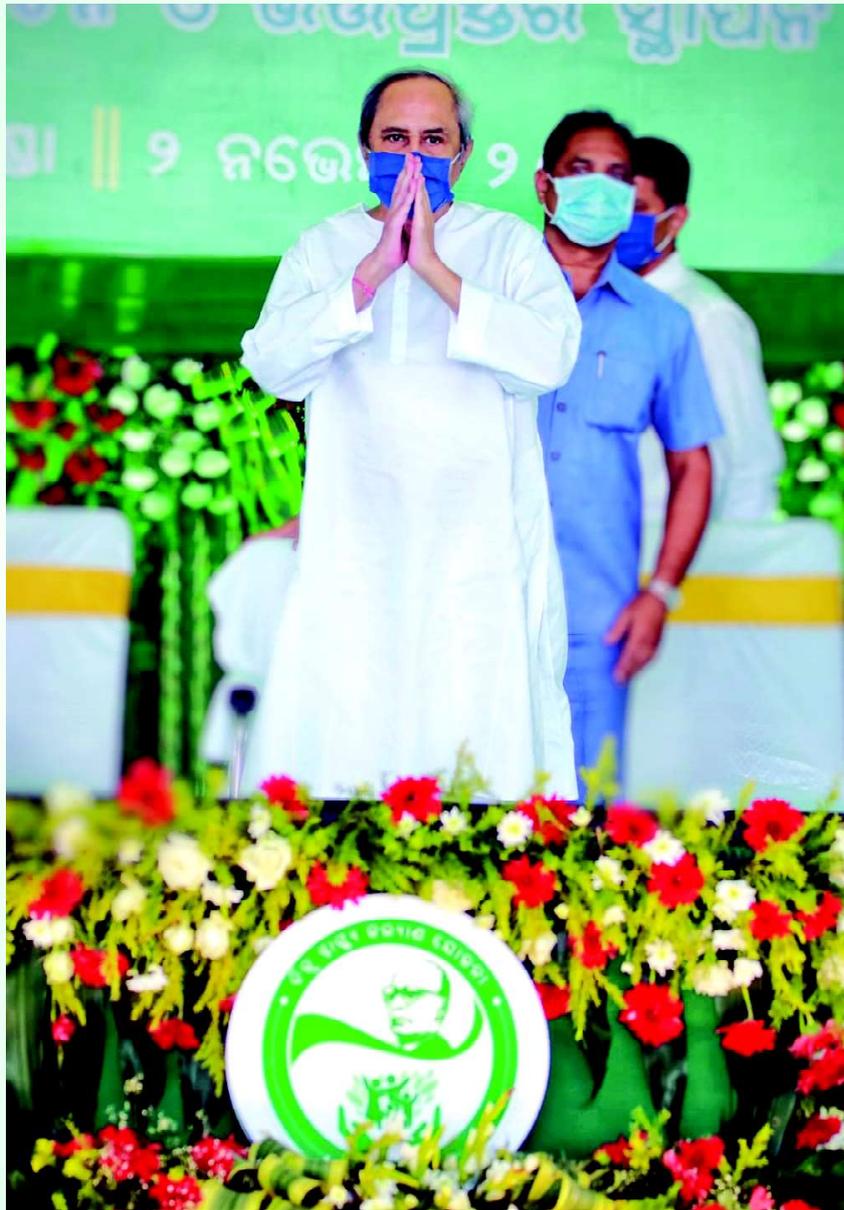


Hon'ble Chief Minister Shri Naveen Patnaik reviewing the Sri Mandir Heritage Corridor Project at Puri. Secretary, 5T Shri V.K. Pandian is also present.



Hon'ble Chief Minister Shri Naveen Patnaik and Puri Gajapati Maharaja Shri Dibyasingh Dev during the rituals for laying of foundation stone of SriMandir Heritage Corridor Project.

Healthy Odisha : Happy Odisha



Hon'ble Chief Minister Shri Naveen Patnaik attending a function for distribution of BSKY Smart Health Card.



Hon'ble Chief Minister of Odisha Shri Naveen Patnaik with Hon'ble Chief Minister of Andhra Pradesh Shri Jagan Mohan Reddy.



Hon'ble Chief Minister Shri Naveen Patnaik discussing with Hon'ble Union Minister for Coal & Mines Shri Pralhad Joshi and Union Minister of State, Shri Raosaheb Patil Danve at Naveen Nivas.



Hon'ble Chief Minister Shri Naveen Patnaik with DMK leader
Ms. Kanimozhi Karunanidhi at Naveen Nivas.



Hon'ble Chief Minister Shri Naveen Patnaik paying floral tribute to the mortal remains of Junior Warrant Officer martyr Rana Pratap Das at Biju Patnaik International Airport.



Hon'ble Chief Minister Shri Naveen Patnaik interacting with a School student of 5T transformed Brundaban Govt. High School, Hinjlicut.



Hon'ble Chief Minister Shri Naveen Patnaik dedicating the State's longest bridge (T setu) over the Mahanadi.



Hon'ble Chief Minister Shri Naveen Patnaik attending the Regional Conference on Good Governance. Secretary, 5 T Shri V.K. Pandian is present during the occasion.



Hon'ble Union Minister Dr. Jitendra Singh appreciating the "Mo Sarkar" initiative of Odisha Government during the Regional Conference on Good Governance.



Hon'ble Chief Minister Shri Naveen Patnaik reviewing the developmental works around Maa Tara Tarini Peetha, Ganjam.



Hon'ble Chief Minister Shri Naveen Patnaik launching the world class Start-up hub "O" hub, Bhubaneswar.

"All support to be extended for the para-sports events and to the para-sports persons"

- Chief Minister
Odisha

Hon'ble Chief Minister Shri Naveen Patnaik felicitated the Para badminton players who won the medals at the recent Tokyo Paralympics. He congratulated them on their spectacular performance in Tokyo.

He felicitated Ms Deepa Malik (President Paralympic Committee of India), Sh Prabhakar Rao (Chairman, Para-badminton India), Sh Gaurav Khanna - Head Coach, Para Badminton Indian team, Shiba Prasad Das - Head Coach, Odisha Para badminton, Pramod Bhagat – Tokyo Paralympics Gold medalist, Krishna Nagar - Tokyo Paralympics Gold medalist, Manoj Sarkar - Tokyo Paralympics Bronze medalist, Tarun Dhillion – Paralympian, Parul Parmar – Paralympian, Palak Kholi – Paralympian, Rajkumar - Arjuna Awardee.

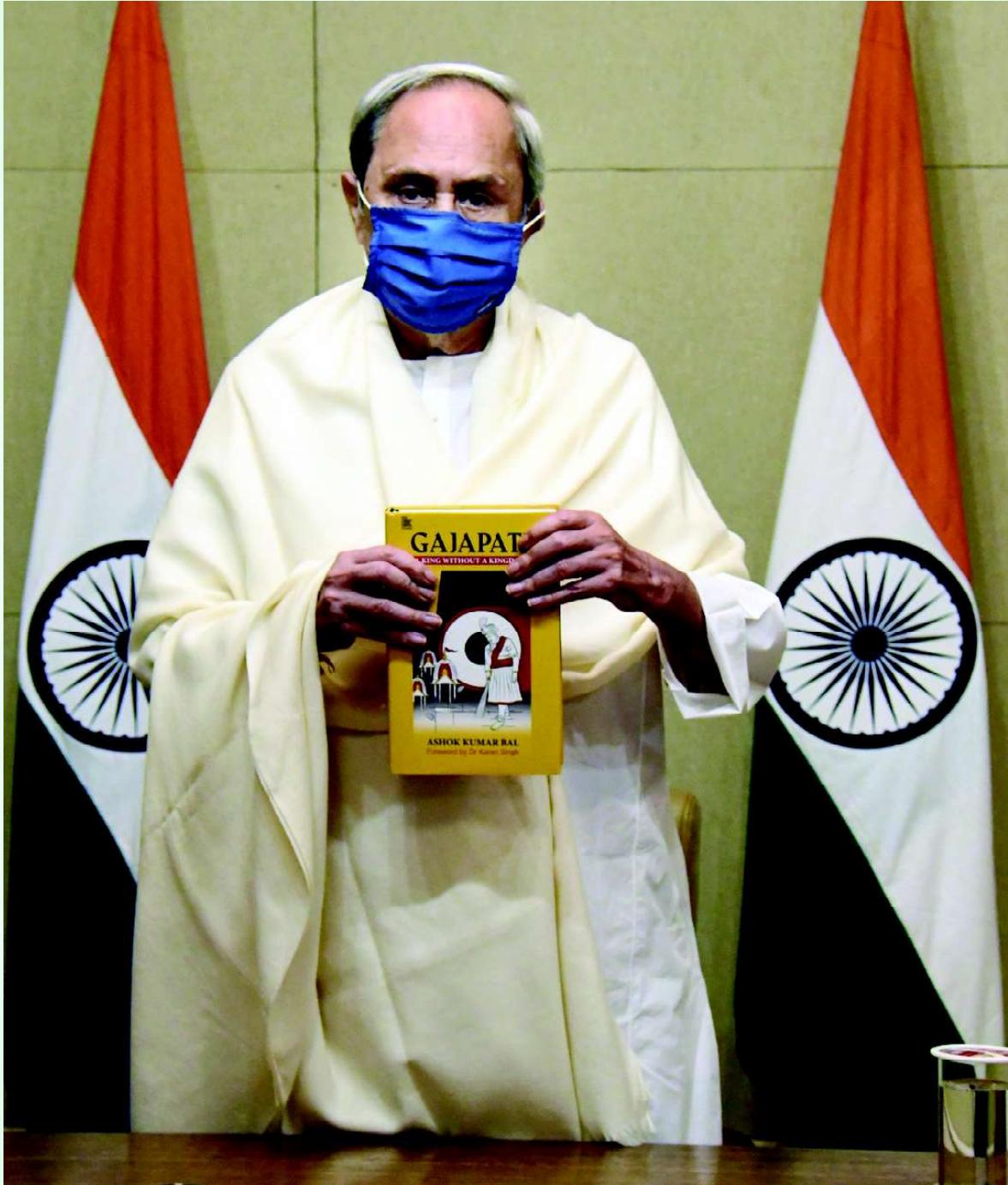
Hon'ble Chief Minister Shri Naveen Patnaik felicitates the Paralympians on their performance in the Tokyo Paralympics.

Ms Deepa Malik thanked Hon'ble Chief Minister for his initiatives for development of sports in the country. She lauded Odisha as a model for sports development and for the support of the state towards the sports persons and para-sports persons.

Bhubaneswar hosted the 4th National Para-badminton Championships from December 24th to 26th 2021. More than 400 para-badminton players from across the country participated on this event, which was the largest so far in this field. Ms Malik and the Paralympians praised the Government and the State association for making such good arrangements for the comfort of the para-badminton players.



Hon'ble Chief Minister Shri Naveen Patnaik assured all support for the para-sports events and to the para-sports persons.



Hon'ble Chief Minister Shri Naveen Patnaik releasing the book titled, "Gajapati : A king without A Kingdom" written by Shri Ashok Kumar Bal.

Meeting with Niti Aayog

Odisha Has Made Substantial Improvement in Macro & Socio-Economic Indicators

- *Naveen Patnaik*
Chief Minister

Hon'ble Chief Minister Shri Naveen Patnaik, during his interaction with Niti Aayog Vice Chairman Dr. Rajiv Kumar and his team, said that Odisha has made substantial improvement in the last two decades both in macroeconomic indicators and also in socio-economic indicators.

Welcoming Dr. Rajiv Kumar and his team to Odisha, Hon'ble Chief Minister expected to engage with Niti Aayog in a constructive manner in the spirit of cooperative federalism.

Chief Minister Seeks Special Dispensation From Central Government to Catch Up With the Frontline States.

Stating that this platform will help in sharing innovative and emerging ideas for development, he said, "We would like to take this opportunity to present various longstanding and emergent developmental issues requiring support of NITI Aayog and Government of India."

Hailing the NITI Aayog for its support to States in identifying priorities, sectors, and strategies for sustainable development, Hon'ble Chief Minister said that we welcome more such consultations and collaboration with the States in course of strategy and policy formulation across sectors.

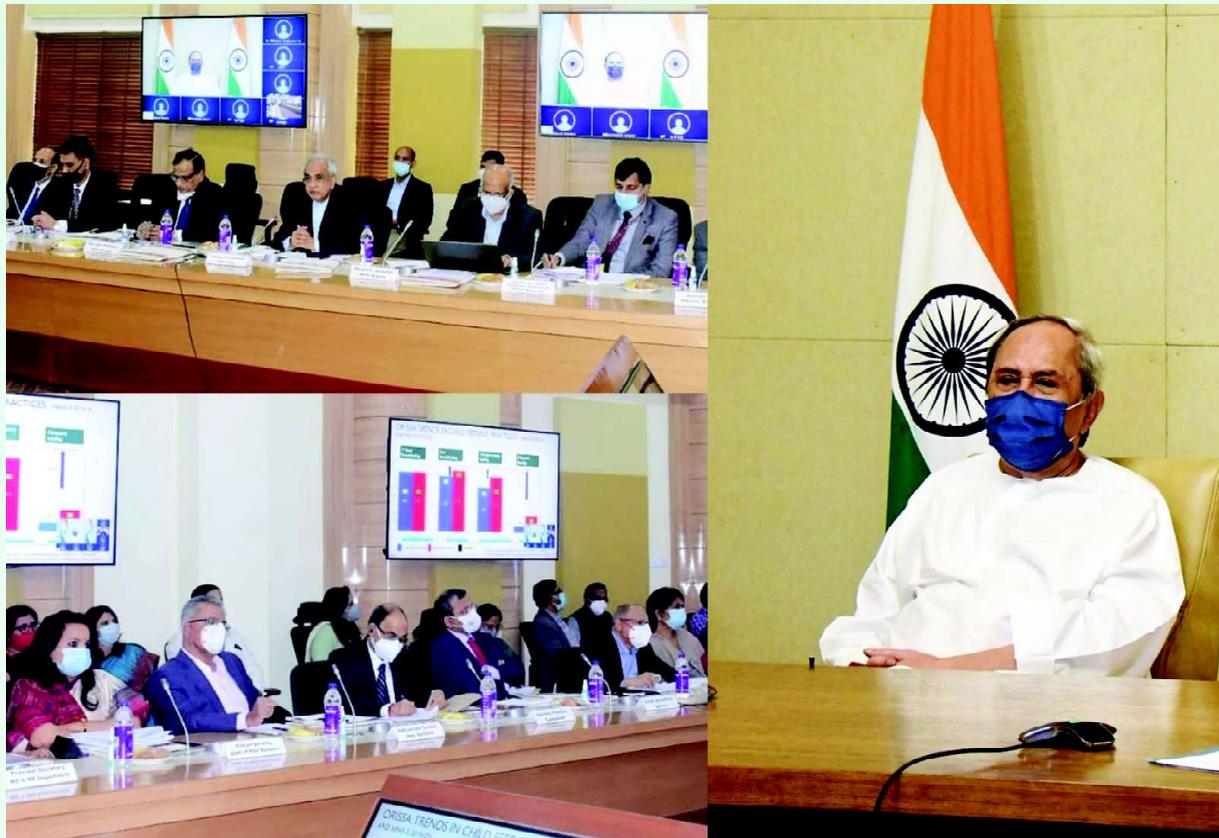
Hon'ble Chief Minister said that our development interventions have been successful in combating Left Wing Extremism, mobilization and economic empowerment of nearly 70 lakh women through Self Help Groups.

He further said that we have our own health assurance scheme for cashless treatment in empanelled hospitals with wider coverage to reduce out of pocket health expenditure. We are the third largest contributor to PDS rice pool of the Country. We have pioneered a conditional cash transfer system for pregnant women and lactating mothers, he added.

Niti Aayog Keen to Partner with Odisha for State Specific Development Blueprint.

- *Rajiv Kumar*
Niti Aayog Vice Chairman

He said that the State has invested heavily for infrastructure development and has become an attractive investment destination in manufacturing and mining Industries.



Focusing on State's long term issues, he said that the State is burdened with infrastructural gaps and vulnerability to recurring natural calamities. This requires a special dispensation from the Government of India to help the State to catch up with the frontline States, he added.

Niti Aayog Vice Chairman Dr. Rajiv Kumar congratulated Hon'ble Chief Minister for the increase in State's per capita income, improvement in agriculture and mining along with managing the fiscal deficit below five percent. He also advised the State to improve its mining production from one percent to more than two percent. He proposed the State to set up an SDG Monitoring Unit. He also suggested for switching to chemical free agriculture in the State. Stating that every state has its own priorities and specificity, he said that the Niti Aayog is keen to partner with Odisha for developing a State Specific Development Blueprint for the State.

New Start-up Policy 2021 to Include Entrepreneurship in School Curriculum

- *Naveen Patnaik*
Chief Minister

- CM Launches World Class Start-up Hub ‘O-Hub’
- 'O-hub' to Facilitate 200 Start-ups Every Year
- 5000 Start Ups by 2025

Hon'ble Chief Minister Shri Naveen Patnaik inaugurated 'O-hub', a flagship initiative of Government of Odisha, to support Start-up formation and subsequent scale-up.

The State supported incubation hub is located in the Special Economic Zone, Patia, Bhubaneswar and offers 1,50,000 square feet area with state-of-the art facility, plug-n-play infrastructure to support Start-up activities within the state. This initiative would provide a platform for Innovators and Entrepreneurs to develop products or services, establish formal businesses and interact with stakeholders of the ecosystem.

Inaugurating this world class incubation centre, Hon'ble Chief Minister said that O-Hub will be the first point to identify the best in the industry for co-creation and development of business with their new ideas and it will be a conglomerate for Business Houses and Innovation. Hon'ble Chief Minister said that now the innovators, mentors, corporate partners, ecosystem enablers and facilitators— all of them will work under one roof.

1200 Start-ups so far under Odisha Start-up Policy 2016 that have generated 10 thousand employments in the state.

Start-ups being the agents of economic freedom, ideas and innovation, Hon'ble Chief Minister added that O-hub will facilitate 200 start-ups every year in diverse sectors like Healthcare, Renewable Energy, ICT, Artificial Intelligence, Machine Learning, Augmented Reality/Virtual Reality, Internet of Things, Handlooms and handicrafts, Agri-tech and many more.

Expressing happiness over creation of more than 1200 Start-ups so far under Odisha Start-up Policy 2016 that have generated 10 thousand employments in the State, Hon'ble Chief Minister expressed

confidence that the State will achieve the goal of 5000 Start-ups by 2025. O-hub will be a propellant to foster a spirit of entrepreneurship by providing end-to-end assistance to a Start-up during their start up journey, he added.

Hon'ble Chief Minister said that Start-up Movement in Odisha is growing everyday and Start-up Odisha has been a Catalyst to this movement, driving them by Energy, Enterprise and Innovation.

The State has proposed in the new draft policy 2021 to reach out to the young minds in school by adding entrepreneurship as a part of the school curriculum, Hon'ble Chief Minister announced.

He said that the narrative of Odisha is changing and progressing towards a new world of ideas, innovations and a budding entrepreneurial community. We are on a path of resurgent Odisha scripting new stories of success in all fields.

He wished success to the budding entrepreneurs.

Speaking on the occasion, Minister MSME Shri Dibya Shankar Mishra applauded the State initiative towards entrepreneurs & how Start-up Odisha has been pivotal in nurturing grassroots innovations and aiding them to be a scalable business.

The State incubation hub aims to mobilize Start-up Investments to the tune of Rs.100 Cr per year through Venture Capitalists, Angel Networks, HNIs, State and Central Government Departments or Agencies or PSUs.

Odisha Skill Development Authority Chairman Shri Subroto Bagchi said that O-hub is a great platform to celebrate Start-ups and provide an investor ecosystem in the State.

Shri Asit Tripathy, Principal Advisor to CM said how O-Hub would bring the start-up community together by providing a platform for entrepreneurs, mentors, investors and academia to interact and collaborate.

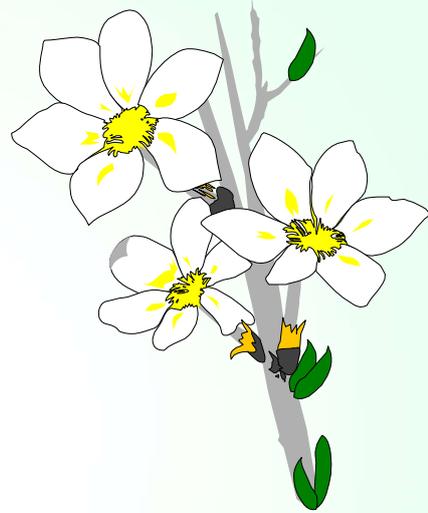
On the august occasion Hon'ble Chief Minister also released a coffee table book on Start-up Odisha.

With Startup Odisha Office stationed in O-hub, it will be a central place for Incubators, Accelerators and other major stakeholders. With a complete infrastructure support for High End Fabrication Labs, R&D Facilities, Amphitheatre among other facilities.

Tribute to Martyrs



Saheed General Bipin Rawat



Saheed J.W.O. Rana Pratap Das

Editor's Note



Odisha pays tribute to its brave son Martyr Rana Pratap Das, JWO, who sacrificed his life for the sake of the country.

A handwritten signature in black ink, which appears to read 'Kishan Choudhary'.

Editor, Odisha Review

Exploring Maritime Silk Route and Ancient Odisha : Recent Researches

Dr. Sunil Kumar Patnaik

According to Odishan folklore, the *Sadhavas* or merchants, from Kalinga who routinely embarked on voyages in the Bay of Bengal to South East Asia and Sri Lanka were from an affluent class, made prosperous by the commerce from beginning of historical period. There is a strong ecological and historical reason behind it. It is because, Odisha being a coastal state, its people ventured into sea voyage from its earliest period and the legacy is seen in every aspect of life style be it *Bali yatra* or *Khudurukuni Osha* or worship of Tara or representation of boat motif in art and literature and many more. Between c.500 BCE and c.350 CE, South Asia underwent most profound transformation. For the second time, the shift from village-based agrarian society to a complex urban civilization built around large integrated estates over a geographical area. This 'change' occurred within the context of Buddhism and changing socio-political and economic framework. The shift from village to state society and led to the establishment of a network internal and overseas trade routes and allowed rapid interregional distribution of ideas and artefacts through the growth of communication and the increased mobility of people¹. The Buddhist scriptures (Pali texts) describe the society which reflects the presence of a very influential mercantile

community organised in guilds. It is evidently, a period of expanding material culture, with far and wide trade relations and populous towns and cities existed in the Ganga Valley². Great roads with travellers' rest houses and occasional hospitals covered north India and connected distant parts of the country particularly under Mauryas in 3rd century BCE. Trade flourished not only in the country itself but between India and foreign countries. There was a colony of Indian merchants living at Memphis in Egypt in about the fifth century BCE. as evident from the discovery of modelled heads of Indians. Probably, there was also trade between India and the islands of South-East Asia. Overseas trade involved shipping and it is clear that ships were built in India both for the inland waterways and for ocean traffic. There are references in the Epics for shipping duties being paid by 'merchants coming from far off places. The 'Milinda' (Milinda- first century CE, is the Greeko -Bactrian king of North India who became an ardent Buddhist), refers that : 'As a ship owner who has become wealthy by constantly levying freight in some sea-port towns will be able to traverse the high seas, and go to Vanga (Bengal) or Takkola, or China or Sovira, or Surat or Alexandria or the Coromandel which also included the Kalinga coast or further India, or any other

place where ships congregate.³ Infact, recently in the year 2020, a Kushan gold coin of Huviska of Naana series is retrieved from Radhanagar Buddhist Excavated site which proves this fact.

It is a fact that Buddhism is the religion that travelled in the Silk Routes connecting China and Central Asia in Pamir, Hindukush and beyond by Sea through the ports of Eastern India to the Southeast Asia from the beginning of historical period and we have the material remains that comes from every part of Indo-China and Indo-Asia. Buddhism played a vital role up to 10th century CE for connecting cultures and there was an intimate encounter particularly in the east coast for which we are getting early Buddhist sites and settlements on the coast. The Buddhist and Port sites stretching from lower Ganga, precisely from Tamruk through Odisha costal sites Jayrampur, Ayodhya, Solampur, Radhanagar, Lalitgiri, Udaygiri, Dhauli, Aragarh, Jaugarh, Palur, Manikapatana, Kalingapatnam, Thotlakonda, Bhavikonda, Bojjannakonda and Gitupalli up to Godavari river. Some of the sites like Tamruk or Tamralipti, Palur, Brahmavana, Jaugada, Kalingapatnam, Thotlakonda were served as port settlements^{3b} (Patnaik, 2021). This aspect has been studied by Odishan Institute of Maritime and South East Asian Studies, in the recent years and more work is under progress.

The Southeast Asian countries particularly Sumatra (Srivijaya), Java, Bali, Khemars of Angkor (Cambodia) and the empires of Burma (Myanmar) had their deep penetration into the Eastern Indian States like, Bihar, West Bengal, Odisha, Andhra and Tamil Nadu. Many scholars in the past have shed light on this aspect but none have focused concomitantly taking archaeological evidences into account. More and

more new research from both the areas are coming up, particularly, from archaeological field work in the recent times. From the dry zone of Burma to the snow covered mountains of the Indonesian province of Papua and from the rolling pastoral grasslands of north-western Vietnam to the steep terraced rice lands of the Philippine Islands, Southeast Asia is a conglomeration of geographical and agricultural contrasts. The story of settlements, the evolution of civilization and the synchronized religious, social activities had indelible imprints on the aspects from early times. The spread of Indian cultural elements in various parts of Asia reveals the extensive strong connectivity that existed in the historical period. At least, from the beginning of Common Era, we have good evidence of the spread of Indian cultural and religious influences to Southeast Asia, first Buddhism and from fourth or fifth centuries Brahmanical-Hinduism. There is evidence of an increasing use of Indian Hindu and Buddhist religious ideas, monuments and icons and Indian scripts and languages which could be very well seen from the standing monuments of Cambodia such as Beyon Temple, Angokar Wat etc.

Odisha in ancient times had 600 kms long coastline to the west of Bay of Bengal. Some historians have suggested that the Kalinga War of 261 BCE vanquished the independent kingdom of Kalinga (ancient Odisha) on Bay of Bengal coast, led a sizable exodus of the surviving Kalinga people to the eastern lands across sea. Although, the authenticity of this exodus is still to be confirmed historically but there is a greater evidence of commercial voyages and emigration of Kalinga people, whose point of origin includes what is today's Odisha as well as northern Andhra Pradesh (part of ancient Kalinga), to Southeast Asia, and their cultural and economic presence

especially in what are today Burma (Myanmar), Malaysia (where they are known as 'klings'), Cambodia and Indonesia (Sumatra, Java, Bali and Borneo)⁴. The Indian archipelago established its maritime supremacy over the world trade since time immemorial. The Bay of Bengal has been, historically, an important part of the eastern Indian Ocean. It is spread over 2,172,000 square kilometers, making it the largest bay in the world. Within this dynamic maritime space, fundamental techno-cultural processes are observed: movement of ethnolinguistic communities, opening of land-sea routes and ports, innovations in boat building and navigational technologies, spread of botanical cultivars, and refining of crafting and artistic skills. The engagements between the Indic world and the Southeast Asian realm are critical to understanding the formation of the Bay of Bengal Interaction Sphere (BBIS). The BBIS comprises the eastern part of the Indian Subcontinent (the country of Sri Lanka, the Indian states of Tamil Nadu, Andhra Pradesh, Odisha, West Bengal; and the country of Bangladesh) and the western part of Southeast Asia (Myanmar, coastal Thailand, coastal Malaysia, and the Indonesian island of Sumatra adjoining the Andaman Sea). The Andaman and Nicobar Island chain, which are spread in a north-south axis in the Bay of Bengal, overlook the passage through the Malacca Straits to the South China Sea. For purposes of analysis, the Andaman Sea is taken as a contiguous extension of the Bay of Bengal and treated here as one with the bay⁵.

Traders and shippers from both sides were involved, and we find groups of traders from particular places would reappear annually at the ports with which regular relations had been built up and would reside there during the trading season. This historical phenomenon has been

studied by many scholars who are of opinions that between four to fourteenth centuries, Indian culture, religion and political ideas played a significant role in the politico-cultural landscape of South East Asia. Kulke remarks that Indian culture did not reach Southeast Asia through any moment of 'transplantation', but through a continuous and complex set of networks of relations within and between the regions, by mutual process which linked both sides of the Bay of Bengal⁶. Joan Crawford (1783-1868), a scholar of his time who served at Penang and acquired extensive knowledge of Java and Bali. He has stated that the first Indian colony was set up in Java in the 2nd century CE and that the Javanese considered Kalinga 'as the country from which the civility, law and religion of India were introduced among them (Crawford 1820 :337). The major studies by R.C. Majumadar (1927, 1933, 1934) on Champa, the Sailendras and the Cholas provided a basis for his later works (1937-8) which examined the overall Indic influences on Southeast Asia, including maritime links. Other Indian scholars who have worked on this area included B.C. Chhabra (1935,1956) and H.B. Sarkar (1971,1986)⁷. The later works G.Coeds, (1956, 1957, 1964), Wheathly (1961 and1975) Guy (1993-4), Ray (1996, 1999, 2003, 2013)⁸, Behera (1999, 2007), Kulke (2001, 2010), Patra (2013) and some others. The erudite scholars have focused on the different aspects of the India and Indonesian interaction. But very few works have done on Kalingan context and not much has done on field study as required at this hour. Now, many new sites have been excavated, many art motifs and inscriptions have been documented and good number of historical sites have been explored which need comparative study and interpretation by scholars of Indonesia as well as of Odisha⁹.

The religious networks of the Buddhist, Hindu, Islamic Jewish and Parsee faiths point to the deep-rooted interactions in the ancient and medieval Indian Ocean region. The spread of Buddhism across Asia has been studied mainly from a perspective focusing on the transmission through the overland routes popularly known as “Silk Roads” and emphasizing Central Asia as an important transit corridor and contact zone between South and East Asia. However, recent scholarship has increasingly recognized the significant role played by the sea routes or maritime “Silk Roads” in shaping pre-modern intra-Asian connectivity¹⁰. This has paved the way for an appreciation of the important contribution of the southern rim of Asia, especially Eastern and Southern India, Sri Lanka, and Southeast Asia to the genesis, transformation and circulation of various forms of Buddhism. I was in Sri Lanka for a conference in mid-September 2013 and November 2018 at Bangkok (Thailand) and SiamReap (Cambodia) and on October 2019 at Borobudur and Prambanan (Yogyakarta, Java). I was interested for Angkor Wat and visited the site of Beyon and complex of Angkor Watt and Borobudur. The observations, I made at Bangkok, Siam (*Shyama Desha* in Odia) and Yogyakarta was heart-touching and recalled the history what has been written so far, as the scholars in the past have pointed out the cultural interactions of ancient Odisha with these countries. Scholars opine that between fourth to fourteenth centuries, Indian culture, religion and political ideas played a significant role in the politico-cultural landscape of Southeast Asia. "When civilizations meet, they do not necessarily clash but can cohabit and cooperate. They do not compete but can learn from each other. This is true when we look into the standing monuments, ritual practices, social beliefs, and in the material cultures of both the

regions”. It is appropriate to quote Manguin that while art and architecture, along with inscriptions, were central to the earlier understanding and debate over Indianization, including the rejection of the ‘Indian colonization’ thesis, a newer set of insights that confirms the localization perspective comes from archaeology. The recent archaeological findings confirm the existence of extensive early trade links between India and Southeast Asia, especially trade in artifacts. This has given rise to the view not only that Southeast Asia had come into contact with India for several centuries, “a millennium-long phase of exchange” before the hitherto accepted beginning of Indianization, between the third and fifth centuries CE, but also that in this process, Southeast Asians may have had even greater agency than critics of the conventional Indianization thesis had assumed¹¹.

However, recently Milton Osborne in his 12th Edition book *Southeast Asia* has clarified a number of issues relating to general historical developments in the Southeast Asian countries particularly in Post-Second World War. He argued that the countries of Southeast Asia were neither ‘little Indians nor ‘little Chinas’. Earlier, it was the conception that Southeast Asia is an area shaped by external cultural values, most particularly those of India and China, but modern scholars have stressed to the strength and importance of indigenous cultural traditions. The importance of Indian religious concepts is recognized in a broad area of Southeast Asia. But the essential features of Indian artistic and architectural concepts played an important part in the development of South-east Asian Art¹².

Undeniably, the overland and maritime “Silk Roads” were interlinked and complementary, forming what has been called a

“great circle of Buddhism.” At the same time, the combined archaeological and textual evidence increasingly points to a predominant role of the maritime Silk Roads in facilitating the mobility of Buddhist agents, artifacts, texts and ideas over a long distances from the early centuries of the first millennium CE, if not earlier, as testified by the presence of Sri Lankan and Southeast Asian toponyms in the *Mahānidessa* and some Jātakas dating to the late third–first centuries BCE.¹³

The connection between Buddhism and trade, including that to Southeast Asia, is not really casual. Rather, we can see in the early Common Era, a mutually supportive system. At the ideological level, Buddhism encouraged lay devotees to accumulate wealth by trade; at social level donations to Buddhist monasteries gave status to traders, and at the professional level, Buddhist monasteries were repositories of knowledge and essential skills, such as writing. Not all traders were Buddhist, though many wealthy ones were¹⁴. Sea travel was the fastest, most economical and safest way to move people and goods in the ancient world. By the 2nd century CE, the seasonal monsoon winds were fully exploited by maritime traders plying the routes connecting the ports in the Mediterranean Sea with those along the coastal and insular areas of South, Southeast and East Asia. The sea was a connecting factor in Asian history since time immemorial. Cutting across the natural boundaries and barriers of continental topography, sea-based routes formed a network of conduits that led to the formation of a medieval global Buddhist Asia. By the middle of the 7th century CE, factors such as a radical expansion of commercial maritime routes connecting South with East Asia, as well as the gradual decline of Buddhism and Buddhist exchanges in Central Asia, following the Muslim

conquest of Trans-Oxiana and other socio-political contingencies, contributed significantly to the sea-based exchange not only of mercantile goods but also of Buddhist beliefs and ritual practices. Unlike the Central Asian networks, the interlocking maritime networks of Buddhism survived well past the 13th century into the 19th century, for instance, the Bay of Bengal circuit connecting Sri Lanka to Myanmar and Thailand, and the China Sea circuit linking China to Southeast Asia, Korea, and Japan. It could well be seen in Odishan context, where monks and merchants and even princess went to distant islands from East Coast to distribute and popularize Buddhist texts in particular and Buddhism in general. Perhaps, this is the reason why, we get some reflections of Odishan culture in the monuments of Angkor and Bayon temple in Cambodia, Borobudur and Prambanan in Java, Polonnaruwa and Kandy in Sri Lanka, She-hwan Dogaba in Myanmar, Craft tradition of Philippines and cultural traditions of Thailand, Malaysia and Bali even in China but not yet explored systematically. It may be mentioned that Buddhism went from India, but ‘developed in unique ways in Southeast Asia’¹⁵. This may be the reason, why Buddhism flourished in Southeast Asia while in India, the religion withered. We need to focus our study to unfold the historical truth which require extensive documentation and intensive research.

As suggested, the existence of monasteries near major commercial nodes and trading routes, the establishment of trade networks may have facilitated the spread of Buddhism as well as ensured its support by merchant communities. Buddhist sites in the Western Deccan, the Konkan coast, West Bengal, Andhra Pradesh, Odisha, and Tamil Nadu were

strategically located in the vicinity of ports along the trade routes connecting the mainland to Sri Lanka and further afield to Southeast Asia. Buddhist vestiges, however scant, have been found in such remote insular locations as the Maldives Islands in the Indian Ocean and Socotra in the western Arabian Sea. The widespread presence of maritime scenes of navigation and shipwreck, depicting sea travel in its political, spiritual, and economic ramifications—in sites located on/near the coast or along trading routes in South and Southeast Asia suggests that those scenes, rather

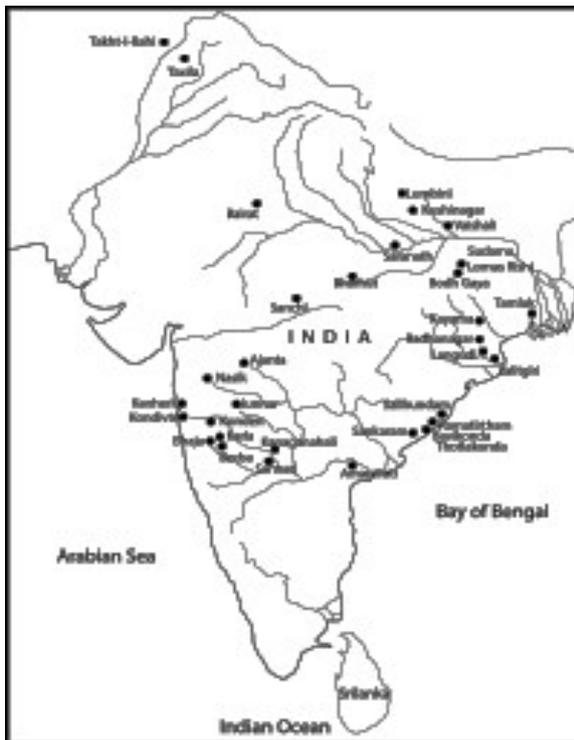


Fig. 1 Early Historic Buddhist Sites

than being purely symbolic and metaphysical representations of spiritual dangers, were linked to an actual imaginary. This, in turn, testifies to the increasing popularity of maritime travel in Buddhist communities from the 6th century CE onwards¹⁶.

The concurrent development in the same locales of “Savior Cults” focusing on the Bodhisattvas Avalokiteśvara, Tārā (especially in her aspect of *astamahābhaya* or protectors from the Eight Great Perils) and *Mahāpratisarā* as protectors of travelers (especially of sailors) against the perils encountered along their journeys may be due to the increasing number of merchants and monks plying in the commercial routes¹⁷.

Overseas trade involved shipping and it is clear that ships were built in India both for the inland waterways and for ocean traffic. There are references in the Epics for shipping duties being paid by ‘merchants coming from far off places’. The export items from India include silk, muslin—the finer sorts of cloth, cutlery and armoury, brocades, embroideries and rugs, perfumes and drugs, ivory and ivory work, jewellery of gold and other metals and of precious stones. These were the main articles in which the merchants dealt with¹⁸. Significantly, many of the powerful dynasties who were instrumental in the sponsorship

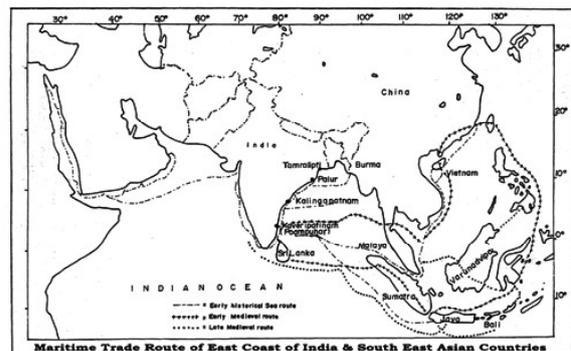


Fig.2. Purbiyapatha: Eastern Trade Route.

and spread of Mahāyāna and Mantrayāna Buddhism ruled over domains located along the nodes of commercial and diplomatic maritime networks. The examples are the Pālas in North-

Eastern India, the Bhauma-Karas in Odisha, the Early Second Lambakannas in Sri Lanka, the Sailendras in Java and Sumatra, and the Tangs in China. In some cases, the maritime passages of monks were directly sponsored by kings and doubled as diplomatic missions, involving large travel parties including dignitaries and military exponents¹⁹.

It is evident from *Buddhagat* (Burmese sacred scripture) that a steady commercial intercourse was cultivated with Burma by the Buddhist merchants of Kalinga, which soon led to missionary undertakings for the propagation of their religion, and afterwards to the assumption of political supremacy in the land. Kalinga was so prominent in the maritime trade that the great poet Kalidas referred in the *Raghuvamsa* to the king of Kalinga as *Mahodadhipati*, the conqueror of sea²⁰. The text *Aryamanjusrimulakalpa* of Mahayana Buddhism refers that all islands of Kalinga sea were dominated by ships of Kalinga. R. Thaper mentions that Kalinga, on the coast of eastern India was in some way a counterpart to the north-west, as the maritime trade going southwards along the eastern coast of India would have to pass through it²¹. With discovery of so many monastic sites on this coast from Tamralipti through Odishan coast Radhanagar, Langudi, Lalitgiri, Udayagiri, Aragarh and Andhra coast sites Salihundam, Kalingapatna, Ramatirtham, Thatlakonda, Bhavikonda, upto Guntupali and Nagarjunakonda²² which all are inter-connected and may be appropriately termed as *Prubiyapatha*. This route was the main spine in joining the whole of North and South India as well as Southeast Asia atleast from first century to throughout the history and was not discussed so far where Kalinga played a major role.

Ptolemy in his *Geography of Ancient India* mentions, the names of various ports of Kalinga like Palura (Palur area) Nanigania (Puri), Katikardama (Cuttack), Kannagara (Konark), Kosamba (Pipili) or Balasore²³. But Ptolemy did not refer to the other ports of Kalinga like Tamralipti, Manikapatana, Che-li-Talo, Kalingapatnam where we get all archaeological evidences of port town which also played a dominant role in maritime history of Odisha from pre-Common Era. The economic factor and the profit of the overseas trade were the main factor for the earliest maritime activities of the people of Kalinga. In support of this N. Dutt writes “The main cause of expansion of Indian culture was commercial enterprise. There were Indian seamen and traders, who ventured into the sea in large boats to procure gold by selling their goods in foreign countries. This search for gold led the Indians to use the name Suvarnabhumi or Suvarnavipa indiscriminately—the Silver land and gold land of Ptolemy”. Further, he also says that the trade and commercial activities were carried on not only from the Indian side but were reciprocal²⁴. The wealth of Southeast Asia (more particularly Burma and Indonesia) was an attraction for the Indians. This is illustrated by the Sanskrit names that were given to these countries: Suvarnabhumi, land of gold; Suvarnavipa, island of gold; Karpuradvipa, island of camphor etc. These toponyms, as well as the Buddhist Jatakas which described Indian princes going to the east to make their fortune attest to Indian interest in Southeast Asia as a source of gold²⁵.

The ports of Kalinga had spread different sea routes to different lands for seaborne commerce. The mariners continued to have commercial, socio-cultural and political relations with South East Asian countries like Java,

Sumatra, Bali, Borneo, China, Burma, Cambodia, Malaya and Thailand and also Sri Lanka. R.D. Banerjee emphasizes that the term, "Kalinga was used extensively in the Malay peninsula denote a man going there from any part of India"²⁶. Probably, every Indian seemed to them as a Kalingaite, irrespective of the province from where he had come. Scholars have accepted that in addition to trade, a potent motivating factor in this expansion of network from the Indian Sub-continent was Buddhism²⁷.

Eastern Trade Route : Purbiyapatha

The mariners of Kalinga possessed sound knowledge of navigation. They were aware of current pattern, wind direction and depth of different parts of the Bay of Bengal. The sailors

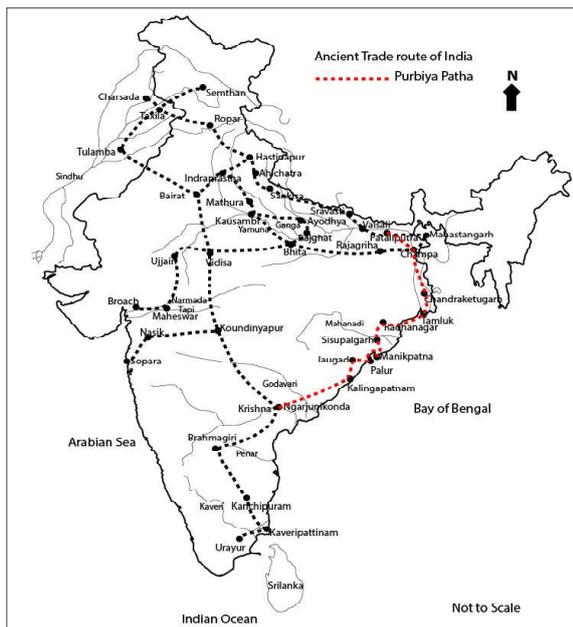


Fig.3. Trade Route in East Coast

used to sail to South East Asian countries for trade when the wind used to blow from Northeast direction and favorable current pattern. During south west monsoon the wind and the current used

to flow towards north and the sailors used to return back from Southeast Asian Countries.

The usefulness of wind and current pattern to the sailors has been scientifically proved. The use of Sun, Moon and Stars were known to them for open sea navigation. In fact, the voyages were partly coastal running south along the east coast till it reaches north of Sri Lanka and then turned east across southern Bay of Bengal to Sumatra and then to Java and Bali. The leading port in Northern Jaffna Peninsula in Sri Lanka is known as KalinganTurai²⁸ and hence the *Purbiyapatha* comes to forefront and this historical phenomenon involving both land and sea routes has to be recognized with all archaeological sites on the coast connecting nations and connecting culture.



Fig.4. *Purbiyapatha*: Trade route in East Coast connecting North and South India and Southeast Asia.

In ancient Odisha, there were two types of trading ships, known as common ships and special ships, with the common ships in turn divided into ten categories, and the special ships into two: high and wide ships and long and wide ships. The ships were 8 to 80 meters long, 5 to 25 meters wide, and 3 to 27 meters high. Rules and regulations regarding construction of ships were recorded in the Sanskrit *Yuktikalpataru*²⁹.

This Sanskrit literature records that king Bhoja built many ships with local wood. The recovery of many wood working adzes and other artifacts from Chilika Lake area shows that this region was popular for boat-building activities which still continues at places like Arakhakuda, Pathra, Gourganapatna etc³⁰. The remains of a ship excavated at Tante, near Yangon is thought to have belonged to Kalingan traders. The *Buddhaghat*, the Sacred Scripture of Burma describes trade with Buddhist merchants of Kalinga, leading to missionaries coming to propagate the faith, and then to political domination of parts of coastal Burma by Kalinga during the 4th to 7th centuries CE. Coins with Hindu symbols have been found in Pegu which confirms this contact³¹.

Further, ancient Odisha was the epicenter of the inland and foreign trade, being a coastal region that spread from the river lower Ganges to at least up to the Godavari river. It was and prosperous with riverine ports crisscross from west to east and east and its free and flexible accesses to the *Kalinga Sagar* which was re-designed later as Bay of Bengal. The geographical position of Kalinga with several rivers, shelter ports, provided an ideal environment for sea voyages. The rivers like the Mahanadi, the Tel, the Suvernakha, the Baitarani, the Brahmani, the Rishikulya, the Vamsadhara and the Godavari etc., embark for distant lands provided access to the interior, where precious-stones were found, and their deltas provided natural harbours. It has been observed that the agrarian and industrial products of Kalinga like rice, barley, wheat, incense, timber, ivory, textiles, conch shells, stone products, elephants were mainly exported to Southeast Asian countries. The items of export may be divided into three categories i.e., plant

products, animal products and mineral products. But here, it was mostly plant and mineral products were the items of export. The cloth of Kalinga was considered as high value and used by royal persons. It was observed that certain metals such as silver and copper were probably imported in to Kalinga from the mines of Ceylon and spices like clove, spikenard imported from Java³².

The *Periplus of the Erythraean Sea* (first century CE) of an unknown author besides mentioning the Kalingan port of Dosarene, has referred to the trade relation between Kalinga and the Roman World. The author mentions Dosarene as producing the best type of ivory known as Dosarenic³³. Ptolemy, the Greek Geographer during the second century CE. referred to another famous port of Kalinga named Palur from where ships disembarked directly across the Bay of Bengal to the Southeast Asian countries³⁴. The discovery of Rouletted Ware from Sisupalgarh, Radhanagar of Odisha and Tamluk in the Midnapore district of modern West Bengal is very significant in this regard. The Rouletted Ware was first identified and dated by Wheeler at Arikamedu is one of the parameters for trade³⁵. These were probably brought into Odisha by the Roman merchants. Rouletted Ware is often regarded as important evidence of Indo-Roman trade. Influenced by the Hellenistic tradition of impressed decoration, rouletting is usually produced by the continuous rolling motion of a toothed-wheel, called roulette, when it is held against the revolving clay vessel. It is believed that the finer varieties of Rouletted Ware were imported from Roman Empire, while the coarser varieties were made in India. It may be mentioned that Roman bullae's have been discovered at Sisupalgarh and Radhanagar and Roman coins at Biratgarh and Bamanghati in

Mayurbhanj district, which suggests trade link of Kalinga with the Roman empire³⁶. Besides, a gold coin bearing Graeco-Roman motif together with pottery fragments and terracotta figures of the Roman origin have been also discovered from Tamruk³⁷, the site of ancient Tamralipti port which was in operation and part of Odisha till 15th century CE.³⁸

It is believed that the famous Bali Yatra festival of Odisha is observed every year to commemorate the first voyage of Kalingan people to Bali. From the history of Sailodbhava dynasty of Odisha, it is known that king Madhavaraja was banished to Bali along with 20,000 soldiers in 6th century CE. He established his kingdom in Bali and later on spread his influence to other territories by conquest and trade activities. It is believed that, since then, large scale seafaring activities to Bali began. The dance forms of Bali have much connection with Mahabharata and Ramayana themes of Odishan origin. Legong dance with Balinese ballet, Ketchak or Monkey dance has much similarity with Odishan tribal dance forms. The famous Ubud paintings on Balinese life reflects echo of Odishan tribal life pattern. While, god of the forest seeing through the whistling leaves are excellent and reminiscent of tribal life in hills and dales of Odisha. The Sambalpur tie-and-die and weaving traditions of Odisha have also left imprints in Balinese textile traditions. I.G.P. Phalgunadi, a scholar of Bali has observed semblance in food habit, religious practices and vocabulary in Balinese and Odishan life style³⁹. In Bali like Odia food habit, the people are fond of leaves of *saga* especially the tender leaves of the drum-stick tree, known to us as *Sajana* so also use of mashed coconut and cooked banana-flowers. Even *Manda* and *Enduripitha* made of rice-flour are being prepared by the Balinese people like that of Odia people.

As is shown by textual, epigraphic, and art historical materials, including icons, ritual *dharanis*, manuscripts, and monuments, Buddhist cults, imageries, and ritual technologies flourished across the vast swathe of littoral island, and hinterland territory that can be conceptualized as the socio-spatial grouping of “Maritime Asia.” Buddhist vestiges recovered from the Indian Sub-continent littorals, Sri Lanka, the Maldives Islands, peninsular and coastal mainland Southeast Asia, and what are now called the Indonesian Archipelago and the Philippine islands, speak in favor of the existence of pervasive and sustained multi-directional Buddhist exchanges among interconnected nodes linking South Asia and the Indian Ocean to China, Korea, and Japan through the maritime routes⁴⁰.

Recent excavations and explorations have brought to light many port sites of Odisha. Manikapatna, an early historical port site on the estuary of Chilika Lake and Bay of Bengal continued to exist up to 14th century. The archaeological findings that include coins of Sahasramalla as well as Chinese celadon and porcelain, Burmese pottery, ivory, and a number of such other materials makes us understand about the early maritime interactions⁴¹. Another port-site of Chillika region is Gaurangapatna, with its early historical antiquity, yielded Persian turquoise glazed ware of 9th- 11th century CE.⁴² To further north, near Konark, was excavated the port-site of Khalakatapatana, which also yielded Chinese celadon, porcelain as well as Middle Eastern pottery of 9th- 10th century CE⁴³. Potagarh, another medieval port site to the south, again brought out two Chinese copper coins of late Tsong period. Exploration in the coastal tract below the Rushikulya river, revealed shreds of Chinese Celadon and so also the port site

Kalingapatnam, Salihundam and Thatlakonda (Vishskhapatnam) in further south on the ambit of ancient Kalinga yielded number of inscriptions, rouletted ware, knobbed Ware that indicates maritime intercourse of Southeast India and South and Southeast Asia.⁴⁴ However, towards 1014 CE, the Chola armies ransacked the eastern Chalukya, Kalinga, (Odisha) and Pala kingdom reaching the Ganges River. After victory over the coastal kingdoms and devastating their naval power, the Chola's attacked on Srivijaya kingdom. South Indian guilds become increasingly powerful and encroached on the commercial domain of Srivijaya. It is recorded that the first Chola embassy to China occurred in 1015 CE⁴⁵. It is also evident that there were a triangular trade network between Kalinga, Siam and Java around 11th-12th century CE and the kings of these countries had to periodically mount expeditions to put down Malaya and Bugi pirates operating in the Strait of Malacca in the Maritime Southeast Asia. The journey of Maritime trade and cultural interactions resulted in intimate encounters throughout the history of Odisha which is still reflected in the form of folk tales, traditions and rituals and Bali-yatra being celebrated in the sand bed of Mahanadi in Cuttack is one of them. The Arab writers have left behind volumes of accounts on Indo-Southeast Asian Maritime trade. Some of them visited these islands were Abu Dulaf Misar (940 CE), Masudi (943CE), and Iban Batuta (1225-54 CE). Subsequently again there were fierce contention between Arabian sailors, Portuguese, Dutch, French and English ships to become dominant in the Bay of Bengal and the internal riverine and coastal trade was thriving up to last part of 19th century. The remnants still visible in Ganjam Fort (Potagarh), Chandbali, Hukitola, Narendrapur, and Balasore coast which all need to be documented and interpreted

carefully to unravel the Maritime Past of East Coast.

The folklores and popular sayings about the sea voyages of the merchants of ancient Odisha, popularly known as *Sadhabas* in the past, are interesting chapters in the history of Odisha. The Odia *Mahabharata* of Sarala Das, *Prastaba Sindhu* of Dinakrishna and many other Odia literary texts of the late medieval period provide unmistakable evidence on the maritime trade and the ship building activities in those days. Numerous references to sea-voyages, including a mention about *Suvarna Boita* by Sarala Das, can be found in the stories and tales that have come down to us from antiquity.

The month of Kartika was favorable for sea voyage to the South East Asia with the onset of North Eastern Monsoon over Odisha. So in those days, the sailing ships, called *Boita*, used to start their journey within days after Diwali and return by the end of the month of Chaitra. The women folk of the *Sadhabas* were giving them an emotional and warm send off before they ventured in to the sea. This ceremony was called *Boita Bandana*. The ritualistic custom is even today observed as Bali Jatra on the Purnima (full moon day) of Kartika by floating small boats made of cork, colored paper and banana barks in the rivers and water bodies. At Chandrabhaga also this is celebrated with much pomp and ceremony on the beach. On Baliyatra festival of Kartika Purnima an Odia lyric is usually recited i.e. '*Aa-Ka-Ma-Bai, Pana-Gua- Thoi*'. Aa-Ka-Ma-Bai connotes the month of Asadha, Kartika, Margasira and Baisakha of Odia calendar. While the period from Asadha to Kartika (July-September) was the season of outgoing voyage and Magha to Baisakha was considered to be

the season of return voyage. Apart from other places of Odisha, Baliyatra is celebrated with much pomp and grandeur in the historic city of Cuttack for seven days from Kartika Purnima. However, the material evidences together with the traditions and rituals are the best evidence to showcase the rich tradition of Odisha which akin to the similar traditions still prevailed in Thailand and Bali. The interesting celebration of Kartika full moon day in the city Bangkok which I have witnessed in the year 2018 is that they celebrate with lighting the lamp in the night before the day of Kartika purnima celebration in Odisha which is known as Loyi Khartung. The legend and tradition associated with festival is that the Thai people is still waiting to welcome the princess who was missing in the Saphaya river. The princess happened to be from Kalinga. There is very interesting story still echoed in Thailand in relation to maritime link with Kalinga. More documentation and field research is the need of the day.

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Sir Henry Ricketts : The British Administrator Who Loved ‘Ooreeahs’

Sashadhara Nayak

Continuous Political subjugation of Odisha for centuries by the Afghans, the Mughals, the Marathas and the English led to the dismemberment of Odisha, resulting in loss of its distinct political identity and cultural decline. By historical accident, different parts of Odia-speaking tract were brought under different provinces during the British rule. Consequently, progress in agriculture, industry, trade, commerce, means of transport and communication, educational and social development, etc., of the province fell into neglect. Political decline and cultural decadence of Odisha reached nadir during the first half of British rule. In the second half of the 19th century, especially after the Na-Anka famine, establishment of the English schools, spread of English education, impact of Western civilization, emergence of English-educated middle class, development in means of transportation and communication, establishment of the printing press and growth of newspapers, growth of numerous political, literary and cultural associations, etc., led to emergence of political consciousness and movement for separate Odia identity. The contributions of some British administrators working in the then Odisha were historically significant for igniting this socio-political renaissance and upsurge for separate identity. John Beams and Ravenshaw will ever be

remembered for their efforts towards growth of education, health and the preservation of the Odia script, language and culture. Among others, Wilkinson, Collector of Puri, Henry Ricketts, the first Collector of Balasore and later the commissioner of Cuttack, J.S. Mill and Shore, the commissioners of Cuttack and T.J. Maltby are worth-mentioning. The contributions of these civilian officers were appreciated in an article published in the ‘Utkal Putra’ in the 1874. The article praised Mr. Mill for establishing Cuttack English School for the natives, Shore for making ample contributions in sphere of education, administration and development of Odisha and Mr. Ricketts for employing the native Odias in higher Government posts. Wilkinson had done great service for Odisha by his work of Khurdah settlement and other works.¹ In the present article, an attempt is made to shed some lights on Henry Ricketts, who loved Balasore and his *Ooreeahs* very much.

Born on 25 March 1802 at Lainston, near Winchester of England, Sir Henry Ricketts was educated at Winchester College. After training at Haileybury College of English East India company, he entered the Bengal Civil Service in 1821. After spending some years in sub-ordinate offices in the Revenue & Judicial Department of Bengal, he was appointed as the Joint Magistrate or

Deputy Collector in Balasore in 1827. He joined as the Collector and District Magistrate of the newly formed Balasore District on 23 October 1828.²

While working as Collector of Balasore district, he personally streamlined the newly introduced work of survey and settlement of land in the district. He had developed deep sympathy for native races. His affection for the natives of Balasore was remarkable. The racial arrogance and hatred of colonial officers towards natives during the British rule is well-known. But in his writings, Toynbee described Ricketts as 'A friend of native'.³ Ricketts had deep affection for the native Odias and above all, for the people of Balasore. The local natives like Abdul Rauf and Barjyananda Das were his friends. During his stay at Balasore as District Magistrate, his wife Jane died prematurely in 1830 and was buried at Barabati in Balasore. So Balasore was always dear to his heart.

During his incumbency as Commissioner of Cuttack, he spent most of his time at Balasore. The natives of Balasore had cherished the memory of Ricketts even after his transfer from the district. This was narrated by the 'Utkal Deepika' in its publication in September issue of 1866. The Deepika reiterated that Mr. Ricketts developed so much affection for Balasore and its people that he spent much time there during his incumbency as Commissioner.⁴ Ricketts was much-talked-about among the people of Balasore.⁵ Even after his departure from India, he did not fail to keep in touch with his friends in Odisha and used to write letters to them.⁶

When he was Collector of Balasore, a catastrophic storm hit the district on the evening and night of the 31 October 1831, causing devastation. Along the coast, the villages were submerged by a tidal wave of 7 to 15 feet height,

creating breaches in the Trunk road situated at a distance of nine miles from the coast.⁷ "The whole country, for many miles on the sea coast, was inundated and in this district alone, upwards of 22,000 lives were lost and more than 50,000 head of cattle."⁸ "Dead bodies of men, women and children were found after the storm, interspersed with thousands of wild beasts, birds and bullocks...."⁹ District Magistrate Ricketts travelled throughout the district to assess the damage, oversee relief and restoration work and was highly praised by the public.¹⁰ Until the next summer, Ricketts was pre-occupied with relief and rehabilitation work. In October 1832, there was another cyclone followed by drought in 1833. "In these three years, 50,000 human beings were destroyed by drowning and starving."¹¹ Ricketts had organized relief operation in a systematic manner. The statement of Padmo lochan Mandal, a famous zamindar of Balasore, recorded before the Relief Commission bears to this fact. He stated, "I remember in Rickett's time, when there was great calamity from inundation from sea, rice was bought at Calcutta and brought here. Houses of relief were established every three or four coss and such arrangements were made that everyone could eat and then go to sleep at home..."¹² He stated that the relief work during Na-anka was not as systematic as it used to be at the time of Ricketts. During famine at Balasore in 1836, Ricketts collected charitable donations from Calcutta and other places and could save starving multitudes by providing relief.¹³ He later wrote in his account: "When magistrate of Balasore, on occurrence of famine, I caused the people to be actually counted house by house."¹⁴

The Chudamani Canal which was dug for transportation of salt in the district was named as the Ricketts Canal. The canal was completed in

1826, but the canal was named after him because of his love for district.¹⁵ He displayed his prudence in resolving the disturbance in the Princely States of Nilgiri and Mayurbhanj. In 1836, he was appointed Commissioner of Cuttack; he was instrumental in helping the Madras Government in suppression of the Ghumsar uprising. During his incumbency as commissioner, famine gripped Cuttack in 1836. He took sufficient measures to alleviate sufferings of the people. He brought rice from outside and sold at Cuttack to overcome scarcity. He distributed clothes and blankets among the people.¹⁶

After becoming Commissioner, he also looked after the state's land survey and land settlement. He appointed the native Odias to the higher positions in the settlement work. Earlier, in 1825, Sterling described the Odias as foolish and ignorant people. Due to non-availability of English-educated Odias, the Bengalis in the north and the Telugus in the south had filled the posts of the government jobs.¹⁷ Even the Magistrate of Cuttack wrote in 1821, "Scarcely a single real Odia receives a salary of more than Rs.10 perensem, but several are naturalized Bengalis or Musalmans, I always give a preference to Odias, but at this moment I scarcely know a single Odia possessing qualification to fit him for being a common muharrir."¹⁸ This state of affairs changed during the time of Ricketts. He deployed Odias for settlement work and promoted some of them to posts of Deputy Collectors. The Utkal Dipika praised him for this work and stated that the Odias were greatly indebted to Ricketts for allowing them to be absorbed in Government jobs.¹⁹ Ricketts was full of praises for the efficiency of the Odia Deputy Collectors in settlement work. He wrote "... .. in a few years nearly all administrative offices in the province were held by Oorians... ..All the details of the Settlement

of the Province were conducted by Oorish Deputy Collectors: and it is not too much to say, that their excellent conduct, the efficiency and the honesty which trust and sympathy produced, had beneficial effect on the fortunes of their fellow countrymen The manner in which they acquitted themselves called for the warmest encomiums of the superior authorities, repeated again and again.²⁰

After spending about 13 years in Odisha, he was transferred to the Chittagong Division in 1841. He was also a member of the Calcutta Revenue Board from 1849 to 1856. While a member of the Board, he proposed the waiver of the land revenue in the event of natural calamity; his proposal was not accepted by the Bengal Government. He issued direction to the Superintendent of the Garjat Mahals to appoint only Odias as assistants in Commissioner office for better administration of Garjat Mahals. He approved the then Angul Tahsildar Brahmananda Das' salary to Rs.500 and Rs.100 per month for the establishment work.²¹

Even after his retirement from Government service in 1860, Ricketts's attachment for Odisha in general and Balasore in particular remained intact. At the time of plight and sufferings of the people during the Na-Anka famine, he sent Rs.200 to Odisha for relief work. He also wrote a letter stating that the people of Balasore might have forgotten him but he fondly cherished the memory of the people of Balasore.²²

A few years after his retirement from India, an article titled 'Orissa Past & Present' was published in the Calcutta Review, belittling the Odias as stupid, lazy and ignorant race. In response to it, Ricketts wrote a strong-worded protest letter to the editor of the Calcutta Review. He objected to such portrayal of Odias. He stated that the opinion of the author of the above article

was based on the earlier description of the Odias by Sterling some years ago. Sterling had held such view because due to non-availability of English-educated Odias, the Bengalis in the north and the Telugus in the south filled all the Government jobs. During the time of Wilkinson, Mill and his tenure (Ricketts'), many qualified Odias were employed in Government jobs. Ricketts wrote that the Odia Deputy Collectors had shown their capability and efficiency in the survey and settlement work. He reiterated that the persons who carried Palinki in Calcutta in the hot summer months or sweated to pull pankha in the bungalow of senior administrative officers were never lazy. "I lived among the Ooriahs for twelve years; one of the most pleasing recollections of my life is the treatment I received at their hands; I must not allow such attacks to pass unnoticed"²³ The Utkal Dipika also carried the news of protest by Ricketts in its publication.²⁴

Ricketts died on 25 February 1886, in the eighty-fourth year of his age. Deeply mourning his death, the Utkal Dipika wrote that Ricketts was a great friend of Odisha who had done much for development of Odisha and Odias.²⁵⁻²⁶ He was buried in the churchyard at Twyford near Winchester. Before his death, he had expressed his last wish that his name and date of his death, with the following words, "He never forgot Balasore & Ooreeahs (Uriyas)" should be inscribed on the monument put up to his wife at Balasore. This was done at Balasore by native officials as per his wish. What else could be better example of his love for Odias !

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Paradip Port : A Decade of Dazzling Development (2011-2021)

Prabhat Kumar Nanda

International maritime sector has witnessed five and half decades of elevating operation of Paradip Port. The 3rd January, 1962 was the red letter day in the history of Port, as Pandit Jawaharlal Nehru, the first Prime Minister of India laid the foundation stone of the first Major port commissioned on the east coast after independence of our country. The world famous visionary Statesman the then Chief Minister of Odisha, Biju Patnaik had the august presence in the decorous celebration. In the debut year of operation during the year 1966-67, Paradip port handled 0.08 million tons of cargo through the available single berth (Iron One Handling Berth). During fifty five years, Paradip Port is equipped with twenty four berths and has the glory of handling 114,55

million tons of cargo. During 1966-67 financial year, Paradip port was a mono commodity handling port for export of iron ore. At present port is handling varieties of cargo i.e. Iron ore, Thermal Coal, Coking Coal, Gypsum, steel, containerized cargo, FRM (Fertilizer Raw Material) and other commodities.

Out of twenty four berths, two berths are mechanized iron ore berths, and one berth is used handling iron pillet. Two berths are meant for dealing thermal coal and another berth is designed

BERTH PARTICULARS

Berth Name, No.	Type of Berth	Rated Capacity (in MMT)	Usable Capacity (in MMT)	Designed/ depth (mtrs.)	Permissible draft (mtrs.)	Quay length (mtrs.)
North Oil Jetty	POL	6.20	4.30	14.50	13.00	Dolphin to Dolphin 360 m
New Iron Ore Berth	Iron Ore	22.00	15.40	17.10	14.50	370
New Coal Import Berth	Coking Coal	Under Construction				370
Iron Ore Berth	Iron Ore	15.60	10.90	13.50	13.00	210 (D to D 320 m)
Coal Berth-1	Thermal Coal	20.60	14.40	15.00	15.00	260
Coal Berth-2	Thermal Coal	20.60	14.40	15.00	14.50	260
East Quay-3	General Cargo	3.20	2.20	15.00	13.00	685
East Quay-2	General Cargo	3.20	2.20	12.00	11.50	
East Quay-1	General Cargo	3.20	2.20	11.50	11.00	
South Quay	General Cargo	8.50	6.00	13.00	12.50	270
Central Quay-1	General Cargo	9.00	6.30	15.00	14.50	750
Central Quay-2	General Cargo	9.00	6.30	15.00	14.50	
Central Quay-3	Iron Pellet	22.40	15.70	15.00	14.50	
Multi-Purpose Berth	General Cargo	8.10	5.70	15.00	14.50	250
Fertiliser Berth-2	Fertiliser Raw Materials	6.60	4.60	15.00	14.50	230
Fertiliser Berth-1	Fertiliser Raw Materials	4.20	2.90	15.00	14.50	250
PICT	Clean Cargo & Containers	5.00	4.25	17.10	14.50	450
South Oil Jetty	POL	6.10	4.30	17.10	14.50	210 (D to D 360 m)
SPM Terminal-1	Crude Oil	129.00	60.20	21.00		
SPM Terminal-2	Crude Oil			23.00		
SPM Terminal-3	Crude Oil			23.00		
RO-RO Jetty	Project Cargo	--	--	5.50	5.50	50
Mooring Berth (Off FB-1)	Edible Oil	--	--	--	7.50	130
North Quay-2	General Cargo	--	--	--	7.50	130
		302.50	182.25			

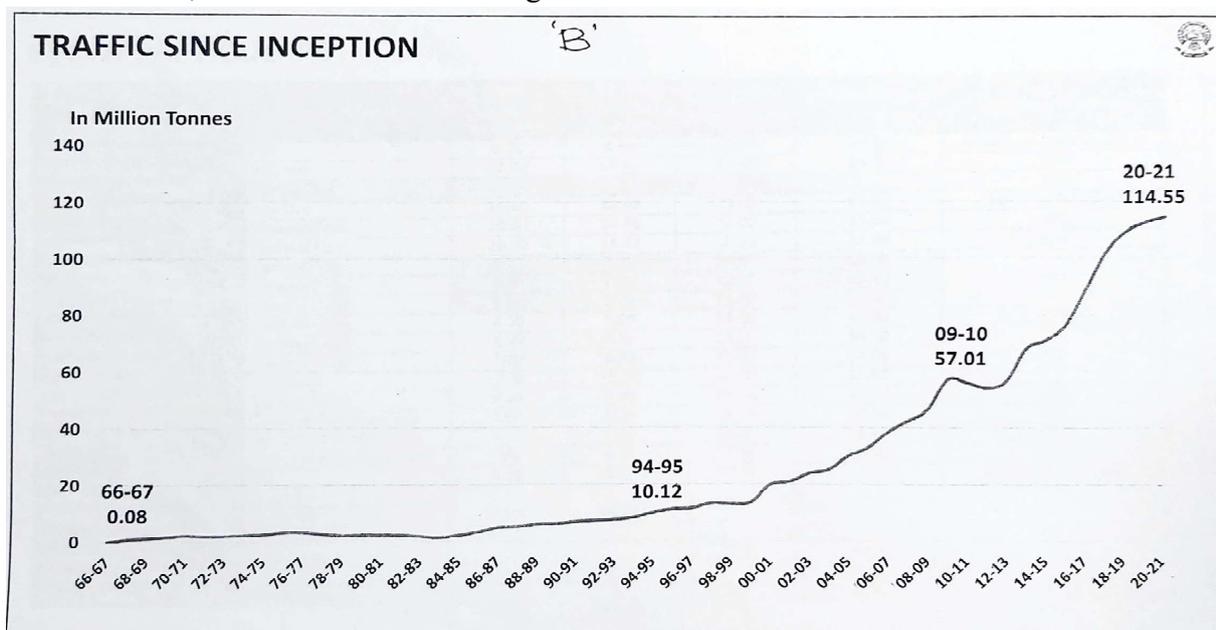
to handle coking coal. Eight berths are available for dealing with varieties of commodities where as two berths handle fertilizer raw materials. Six berths specifically handle oil cargo and one berth is used to deal with clean cargo and containers. One RO-RO Jetty (Roll on Roll off), cater to the need of handling project cargoes is available in the port. The details of different berths are given in a tabular form 'A'.

A dazzling decade (Financial year 2011-12 to 2020-21) was the years of lighting and days of dreams for Paradip Port. Utilizing the most conducive natural infrastructure i.e. the draught (Depth), abundant space for cargo handling and movement of vehicular traffic, large turning circle and fully mechanised berths, Paradip Port has put another feather on her cap during the last decorous decade. The port which handled 57.01 million tons of cargo in the financial year 2009-10, had mammoth development to handle double the volume i.e, 114.55 million tons during the

financial year 2020-21. **Out of twelve major ports of India, no port has experienced such continuous growth as that of Paradip Port.**

The growth of traffic volume from the period of inception of the port is shown in a graph 'B'. The continuous elevating success depicts the excellent port administration, dedicated workforce, proper maintenance of infrastructure by skilled personnel and the sole support of stakeholders.

Paradip Port has many supportive in virtues to manoeuvre dazzling results in future fostering the excellent position in world shipping. Paradip Port is the largest port in India in terms of rated capacity. The port has the highest out put per ship berth day in bulk cargo handling. The port has largest railway terminal in India in terms of rakes handled. Paradip Port has the largest crude oil handling facility in our country. It is the largest dry bulk cargo handling port. As far as the

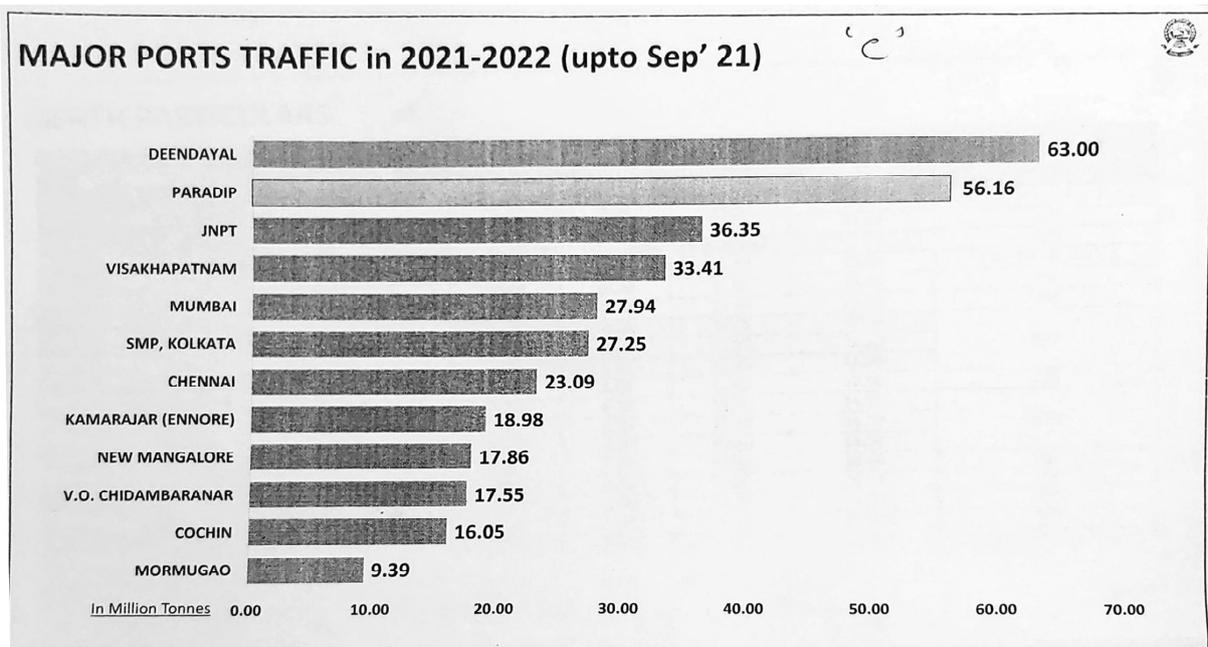


commercial aspect taken into consideration Paradip Port with the lowest charges in Indian major ports having rates lower than international counterparts.

At present by the end of September 2021, of current financial year (2021-22), Paradip Port secured second position in cargo handling next to Deendayal Port (former Kandla Port). Deendayal Port has handled 63.00 million tons of cargo, where as Paradip has handled 56.16 million tons during the corresponding period. Jawaharlal Nehru Port has secured the third position by handling 36.41 million tons of cargo. Cargo handled in ports are broadly divided in two categories, i.e. general bulk cargo and petroleum products (Oil cargo). It is easier to handle oil cargo as the loading and unloading is carried out by pipes with mechanical pressure. It requires less man power utilisation, where as handling of bulk cargo (ores, machineries, food grains and miscellaneous cargo) requires the placement of skilled workers

and heavy mechanical equipments. Most of the cargo by volume handled by Deendayal Port is oil cargo, where as Paradip Port handled about 29% oil cargo of total volume. Hence as far as handling of general cargo is concerned in major ports of India, Paradip has handled highest volume fostering as a balanced port i.e., not to depend solely on a particular cargo. A comparative statement of cargo handling by all major ports of India is shown in a bar chart form, 'C'.

Overall efficiency of a port is assessed by out put per ship berth day. The volume of cargo handled during 24 hours in particular ship is termed as out put per ship berth day. Paradip has a record of achieving 25861 metric tones of out put per ship among major ports of India. Another parameter to assess efficiency of a port is Average Turn Round Time (in hours), i.e. time taken by a ship to enter the port, complete loading or unloading and to return back to the sea after



completion of maritime formalities. Paradip Port has also created record by continuous decrease of such time. It is calculated as 57.46 hours during the period upto September 2021 in the current financial year and accepted as national major port record. Such time was 119.76 hours in the financial year 2016-17. Hence the spectacular achievements have been experienced in different parameters of port functioning during last ten years by Paradip Port.

During the last decade a number of projects pertaining to port capacity expansion were carried out in Paradip Port. Unless the port capacity in different spheres are not developed, it can not match with international maritime standard. Considering such aspects, Paradip has taken important projects to enhance Port capacity. The Development of Multipurpose Berth to handle clean cargo including containers at a cost of 430.78 crore rupees was completed on the 3rd April, 2019. The annual capacity of such berth is 5 Million Tones of cargo, having the berth length of 450 mts and the draft of 16mts. It is fully equipped with mechanical facilities for handling clean cargo and containers.

Another project of the Development of New Iron Ore Berth to handle iron ore at the cost of 740.19 crore of rupees was completed on the 31st March 2020. It paves the capacity of 10 million Tons per annum having the length of 370 mts and 16 mts draft. The berth is equipped with sophisticated ancillary facilities for unloading iron ore from rail rakes and loading into ships through conveyor system.

Mechanization of East Quay 1, 2 and 3 berths to handle coal exports at a coast of

1437.76 crores rupees is under construction. It will enhance the capacity of 30 million Tons per annum having the berth length of 686 mts and 15 mts draft. Berths will have all equipments and ancillary facilities for unloading coal from rakes and loading into ships through conveyor system.

Development of new coal berth project at a cost of 655.56 crore rupees for handling coal imports is under construction. After completion, the berth will have the capacity of handling 10 million tons per annum. It will have the length of 370 mts and 16 mts draft with all equipments and ancillary facilities for loading and unloading coal from ships and loading into rakes through conveyor system. Draft is simply the distance between the waterline and the deepest point of the ship. Draft is one of the most important commercial infrastructures of every modern and successful port. Depending on the depth, the acceptable sized ships can enter the port and accept the loading of cargoes. The higher the depth, bigger size ships can enter the port and bear the load of high volume cargoes. A port having the depth of 15 mts can safely accept the ship to take a load of one lakh ton cargo. Paradip Port is designed to handle bigger ships having the capacity to sail with one lakh ton cargo. After modernisation of the port, vessels with one lakh fifty thousand metric tons of cargo will be handled at Paradip.

The project of deepening and optimization of inner harbor facilities includes development of Western Dock to handle cape size ships. Capesize ships are the largest dry cargo ships. They are too large to transit the Suez canal or Panama canal and to pass to traverse between

pacific and Atlantic oceans. There are 523 capesize ships travelling globally, connected to 121 ports in 31 countries. About 84 percent of capesize ships are between 2,00,000 to 3,00,000 DWT. The DWT is known as Dead Weight Tonnage in maritime parlance. It is a measurement of how much weight, a ship can carry. It is the sum of the weights of cargoes, fuel, fresh water, ballast water, provisions (food etc), passengers and crew.

The deepening project of inner harbor will have the cost of 3004.63 crore rupees. It will have the capacity of 25 million tons per annum having the berth length of 1260 mt with the draft of 18 mts. It will handle all dry bulk break bulk cargo, both export and import through fully mechanized facilities.

Projects for the development of port connectivity has been properly looked after by Paradip Port Trust. Haridaspur Paradip Rail Line Project at a cost of 2700 crore rupees was completed on the 12th August 2020. It is an 82 kms railway line connecting Paradip Port to the rich iron ore mining hinterland. The port has handled 53.45 million tons of rail traffic in the financial year 2020-21.

The project of development of 2nd exit road cum flyover as part of additional port connectivity pronational highway at a cost of 93 crore rupees is under construction. The second exit road cum flyover will serve as an alternative entry and exit option from the port facilitating safe and congestion free movement of vehicles.

No port can flourish without the support of cargo generating industries in the port

hinterland. In order to expedite such endeavour, Numaligarh Refinery Limited Storage Terminal at the cost of 500 crore rupees has been geared up. The project is implemented by Numaligarh Refinery Limited for construction of their crude Oil Storage Terminal with the guidance of Paradip Port Trust. In the first phase 200 acres of land has been allotted to the company.

A number of initiatives have been taken by Paradip Port Trust to improve ease of doing business in the port. To save time, online berth allotment and online allotment of cargo plots have been enforced. There is the provision of container scanner to detect cargo handled in the container. Automated Gate Entry System with scanning enforced in the port to improve efficiency. To avail port facilities smart metering with prepaid cards have been introduced. There is the provision of mobile App and 100% cashless transaction in port operation.

Paradip Port is a safe port having underground cable network, 100% illumination inside dock and concrete road network inside the port. Paradip Port is the only major port of India to ban two wheelers movement inside harbor area to avoid accidents. For conveyance facility, Odisha State Road Transport Corporation provides bus services inside harbour area. Audio Visual Alarm signal provision has been provided in at all level crossings for safety and all substations have been equipped with high power generators for uninterrupted supply of electricity and water. The first de-salination plant of 10 MLD capacity in Odisha has been setup at Paradip Port.

In order to cater to the need of international standard environment protection a

number of steps have been taken by Paradip Port Trust during the last decade. The roof top Solar Power generation, dry fogging system of Mechanised Coal Handling Plant, setting up of three Swerage Treatment Plant, Five Kilometer long net barrier to arrest the flow of dust from port area to the town, plantation of more than one lakh trees have been undertaken by Paradip Port Trust effectively. For development of low land, the filling have been done with dredged materials to avoid swampy atmosphere. Shore power supply to all marine crafts have been ensured to reduce oil consumption. Oil pollution response equipment, vehicles tyre washing system, road sweeping machine and mist canon have been procured and effectively utilised to arrest environment pollution.

All above achievements in port operation, debonair persuasion in enhancing the port capacity, communication, pollution control and effective steps taken to safeguard the future interest of Paradip Port, during last decade can be envisaged as a Decade of Dazzling Development promising for paramount decades to come in future.

Source : Paradip Port Trust

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Autobiography or Autofiction : Fakir Mohan Senapati's *Atmacharita*

Prof. Tanutrushna Panigrahi

Although autobiography has been existing for more than two hundred years for now or much earlier with the example of *The Confessions of Saint Augustine*, which is widely considered as the first western Christian autobiography, the form started to receive critical attention as a literary genre much later. Stephen A. Shapiro in his essay *The Dark Continent of Literature*:

Autobiography provides an explanation for the delay and neglect when he says: '...literary cartographers have long been precisely mapping the continents of fiction, drama, and poetry, all the while pretending that autobiography was not there or simply coloring it a toneless black. Aristotle makes no mention of autobiography: therefore it does not exist. However, from St. Augustine to Sartre, autobiography is a form of literary art... The value of the autobiographical tradition, its relevance to our lives, lies in its capacity to furnish us with models and mirrors that can help us to accept, celebrate, and transform our lives as individuals...' ¹ Critical history of autobiography began to change in the eighteenth century. The century witnessed the rise of autobiography with writers like Bunyan, Rousseau, Locke, Hume, Franklin, Gibbon, Sterne, Boswell, with their carefully crafted classic models of the same. Autobiography as a serious

form of literary art gradually received the critics' and the autobiographers' attention and intellectual investment only from the middle decades of the twentieth century. The modern autobiographers took a different view of the genre and established that an autobiographer does not just copy himself in his book but invents, creates and skillfully crafts a narrative around his life story. He necessarily moves from an aggregation of biographical detail to an auto-recreation and re-comprehension of life experiences. James Olney observes that much of the 'early criticism of the autobiographical mode was directed to the question of autos—how the act of autobiography is at once a discovery, a creation, and an imitation of the self ...' which he thought is 'the most important explanations for the critical turn toward autobiography as literature,' and this 'shift of attention from bios to autos—from the life to the self—was... largely responsible for opening things up and turning them in a philosophical, psychological, and literary direction.' ²

The revisionist attention to the form of autobiography brought a new lease of literary value and with a rush of autobiographies more valuable analyses on the genre began emerging. One of the very important critical turns was to place the form on the pedestal of novel, historical narrative

and fictions. It was a result of the phenomenon that late nineteenth century onwards the autobiography criticism started to be impacted by the modern empiricism and slowly and gradually the distinctions between historical and mimetic narratives and novels/fictions got more and more faint and blurred. Scholes and Kellogg in their book *The Nature of Narrative* wrote, 'After the final, powerful impact of the autobiography, for example, on the novels of Proust, Joyce, Lawrence, Wolfe, and Fitzgerald... a clear distinction between the confession and the novel can no longer be sustained. The convergence of the novel with the history, biography, and autobiography has resulted ... from a modern skepticism of knowing anything about human affairs in an entirely objective (non-fictional) way.'³ With more and more critics, like Scholes and his colleagues reviewing the differences between biographies, biographical novels and novels and their relations between themselves and to literature. The genre of autobiography came to be defined as 'an imaginative organization of experience for aesthetic and for various intellectual and moral purposes.'⁴ It received its strength from the fortified literary status that it is not simply a portrait of the self, but an artistic interpretation of the evolution of the self in relation to the world at particular moments. Roy Pascal in his book *Design and Truth in Autobiography* contends that what the 'autobiography does is just as important as what the author says: that is, as in a poem or a novel, a statement may be reinforced, satirized, undermined, or balanced by an action. The story-structure of autobiography is its mode of presenting truth - truth as process, drama, image, symbolic form.'⁵ Pascal does of course mentions the differences of the two forms; the novel and the autobiography when he says: 'the former is free to explore the extreme ranges of

man's possible experience with only its own coherent development as a formal limitation, while the autobiography is bound to actual experience and practical wisdom, to the evolution of its own point.'⁶ However, the actual experience of the autobiographer is given an artistic life, a narrative form as in a novel. As in a poem or novel, the narrative functions in relation to theme, earlier experience and later and prospective experiences the autobiography does so and can be called literary art and the autobiographer a literary artist. A passage from Rousseau's *confessions* gives us an example of how an autobiographer is an artist and how a reader is responsible as well as free to interpret the life-narrative of the autobiographer:

'These long details of my early youth may well seem extremely childish, and I am sorry for it. Although in certain respects I have been a man since birth, I was for a long time, and still am, a child in many others. I never promised to present the public with a great personage. I promised to depict myself as I am; and to know me in my latter years it is necessary to have known me well in my youth. As objects generally make less impression on me than does the memory of them, and as all my ideas take pictorial form, the first features to engrave themselves on my mind have remained there, and such as have subsequently imprinted themselves have combined with these rather than obliterated them. There is a certain sequence of impressions and ideas which modify those that follow them, and it is necessary to know the original set before passing any judgments.

I endeavor in all cases to explain the prime causes, in order to convey the interrelation of results. I should like in some way to make my soul transparent to the reader's eye, and for that purpose I am trying to present it from all points of view, to show it in all lights, and to contrive that

none of its movements shall escape his notice, so that he may judge for himself of the principle which has produced them. If I made myself responsible for the result and said to him, "Such is my character," he might suppose, if not that I am deceiving him, at least that I am deceiving myself. But by relating to him in simple detail all that has happened to me, all that I have done, all that I have felt, I cannot lead him into error, unless willfully; and even if I wish to, I shall not easily succeed by this method. His task is to assemble these elements and to assess the being who is made up of them. The summing-up must be his'⁷

Rousseau presents a creative complexity here, complexity between his presenting of "all points of view" and the readers' interpretations of the presentations; 'His task is to assemble these elements and to assess the being who is made up of them. The summing-up must be his' The tension and ambiguity between the presentations and the interpretations look forward to the novelistic dimension. Moreover, the anticipation factor has been created for the narrative suspense by Rousseau like other great autobiographers such as St. Augustine. Presenting one's life as a dramatic series of incidents is to tell a story, and thus the autobiographer tells a story, a story of actual life-lived. This performs as one of the aesthetic functions of literature, although it is not the major function of the autobiography form.

Another important aspect of the autobiography form to be considered as a novel is not to follow the convention of chronology. Artists have the freedom to play with fact, information and imagination and the life processes in the autobiography can be recorded, presented and played with in the most creative manner so that those can become symbols, revealing

moments, epiphanies, micro-literary episodes and transformative tools. It is interesting to read Stendhal saying in *The Life of Henry Brulard*, in the beginning, 'I sat down on the steps of San Pietro and there I dreamed for an hour or two about this idea: I am going to be fifty years old, it would be good time to know me. What have I been, what am I, in truth I would be very embarrassed to say that.' and towards the end of the second chapter, 'After all these general observations, I will now be born.'⁸ Stephen Spender emphatically writes in his autobiography, *World Within World*, 'That autobiographers have to begin by plunging into their earliest memories is surely an unnecessary convention.'⁹ And he says he is irritated by many autobiographies because of their detailed attention to childhood memories and chronology of events. It is also inappropriate to say autobiographies cannot use conventional representations of birth, growth, developments, achievements of the autobiographer, but those can be presented as a part of the creative component of the whole unified work.

II

Negotiating Fakir Mohan Senapati's *Atmacharita* within the critical premise discussed in the preceding paragraphs can highlight several important dimensions of it. It can be read as an autobiography that transcends the limitations and limits of the form and has the transformative powers of a novel, contains the fascinating points of intersection between autobiography and novel, between history and autobiography and between history and fiction. The first autobiography in Odia, written in the second decade of the twentieth century (1916-17), *Atmacharita* is the first all in one text: a full-fledged human drama, a nineteenth century Odia history, the first Odia

autofiction and an autobiographical novel. Fakir Mohan does not confine his writing only to the biographical representations but narrates the self's journey, evolution of him as an individual, responding to the world around him, and discovers, rediscovers lifetransactions in relation to the contemporary realities. His poetic self discovers the historical processes in a to and fro, back and forth movement while creating both personal and historical narratives. *Atmacharita* is no slave to the historical chronology and thus the convention of the genre is ignored, of course for better effects, better literary merit as Spender suggests in his own autobiography. The beginning of the book is not the beginning of his earliest childhood he remembers and the end appears abrupt. In a passage in chapter two named *Shaishabara Katha*, the autobiographer Fakir Mohan recollects the memory of the death of his parents and crosses the entire history of his life to now and sadly comment how he has been lonely and tormented all these years and now writing his autobiography in an infirm condition when memory fails him. The text nurtures authorial silences, narrative gaps, unexplained jumps and historical discontinuities. The historical accuracy and continuity, one can argue, are achieved by an author through temporal devices of the historical time and not the experience-time. An artist moves beyond the trajectory of a life from birth to death. He uses or interprets the historical time not through calendars, documents, archives, contemporaries, but by how he/she relates to the past. Fakir Mohan, as an autobiographer, can be more appreciated when we revisit what St. Augustine said about memory centuries ago that it becomes a vast, immeasurable sanctuary and parts of it must be overlooked.

The structure and form of *Atmacharita* are not in the line of expected principles of many

autobiographies. Chapters are episodic, short and epiphanical, like glimpses into a deeper socio-psychological conditions, a peep into characters around him amounting to the craft of contemporary microfiction. The nineteenth century Odisha forms part of the narrative as Senapati turns it in a philosophical, psychological, and historical direction. Very often, the autobiographer is objective, detached and dispassionate in his presentations that urge the readers to interpret and take positions, essentially a novelistic stand. Chapters in *Atmacharita* indicate autonomy and an absence of contextual interdependence although in the larger fabric of the text they are unified into one single narrative. Fakir Mohan deliberately adopted this style or it was unintentional, if it is the craftsperson's error and immaturity or the editors' slips should not be the concern of the reader to appreciate the work.

Representation of memory by the autobiographer is not a linear representation, and "The past is evidently not transparently and unproblematically available."¹⁰ Andreas Huyssen in *Twilight Memories* writes beautifully about how memory pattern works in an autobiography:

"It does not require much theoretical sophistication to see that all representation ... is based on memory. . . The past is not simply there in memory, but it must be articulated to become memory. The fissure that opens up between experiencing an event and remembering it in representation is unavoidable. Rather than lamenting or ignoring it, this split should be understood as a powerful stimulant for cultural and artistic activity"¹¹

What Huyssen suggests is that the history based narratives also are creative and by extension, autobiographies are creative pieces and

the assumptions that they are non-imaginative are wrong.

Atmasharita was written by Senapati at the fag end of both his life and career. It was composed by him with a fallible memory and infirm health condition and historical chronology is certainly not well maintained. But the *fissure* that Huysen refers to is applicable in the case of *Atmasharita* and to be taken as “artistic activity” and should not be considered a gap in the literary whole. In his editorial introduction, Debendra Kumar Dash, the eminent Fakirmohan scholar, critic and editor makes an important observation. He says Fakir Mohan followed Maharshi Debendranath’s Thakur’s *Atma Jibani*, published in 1898, as his model to a great extent.

In Debendranath’s *Atma Jibani* one finds a selective drop of the historical chronology of events in the representations of the earliest memories and it is a deliberate attempt to ignore the convention. Fakir Mohan too begins from his early young age, from a chapter called “kacherire karjyasiksha”, not from his early childhood and thus both autobiographies move beyond the limiting principles of a conventional autobiography genre. Dash further says that Fakir Mohan’s 10 presentation style, topic selection for each chapter and beginning and end of the text are all carefully and intentionally designed so.¹² This throws much

light on the unmatched merit and modernity of the text. Fakir Mohan critics, including Boulton, are of the opinion that *Atmasharita* is a better representation of contemporary Odia history than the portrayal of life evolved of Fakir Mohan Senapati. One can see that it is just the reverse of the opinions and the historical narrative and the bio-narrative are continuously intersecting to create meaning and not allow dominance from either of them.

Like the poet, like the novelist, the autobiographer is a maker. The difficulties and challenges encountered by them are all shared ones. The imagination in the fictionists and the autobiographers is all alike. Fakir Mohan is a fictionist, a novelist and above all one of the finest literary artists. His own complex imagination, unmatched observations of life, his historical sense and his ability to capture and recapture, comprehend and recomprehend make him an incredibly complex creation whose insights, career, life story and understanding of human minds make him the source of our understanding of the nineteenth century Odisha and the Odia civilisation.

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Tourism and Odisha : A Comprehensive Study

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Tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal, professional or for business purposes. It also means travelling of people for pleasure, fun or to see something of interest to them. Tourism boosts the revenue of the economy, creates thousands of jobs, develop infrastructure, and plants a sense of cultural exchange. Tourism may be of international, national or regional tourism. With these briefs, a trial has been made in this article to highlight on the present day status of Tourism in the state Odisha, the impact of COVID pandemic in the world tourism sector. Towards the end it also focuses on the performance and growth of tourism sector of Odisha and highlights on the plans and proposals for improving the sector. Odisha is a State of rich tourist hubs. The State has a very good strategic and geographical location. The State has marvelous demographic composition carrying very important historical, cultural and plenty of beautiful natural sites to visit. It has sites like Atri and Taptapani, the hot Sulphur springs, Balighai; a lovely sea side resort, Banapur; the famous shrine of Goddess Bhagwati, Banki; a traditional spot of Shaktism named Maa Charchika, Bhitarkanika; the crocodile sanctuary attracting a large number of tourists of all kinds



in to the state. The mythological city Bhubaneswar is also the capital of Odisha is very much famous for its ancient Shaiva temples like Lingaraj, Mukteswara, Rajarani, Parsurameswar, Vaital, Brahmeswara, Kedara Gouri, etc. Similarly, the Chandipur the calm and quite silver sandy beach of Baleswar, Asia's largest lake Chilka, give no bound pleasure to the domestic and tourists from abroad. Hari Shankar, the Temple on the Gandhamardan hills, Nrusinghnath temple and Buddhist shrines are located in western part of Odisha also attracting visitors of national and international importance. Some other tourist spots are Hirapur's Chousathi Yogini, Hirakud dam, Jajapur's Maa Biraja, Tara Tarini, Bhairabi, Khambeswari, etc. the Shakti peethas, Jau Gada, the rock edict, Kapilas, the Saiva kshetra, Khandagiri, Konark the Black Pagoda, Khichingi, the Kichakeswari temple, Ratnagiri, Lalitagiri Udayagiri (Buddhist complex), Nandan Kanan, the zoological park with a botanical garden of very

rare medicinal plants are also the invaluable spots of Odisha in the eyes of visitors. Other attractive spots like Pipili, Paralakhemundi, Belguntha, Mathura, Brahampur are carrying different handicraft centers, Puri; the world famous Jagannatha temple, Similipal, the tiger Sanctuary, Ranipur Jhariyal (Chousathi Yogini), Remuna for Khirachora Gopinath temple, Sakhigopal, Sonepur, Gopalpur, Paluru port are bearing a lot of tourist importance. Beyond these there are also numerous other places like Potagada, Jaugada, Barabati, Barunai forts and gadajats also carry a lot of legendary, historical and military importance. Odisha a state with different types of tribal inhabitants looks very decent in their rare cultural celebrations which are seemed to be the resourceful wealth for Indian tourism.

India in World Tourism Sector :

The world tourism sector is suppressed by the pandemic of Covid-19 at present and brings a lot of devastation to the physical and financial world of tourism. Till today the sector is also not receiving a green signal to flourish. It is seen from the various statistical reports that out of 140 countries, the first top ten countries in attracting tourists (2019) were France, Spain, United States, China, Italy, Turkey, Mexico, Thailand, Germany and United Kingdom. Similarly, in earning tourist revenue the first 10 countries were United States, Spain, France, Thailand, United Kingdom, Italy, Japan, Australia, Germany and China. In 2019, there were worldwide 1459 billion international tourist arrivals. The Travel and Tourism Competitiveness Report, 2019 ranked our India 34th out of 140 countries. India's position was improved by six places over to 2017 report. Tourism generated an income of 16.91 lakh crore rupees (220 billion

dollars) and supported in creation of 42.673 million jobs which counts 8.1 percent of total employment of the country. The sector hopes to get a return of more than 1 32 lakh crore by 2028 i.e., about 10 percent of our national GDP. Now a days India is also gaining an important space in health tourism. In this regard 1,84,298 foreign patients travelled to India for medical treatment. It is in an increasing trend. In the year 2019 nearing to 11 million foreign tourists were arrived to India. This records a growth of 3.5 percent over the year 2018. In providing infrastructural transport facilities to the tourists our India ranks 13th, in providing air transport facility our rank is 33rd, in providing sea transport facilities our India positioned at 28th rank. Regarding the availability of very beautiful natural tourist sites India ranked 14th and in providing cultural and business travel facilities the country acquires 8th position in the world. But the country is poor in providing stard accommodation facilities to the visitors in comparison. In comparing earnings from tourism sector India remains at 16th in the world but among Asian countries remains 7th. To increase the foreign tourists in to India the travel Visa and passport availability is liberalized and issuing power rests with the embassies of the respective countries of the tourists as a redressal measure.

Odisha and Tourism sector: The tourism sector of Odisha has a rich potential of employment, income generation, foreign exchange earnings and value additions to the economy. At present the sector is able to create 89 jobs as against 45 jobs in primary and 13 job in secondary sector on an investment of 1 million rupees. The ratio of indirect jobs to direct jobs in this tourism sector is nearly 3:1. It is a labor-intensive sector. The state Odisha in comparison has more intensity in domestic tourism with an average of 541 trips whereas the

national average is only 418 trips per day. More or less Odisha has 357 nos. of identified tourist destinations located in 30 districts of the state. Out of which the district Cuttack carries 28 spots, the highest. Similarly, the district Balasore and Ganjam have 22, Puri has 21, Mayurbhanj and Khurda have 19 important destinations. Along with this the state has specific tourist attractions hubs like the Golden Buddhist site and wild life tringles etc.

Data plotted in Table1 shows that number of domestic tourists is increasing from the year 2016-17 to 2018-19 year having a growth of more than eight percent. But it is reduced by more than three percent in the year 2019-20 and eighty four percent for the year 2020-21. This is for the

reduced to a negative growth of 11.57 percent in the year 2020-21. This negative growth is of 99.35 percent. So, it is marked that the Covid-19 ruined the total tourism market of the state.

On looking at the data plotted in Table2 which depicts the inflow of money to the state by the domestic tourists spending. It is seen that from the year 2013-14 to 2018-19 the inflow of money is increasing i.e., from Rs.10,288.60 crore to Rs.15,441.67 crore. But the money income is reduced in the year 2019-20 to Rs.14,969.81 crore. In case of the earning by the state from foreign tourists is similarly increasing for the first two years. But for the third year it is reduced to

Table-1 Domestic and foreign tourist visit to Odisha (2016-21)

Year	Domestic		Total	% Growth	Foreign	% Growth	Grand Total	% Growth
	From Odisha	Outside Odisha						
2016-17	78,67,321	52,45,407	1,31,12,728	8.66	77,496	15.04	1,31,90,224	8.69
2017-18	85,56,603	57,04,943	1,42,61,546	8.76	1,02,995	32.90	1,43,64,541	8.90
2018-19	93,05,282	62,04,247	1,55,09,529	8.75	1,13,721	10.41	1,56,23,250	8.76
2019-20	90,20,922	60,14,671	1,50,35,593	(-3.06)	1,00,567	(-11.57)	1,51,36,160	(-3.12)
2020-21	14,25,770	9,50,753	23,76,523	(-84.19)	652	(-99.35)	23,77,175	(-84.29)

Source: Dept. of Tourism, Govt. of Odisha

active pandemic effect of Covid-19. In case of foreign tourists visits to Odisha is not showing a systematic rise. For the year 2016-17 the growth percent is 15.04, but for the year 2017-18 it is nearly 33 percent. The growth is 10.41 percent for the next year 2018-19. But drastically it is

Rs.308.78 crore. The inflow of money is again rising for next three years i.e., from Rs.355.22 crore to Rs. 474 crores. But due to the negative pressure of Covid-19 pandemic the inflow is again reduced to Rs.419.17 which is accounted negatively by (-)13 percent.

Table-2 Inflow of money via tourist spending in Odisha (INR Crore)

year	From domestic tourist	Percent growth (approx.)	From foreign tourist	Percent growth (approx.)
2013-14	10288.60	-	308.94	-
2014-15	11297.91	9.7	331.01	7.11
2015-16	12336.93	8.85	308.78	-6.64
2016-17	13405.27	8.94	355.22	15
2017-18	14579.72	8.95	472.10	33
2018-19	15441.67	5.5	474.00	0.42
2019-20	14969.81	-2.59	419.17	-13

Source: Dept. of Tourism, Govt. of Odisha

The O.T.D.C a corporate undertaking of tourism department of Odisha govt. is maintaining mostly all the virtual and physical programs to develop tourism in different places of the State carrying National and International importance. Along with the hotels and Restaurants of Govt. private sector are also providing the best accommodation and hospitality services for the visitors. The table elaborates the rooms and beds available for tourists. Similarly in private sector the hotels are of three categories like lower, middle, higher spending groups. There are more than 1823 hotel, with 37,674 rooms which carry 75,152 beds. The O.T.D.C is also providing comfortable and attractive transport facilities for the tourists. Accommodation facilities provided by the Odisha tourism development corporation in different places of Odisha are mentioned in the table-3. They are of different types like Pathanivas, Panthika, Yatrivas, Panthasala, Aranyanivas, tourist complex, tribal and cyclone shelter centers. O.T.D.C has provided 533 such rooms which have 1184 beds. Along with, there are four tourist

conference halls. O.T.D.C tries to accommodate the tourist of Odisha in different tourist centers like Bhubaneswar, Puri, Cuttack, Barkul, Sambalpur, Rambha, Chandipur, Dhauli, Konark, Satapada, Atri, Panchalingeswar, Chandabali, Chandaneswar, Paradeep, Keonjhar, Rourkela, Dangalmal, Nrusinghanath, Chadanswara. At present the O.T.D.C has three different rates for three different category of tourist accommodations. The rates per day for LSG Rs.900 for MSG group Rs.1800 and for HSG group it is more than Rs.1800. On analysing the tourist arrival to Odisha, it is marked that the sufficient number of foreign tourists are from U.S.A, Japan, China, UK, France, Italy, Netherland, Germany, Malaysia, and Bangladesh. Similarly, it is seen from the Tourism Statistical Bulletin of 2019 that the majority of domestic tourists are from the ten states like West Bengal, Maharashtra, Madhya Pradesh, Andhra Pradesh, Chhatisgarh, Uttar Pradesh, Jharkhand, Tamilnadu, Bihar, and of Karnataka. It is also noted that the average duration of stay for a

domestic tourist is 3.75 days where as it is 9.75 days for a foreign accordingly. The average tourist spending per day per head comes Rs.2655 for a domestic tourist where as it is Rs.4275 for a foreign tourist. It seen that the domestic tourists

utilize air transport 11 percent, rail 76 percent and rode transport by 13 percent. But it is 81 percent by air, 14 percent by rail and 5 percent on road utilized by foreign tourist. The ratio of foreign to domestic tourists' arrival for 2019 is 3:97.

Table3 : Government Accommodation facilities under O.T.D.C

Sl. No	Accommodation particulars	Venue	Rooms	Beds available
1	Panthanivas	Bhubaneswar	54	108
2	Panthanivas	Puri	52	114
3	Panthanivas	Cuttack	28	56
4	Panthanivas	Barkul	41	84
5	Panthanivas	Sambalpur	33	66
6	Panthanivas	Rambha	24	48
7	Panthanivas	Chandipur	41	94
8	Panthanivas	Rourkella	32	68
9	Panthika	Dhuli	3	6
10	Yatrinivas	Konark	46	100
11	Yatrinivas	Satapada	28	56
12	Pathasala	Panchalingeswar	30	70
13	Aranyanivas	Chandbali	16	38
14	Panthasala	Chandaneswar	29	58
15	Panthanivas	Paradeep	12	24
16	Panthanivas (Trc)	Keonjhar	14	28
17	Panthika	Khandagiri	4	CH
18	Panthanivas	Baripada	10	20
19	Aranyanivas	Dangamal	12	24
20	Panthasala	Nrusimhanath	5	16
21	Tourist complex	Atri	6	20
22	Yatrinivas cyclone shelter	Chandaneswar	13	20

Source: Dept. of Tourism, Govt. of Odisha

Table-4 Govt. approved expenditure for tourism development in Odisha

Schemes ↓	Year →	2017-18	2018-19	2019-20	2020-21	2021-22*
tourist accommodation		8730.00	10450.00	11350.00	24050.00	35660.00
Promotion publicity		6282.00 291.00	7538.04	8060.00	11252.99	9340.00
C.P(prasad)*		3000.00	3000.00	-----	3210.00	3508.00
Total		18303.00	21188.04	19410.00	38512.99	11803.00

Source: Dept. of Tourism, Govt of Odisha

*Govt. approved outlays yet to spent

The Govt. of Odisha started many projects to boost tourism. The projects are different audiovisual programs, publicity through Akash Bani and television channels, improving other infrastructural facilities like transportation, accommodation and organizing different trade Fairs, festivals, seminars, conferences, training programs etc. Accordingly, the tourism dept. of the Odisha Govt. has organized following cultural, entertainment programs and rewarding events to attract visitors of different kinds in the year 2020-21. The events are like; 1. 26th Guru Kelucharan Mohapatra Award Festival Bhubaneswar, 2. Narayani Namastute Kolkata, 3. 19th Anjali International Children & Youth Festival Bhubaneswar, 4. 24th Gunjan Dance & Music Festival Cuttack 5. National Press Day Bhubaneswar, 6. 4th Chilika Shelduck Carnival Barkul, 7. 8th Satkosia Mahotsav Angul, 8. Saptashajya festival-2020 Dhenkanal, 9. 7th Utkal Folk Dance Festival Bhubaneswar, 10. 14th Guru Deba Prasad Award Festival Bhubaneswar, 11. Global Odia Mahotsav-2020 USA, 12. 4th All India Classical Dance Festival Bhubaneswar, 13. Cultural program on Republic Day Bhubaneswar, 14. Kabisammilani Balasore

15. Cultural program on Republic Day Bhubaneswar, 16. Aarya Awards Bhubaneswar, 17. Natak Bhubaneswar 18. Guru Pranam Utsav Bhubaneswar, 19. 23rd Chandipur Beach Festival Chandipur, 20. Odissi Sangeet Mahotsav Bhubaneswar, 21. Guru Dakshina Utsav Bhubaneswar, 22. Guru Pranam Utsav at Rabindra Mandap, Bhubaneswar Bhubaneswar, 23. 4th Jasuapur Mahotsav Jasuapur, 24. Konark Music & Dance Festival, Konark Konark, 25. 27th Guru Pankaj Utsav & Mahari Award Bhubaneswar, 26. Bhajan Samaroha on Shivratri Bhubaneswar, 27. 9th Annual Meet-Connections 2021 New Delhi, 28. Annual Function 'Kamala Desha Rajakumar Bhubaneswar', 29. Sufiana Music Festival Bhubaneswar, 30. 16th Odissi Sangeet & Laghu Sangeet Samaroha Bhubaneswar, 31. Cultural event for promoting Odisha Handloom Bhubaneswar, 32. Music Programme "Ei Aamari Gaon" Bhubaneswar, 33. 69th Senior National Volleyball Championship Bhubaneswar, 34. Conclave "Odia Asmita" Bhubaneswar, 35. 2nd Kanchan Corporate Award Bhubaneswar, 36. Celebration of International Women's Day Balasore.

Central Projects: Similarly, the Govt. of India is also participating in tourism development programs. Following are the central projects undertaken by the central Govt. year wise to boost Indian tourism market year after year. The projects of tourism development are illustrated below year wise from the year 2014-15 to 2020-21.

2014-15 Development of Shree Jagannath Dham, Prachi river front, Ramachandi Temple, Gundicha Temple and Maa Mangala Temple under Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD) scheme.

2016-17 Development of Gopalpur-Tampara-Barkul-Satapada Coastal Circuit under Swadesh Darshan Scheme. List of Ongoing Projects sanctioned during 12th plan (year wise) Tourism Projects with a view to create adequate tourist infrastructure and facilities within the State; Odisha Tourism has undertaken to execute a lot of tourism projects in different locations through the support of Government of India funds and State Budget.

- Development of Ekamra Kshetra under Destination scheme
- Construction of modern WAC at Rairakhol (Sambalpur), Kalamati (Deogarh), Kureimal (Jharsuguda), Jharbeda (Sundergarh), Girisola (Ganjam) & TRC building at Jharsuguda
- Development around Baraha Temple, Jajpur
- Establishment of Gandhi Peace Centre at Khandagiri in partnership with Birla Management Centre Services Ltd.
- Development of infrastructure for getting Blue Flag Beach certification Haripur & PatiSonapur in Ganjam district, Niladri, Muhan & Pir Jahania Beach in Puri district.
- Establishment of Special Odia Cuisine Restaurant (NIMANTRAN) at Puri, Bhubaneswar and Sambalpur
- Development of Eco-Tourism in the State
- Development of Beach

front & Beautification of seaside at Talsari-Udayapur Beach in Balasore district.

2017-18 1. Development of Satyabhamapur (Birthplace of Utkal Gourav Madhusudan Das) 2. Development of Magura Pond at Choudwar in Cuttack District 3. Development of Barehi at Ganjam 4. Development of Prempahad at Raygada 5. Development of Water based recreation in the State.

2018-19 1. Light & Sound show at Samaleswari Temple, Sambalpur 2. Completion of Eco-Cottages at Dangmal 3. Improvement of water quality of Bindusagar Pond with water source as Daya River 4. Illumination along main road from Palasuni to Utara NH Bypass Road, Bhubaneswar 5. Construction of decorative compound wall on outer premises & others stone flooring at Maa Tara Tarini Temple in Ganjam District. 6. Development of Tourism related activities at Duduma under Lamtaput Block in Koraput District.

2019-20 1. Infrastructure development of Maa Tara Tarini Pitha in Ganjam district, 2. Integrated Tourism Master Plan of Rambha cluster and Satapada-Sipakuda cluster at Chilika Lake, 3. Development of Maa Biraja Kshetra, Jajpur, 4. Holistic development in the vicinity of Dhauli Stupa, 5. Integrated development of Ekamra Kshetra, 6. Installation of Vending Zone for transitional /rehabilitation of beach vendors at Digabareni Beach, Puri, 7. Floating Jetties and Fibre Boats for Eco-Tourism Nature camps, 8. Development of House Boats related infrastructure in Chilika, Satakosia, Bhitarkanika and its peripheries for the promotion of water based recreational facilities.



2020-21 1. Development of infrastructure for getting Blue Flag Beach certification Haripur & PatiSonapur in Ganjam district, Niladri, Muhan & Pir-Jahania Beach in Puri district, 2. Establishment of Special Odia Cuisine Restaurant (NIMANTRAN) at Puri, Bhubaneswar and Sambalpur, 3. Development of Eco-Tourism in the State, 4. Development of Beach front promenade at Talsari-Udayapur Beach in Balasore district, 5. Development of infrastructure at Udaygiri in Jajpur district, 6. Development of infrastructure at Ratnagiri in Jajpur district, 7. Development of infrastructure at Langudi in Jajpur district, 8. Development of Jirang at Gajapati district, 9. Development of Gopalpur beach in Ganjam District 10. Infrastructure development of Balangibandh in Nayagarh district, 11. Development of infrastructure at Sanaghagara in Keonjhar district, 12. Development of infrastructure at Chandaneswar in Balasore district, 13. Development of infrastructure at Chandipur in Balasore district, 14. Development of infrastructure at Khandagiri-Udayagiri in Khordha district, 15. Development of infrastructure at Dhauligiri in Khordha district, 16. Development of infrastructure at Ghatagaon in Kendujhar district, 17. Development of infrastructure at Khandadhar in Sundargarh district, 18. Development of infrastructure at Dhabaleswar

in Cuttack district, 19. Development of infrastructure at Lalitgiri in Cuttack district, 20. Development of infrastructure at Paradeep in Jagatsinghpur district, 21. Development of infrastructure at Khandadhar in Keonjhar district, 22. Development of infrastructure at Panchalingeswar in Balasore district, 23. Development of Kanta Kabi Laxmikanta Mohapatra memorial park at Bhadrak, 24. Development of Sarisua Waterfall at Khaira, Bhadrak, 25. Development of Vir Surendra Sai memorial at Sambalpur.

Suggestion and Conclusion: To promote tourism in the state like Odisha some of the following suggestions can be given. They are like development of infrastructural facilities such as construction of sufficient hotels and restaurants, roads and buildings at different tourist centers. Tourist centers of Odisha are also required to be well furnished and connected with rail, road and air ways. The starred spot like Konark and some of the southern and western Odisha tourist spots are still lagging behind with rail, air and road ways. The Govt. (State and centre) should come forward with some budgetary means to develop tourism. The sector should give much priority to supply quality fooding along with good hospitality services for the visitors. Providing security and sufficient safety measures at the tourist centers are also got priority for the present-day situation. The highly skilled, well behaved and informative tourist staff will able to enhance the figures of tourists and accordingly the inflow of earnings. Information and Public Relation staff, tourist officers and the guides' role is also important to boost tourism. So sufficient number of quality employees of talent are to be recruited on commission cum salary basis. The sector should arrange plenty of audiovisual, entertaining dance

drama and cultural programs suiting to different tourist spots of interest. After all it is the prior necessity of the Govt. to publicize on the features, the approximate spent, the means of transportation, availability of accommodation facilities of the spot in detail with any package if available to the tourists. There should be proper advertisement and publicity in this regard which can easily be available to the prospective tourists of all kinds. At the end a suggestion can be given as a conclusion that proper sanitation, health care, security and safety measures are to be provided to the tourists to overcome any type of emergencies or pandemic situations. Tourism will bring development in culture, prosperity, wealth to Odisha if properly redressed.

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Celebrating World Tourism Day 2021

Focus on Inclusive Growth

Dr. R.K. Pattanayak

The United Nations World Tourism Organization (UNWTO) has adopted “Tourism for Inclusive Growth” as the theme of this year’s World Tourism Day which is celebrated each year on 27th September. The apex body of the global tourism industry picks up a theme each year to foster awareness about tourism’s social, cultural, political and economic value and the contribution that the sector makes to attain sustainable goal. Travel to new destinations and exploring unexplored horizons as an activity is an urge and inherent to human beings since time immemorial. This is glaringly evidenced through ravages of time by the exploratory zeal and zest of the great explorers.

Looking in to the origin of World Tourism Day, the World Tourism Organisation in its 3rd session held at Torremolinos, Spain in September 1979 decided to institute World Tourism Day commencing from 1980. The date of the celebration was chosen to coincide with an important milestone in World Tourism: the anniversary of the adoption of the UNWTO Statutes on 27th September 1970.

Understanding Tourism’s great capacity to integrate different sectors and transform the socio-economic fabric of human beings, the theme

suitably justifies its mission and objectivity to make tourism an engine of economic growth through inclusive growth. The UNWTO coins a theme each year basing on the emergent issues that undermines the growth and development of tourism globally. The global pandemic of COVID-19 which made headlines in December 2019 and has gripped more than 219 countries across all continents has had massive social and economic impacts on all sectors including tourism. The world community are also afflicted with a sense of despair.

UNWTO has rightfully and consciously designated this theme and has urged all sectors to bring progressive changes in the society through this instrument of inclusive growth. This is a unique occasion for all the travel and tourism fraternities in the world under UNWTO umbrella to unite and celebrate the WTD with much fun and fanfare. But this year like last year, the WTD celebration is poised to be a dampener. Therefore the apex body is urging a quick path for recovery and growth inviting all members in the society and organizations to be part of this. All should reaffirm their commitment to this mission through sharing best practices and success stories of their destination initiatives to keep alive tourism to foster and flourish as ever before.

It is a fact that, COVID-19 and its impact has broken the structural edifice and economic backbone of many developing and developed countries. Tourism stakeholders and service providers however small or big they are, including hospitality sector solely depending on tourism as a means of business and livelihood are directly or indirectly affected by this pandemic. They have experienced the best of time in tourism before pandemic and this is perhaps the worst ever challenges they are encountering with onset of COVID-19.

Tourism as an industry was thriving upwardly over a decade prior to the pandemic and growing globally at a rapid pace of about 4%. But in case of regional and individual countries growth was much higher. This sector is employing one in every ten people on earth. Suddenly with the outbreak of the pandemic the world experienced one of the worst and unprecedented scenarios that are unparalleled in the history of mankind. The world had never experienced a disaster of this scale and magnitude. There was complete halt and stoppage of all activities including tourism as safety and security with providing livelihood to millions was the priority and national concern. There was a drop of 1 billion international tourist arrivals, loss of 1.3 trillion US\$ in total revenue from tourism and has rendered 120 million direct tourism jobs are at risk in comparison to last year. This downturn had a ripple effect in the economy and agonies of the tourism supply chain agencies, wholesalers, retailers, hoteliers, airline operators, etc. multiplied.

While we talk about inclusive growth of tourism, primarily it entails on economic growth that creates employment opportunities by scaling

up and bolstering different sectors of tourism which in turn helps in reducing gap between the rich and the poor and reduce poverty through forward and backward linkages. It provides access to essential goods and services, equal opportunity and empowers people through high quality product offerings in this sector.

The outbreak of COVID-19 has had a massive impact of economy and human beings at large lost their life and livelihood. Of all the sectors, Tourism was the first to affect and worst hit. But in case of tourism, the pace of recovery and restart process is last and very slow. This soft and invisible industry has pushed 32 million people to extreme poverty. It is a great challenge for survival of each individual service providers however big or small in tourism.

Broadly, the pandemic impacted much in economy mobilization, job creation and harnessing growth. This has resulted in uneven growth, retrenchment and job cut due to closure of units and despair looms in all corners. For example in sector where high skilled jobs are involved like IT, Finance etc. the shift to Work From Home (WFH) was order of the day. But WFH concept was not feasible in Service sectors like Hotels, Restaurants, Travel Trade and Tour Operations, Supply Chain Management Systems which require physical presence, personal touch and close proximity involvement. The small firms in Tourism Industry have been hit hard than the big firms.

Employment & Labour intensive sector like micro, small and medium enterprises had no option but to cut wages and costs to remain afloat. But in informal and service sectors the employees have been significantly affected. It is revealed that in July 2021 the total employment was about

399.4 million down from 406 million in February 2020.

UNWTO foresees that the domestic tourism will bounce back quickly before international tourism. It is therefore prudent to see how quickly we address these issues, manage the crisis and mitigate the impacts in war footing, which provides much needed stimulus for recovery to restart and the industry prepares itself for the future. It is therefore imperative on all stakeholders to look responsibly the efficacy of tourism in the context of driving the economy and ensure that everybody has a role to play in its future under the Sustainable Development Goals (SDGs). Above all, Tourism is all about travel by people to destinations and sharing their

experiences across all sectors in different platforms. This will continue once people start believing that they are safe and secure in a new world and in a new destination. In such a critical situation, approach to product development and marketing need to be looked differently. All should pledge to practice and champion safe and honourable tourism as a cardinal principle being part of the global initiative about how this sector catalyze more inclusive growth in the days to come and back to track as it was before.

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Forest Fire in Odisha

*Dr. Rajballav Mohanty
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The occurrence of wildfire in forest is a common phenomena during the period between February 15 to June 15, considered as fire season in India. It is needless to say that such destructing process is normally initiated by local people to clear wild growth of plants for smooth collection of minor forest produce and particularly 'Mahua' flower during this period. Some unscrupulous elements also become instrumental in burning the forest patches for illegal poaching, fuel-wood as well as timber collection. Of course the Govt. takes appropriate measures through the forest department and other non-Govt. organizations to check and control the process every year.

Causes and Effect of Forest Fire

Forest fire is caused either due to some physical factors like volcanic eruption, lightning, rubbing, or Sun heating or due to biological causes like microbial as well as manmade causes. In India, it is mostly made by human beings. The accidental fire caused by careless handling in forest areas also adds to this problem and sometimes results in great loss. Forest fire once started, used to ravage for several days till some natural barrier or human effort could seclude the burning vegetation. At times, summer rain can control this devastating process. Fire is lethal to vegetation.

It burns down all plant life and driven away or kill wild animals. It also brings about marked alteration of environmental factors like light, rainfall, nutrient cycles, fertility of the soil, pH, and soil fauna. Sometimes, the damaged habitat needs thousands of years in return for the normal condition.

Present Scenario

In February 2021, the forest took an ugly turn when it was reported that, more than 700 places in the districts of Sambalpur, Malkangiri, Raygada, Ganjam, Bolangir and Boudh are affected by forest fires. It was specifically important in the case of 'Similipal', the "jewel in the crown" among the forest divisions of Odisha. It attracted the attention at the national level. Similipal National Park has the rare distinction of being a tiger reserve (from 1956), under project tiger (1973), a wild-life sanctuary (1979), a national park (1980) and declared as one of the Asia's biggest "Biosphere Reserve" as mentioned by India Govt. (1994) and also by UNESCO (2009). This important park covers around 2750 kms of forest area which is also a part of the Mayurbhanj elephant reserve, 'Project Elephant'. This is functioning to protect the Asian elephants. It is the treasure house of 1076 plant species along with 96 species of rare Orchids. This tropical

moist broadleaf as well as tropical moist deciduous forest, is the habitat of 42 species of mammals, 242 species of birds and 30 species of reptiles. The forest also boasts innumerable medicinal, aromatic, and other economically important plants.

The forest fire was detected in different localities of Similipal forest ranges from the last week of February 2021 which gradually spread and covered larger areas. It was due to dry weather and heavy deposit of litter at ground level. Ultimately more than half of the total area was devastated. Although the local staff of the forest department tried to check the spread of fire, it could not be controlled. When it came to light by satellite photos, there was a nationwide hue and cry. The local people, media, politicians of different parties, and ultimately the Union Govt. expressed concern over the fire. The state Govt. became serious to tackle the problem and took all possible steps to control the situation.

Steps Taken to Effectively Control Fire

1. Govt. had mobilized the local villagers and sought their help to douse the fire.
2. Meetings and awareness campaigns with the general public were conducted under the aegis of "Van Sanrakshan Samities (VSS), Joint Forest Management (JFM) Committee and Eco-development societies throughout the state, with about 13,500 active VSS.EDCS.
3. A nine-member task force was created under the chairmanship of former PCCF, Mr. Sandeep Tripathy, to assess the causes behind the incidents of forest fire and to suggest measures for its immediate containment.

4. On March 3, the state Govt. has sent a high-level team to Similipal National Park to examine the situation and to control the raising inferno.
5. Teams of some political parties and journalists also visited the national park for on-the-spot observation.
6. The leave of all forest department personnel have been cancelled and they were instructed to proceed on the field immediately to deal with the disaster.
7. Along with the forest staff, fire service personnel, as well as ODRAF teams, were also engaged in fire fighting with 400 leaf blower machines.
8. All the staff, squads, ODRAF teams, fire personnel, VSS and PRI members are in the field with full preparedness. Also, Sub-Collectors, BDOs, Tahasildars and IICs of the region have also participated in public sensitization programmes in fire vulnerable areas.
9. The Union Govt. has also sent a top central team consisting of 3 experts to visit the affected area, take stock of the situation, and to tender expert technical advice for an early dousing of the forest fire.

Consequence

The Similipal forest fire became under control, though not fully extinguished, with the combined effort of people to fight with fire and also due to a heavy shower of rain as well as the hailstorm in that region. In fact, the forest fire points were more than 290 on 9th March 2021,

while the latest figure indicates that the points inside the forest are 268. The fire in Similipal is contained while only 24 points are detected. Ultimately the fire totally came under control as reported by the special task force chief on 15th March 2021. There is also no damage to wild-life or human beings, so far been reported from the field.

Recommendations

The occurrence of forest fire is a regular phenomenon in summer season all over India and there is irreparable loss to the environment, vegetation and wildlife in a region, similar is the situation in Odisha. Hence, the administration is required to take stringent punitive measures

against the violators responsible for causing such intentional activity. Moreover, wider public awareness programmes, involving local inhabitants in forest protection as well as conservation activities and ultimately upliftment of the economic status of such people can check the recurrence of such disaster in future.

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Smog Tower

Er. Mayadhar Swain

Smog is a form of air pollution. It is the dirty brown haze that hangs over the skylines of major cities. Its composition is variable. The term is derived from the words *smoke* and *fog*, but it is commonly used to describe the pall of automotive or industrial origin that lies over many cities. The term was first used in 1905 by H.A. Des Voeux to describe atmospheric conditions over many British towns.

Smog is often worst in the mornings, when there is less air movement. Further, it is specially a major concern during the winters when air quality remains at hazardous levels for weeks together and air is almost still.

More than 1,000 “smoke-fog” deaths occurred in Glasgow and Edinburgh during the autumn of 1909. During the Great Smog of 1952, coal pollution blanketed the city of London, England. More than 4,000 people died from respiratory ailments as a result. The smog was so thick that the city had to shut down roads, railways, and the airport. Robbers used the cover of smog to break into houses and shops.

Sources of smog include coal-fired power stations; construction; factories; gasoline and diesel powered vehicles; lawnmowers; oil-based paints, solvents and cleaners; pesticides; and pollutants carried by the wind.

There are two distinct types of smog: sulfurous smog and photochemical smog. Sulfurous smog, which is also called “London smog,” results from a high concentration of sulfur oxides in the air and is caused by the use of sulfur-bearing fossil fuels, particularly coal. This type of smog is aggravated by dampness and a high concentration of suspended particulate matter in the air. This is mostly seen in industrial areas.

Photochemical smog which is also known as “Los Angeles smog,” occurs most prominently in urban areas that have large numbers of automobiles. It is produced when sunlight reacts with nitrogen oxides and at least one volatile organic compound (VOC) in the atmosphere. Nitrogen oxides come from car exhaust, coal power plants, and factory emissions. VOCs are released from gasoline, paints, and many cleaning solvents. When sunlight hits these chemicals, they form airborne particles and ground-level ozone or smog.

One major component of smog is fine particulate matter. Fine airborne particles are usually 10 micrometres in diameter or smaller and are a mixture of solid particles and liquid droplets, usually soot and acids, that can also be described as acid water droplets or acid aerosols. The particles are microscopic and remain suspended

in the air for some time. Particulate matter decreases visibility and contributes to the brownish-yellow colour that is characteristic of smog. It can be generated naturally by dust, sea salt spray, or windblown soil and pollen, but studies show that particulate matter generated from human activities is more harmful. Industrial and car emissions, road dust, and the processes of demolition and construction all generate fine airborne particles.

Why is Smog Harmful?

Smog causes multiple health problems, such as difficulty in breathing, eye irritation, asthma, reduced immunity to lung infections, and colds that can be fatal in children. The ozone in the smog also inhibits plants' growth. It can cause widespread damage to crops and forests, and the haze reduces visibility. When inhaled, smog irritates our airways, increasing risk of serious heart and lung diseases. Surface-level ozone concentrations are considered unhealthy if they exceed 70 parts per billion for eight hours or longer; such conditions are fairly common in urban areas prone to photochemical smog.

The ozone layer high up in the atmosphere at the stratosphere protects us from the sun's dangerous ultraviolet radiation. But when ozone is close to the ground, it is bad for human health. It can damage lung tissue, and it is especially dangerous to people with respiratory illnesses like asthma. Ozone can also cause itchy, burning eyes.

Smog Tower

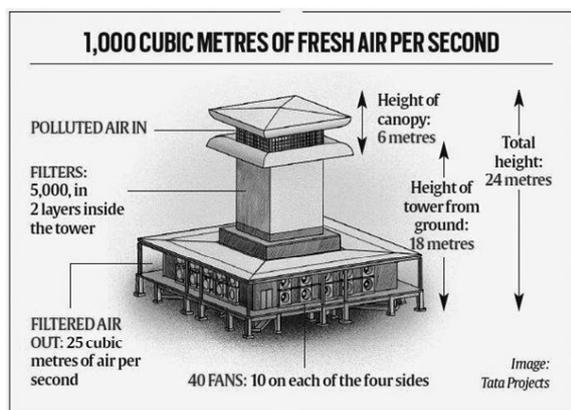
Smog towers are structures designed as large-scale air purifiers to reduce air pollution. Smog towers work on the principle of HEPA (High Efficiency Particulate Air) filtration or air ionisation

technology to remove PM 2.5 particles. That is, air flowing through a smog tower passes through a filter to provide clean air coming out of it. These methods of cleaning air are scientifically well established and used widely for cleaning indoor air where the air exchange with the outdoors is minimal. The first prototype of a smog tower was built in 2017 by Dutch artist Daan Roosegaarde in Beijing as a demonstration. The only operational smog tower in the world is a 60-metre high tower in Xian, the capital of northwest China's Shaanxi province.

Delhi Smog Tower

According to the World Health Organization (WHO), India has six of the top 10 most polluted cities in the world, with Delhi on the top of the list. A 2020 study in *The Lancet* found that there were 1.67 million deaths in India attributable to air pollution in 2019, including almost 17500 in Delhi. The Supreme Court in January 2020 directed the Central Government to construct a smog tower to reduce pollution at Anand Vihar and the Delhi government to install another such structure at Connaught Place in three months.

On 23 August 2021, Delhi Chief Minister Arvind Kejriwal inaugurated India's first smog tower at Connaught Place. It has been built at the cost of Rs 20 crore. The structure is 24 m high, about as much as an 8-storey building — an 18-metre concrete tower, topped by a 6-metre-high canopy. There are 40 fans at its base, 10 on each side. Each fan can discharge 25 cubic metres per second of air, adding up to 1,000 cubic metres per second for the tower as a whole. There are 5,000 filters inside the tower in two layers. The filters and fans have been imported from the United States.



The tower uses a ‘downdraft air cleaning system’ and is developed by the University of Minnesota, USA in collaboration with IIT-Bombay. Polluted air is sucked in at a height of 24 m, and filtered air is released at the bottom of the tower, at a height of about 10 m from the ground. When the fans at the bottom of the tower operate, the negative pressure created sucks in air from the top. The ‘macro’ layer in the filter traps particles of 10 microns and larger, while the ‘micro’ layer filters smaller particles of around 0.3 microns.

The downdraft method is different from the system used in China, where a 60-metre smog tower in Xian city uses an ‘updraft’ system — air is sucked in from near the ground, and is propelled upwards by heating and convection. Filtered air is released at the top of the tower.

An automated Supervisory Control and Data Acquisition (SCADA) system in the tower will monitor air quality levels of PM 2.5 and PM 10. Besides, temperature and humidity will be measured constantly and all the parameters will be displayed on a board atop the tower. Monitors

will soon be installed at various distances from the tower to determine its impact at these distances. The project aims to provide purified air in a 1-km radius around the structure.

The second smog tower for Delhi, being constructed at Anand Vihar in east Delhi with CPCB as the nodal agency, is nearing completion.

Conclusion

The effectiveness of the smog tower can be known in a few months. However, the people should take some precautionary measures so that smog will not be formed. A few measures are given below:

- Drive less. Walk, bike and use public transportation whenever possible.
- Take care of cars. Getting regular tune-ups, changing oil on schedule, and inflating tires to the proper level can improve fuel mileage and reduce emissions.
- Fuel up during the cooler hours of the day—night or early morning. This prevents gas fumes from heating up and producing ozone.
- Avoid products that release high levels of VOCs. For example, use low-VOC paints.
- Avoid gas-powered yard equipment, like lawn mowers. Use electric appliances instead of diesel apparatus.

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An Analysis of the National Integration of India

Dr. S. Kumar Swami

National integration is also known as Rastriya Ekta and National integration day as Rastriya Ekta Diwas. It is a positive aspect to reduce the differences of socio-cultural and economic as well as inequalities among people of the country. It promotes to strengthen the unity among people of any group society, community and whole country to bring national unity a day. It is not a force by any authority however it is a request from people to make our country a developed country. It is possible only through the unity and harmony of the people. They should share their ideas, values and other issues to enhance their emotional bonds. People must feel and live the Unity within diversity and make our national identity a supreme power.

Generally speaking, the extent of diversity found in India tends to create the impression that it is not a country but a subcontinent. But this does not imply that unity or integration is impossible in such a situation. One finds distinct and different racial characteristics among the inhabitants of different parts of the country because differences of complexion, size, shape etc. are clearly indicative of the inhabitants as one moves from Punjab to Assam. If other examples are necessary, it can be seen that there are all kinds of complexions in this country. In the north complexion varies from darkly, whitish, dark, yellow to red even runs into mixtures of these colours. Turning to languages one finds that the

Indian Constitution has granted recognition to Urdu, Bengali, Assamese, Odia, Punjabi, Gujarati, Marathi, Sindhi and numerous other languages in addition to Hindi. Differences exist not only at the level of language but also in respect of dress, religion, culture etc, Tribes of the North east, central districts and the south differ from each other in their modes of life, their social and in psychological characteristics etc.

But despite these differences of region, race, language, tribe etc, the existence of a national Unity cannot be questioned. One finds this inner unity or integration in all the people spread over the land limited by Himalayas on the one side and the Indian Ocean on the other, the Burma Hills in the east and Pakistan in the west. Their inner Unity is the basis of emotional integration. This inner integration or unity is the basis of Indian culture. In fact, the very name Bharat Varsha denotes not merely geographical boundaries but actually the ideal of a cultural unity. During the middle ages, India was always treated as one unit. That India is accepted as the mother by all Indians is only due to feeling of oneness and identity.

Efforts to bring integration

It was this question of integration which inspired the Central Education Ministry in 1961 to organize a committee for integration under the chairmanship of Dr. Sampurnanand. All that is needed is that the younger generation should be

educated in this direction through various kinds of programmes. Therefore the committee has given the following views.

- 1) There should be reorganization and reshaped the syllabi of colleges and Universities to accord with the needs of the nation.
- 2) Encouragement to Extracurricular activities which are important from the stand point of emotional integration.
- 3) Improvement of textbooks of various subjects and also be amended.
- 4) There should be the improvements of concerning language and scripts at the University level. The study of Hindi and English literatures, should be encouraged so that integration is encouraged and divisive forces checked. The rights of the minorities should be protected in formulating a language policy.

In addition to the above suggestions, the committee made certain other suggestions. In school the students should be encouraged to discuss on this topic and asking the students to take an oath to improve emotional integration. At the same time to create a climate in which all people feel that they are members of one nation.

Suggestions for its improvement

Above all, we must give importance to education which can improve our moral strength to feel oneness among us.

Education can be used in the following suggested ways for improving integration in the country.

- 1) There is necessity of development of an all India languages.
- 2) A national educational plan should be devised so that the younger generation may be of brought up in an atmosphere of nationalistic fervour.

- 3) Many kinds of programmes can be devised for increasing national unity. All India competitions and meetings can be organized in various parts of the country to increase national unity.
- 4) There must be promotion of intercultural understanding to achieve liberality of attitudes to other cultures which is an essential precondition of national unity in a country.
- 5) It is desirable that national consciousness should first be stirred in the students. This can be done through the teachers.
- 6) Above all, governmental effort is essential for bringing success to all the projects outlined above because without official blessing, there is little that education can achieve.

Conclusion

It is evident from the foregoing analysis of the measures for increasing natural integration that these measures must be both positive and negative. Adoption of all these measures would be a positive step. The negative step of destroying all obstacles in the way of emotional integration is no less important. For this the teachers, administrators and guardians will have to work collectively. Then alone the country will witness solid natural integration in spite of regional integration in spite of regional pluralism.

Hence Dr. Rudrakrishna says- "National Integration is not a house which could be built by mortar and bricks. It is not in industrial plan too which could be discussed and implemented by experts. Integration, on the contrary, is a thought which must go into the heads of the people, it is the consciousness which must awaken the people at large.

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The Universe - A Well Ordered Whole

Dr. Ajit K. Mahapatra

In the inexorable march of Science
unexplored form of matters and energy
lurking in the universe is still being pursued;
considered from two complementary aspects
the wave and particle - all matters, essentially, is
a wave of electromagnetic vibrations.
From the waves of universal consciousness
the particles manifest, and express themselves.
All that exists in the universe
Is a whirlpool of energy, emerging
and disappearing into the infinite
parent consciousness, in affirmation of
the oneness of the finite with the infinite.

All elements in the cosmos plan their part
In sustaining the marvellous order in creation.
The global laws that govern lives
And sustain the right to well being of humans,
plants, animals, mountains, earth and water
exhibit harmony of their mutual belonging.
Each domain has the right to grow,
manifest itself.
Violation of laws that protect right to reveal
generate upheavals on multiple fronts.
Violence chaos, calamitous consequences occur
In the wondrous universe, a well ordered whole.
Human consumption and production impact on earth
Earth impacting worryingly by human actions,
Human nature conflating need with greed;
Animal and plant species face extinction
Climate change drives the bee to extinction
Their habitat, water and food sources altered,
Expert stress on the technologies minimising
climate damage.
Solar geoengineering intervenes to counteract
climate change
In order to lower warming on earth,
The nations have to prioritise lessening
environmental impacts
To mitigate ecological damage, global warming
And sustainably build back better ecobiodiversity.

Indigenous Americans plants beans alongside
corn and squash,
The beans enrich the soil- with nitrogen
The corn protects beans from the pests;
And, the squash suppresses weeds;
Wildebeest, Zebra, always migrate together in horde
Zebra eats the long grass, the wildebeest, the short,
In their collaborative effort there's strength and
purpose
collaboration is for mutual benefit and survival.

Global culture of disintegration rising,
culture of respect and acceptance largely
disappearing on so many levels of life, violence
witnessed goodwill overturned by hate,
greed cause, loss of peace.
Expansionism and intrusion destroy sense of
security Congenitally acquired, innocence and
inherent Simplicity can get rid of such muddle.
Sticking to global rules, return to unmixed
original Will enhance human existence and
lessen suffering.
Sense of objectivity, feeling of peace being
constant No external event can interrupt the flow.

"Respect" is the basic global ethics, from which
Emanate acceptance, inclusiveness, ultimately
love; Love, the basic natural instinct of human
spirit, The most powerful weapon, used as
means for gaining advantage in a conflict,
to win, unite, gain, to revive harmony and global order.

Love becoming the grounding principle of all actions
Most of the ills of the universe will disappear. The
power of love not only saves but transforms lives.
This is not only true of human beings, also of
humans in relationship with animals; the
energies of love bring solace to the sick and the
dying.

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Bali Yatra :

The Celebration of Maritime Splendour

Er. Raghunath Patra

Baliyatra celebration along bank of Mahanadi resurrects maritime splendour Legacy in by gone days. Visitors flock to enjoy sight, purchase articles of desire.

For brisk trade, spread towns around. Ports are centre of commercial, cultural campus Tamralipti, Che-li-ta-lo (Manikpatna), Khalkatta patna, Paler, Deserene, Pithund famous.

Tamralipti in W.B, Pithund in A.P., now near Brahmagiri Che-li-ta-lo (Manikpatna) connecting lake Chilika with bay of Bengal linked with Ceylon, Sumatra, Rome, China.

Palur near Chatrapur, Ganjam is Dantapur Elephant trunk was a main item for export Aphaterian (Mansurkotta) is Gopalpur, Ganjam Khalkotta patna near Konark for China, Asia S.E.

With floating of time, ports declined succumbed Due to royal instability and mischievous piracy, Loss of trade, costal sedimentation, change of rever course etc and natural calamity.

For daring venture and dynamic spirit Our people remembered as Kalinga Sahasika For our influence prevails Siva workship Lord Shiva is treated as supreme, brother of buddha.

Every home of Bali, provided with small temples of departed souls.

Ancestor- worship spread over.

Balinese believe Bali is centre of universe, Abode of gods. Shibji presiding deity ever.

Saivites believe in bhakti, Buddhist yoga Buddhist address god Sureswar, Jagannath. Some of us anticipate Adi Buddha is Jagannath No untouchability there, Brahmins regarded best.

Balinese celebrate Shibaratri, Saraswati puja, Durga puja. In Odisha we take a dip or sink in water in Kartika purnima. Cuttuck throngs For celebration of Bali yatra, journey to Bali, We think.

Balinese observe festival floating small boats With burning candles, with a belief that child is sent to home land Kalinga. Infuneral Rites they shave heads, offer Brahmins food.

In food, manner, dress alike Odian. Manda, Enduri Cake also prepared like Odisha Chew betels, keep ingredients in wooden box bridal dress quite akin to that of Odia.

In Balinese "Kawi" language Odia words entered. Bou (bu), Barakoli(bokul), Genda(gendan), Goa (buah), Munha (muha), ruti (roti) Transit between regions exhibit wide Cultural horizon.

Thanks to our ancestral mariners of Odisha In maritime trade connected distant regions Aaa-ka-ma-bai, we sing in Kartika purnima. While floating our boats of banana peels.

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Co-operation in Odisha

Kishore Chandra Pattnaik

During November 2021 Co-op. week is to be celebrated by the Co-Operators and Co-op. flag is to be hoisted as usual. On this occasion the matters relating to Co-op. movement are discussed for information of general public. The following facts are narrated below about the Co-op. structure in Odisha. I hope the people of our state who are not in touch will have some idea about Co-op. movement and join hands for their economic development. The main criteria is willpower to achieve the goal. Ants are the examples of Co-operation. Co-operation is an integral part of Human society. Without mutual help it is impossible to thrive. One man cannot solve all his problems as those are multifarious in nature.

What is Co-Operation ?

Co-operation is a form of Organisation where-in, persons above the age of 18, voluntarily associate as human beings in order to solve their economic problems.

How the Co-operatives are organized?

More than 10 persons form a Co-operative society. Adopt a by-law basing upon Odisha Co-op. Societies act and rules enacted by State.govt. Get it registered by the Co-op. Dept and then start functioning.

Different types of Co-op. Societies

A) Panchayat level:- Primary Agricultural Co-op. Societies (P.A.C.S)

B) Block level:- Branch of Dist.level Central Co.op. Banks.

C) Sub-Divisional level:- Co-op land development banks , Co.op Housing society and regional Co.op. Marketing society.

D) District level:-Central Co-op. banks, Dist. Co-op. Union, Dist. Milk union, and urban Co-op. Banks. Etc.

State level :- State Co-op. Bank, State Co-op. Land development bank, State Co-op. Marketing federation, state Co-op. union, State Co-op Consumer Federation, State Co-op Milk federation, State House Building Co-op. Corporation.

National level:- National Agricultural bank for rural development, Indian farmer fertilizer Co-op. and National Co-op. union of India.

How they are Governed ?

General body is the ultimate authority. They delegate a Board of Directors. Secretary is

the chief executive assisted by manager, Accountant, clerks, storekeepers and other required staff as the case may be. Co-Op. Dept. of State govt. regulate the activities as per Act, Rules and bye-laws by way of inspection Audit, Award and Execution.

How the Co-operatives serve the people?

State Co-operative bank provides short term (1 year), Medium term (3 years) loans through Central Co-op banks. State Co-op. Land development bank provides long term credit up to 15 years for agricultural purposes through the sub-divisional level Primary Co-op. Land development banks. State Co-op marketing federation supply chemical fertilizers, insecticides, and agricultural implements through the regional Co-op. Marketing Societies (R.C.M.S).

State Co-Op. Union educates the Co-op. Personnel and acts as the mouthpiece of all Co-op. Societies of the state and apprise the state govt. about the difficulties and to solve them.

State Co-op. Consumer federation :- It guides the consumer Co-operatives in solving the consumer activities of the member societies. State milk federation regulates the milk Co-op societies. State housing building Co-op. Corporation solves the housing problems through sub-divisional level housing co-operatives.

N.A.B.A.R.D controls the agricultural finance of different states, I.f.f.co controls the supply of chemical fertilizers, insecticides and improved Agrl. Equipments. National Co-op union of India (N.C.U.I) educates the Co-op personnel through state Co-op. unions and apprise the central govt. about the difficulties and to solve their problems.

Government Aid:-

During the past years, the state as well as central govt. have left no stone unturned in the upliftment of the Co-op movement. The State Govt. has actively participated in purchasing shares of the Co-op societies to strengthen the financial position and gain confidence of the members. Godowns were constructed at R.C.M.S and O.S. Co-op. Marketing level for storage of Agrl. Produce, fertilizers and insecticides etc. Provided trucks for transportation of Agrl. and other products. Managerial subsidies were also given by government.

Difficulties faced by Co-operatives and how those can be solved:-

- 1) There should be no illegal interference in any manner contrary to Act, Rules, Bye-laws and other departmental directions in the shape of circulars etc.
- 2) The chief executive must be an ex-officio director of the board of management in order to exercise full control over the working of the institution.
- 3) To make the institution self supported programme of business be prepared for each year and reviewed monthly as to how far those are implemented. Target and Achievement be reviewed regularly. All activities need to be done basing upon the Act, Rules, bye-laws, circulars and violation thereof must be taken to task.

Suggestions for improvement:-

The integrity, honesty and sincerity of the employees of Co-op societies can make the

movement a success. Special attention need to be given to these aspects while recruiting the Co-op. personnel. Their performances should be reviewed and recorded in their service book each year.

Conclusion

The paid employees are responsible for day to day management in achieving the target and lapses if any. The managing director need to be vigilant in enforcing the Act, Rules, Byelaws and circulars and appraise the management for suitable action.

Staff should be categorised and service rules need to be formulated. E.P.F and insurance need be introduced for retirement benefits.

Compulsory and voluntary retirement may be included in the service rules.

The members are required to Co-operate each other for their economic development as there is no other alternative than Co-operation for all success.

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Life Saving Ozone Layer

Bibhuprasad Mohapatra

“Earth without ozone is like a house without roof.”

Can you imagine a house without roof on it? Whether this house will be safe and habitable? Thinking about Mother Earth without ozone layer is merely childish imagination and symbol of madness. Now-a-days Ozone layer depletion became a growing threat and created more panic among people than we think and realize. Then why panic?

Franz Kafka (1883-1924) was a German-language writer of novels and short stories who is widely regarded as one of the major figures of 20th-century literature. “*A Little Fable*” (German: “Kleine Fabel”) is a short story written by him between 1917 and 1923, likely in 1920. The story is:

“Alas,” said the mouse, “the whole world is growing smaller everyday. At the beginning it was so big that I was afraid, I kept running and running, and I was glad when I saw walls far away to the right and left, but these long walls have narrowed so quickly that I am in the last chamber already, and there in the corner stands the trap that I must run into.” “You only need to change your direction,” said the cat, and ate it up.

Situations of so-called civilized and educated people are not different from Kafka’s mouse.

We have entered an era of expanding scientific knowledge. With these great advances, however, we have still not solved the riddle of how ultimately may curb the Ozone Depleting Substances (ODS) in our midst. Each of us will be affected by the consequences of Ozone Layer Depletion. Remarkably, we did not see this as a war against ODSs that could be won. Startling rise of ODS due to excess use or overuse of certain luxurious instruments like Refrigerator etc. We should strive to protect ourselves. Certain questions come to our mind. What can each of us do so that this problem does not accelerate? How we live safely?

Ozone or trioxygen (name given by The International Union of Pure and Applied Chemistry (IUPAC)), is an allotrope (first allotrope of any chemical element to be recognized) of oxygen, a pale blue natural gas with the chemical formula O₃ (determined in 1865 by Jacques-Louis Soret). Ozone is a powerful oxidant and the word ‘Ozone’ derives from “ozein”, the Greek word for smell and named by Christian Friedrich Schonbein (1799-1868) in

1840. It is found in 2 different layers of the atmosphere and makes up only 0.6 ppm of the atmosphere. In the upper layer, Ozone protects life on earth by absorbing some of the sun's Ultraviolet (UV) rays. Too much UV rays can cause skin cancers i.e. basal and squamous cell Carcinomas and malignant melanoma, ocular cortical cataracts and will also harm all plants and animals.

Ozone layer is a portion of the stratosphere with a higher concentration of ozone, from 2-8 ppm (part per million), is beneficial, preventing damaging ultraviolet light from reaching the Earth's surface, to the benefit of both plants and animals. Ozone in the ozone layer filters out sunlight wavelengths from about 200 nm UV rays to 315 nm. However, certain chemicals that we use can destroy the ozone layer. These substances include Chlorofluorocarbons (CFCs), Halon, Carbon tetrachloride (CCl₄), Methyl chloroform (CH₃CCl₃), Hydrobromofluorocarbons (HBFCs), Hydrochlorofluorocarbons (HCFCs), Methyl bromide (CH₃Br) and Bromochloromethane (CH₂BrCl). CFCs were invented by Thomas Midgley, Jr. (1889-1944) in the 1920s. They were used in air conditioning and cooling units, as aerosol spray propellants prior to the 1970s, and in the cleaning processes of delicate electronic equipment.

Ozone layer thickness is expressed in terms of Dobson units (DU), which is named after Gordon Miller Bourne Dobson FRS (1889-1975). Dobson was an experimental physicist and meteorologist of unusual ingenuity who devoted much of his life to the observation and study of atmospheric ozone. Really, he was the 1st scientist to observe ozone depletion. The discovery of the

Antarctic "ozone hole" by British Antarctic Survey scientists Joseph Charles Farman (1930-2013), Brian Gerard Gardiner and John Shanklin (1st reported in Nature, May 1985 issue) came as a shock to the scientific community, because the observed decline in polar ozone was far larger than anyone had anticipated. In 2006, a 2.5 million square kilometer ozone hole was detected over Tibet. Also again in 2011 an ozone hole appeared over mountainous regions of Tibet, Xinjiang, Qinghai and the Hindu Kush. On March 15, 2011, a record ozone layer loss was observed, with about half of the ozone present over the Arctic having been destroyed.

There is a common misconception that the "ozone hole" is really a hole in the ozone layer. When the "ozone hole" occurs, the ozone in the lower stratosphere is destroyed. The upper stratosphere is less affected, so that the amount of ozone over the continent decreases by 50 percent or even more. The ozone does not disappear through the layer, nor is there a uniform 'thinning' of the ozone layer. The "hole" is a depression, not in the sense of "a hole in the windshield".

The International Day for the Preservation of Ozone Layer is celebrated globally on 16th September every year for raising awareness among people. In 1994, the United Nations General Assembly voted to designate September 16 as "World Ozone Day", to commemorate the signing of the Montreal Protocol on that date in 1987. The Montreal Protocol (1987, Canada) on Substances that Deplete the Ozone Layer is an international treaty designed and signed by 24 nations, to protect the ozone layer by phasing out the production of numerous substances that are

responsible for ozone depletion. 7th Secretary-General of the United Nations and co-recipient of the 2001 Nobel Peace Prize, Kofi Annan once told-”Perhaps the single most successful international agreement to date has been the Montreal Protocol”. Since 1995, September 16 was designated by the United Nations General Assembly. The UN General Assembly on 23.01.95 adopted a resolution 49/114 which proclaims 16th September as the Ozone Day. The main purpose of this precious day is to focus attention and due action at the global level, on the protection of the sensitive ozone layer. This year’s theme for this auspicious day i.e. Ozone Day:

“Ozone for life: 36 years of ozone layer protection.”

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Scientific Methods and importance of Producing Paddy Straw and Oyster Mushrooms in Odisha Condition

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Global scenario of mushroom production

China is the largest producer, consumer and exporter of mushrooms in the world followed by USA and Netherlands. China grows over 60 mushroom species in a small to industrial scale. Ten most widely cultivated mushrooms in China include *Pleurotus ostreatus*, *Lentinus edodes*, *Auricularia auricula*, *Agaricus bisporus*, *Flammulina velutipes*, *A. polytricha*, *P. cornucopiae*, *Coprinus comatus*, *Agrocybe chaxinggu* and *Volvariella volvacea* (Li 2012). World production of cultivated, edible mushrooms has increased more than 30-fold since 1978, from about 1 million ton in 1978 to 34 million tons in 2013 (Royse et al. 2017).

The three major mushroom producing countries as per FAO data namely China, USA and Netherland account for more than 60 % of the world production. However, share of China itself is 46 % which is about half of the world mushroom production. According to current Indian estimates, mushroom production of India is about 1,55,553 tons per annum with an average growth rate of 4.3 per cent, which is 0.5% of the world mushroom production. The button mushroom commands the largest share of 73 per cent of the total production followed by oyster

(16%), paddy straw (7%), milky (3%) and others (1%).

National scenario

Mushroom production in the country started in the 70s but growth rate, both in terms of productivity as well as production has been phenomenal. In seventies and eighties button mushroom was grown as a seasonal crop in hills, but with the development of technologies for environmental controls and increased understanding of the cropping systems, mushroom production shot up from mere 5,000 tons in 1990 to over 1,00,000 tons in 2010. The mushroom production of the country at present stands at 1,55,553 tons per annum. Today, commercially grown species are button and oyster mushrooms, followed by other tropical mushrooms like paddy straw mushroom, milky mushroom etc. Two to three crops of button mushroom are grown seasonally in temperate regions with minor adjustments of temperature in the growing rooms; while one crop of button mushroom is raised in North Western plains of India seasonally. Oyster, paddy straw and milky mushrooms are grown seasonally in the tropical/ subtropical areas from March to October. The areas where these mushrooms are popularly grown are Odisha,

Maharashtra, Tamil Nadu, Kerala, Andhra Pradesh, Karnataka and North Eastern region of India.

In India, the mushroom production systems are of mixed type i.e., both seasonal farming as well as high-tech cultivation. Button, oyster, paddy straw, and milky mushrooms are cultivated in different parts of the country as per temperature profile in different seasons. Haryana, Odisha, Maharashtra, Himachal Pradesh and Punjab are the major mushroom producing states with more than 55% contribution to the total production of the country. Many commercial units are located in different regions of our country and produce quality mushrooms for export round the year. The present production of white button mushroom is about 73% of the total production of mushrooms in the country.

Paddy straw mushroom has been a popular vegetarian diet of the people of Odisha since long. People in rural areas are in the habit of collecting this mushroom grown naturally during the rainy season on straw piles. However, it could not find a regular place in the diet due to its non-availability in other seasons. Now the scenario has changed altogether and straw mushroom is being cultivated 8-10 months a year. Besides, methods for off-season cultivation of paddy straw mushroom in the coastal ecosystem of the state are in the offing. The conditions in most of the agro-climatic situations of Odisha are favourable for taking up cultivation of a number of edible mushrooms. Diverse agro-wastes suitable for mushroom production are also available in abundance. Paddy straw, the main input for mushroom cultivation, is plentifully available at

cheaper rates. Besides, cultivation is comparatively easier, as it involves minimum investment, labour and space. Straw mushroom is cultivated largely as an intercrop in the coconut plantations in the coastal agro-ecological situation (Thakur and Mohapatra 2013). However, in the inland districts it is cultivated under thatched roof. Large number of farmers relies on the cultivation of *V. volvacea* as a secondary source of income, making use of their waste paddy straw. The enterprise has assumed the proportion of a cottage industry among the rice farmers in the hot and humid climate in the East and South-Eastern coastal plain zone of Odisha (Mohapatra *et al.* 2013).

State Scenario

Odisha produces about 10 million tons of paddy straw per annum and a major part of it is left out to decompose naturally or burnt *in situ*. Therefore, farmers utilize paddy straw for straw mushroom cultivation owing to its availability at cheaper rates throughout the state. In most cases, cultivation is done in non-pasteurized substrate with incorporation of pulse powder or wheat bran. The acidic medium in hot and humid climate is more prone to competitor moulds and diseases. Therefore, the biological efficiency hovers at 10 per cent which is low. However, there is scope for improvement in biological efficiency by using more productive strains of the species, producing good quality spawn and effective substrate management. Further, higher and more stable yields (30-45%) could be obtained through adoption of indoor method of farming (Ahlawat and Tewari 2007) using partially composted substrate.

Nutritional Value of Mushrooms

Mushrooms are especially rich in minerals vitamins and carbohydrates the unique flavour and textural characteristics distinguish this mushroom from other edible mushrooms. The nutritive value of paddy straw mushroom is affected by the method of cropping and the stages of maturation. Available data reveal that the paddy straw mushroom contains around 90% water. So on dry wt. basis it contains 30-43% crude protein, 1-6% fat, 12-48% carbohydrates, 4-10% crude fibre and 5.13% ash. The fat content increases with the maturation stage and the fully mature fruiting body contains as high as 5% fat. The N-free carbohydrates increases from button stage to the egg stage levels, remains constant at the elongation and drops at the mature stage. The crude fibre remains at almost same level in first three stages and increases at mature stage. The egg stage contains highest level of protein, which decreases at mature stage. Ash content remains almost similar at all the developmental stages. The straw mushroom is known to be rich in minerals such as potassium, sodium and phosphorus. Potassium constitutes the major fraction of the major elements, followed by sodium and calcium. The levels of K, Ca and Mg remain almost same at different developmental stages, except that of Na & P, which drops at elongation and at mature stages. The contents of minor elements namely Cu, Zn and Fe did not vary much at different stages of development. The levels of thiamine and riboflavin in paddy straw mushroom are lower than *A. bisporus* and *Lentinula edodes*, while niacin is at par with these two mushrooms. At all the stages lysine is the most abundant essential amino acid and glutamic acid and aspartic acid are the most abundant non-essential amino acids.

Tryptophan and methionine are lowest among essential amino acids. The level of phenylalanine increases nearly one fold at elongation stage, while lysine decreases to about half of its value at the button stage. The nutritive value of straw mushroom is comparable to that of the other mushrooms both in terms of amino acid composition and the percentage of essential amino acids as lysine is the limiting amino acid in cereals that form our staple food. In fact, paddy straw mushroom contains high percentage of essential amino acids in comparison to other mushrooms and the abundance of lysine is very important. The other three amino acids namely leucine, isoleucine and methionine are low in paddy straw mushroom.

Oyster mushroom

Oyster mushroom (*Pleurotus* spp.) has species suitable for both temperate and subtropical regions. It is the third largest cultivated mushroom of the world. India produces 24,000 tons/annum during the winter months (November-February) contributing to 16 per cent of total mushroom production of the country. The mushroom can be cultivated in a wide range of temperature (22-28°C) employing most cellulosic farm wastes. It is a fact that though the cultivation of oyster mushroom is feasible during the winter season but not appreciated much by the consumers for fresh consumption. However, this could be a very good raw material for dehydration. *Pleurotus sajor-caju* (grey oyster), *P. florida* (white oyster), *P. pulmonarius* (Indian oyster), *P. eous* (pink oyster) and *Hypsizygus ulmarius* (blue oyster) are the preferred species for cultivation in India.

CULTIVATION OF PADDY STRAW MUSHROOM

Paddy straw mushroom is an edible mushroom of the tropics and subtropics. It was first cultivated in China as early as in 1822. Around 1932-35, the straw mushroom was introduced into Philippines, Malaysia, and other South-East Asian countries by overseas Chinese. In India this mushroom was first cultivated in early 1940's. In India, 19 edible species of *Volvariella* have been recorded but cultivation methods have been devised for three of them only viz; *V. volvacea* (Bull. ex Fr.) Sing., *V. esculenta* (Mass) Sing. and *V. diplasia* (Berk and Br.) Sing. *V. volvacea* is deep grey in colour, number of fruiting body is less per bed where as *V. diplasia* is whitish or ashy in colour, fruiting body is more with smaller size.

Procedure:

Straw bundles of 1.5' length are soaked in clean and cold water for 6 hours. Period of soaking depends upon the stiffness of the straw. Then substrate is pasteurized physically/chemically for 1 hour. In physical method it is treated in hot water or steam pasteurized at 70-80°C for 1 hour. Alternatively, the bundles are soaked in water containing 1-2% CaCO₃ powder for the required period so that the pH of the medium is improved. This suppresses the growth and multiplication of moulds in the substratum. Then bundles are kept in a slanting manner upside down to drain out excess water.

Put 4 bricks at 2ft apart from each other and put bamboo sticks on it to make a platform. Break the spawn bottle, remove the spawn and

Climatic requirement	
Temperature- 25-38°C	Relative humidity- 85-90%
Light- 1000lux	pH- 6.5-7.0
Substrate moisture -65%	Oxygen requirement- more during fruiting stage

Production inputs

Paddy straw-7kg	Spawn-200g (3%)
Additives – 200g (3%)	Standard bed size should be 1.5'x1.5'x1.5'

Requisites:

Thatched shed	Soaking tank
Sprayer	Chaff cutter
Thermometer	Hygrometer
Bamboo racks	Polythene sheet
Spawn bottle	Organic additives

divide it into 4 parts. For preparing a bed of 1.5'x1.5'x1.5' size, 200g of spawn is required. Spread 1st layer of straw having 5" thickness. One fourth of the spawn bit is put at 3" apart from the periphery at spacing of 3" also. One-fourth of the organic supplement should be sprinkled on the spawn bits. After the 1st layer is complete, another layer of straw 5" thickness is laid opposite to the 1st layer and spawn along

with organic supplement (one fourth part each) are sprinkled. Then the 3rd layer is prepared just like 1st layer and seeded 2 parts of spawn as well as organic supplement both at edges and centre. A thin layer of 2-3" straw will be spread on the 3rd layer, which is the cover layer. In this way the bed is prepared and a polythene of 6'x6' is covered in order to maintain moisture for 7 days which is known as incubation period. Covering of polythene helps in rising of temperature inside the bed, less accumulation of oxygen and contaminant moulds with the bed. After completion of incubation period i.e the bed is covered with fungal mycelium.

On 9th-10th day, pin heads come out from the bed which develop gradually and attain harvestable stage (egg stage) towards 14th-15th day of spawning. The first flush yields about 80% of the total sporophores and rest 20% is obtained after one week of 1st harvest. Biological efficiency of straw mushroom is 10-15% (700-1050g per 7kg substrate), but it can be increased up to 30-45% by using cotton waste as substrate.

Biological efficiency =

$$\frac{\text{Weight of total fresh mushroom(kg)}}{\text{Weight of dry substrate used (Kg)}} \times 100$$

Economics:

Particulars	Amount	Rate	Total
Straw	7kg	₹4.00/kg	28.00
Spawn	200g	60.00/kg	12.00
Supplements	200g	20.00	4.00
Miscellaneous	-	-	16.00
			60.00

Average yield per bed- 1kg (in 2-3 flushes)

Minimum sale price- 120.00/kg

Net profit-(120.00-60.00)= 60.00 (from 10 ft² area)

CULTIVATION OF OYSTER MUSHROOM

Oyster mushroom or 'Dhingri' is lignocellulolytic fungus that grows naturally in the temperate and tropical forest on dead, decaying wooden logs, sometimes on drying trunks of deciduous or coniferous woods. A large number of agricultural, forest and agro-industrial by-products including straws of wheat, paddy and ragi, stalks and leaves of maize, jowar, bajra and cotton, sugarcane bagasse, jute and cotton waste, dehulled corncobs, pea nut shells, dried grasses, sunflower stalks, used tea leaf waste, discarded waste paper, paper mill sludges, coffee byproducts, tobacco waste, apple pomace and synthetic compost of button mushroom which are rich in cellulose, lignin and hemicellulose useful for growing oyster mushroom. However, yield of oyster mushroom largely depends on the nutrition and nature of the substrate.

This mushroom is cultivated in about 25 countries of far-east Asia, Europe and America. It is the 3rd largest cultivated mushroom in the world. The major producing countries are China, South Korea, Japan, Italy, Taiwan, Thailand and Philippines. At present India produces annually 10,000 tones of this mushroom. It is popularly grown in the states of Odisha, Karnataka, Maharashtra, Andhra Pradesh, Madhya Pradesh, and West Bengal and in the North-Eastern States of Meghalaya, Tripura, Manipur, Mizoram and Assam.

A. Climatic requirement

Temperature- 20-30°C	Relative humidity- More than 75%
Light- 200lux	pH- 6.5-7.0
Substrate moisture -65%	

B. Materials required

Straw-2kg	Spawn-200g
Polythene bag-1 (80x40cm)	Supplements-200g (boiled wheat, pulse powder, maize mill, wheat bran, rice bran, vermi-compost etc as optional)

C. Cultivation

Good quality dry paddy straw is cut into small pieces (1-1.5") and soaked in clean water for 6 hours. The soaking period depends upon stiffness of the straw. The soaked straw is then pasteurized physically or chemically. The humidity of pasteurized straw is then maintained at 65%. The substrate is then filled into the polythene bag (one end of the polythene tube is tied with rubber band in order to make a bag) about 6" thickness and spawning is done at periphery along with dry boiled wheat grain. In this way 4layerd bag is prepared, the other end is tied with rubber band and 15-20 holes are made to facilitate aeration. This type of spawning is called layer spawning. Sometimes, spawning is done on the top of the small bags containing the substrate is known as top spawning. But, in big farms where a large number of bags are prepared, the spawn is mixed thoroughly with the substrate is called as through / mix spawning. The spawned bags are then incubated in dark room for about 15 days. After incubation, the bags are fully covered by mycelium and then the polythene bag is removed either by cutting or pulling the polythene. The naked and compact colonized substrate is hanged in the growing room facilitating the required climatic condition along with watering in order to maintain

the substrate moist. Pinheads appear about 3-4 days and harvest 3-4 days after initiation of pinhead. About 1.5-2kg oyster mushroom can be harvested from 3-4 economic flushes in a cropping cycle of 45 days.

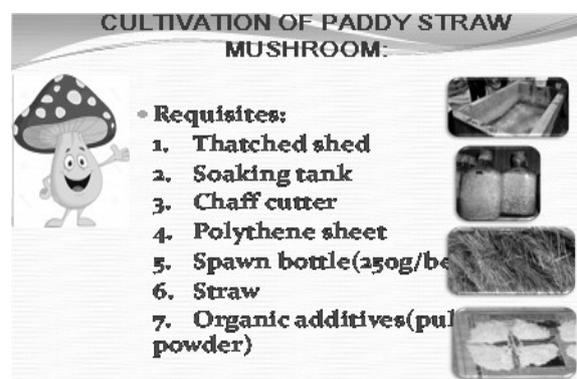
Economics:

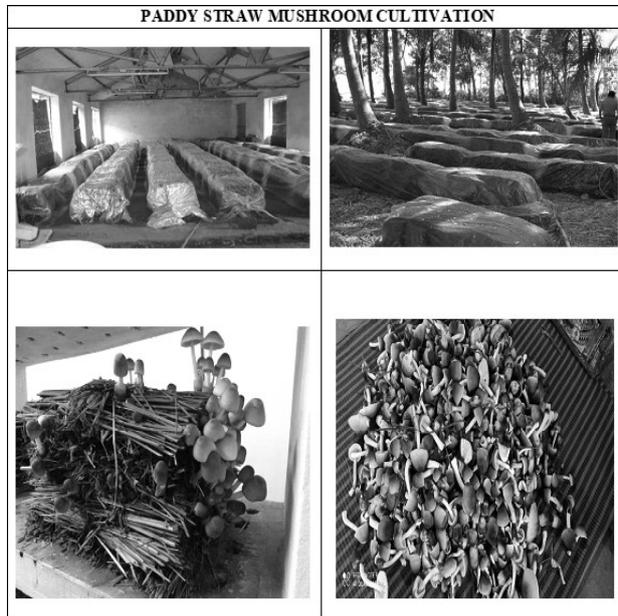
Straw (2kg)	:	8.00
Spawn	:	12.00
Supplements	:	4.00
Polythene	:	3.00
Miscellaneous	:	13.00
		40.00

Average yield per bag- 1.5kg in 2-3 flushes

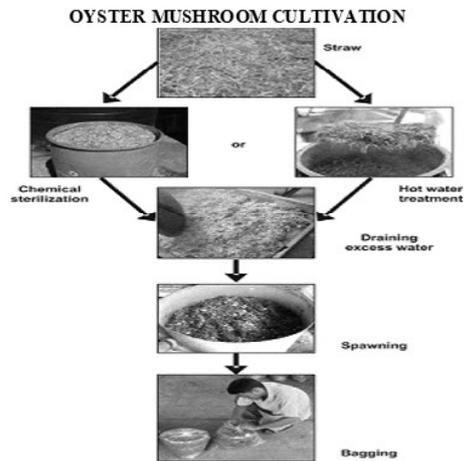
Minimum sale price- 50.00/kg

Net profit-(75.00-40.00)= 35.00 (from 4 ft² area)

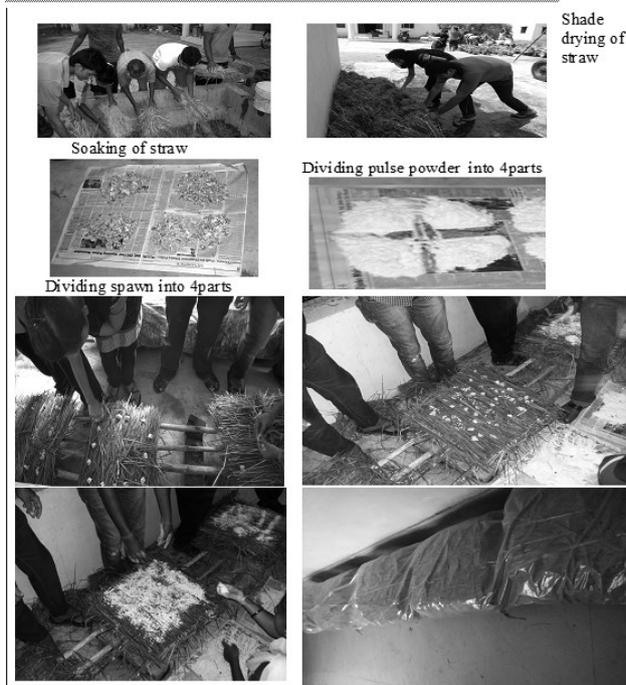




Steps involved in bed preparation of Oyster Mushroom cultivation



Steps involved in bed preparation of Paddy straw cultivation



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Religious Tourists' Spots of Kendrapara

Dr. Sarbeswar Sena

Tourism is 'the commercial organization and operation of holidays and visits to places of interest'. In the modern arena it has become a popular industry all over the world. The precedence of travelling to different places of religious, historical, geographical and cultural importance is prevalent from ancient times. As civilization develops interest and inquisitiveness equally increase to know the world more and more. Needless to mention that modern tourism has paved the path and served the purpose. Stories of 'Panchatantra', 'Kathasarita Sagar', 'Arabian knights' and 'Ishop moral tales' is the bright example of visit to different places of interest and importance by ancient people. Spectacular development in the field of science and technology has made communication facilities easier by road, air and water routes and now the world is just a family. Travel to different places has had been treated a upper class luxury but now-a-days it is a common phenomenon for all classes of people. So all the nations have concentrated in improving tourism facilities and that glorifies the country and brings economic stabilization. To be more particular, modern tourism has become a profitable industry.

India is also very much ahead in promoting tourism industry. Tourists from all over world are

fascinated for a trip to India. The point of attraction is religious, historical heritage, rich culture, art and architecture of the country. In this respect *Odisha* is also world famous for some of her marvelous tourists' spots namely *Puri*, *Konark*, *Bhubaneswar*, *Kendrapara* and some other places. The legendary Black Pagoda (Sun temple at *Konark*), Lord *Jagannath* at *Puri*, *Dangamala*, *Gahirmatha*, *Bhitarkanika* and temple of Lord *Baladevjew* at *Kendrapara* district are the main attraction of the tourists. The great German scholar Mac-Muller has rightly opined that, "India is a land of riches" and her some regions create illusion of a heavenly garden *Nandankanana* (the garden of Lord *Indra*). For this notion in the minds of foreign invaders has forced them to attack and plunder India. The other side is very much encouraging. Tourists also rush to the country in large number that helps the development of India tourism. But special attention is given in this essay to bring out the picture of the tourists' spots of *Kendrapara*.

Introducing Kendrapara:

Kendrapara originally belongs to undivided Cuttack district becomes a sub-division (1859) and at last a district (1993 A.D.) It is situated in 20°49'E. Latitude and 86°25'E to

87°.1'E. Longitude and the district headquarter being the same. The district is surrounded by *Bhadrak, Jajpur, Cuttack* and *Jagatsinghpur* districts and Bay of Bengal in the east. The river Luna (a branch of *Mahanadi*) and other rivers that flow in *Kendrapara* district are *Karandia, Gobari, Chitrotpala* and *Hansua. Aul, Derabish, Garadpur, Mahakalpara, Marshaghai, Kendrapara, Rajanagar, Rajkanika, Pattamundai* are the nine blocks of the district.

As per the population report of 2011 Census of India 1,439,891 people inhabit in this district. The district has a sex ratio of 1006 females for every 1000 males and the literacy ratio is 85.93%. The mothertongue of most of the people is Odia. But a sizeable number of Bengali and Urdu speaking people are in the district. Majority of people can understand, read English and Hindi.

Kendrapara is 59 km far from Cuttack. One can reach the district headquarters by bus from Cuttack via *Jagatpur* on *Cuttack-Salipur* state highway or on the National highway No.-5 and 5(A), crossing at *Chandikhola* via *Chhata* towards *Paradip*. The nearest railway station is Cuttack, 54 Km from *Kendrapara*. Drive from Bhubaneswar Airport on National highway 5 and 5(A) takes 2½ hours only. From *Bhadrak* to *Kendrapara* via *Chandikhola* and *Duhuria*, from *Jagatsinghpur* via *Bhutmundai, Marshaghai, Gopachhaka* and *Duhuria*, from *Chandabali* via *Rajanagar, Aul, Pattamundai, Gogua, Garapur*, one can travel in bus and reach *Kendrapara*.

For lodging and boarding, a tourist can avail the facilities of small and big hotels in the district headquarters. Similarly in each block, some hotels are made available. Taxi, Auto,

Rickshaw services is the easy means of travelling to different places of interest of the district. Tourists can find hotels at *Pattamundai* market which is 20 km from *Kendrapara* and in *Bhitarkanika* also lodging and boarding facilities is there.

Kendrapara is a coastal district, has many attractions for tourists. Temples, historical places, sea-beach, enchanting natural scenery and some world famous eco-tourists' spots have made the district significant one.

Religious Places of Tourism:

Sri Baladevjew, Ichhapur-

Kendrapara is popularly known *Ichhapur* and is famous for the temple of Lord Shree *Baladevjew*, the elder brother of Shree *Jagannath*. As per legend, the name *Kendrapara* is derived from the demon king *Kandarasura*, ruled over the region of *Lalitgiri*.

Tulasikshetra Mahatmya, written by *Sri Bipra Madhuri* reveals that *Baladevjew* killed the tyrant ruler *Kandara*, married his daughter *Tulasi*. The place where *Kandarasura* was killed is named as *Kendrapara* in the memory of *Kandara* and *Tulasikshetra* in the name of his daughter. *Balabhadra* married *Tulasi* on the twelfth day of the bright fortnight of the month *Magha*. The same day is observed 'Marriage day' in the temple each year. Some also say that *Kendrapara* is from *Kendara* (an up stringed fiddle) the musical instrument played by *Nath Yogis* of *Kendrapara* has no strong base to believe. *Bipin Bihari Sen* has written an essay in *Utkal Sahitya*, captioned '*Aswasthakshetra Ba Zilla Kujanga*' that Maratha soldiers camped in the centre of contemporary *Kendrapara* (1753) to defeat *Chaturbhuj Sandha*, the king of

Kujanga. They have named that place *Kendrapalli* (all villages/ middle of the village). From that time the name *Tulasikshetra* is changed and called *Kendrapalli* but uttered *Kendrapara* by the British. Due to faulty pronunciation people are used to write *Kendrapara* as *Kendrapada* in regional language. Besides *Tulasikshetra* is known as ‘*Gupta Kshetra*’, ‘*Gupta Brindaban*’, ‘*Utkale gupta Brindaban*’ and ‘*Brahma Kshetra*’ etc. based on Hindu mythology.

Historical background of *Sri Baladevjew* temple can be traced back to the reign of *Maharani Kalyani*. Initially *Baladev* has been established in “*Chaturasra Mandap*’ with *Tulasi*. But later *Sri Jagannath* and *Subhadra* are associated with *Balabhadra*. The temple is erected by *Jajati Keshari* in 10th century A.D. Some opine that King *Anangabhima Dev-III* has built the big temple ‘*Rekhadeula*’ of *Baladevjew* which was destroyed by *Kalapahada* (1568) a cruel fanatic Muslim. That temple has been demolished (1663) by *sudedar Khan-i-Dauran* of the *Moghul* emperor *Aurangzeb*. The new temple is built (1670) at *Ichhapur* by king *Gopalshree* and *Srinibas Narendra Mohapatra* of *Kujanga* and *Chedera* respectively. The temple is encircled by a big wall of 14 feet height. In the temple premises four big temples (*Srimandir*, *Bhogamandap*, *Jagamohan*, *Batamandir*) are there. In front of the temple stands *Aruna Stambha* of 40 feet height and 4 feet rounded. With main deities *Mahalaxmi*, *Sudarshan*, *Gopalballava* along with a big *Salagram* (a black pebble found in the river *Ganduki*) are worshipped on the *Ratna Singhasan*. *Tulasi* near *Satapahacha*, *Astasambhu*, *Baikunthanath*, *Kamadhenu*, *Nabagraha*, *Sri Ganesh*, *Rabati*, *Kali*, *Yama*, *Nrusingha*, *MaaSarala*, *Kartikeya*, *Bakdevi*

are some of the side deities of the temple. *Jhulanaghara*, *Ratnabhandar*, *Snana mandap* and *Muktimandap* are in the temple campus. The main temple is of 75 feet height and 40 feet width, built with *Baulamalia* stones in the shape of *Saptapidha* style (seven layers).

Deity *Sri Baladevjew* is ‘*Manibighraha*’ where as *Sri Jagannath* of *Srimandir* is ‘*Darubrahma*’. During the rituals of *Navakalebara*, the divine deities of *Srimandir* are replaced by new ones and ‘*Brahma*’ is placed in the new deities. But in the temple of *Baladevjew*, *Ichhapur* only silken clothes of the deities are replaced by new ones.

Different rituals are observed in the temple all along the year. ‘*Raksha Bandhan*’, ‘*Tulasi Bibaha*’, *Jhulanyatra*, *Kanchi Kaverivesha*, *Kandarasura Nidhan (vira vasha)*, *Raghunath Vesha* on the chariot are some of the important occasions of the temple. But *Rathyatra* on 2nd day of the bright fortnight of *Ashadha* is the spectacular one. The deities of *Shreemandir (Jagannath, Balabhadra, Subhadra with Sudarshan)* start for *Gundicha mandir* in separate chariots. But at *Ichhapur Baladev* takes his younger brother *Jagannath* and sister *Subhadra* with him in a single chariot (*Brahma Taladhwaja*), the highest one in the world. The chariot has 14 wheels of 6 feet height. Those are spoke-less and are of three solid Sal wooden planks 7 inches thick each. *Brahma Taladhwaja* is 65 feet high. *Singhasan* of the deities is 12 feet high from the land level. Two white and two black horses are attached to the chariot. They are *Tibra*, *Ghora*, *Dirghashram* and *Swarnanava*. An interesting legend lies behind *Brahma Taladhwaja* that the Gods provided *Balabhadra* the chariot in *Dwapar yuga* to kill *Dhenuka* the dangerous giant. The banner on the

top bore a Palmyra-tree symbol and the war was in Palmyra- tree groves. So the chariot is named Brahma *Taladhwaja*. At *Puri*, *Gundicha* temple and *Mausima Mandira (Ardhashosini)* are in separate place where as the latter is in the premises of *Gundicha* temple of *Ichhapur*.

Kendrapara is famous for *Rasabali* (a soft cake prepared with flour cheese, dipped in sweet milk). Different tasty *bhoga* (offering to the deity) are offered to *Baladevjew* but *Rasabali* is the important one. *Gudia* Panda prepare the same. A tourist never forgets to purchase some *Rasabali* for his family members.

Balabhadra cult has established religious harmony and it spells out the socio-economic and religious spheres in *Odisha*. It has reduced the caste system to a greater extent though car-festival and has tried to bind the people in the rope of love, amity and fraternity. No doubt *Kendrapara* has got an important place in the tourism map of India for the temple of *Baladevjew*, *Ichhapur*. Some other temples of *Baladev* and *Jagannath* are also in the district which needs mention.

Jagannath temple, Keredagada

Keredagada is a village in *Rajanagar Tehsil* and in the past it was the capital of *Nagavamsi* kings. The king of *Kanika* has constructed the temple of *Jagannath*, stands by the side of the river. The rituals of this temple are just like of *Shreemandir*. The ten incarnation of Sri Vishnu, engraved on a single stone is another attraction. Besides, on the body of the temple eye catching art and architecture and ancient Buddhist images made of granite stone are the special features of the temple. As per the instruction of the king three wells are dug just like a mathematical

symbol i.e. therefore (4"), meant for the king, subjects, and the deity separately is a guess work only.

The adjacent village of *Keredagada* is *Balisahi*, the birthplace of great *Namacharya SrimadBaiya*. The image of *Sachidananda* the worshipped god of *Baiya* is also an attraction for the tourists.

Jagannath temple, Mahala

A big temple of *Jagannatha* at *Mahala* in the *Garadpur* G.P. is just 10 km from *sadar Kendrapara*. The concept to build a temple has been originated in the minds of the *Jagannath* devotees of the area in 1996, the year of *Navakalebara*(the new embodiment of the wooden body divine) of *Jagannath* temple, *Puri*. From the same year the four wooden deities (*Balabhadra*, *Jagannath*, *Subhadra* and *Sudarshan*) are worshipped in the temple of *Garuda Maharaj* temple. *Gundicha* and *BahudaYatra* have started in the same year. The construction of the temple is completed in 1998 and the *Nilachakra* measuring 1 quintal 35 kg of *Asthadhatu* (eight types of metal) is setup on the top of the temple. Consecration of the temple is observed on full moon of *Baisakha*. All the rituals of *Sri Jagannath*, *Puri* are observed here including the *Navakalebara*. The *Peeth* is popularly known 'Harihar Kshetra'. The *Jagannath* temple of *Mahala* is just in the centre place in between the river *Chitrotpala* and *Luna* is a delta area in the shape of a conch and called *Sankha kshetra*.

Baladev temple, Righagarh

Righagarh is situated in a dense forest of *Bhitarkanika*. It comes under *Iswarpur* G.P.

of *Rajnagar* Tehsil and is 21 km from *Rajanagar*. A visitor has to move towards north way *Kanika* Road to reach the Place. The temple of *Baladevjew* of *Righagarh* is built by the king *Balabhadra Bhanja Deo* of *Kanika* estate. Hamilton in his book 'The Hindustan' has mentioned *Righagarh* as "Rika fort". Gradually 'Rika fort' becomes 'Riga ford' and at last *Rigagarh*. It is simply an assumption.

The rituals of *Baladev* temple of *Righagara* is the same as of *Puri*. But now a day the famous festival *Rathyatra* and *Chandan yatra* has been stopped. The natural scenery of the place is very much enjoyable.

Banabiharijew, Pentha

Near the mouth of the river *Barunei*, on the seashore of Bay of Bengal the village *Pentha* is the point of attraction for the temple of *Sri Sri Banabiharijew*. King *Rajendra Narayan Bhanja Deo* has built the temple. There is a legend behind the construction of the temple. It is said that once the king had been for hunting, found a herd of deer, aimed at them to shoot, listened a pleasant sound, followed but could not trace the place where the sound of jingling anklet came from. In the night he has dreamt a dream and *Banabiharijew* directed him to build a temple for him and to declare the forest an animal sanctuary. The king has constructed the temple and arranged the sources of expenditure for different festivals. Total revenue collected from 1800 acres of land from five villages (*Banabiharipur, Singadapala, Narangada, Gopalpur and Hariharpur*). *Baruneswar* temple (temple of god Shiva) is also in the *Banabiharijew* temple yard. The place is an attraction for the tourists.

Dadhibaman, Choudakulata

Choudakulat is under *Pattamundai* police station. The deity, *Dadhibaman* is consecrated there in a temple of 60 feet height. The temple is built 300 years ago by the *Zamindars* of *Ghagara*. It is surrounded by dense *Tamala* trees and creates a magnificent sight and for this, the habitation in the western side of the temple is called '*Tamalasashan*'. During the reign of *Gajapati* king *Purusottamdev* (1479-1504) *Dadhibaman* temples are established in different places of *Odisha*. In *Kendrapara* district those temples are found at *Bharatpur, Derabish, Chhoti, Rajnagar* and in some other places. But *Dadhibaman* temple of *Choudakulat* is the famous one. *Nilachakra* of the temple is on *Dadhinauti* (a pitcher-like stone work on the summit of the temple) and a white flag with swastika (an auspicious symbol) flutters. It is a sacred indication. In the temples the only deity *Jagannath* worshipped is called *Dadhibamana*. *Dadhibamana* of *Choudakulat* is known as *Balamukunda*. The deity puts on a *Saree* (a piece of cloth worn by woman) is an exception.

Laxmibarahjew, Aul

Aul is a familiar place of tourism and better recognized by the *Laxmibaraha* temple. History states that *Mukundadeva* the last *Gajapati* king of *Odisha* a good friend of Moghul emperor Akbar, the great was assassinated in 1568 and his wife took shelter near the emperor. *Subedar Mansingh* directed by the emperor provided the widow queen of *Mukunda Dev* the vast region of the river belt of *Kharashrota* and *Brahmani*. Later the place is named Ali (*Aul*). According to a legendary tale king *Bhatta* brought the deity of *Laxmibaraha* from *Jajpur*, originally worshipped

there by *Kesharivamsi* kings. But history is totally different. The foundation of *Laxmibaraha* temple is laid by *Nilakantha Dev*, the king of *Aul* and completed by other *Aul* kings (*Jadunath Dev*, *Prataprudra Dev* and *BrajaSundar Dev*). The artists from the families those built *Shreemandir*, *Puri* have finished the construction of *Laxmibaraha* temple. Two heavy doors fitted to the *Singhadwara* are made of *shirisa* (a kind of tree) wood. Ninety six boxes of the doors bear the portrait of *Sri Hanuman*, *Dasamayee Barahi*, animals in sexual gesture, a male warrior clad in royal robes, sat on a tiger with two hands on its head are the special attraction for tourists. Some believe, that picture is of *Brajasundar Dev*, the brave king of *Aul*.

The shrine of *Laxmi Baraha* is made of granite stone, and is in a beautiful, charming and pleasing posture. The deity adorns yellow silken robes. Earth on his left shoulder, *Devi Laxmi* in her right shoulder, the sun and moon by the side of feet, *Vasuki* under the feet, *Sankha* (a conch), *Chakra* (a sharp circular weapon), *Gada* (a bludgeon), *Padma* (a lotus) in four hands are of special attraction. The deity is of 5 feet 6 inches height. *Chandan yatra*, on full moon of *Baisakha*, *Barahavesha* on full moon of *kartika*, *Kanchi kaveri veshha* on *Sri Panchami* are some important festivals of the temple. On those occasions a large number of pious people assemble to pay homage to *Laxmibaraha*, the incarnation of Lord Vishnu.

Sakhi Bata, Bilabalarampur:

Sakhi Bata an accorded tourist spot is situated in the village *Bilabalarampur*, nearer to *Kendrapara sadar*. One big banyan tree of 500 years old once covered 5 acres of land and it is still difficult to know its root. After super cyclone

(1999) the old tree is not in its original shape. But from the aerial roots of the tree 40 new trees are created. This place bags a splendid history. It is a fact that cruel general of *Aurangzeb* proceeded *Kendrapara* to destroy the temple of *Baladevjew* and before his arrival the priests were successful in hiding the deity of *Baladev* under the banyan trees for twelve years. The exceptional scenario of the place and surrounding is another attraction for tourists. In the old temple the deity *Baladevjew* is worshipped whereas in *Jagannath* temple *Lord Sri Jagannath*, *Sri Baladev* and *Devi Subhadra* and in *Radha Krishna* temple *Lord Krishna* and *Radha* are worshipped. The temple of *Baladev* at *Sakhi Bata* is more than 200 years old but it remained intact in the super cyclone is no doubt a miracle. A tourist cottage is built in the place. It is a beautiful picnic spot. Only vegetarian items without onion and garlic are allowed.

Chhualia Shakti Peeth:

Chhualia Shakti Peeth is the only tourist spot of *Pattamundai* Block. *Maa Chhualia* is the *Adhisthatri Devi*. It is of equal distance i.e. 12 km from both of *Pattamundai* block and *Kendrapara sadar*. A branch river of the *Mahanadi* meets the river *Govari* at *Gandakhia* and united with the Bay of Bengal. It is a belief that *Odia* merchants were going in boats for trade in different islands and paid homage to goddess for safe sea journey and offered cooked fishes as *Bhoga* (an offering to the deity) prepared from the fishes of rivers and sea. That practice still continues in this *Peeth*. *Devi* is surrounded by dense *Sahada* trees that create enchanting scenery. Meat of any kind and wine is strictly prohibited in this *peeth*.

Dolamelana, *Raja*, *Panchuka*, *Biswashanti MahaJajna*, *Asta Prahar Nama*

Jajna are the popular festivals of the place. The goddess is worshipped in *Banadurga Bijamantra*. The priests belong to the gardener caste.

Daria Ramachandi, Ramanagar

Ramanagar is a revenue village under *Marshaghai Tehsil* of *Kendrapara* district. It is 44 km from *Kendrapara* and 34 km from *Marshaghai*. A tourist on bus journey can reach *Chhapali* or *Jambo*, on the embankment of *Jambo* canal, then covers 3 km towards south on foot or by rickshaw to reach *Ramachandi*. The place is significant for the shrine of goddess *Ramachandi*. People say that the idol of *Devi* was found on the seashore and some pious people consecrated the same constructing a temple. In the meantime seawater has receded and the temple is at a distance of 8 km from the sea shore. It is said that the *Odia* traders worshipped the goddess while moved on sea-voyage. The main function is observed in this *peeth* on the day of *Panasankranti* and a mela (festival) continues for three to four days in the nearby village *Petchhola*. The expenditure of the temple is met from the donations by devotees and income from the landed property of the temple donated by *Maharaja Bardhawan*. *Ramanagar* is an important tourist place of *Kendrapara*.

Lachhmanjew, Balipatna

Village *Balipatna* of *Kusiapala G.P.* is just 3 km towards west from *Kendrapara sadar*. It is famous for the temple of *Lachhmanjew* and is a recognised tourists' spot. The main deity is *Lachhman (Laxman)* the younger brother of *Sri Ramachandra* of *Tretaya Yuga*. The Hindu mythology says that *Ramachandra* was pleased with the selfless services provided by *Laxman* and granted a boon to him and wished to be his

younger brother *Jagannath* and *Laxman* the elder brother *Baladev* in *Kali Yuga*. Hence the main deity *Lachhman* in the temple is also regarded as *Balabhadra*. *Bhagabat, Jagannath, Balabhadra, Subhadra* and *Radhakrishna* are the side deities worshipped on *the Singhasana*. As per the history the *Naga Sadhu Gopi Das* on his visit to *Sri Baladevjew* temple, *Ichhapur* on the seashore, took rest at *Balipatna*, installed the deity *Lachhmanjew* there in 1726 A.D. that he brought in a satchel. He has arranged the rituals in *Lachhman* temple just like of *Baladevjew* temple. The newly built *Jhulanaghara*, the temple of *Balunkeswar* and *Sri Sri Hanumanjew* are the other attractions of tourists. *Jhulana Utsav, Holi, Chandan Yatra, Asta prahar Nama jajna, Sri Ramanavami, Rahas Yatra and Basanta Panchami* are main occasions of the temple. Hundreds of devotees gather on the spot on those days. The main deity *Lachhman* moves in a *Biman* (a self-moving chariot of god) in *Holi, Dussehra, Rahasa Purnima* for ten days, one day and three days respectively. In *Jhulan Yatra* *Lachhmanjew* also remains in the *Jhulana Mandap* for five to six days and on *Basanta Panchami* moves to the *Basanta Bagicha* to breathe the fragrant breeze of south is a special cultural tradition. *Kendrapara* is also famous for historical and eco-tourism. It needs special analysis.

To conclude *Kendrapara* is undoubtedly a potential place of tourism. It has a special identity in world tourism map like *Puri, Konark* and *Bhubaneswar*. *Tulasikshetra/Kendrapara* is alive and remains alive for all time to come as a dignified tourist spot.

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Saint Literature : An Introduction and Contextuality

Dr. Debashish Pandia

The Indian scholars have defined and distinguished a “Saint” (Santha) and a devotee (Vakta) with specific and distinctive meanings after having a thorough study and analysis on the ideals, advocacy and way of religious practice of the non-idolatory devotees (Nirgunapanthi). On that basis, the non-idolatory devotees and the idolatory devotees have been named “Santha” (Saint or pious man or holy man) and “Vakta” (devotee or worshipper of idols) respectively. The Researcher of “saint literature” Shri Chittaranjan Das says, by quoting the analysis of different authors of holy scriptures :- “Worship and devotion in religious practice are of two types, one is “Sa-guna” (with specific traits and qualities) and the other is “Nirguna (with-out any specific traits of worshipping procedure). Worshiping the idols with different shape and symbolic look of god’s is the specific cult and traits of devotee of “Sa-guna” category, whereas, the “Nirguna” practice does not require any established or accepted shape of any image for their worship and religious practice. Hence, according to this critical analysis, many critics have suggested to identify the “santhas” (Saints) in the devotees practising worship to shapeless gods with non-idolatory concept.

The sole aim of saints (santha) is to motivate and inspire people towards the purification of soul through right conduct and action by creating awareness for the great values of the society and human life, as well as to lead a divine social life through spiritualism for salvation and by giving up all luxuries and materialism. Those extraordinarily great and lovable personalities, who are free from all desires, expectations, worldly involvement, sensual pleasure, who have no enemy, who are never stimulated or affected by illusory sensuality and services like lust, anger, greed, emotion, who are capable of keeping in control and regulating their own mind and sense, and those who love everyone and be loved and honoured by all, are considered as saint (santha) in real sense.

The noble characteristics of the saints (Santha) is to steer and divert the human being from their desires of unwanted needs and inspire them toward the achievement of great deeds for the purpose of attaining absolute mental bliss and extreme happiness. So, it is only the saints, who are capable of receiving the blessing, mercy and pity from the Almighty, being stable and determined amidst acute sorrow and suffering. The whole endurance of the saints is directed towards “Bhagawata Sannidhya” or submission

of allegiance to the “Bhagabata chintan”. Their longing is nothing but to find a shelter at the feet of the Almighty soon after they leap into the realm of death. They consider “satsanga” (association with true people), “Nama Kirtana” (reciting the name of God) and “Guru Padashraya” (allegiance at the feet of divine teacher) to be the best way to secure absolute peace. The saints put priority to the surrounding world more than their own life and wish for the well being of all human beings and creatures.

The best example of “Sainly thought” and “sainthood” is appropriately reflected through the lines expressed by the “santha” “kabi” (saint poet) “Bhima Bhoi” in his book “Smruti Chintamani” that reads as “ Let the leaving being of the earth be secured from pain and suffering in exchange of my life being sent to all hell” by virtue of this upgraded and benevolent attitudes saints are honoured and worshipped as the most esteemed personality. So it has been expressed in our scriptures that association with true people is association with “Bhagawata”. To have a glimpse of a “saint” is only possible through good deeds. The devotion and regards of saints is invaluable and extraordinary. The frequency of sighting a saint is scare. In his epic “Rahashya Manjari” the great poet Durlhaba Dash has made it clear that, a single best and exceptional human being is created among one crore of good people, and one “Holy man” is created from among one crore best people, and out of one crore holy men a single “Vaishnaba” emerges, and finally, only one “Santha” takes place amidst one crore of “Vaishnaba”.

The Indian tradition is based on that of the Santha. The culture of “Mahabharata” created by sages and spiritual philosophers has been able

to create a stimulation through the world. Our culture has been remarkably superior by the divine enlightenment and spiritual vision of a good many “Siddha sadhaka” (saints who have achieved perfection). The Indian “Santhas” (saints) are well distinguished and recognised in the whole world for their sacrifice. By virtue of their vision and moral Santhas have well guided human beings to lead graceful and blissful life. They have inspired to emphasize on right action, right deed and realization of the essence of life and society, on which the prosperity of Indian depends. So the saints have undertaken real effort for the integration and unity of our society by eliminating the evils of diversities and by throwing light on the right path of human life.

India is the hub of different religions, Many saints have advocated and analysed the essence, objective or good of different religious practice, though their spiritual and visionary power. These saints have drawn the attention and attracted the heart of others towards the theatrical explanation of their own religion, community and way of life as realised by them though their philosophical anxiety. When the thoughts, ideals and vision of saints take the written form and get published, it is marked as “santha sahitya” (Literature of the saints). Saint Literature has been performing the role of a mirror since the ancient time. It is not the literature of any specific religion or community, rather this literature has a universal appeal, equipped with maximum utility towards the solution of critical problems of our past, present and future. The vision of life and theories advocated by Mahavira, Buddha, Jayadeva, Kabir, Tulsi Das, Achyutananda and Bhima Bhoi have been proved to be useful in the solution of our critical problems and adverse situation till now. Santha literature is that which is composed,

created by Santha (saints). It is the literature functioning as the inspiration in the life of the readers and disciples. The literature created by “Sadhaka” (devotees) is termed as “devotional literature”, and the literature born to saints (santha) is called “santha sahitya” (saint literature/ literature of the saints). The researcher of Indian saint literature Dr. Hajariprasad Dwivedi has designated “Santha Sahitya” as “Nirguna sahitya”. It is highly significant from the spiritual and literary point of view. In almost every Indian language “Santha Sahitya” has flourished and gained fame and popularity.

The typical saint literature have been extensively adorable far and wide. Beside giving a priority to devotional thoughts in their literature, the saints have also conceptualised and created from their mighty pen many “Santha Sahitya” (literature by saints) in the context of contemporary society, religion, politics and other aspects. The way of thought as presented by Santha is realized more useful in the current era than it was for the society in the past. It is true that all the “saint literature” are based on religious and social awareness and enlightenment. Saint literature strongly opposed the systems like casteism, communal terrorism and Fanaticism, that created instability in the society. In fact, Indian saint literature is today playing the role of an guardian angel for the whole world with its concept of communal endurance and universal brotherhood. Saint literature is the intense expression of humanitarianism. It is the expression of culture rejuvenation, which has been able to demonstrate the truth of existence of sovereign humanitarian value, being perfected its way through deep sense of humanitarianism that has got all relevance for every geographical environment and time phases such as past, present

and future. Therefore, the eternal and sovereign ideals of saint literature is being accepted with much gravity and importance.

Simplicity and genuineness are the prominent characteristics manifested in the concept and language of “Saint Literature”. Such literature has always been above meanness and narrowness having reliance and trust on a great distinctive power. By virtue of such distinctive attributes saint literature has preserved a vital place in the realm of “All-India Literature”. This literature is undoubtedly unique, especially from the point of view of its expression with simplicity, potential and powerful view, and authenticity. No other literature can be equal to “Santha Literature” with respect to its expression and presentation of humanitarian principle and reality. The wisdom and principle of ancient “Veda and Upanishada” (Scriptures of Spiritual teaching and ideals) get expression in the santha literature in a very simple, transparent manner. Therefore, santha literature is the source of life for the Indian spiritual practice. The effort of the saintly poets in their respective literature is highly remarkable with regard to eradicating discrimination in caste, race and classes of people by virtue of devotion as a medium. These poets have opened the path to the formation of a society free from inequality; casteism and religious partiality by eliminating all those systems responsible for disintegration of the society. The “Indian Santha-kabi” had emphasized on traditional devotion as the source of their enlightened and perfected thoughts. Well did they know that the path to the formation of a beautiful and equally developed social life could be built on the basis of simple, prolific Indian sense of devotion. “Santha Sahitya” still serves as a right route finder for us particularly, a substantial impact and contextual ambiance of the morals, teachings

and guidance given by the saints is highly essential in the current time. Today man is living under all misery and distress, being engulfed by the flame of materialism, selfishness, lust and greed. Individual has become as heartless as a machine. He has become inhuman forgetting belief in god, truthfulness and honesty in conduct. The changed attitude of men now encourages them to be directly involved in different heinous activities like terrorism, brutal murders, abduction, molestation and other barbaric events. The ideology and discipline as prescribed and exhibited by Indian saints may save us from devastation. In this situation it is only the “Saint Literature”, that has been performing the role of a “saviour” and “guardian angel”. Indian santha sahitya (Saint Literature) is that divine light, which will be guiding the human civilization through all ages.

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The Tradition of Sun worship and Arka Kshetra Konark in the Sarala Mahabharata

Dr. Biraj Mohan Das



The Hindus have been worshippers of the Sun God from time immemorial. They perform their morning ritual after praying to the Sun God. It is their belief that the well being and strength that they get from worshipping Him contribute to their prosperity. Every created form on this earth owes its origin to the Sun God. Therefore, it has been justly said, *Surya Atma Jagatascha*, which means Sun is the soul of the entire world. No wonder, the Sun

is worshipped as the creator of the entire universe, the overseer of all their activities.¹ It is believed that one can overcome all obstacles and problems by worshipping the Sun. One can even hope to be cured of incurable diseases of the eye, heart and nerves, leprosy and asthma by worshipping the Sun God. This is what is stated in the scriptures and is commonly believed.² Hence the saying, *Arogyam Bhaskarat Ichhet*, which means

that man's recovery from illness is entirely the will of the Sun God. It is stated in the *Mahabharata* that Samba, the son of Krishna, got cured of leprosy by worshipping the Sun God.

Of the three principal Gods of the *Vedas*, the Sun God is one.³ In the *Rg Veda* there is mention of the seven horses who pull the chariot of the Sun God.⁴ The *Chhandogya Upanisad* mentions the fearsome cry that followed the advent of Sun at the primal phase of the Universe. That cry is the root of all life and all pleasure.⁵ In the *Ramayana* it has been stated that Rama was able to defeat Ravana by learning the hymn *Aditya Hrudayam* from Rishi Agastya, which pleased the Sun God.⁶

The Sun God happens to be the son of Rishi Kashyap and his wife Aditi. The name Aditya by which he is known, derives from the name of his mother. He is also known as Rabi, the name of the first day of the Hindu week and his rotation period around the orbit is one year. According to the Hindu astrology, of the nine planets the Sun is the most significant. The day of *Makar Sankranti* is observed as a special day to worship the Sun God because from this day the Sun begins its journey from the tropic of Capricorn to the tropic of Cancer, otherwise known as *Uttarayan*. The Sun God has various names such as *Bhaskar*, *Bhanu*, *Sabitru* etc. The Sun temple at Konark in Odisha, the Dakshinark temple of Gaya in Bihar, the Suryanar Kovil in Tamilnadu, the Suryanarayan temple at Asavalli in Andhra Pradesh are a few ancient monuments in India dedicated to the Sun God.

Some research scholars opine that the ritual of worshipping the Sun in Odisha was prevalent in the pre-historic period.⁷ This view is established by the symbolic representation of Sun in the rock art panel of Gostimada-I in Sundergarh district, the chalcolithic pottery of Nuagada and Manamunda in Suvarnpur and Boudh districts respectively and early-historic pottery of Manikpatana and Narisho in coastal Odisha. Rishi Dirghatama, the first ancestor of prince Kalinga is known to have composed the hymn of the Sun in the *Rg Veda*. This leads some scholars to argue that the Sun worship was prevalent in Odisha from the Vedic age.⁸ Besides, the narration *Jatam Arka Kalingesu* in the *Jaimini Gruhya Sutra* indicates the relation between the Sun and Kalinga. Thus significant evidence exists to show that Sun worship was widespread in Odisha from fifth century to thirteenth century A.D.

The Sumandala plate of Prithivi Vighraha (Gupta year 250-569 A.D.) records that King Dharmaraj who ruled from his capital Padmakholi was a devotee of *Sahasrarasmi*, the Sun God. The relationship between *Padma* (Lotus) and the Sun (God) strengthens this assumption. The oval seal of the plate contains an emblem, which has the shape of the solar disk. It is recorded that King Dharmaraj was from the Sailodbhava dynasty and the first king of Kalinga to promote Saura cult. Later the Sun God was worshipped as Rabi, the first among the *navagrahs* (nine planets), and as the covering god who was placed in the outer walls of the temples. Some images of the Sun God, erected in the seventh century A.D., prove the immense popularity of the tradition of Sun worship, both in literature

and architecture, during the rule of the Somavansa dynasty in Odisha.

According to *Madalapanji*, a king by the name Purandar Kesari had established a Sun-temple at Konark. One of the fragmentary inscriptions engraved on the back of an image of Surya from the village Gandibeda near Soro in Bhadrak district mentions the name *Somakulatilaka Sri Karnarajadeva* which has been identified as that of the Somavansi King Karnadeva. Someswara Dev Burman III ruled from Subarnapur (Sonepur) on South Kosala. In the Mahada plates (1155 – 1180 A.D.) the king is named as *Satyamarttandadeva Sri Baidyanatha Padapankaja bhramara* (The black-bee at the lotus feet of the sun of truth, Sri Baidyanatha). This denotes his alligiance and devotion to Surya and Siva (the Sun-God and Lord Siva). During the reign of the Ganga dynasty this form of worshipping the Sun God became more popular. In the Nagari plates of Anangabhima-III (1211-38 A.D.) we find the mention of *Aditya Purana* (Scripture of the Sun). During the rule of Narasimha-I this concept of Sun worship had further spread. The grand Sun-temple at Konark (thirteenth century A.D.) was the outcome of this devotion. Even the king had named his son as Bhanu Deva after the Sun God.⁹

The temple of Biranchi Narayan of Palia of Bhadrak district in Odisha is one of the eminent temples dedicated to the Sun God. It is said that this was built by Keshari dynasty in the thirteenth century A.D. During the invasion of Kalapahar, the temple and its presiding deity, the Sun God, were destroyed. According to archeologists, Marahatta rulers

in the eighteenth century A.D. has reconstructed the present temple.¹⁰ Another temple of Biranchi Narayan Swamy, dedicated to the same Sun God and known for its finery in wood work of Odisha, was built by Srikar Bhanja, a king of Bhanja dynasty. This temple is situated in Buguda of Ganjam district. Some scholars opine that the image of the Sun God was retrieved from the dilapidated Malatigarh not far from the village of Kelupadar associated with the Keshari dynasty and was installed in a newly built temple at a Buddhist-pitha.¹¹

In later years the worship of the Sun God ceased to exist as an independent stream and assimilated into Vaishnavism. But it continues to play a significant role in the people's daily conduct of religious rites. Offering of ablution in form of water to the Sun is also a form of *Namaskar – Surya Namaskar*. The daily ritual of worship of the Sun God practiced in the temple of Siva (*God Lingaraj*), is an evidence of this. 'The worship of Vishnu is considered to be incomplete without the worship of the Sun God.' This is stated in the *Niladri Mahodaya* which stipulates how and when the rites of Lord Jagannath are to be performed.^{12,13} The rituals of *Rabi Narayan Brata, Pausa Rabibara Brata, Dwitiya Osha, Samba Dashami* and the rituals offered at the pedestal of tulasi, which are prevalent in Odisha, suggest the significance of Sun worship.¹⁴

It has been established since long that Kona Ark or Konark is the most significant spot of worship of the Sun God.¹⁵ In ancient India, of the three places famous for worshipping the Sun, one is Mundira or Mundira Swamin. Mundira has been subsequently named as Kona Ark or Konark.¹⁶ The importance of taking a holy dip in the Chandrabhaga, a

river near the Konark seashore, on the seventh day of *Shukla Paksha of Magha* has long been recognized. It may be mentioned here that after the Konark temple was demolished the river Chandrabhaga was buried under salt and sand. However, the practice of dipping continues unabated. *Brahma Purana* mentions the rites and rituals to be performed after taking the holy dip on *Magha Saptami*.¹⁷ Bruhaspati Mishra (1350 A.D.) in the *Kruta Kaumudi* has elaborately dwelt upon these rites which are based on quotations from *Smritisukhaya*, *Matsya Purana* and *Brahma Purana*.¹⁸ Sarala Das in his *Mahabharata*, written approximately in the fifteenth century A.D. has included this Konark or Kona Ark and Chandrabhaga among the rivers and rivulets, hills and mountains of Odisha he has glorified. The significance and importance of Konark and Chandrabhaga, have been described in the several parbas of Sarala's *Mahabharata*.

Writers of scriptures in the regional languages have modified certain episodes on the basis of local legends and folk tales while keeping the main stories of the Sanskrit scriptures intact. They have done this in order to heighten the significance of the streams, rivers and the places of pilgrimage of their region. So did Sarala Das. It has been advised to take bath in the rivers like Chandrabhaga in the month of *Kartik* to free oneself from various sins.¹⁹ In order to save the country from famine caused by drought King of Kanaya worshipped the Biranchi or Sun for fifteen years at the Arka Kshetra.²⁰ Pleased with the devotion of the King Kanaya Bindu, the Sun God wanted to give him a boon. At that time the Demon Arka who also lived there could foresee the danger he was about to face. He thought that

the king would pray to the Sun God for more power than he had and attacked the king with an intention to kill him. The king tried to defend himself. As the Demon Arka tried to disturb the meditation of rishis and oppressed them in many ways, the Sun God reprimanded him and thrust him on the ground with his bare hands. To kill the demon he invoked *Suryabrata Chakra*, but it went in vain. Meanwhile, all the Gods in the Heaven prayed to Surya Deva to kill the demon and he killed Arka at one corner of the sea. The blessings of the Sun God poured forth from heaven in the Kingdom of Kanaya in form of rain and the people were saved from famine and disease.²¹ From that day onward the land to the west of Chandrabhaga has been known as Kona Ark and its derivative Konark. According to Sarala *Mahabharata*, when the *Pandavas* were wandering in the forests they visited different places of pilgrimage, took bath in different sacred ponds, rivers and seas of Odisha. These include river Chandrabhaga and the temple at Konark. When Judhisthir wanted to know the significance of this place, the story of King Kanaya Bindu and Demon Arka was narrated to him.²²

According to *Mahabharata* composed in Sanskrit by Vyasa, when Draupadi was on the verge of being denuded in the presence of all of *Kauravas* and *Pandavas* including their guru, kith and kin, ministers and attendants, she prayed to Narayana and accordingly the God of Dharma by the direction gave her millions of sarees to protect her from shame. But Sarala Das made some changes in this story where Surya Deva has taken the place of Dharma Deva. Draupadi prayed to Narayana to save her from disgrace. Narayana advised her to

pray to Surya Deva and asked Surya Deva to give her sarees and save her from disgrace. Draupadi in her prayers and invocations has sung the praise of the Surya Deva as ‘the one without beginning’ (*Anadi Purusa*), ‘the one who can see the past and future’ (*Bhuta Bhabisyatara drsta*) ‘the master of earth, water, heat and wind’ (*jala, sthala, patala, prithvi, ap, tej, bayu o marut ra karta*), ‘the God of meditation’ (*Jogeswar*), ‘one without any form and shape’ (*anakar*), ‘one who cannot be destroyed’ (*abyay*), ‘one who knows the inner self’ (*antaryami*) and ‘one beyond death’ (*akshaya purusha*). Here the poet has used words like *Aditya, Gagana bihari, Dibakar and Bhaskar* etc. to represent Surya or the Sun. In this context she had sung in praise of Surya Deva, ‘who killed the demon in the land of sun on the bank of Chandrabhaga for the well-being of the world’. Thus the importance of the temple and the river has been enhanced.^{23,24}

When Draupadi, disguised as Sairindhri, lived in the kingdom of Birata, she sought the help of Krisna and Surya Deva to evade the imminent danger of Birata’s brother-in-law Kichaka to whose palace she had to go with a letter from the queen of Birata. While praying to the Sun God she uses terms such as ‘one who wears garland of rays’ (*Ansumali*), ‘born of Aditi’ (*Aditya*), ‘God of destroyer of darkness’ (*Timira bidarana Natha*), and ‘the glowing Sun’ (*Martanda*). In course of the prayer she also recounts the greatness of Chandrabhaga and Konark. She prays to the Sun God to save her as he had saved her from utter shame and disgrace of being nude in the *Kurusabha*. This time Surya Deva sends his two wives, Chhaya and Maya, to

stand on either side of her and save her from Kichaka’s carnal desire.^{25,26}

Once Krisna, the king of Dwaraka, was in the house of his queen Jambabati. His son Samba Kumar acted as the sentry. Narada arrived and wanted to meet Krisna immediately. Samba was not in a position to yield to Narada’s demand. Narada became angry and threatened to destroy the entire Dwaraka. Samba was helpless and had no alternative but to go into the zenana. Krisna and Jambabati were in an intimate embrace. Out of shame Jambabati left the room and Krisna was infuriated and cursed him with leprosy. The curse took effect immediately. When he heard the news that Narada had come to visit him, he came out followed by his son. Narada heard everything and saw the disfigurement of Samba with his own eyes. He felt regretful about Samba’s distress. He advised Samba to go to Konark and worship Surya Deva in order to get cured of this incurable disease. Rishi Markanda told this to Judhithir when he was wandering in the forest and advised him to worship the Sun God. The five Pandava brothers accordingly bathed in the river Chandrabhaga and worshipped Biranchi Narayan at Konark.²⁷

In some other episodes of Sarala *Mahabharata* the greatness of these two places, Konark and Chandrabhaga, have also been graphically delineated. In the *Sabha Parba*, Sahadev, advised by Markanda Rishi, visited all the kingdoms to invite the kings and in the course of the travel he visited Chandrabhaga and Konark.²⁸ Arjun’s son Nagarjun learnt about the benefit of the dip in the water of Chandrabhaga on his way to meditate in some far off land.²⁹ Chitrarath,

the son of Indra, also visited Chandrabhaga.³⁰ Chandrabhaga has also been mentioned in the context of the birth of Abhimanyu and the destiny of king Nahusha.³¹ Water from various holy rivers including Chandrabhaga was fetched during enthroning ceremony of Yudhisthir.³² How the scripts of *Vedas* were stolen from the banks Chandrabhaga near the Arka Kshetra (Konark) by the demon Sankhasura when Brahma, the grand father of the universe, was performing the daily chores and how these (the *Vedas*) were retrieved, have been described in the *Udyoga Parba*. Other episodes such as of 'The death of king Drupada during the clash at night' (*Ratri Gola Judha Drupada Rajara Mrutyu*), 'The birth of Hanuman' (*Hanumant Janma Bibarana*) and 'The anger aroused in Arjun at the death of Drona and Angad's recompense for his father's death' (*Drona Nidhane Arjunankara Kopa O Angadra Pitururuna Parisodh*) in the *Drona Parba*, 'The Killing of Karna' (*Karna badha*) in the *Karna Parba*, 'The story of Markanda Brahma before his coronation, the legend that made Hari look bovine' (*Markanda Brahmanka Purba Janma Brutanta O Gomukhi Harinka Katha*) in the *Musali Parba*, 'The test of piety of Yudhisthir and his visit to heaven with his body intact' (*Yudhisthiranka dharma pariksha O swasarire swarga gamana*) in the *Swargarohan Parba*, the glory of Chandrabhaga and Konark has also been narrated.

Thus in different episodes Sarala Das has described the significance of Konark, Chandrabhaga and Biranchi Narayan, while in the introductory and concluding lines he has sung the praise of the Sun. Lines such as 'Bowing at the feet of rising glowing Sun/ Sudramuni Sarala Das humbly seeks salvation'

(*Udaya Martanda charane sarana nitye / Sudramuni Sarala Das Binaya Anubrate*) are testimony to this.³³ Again he has written, 'I bow at the feet of Sri Biranchi Narayan/ Sudramuni Sarala Das eternally asks for your kindness'. (*Sree Biranchi Narayan charane Namaste / Sudramuni Sarala Das anugraha magai nitye*).³⁴ It can be asserted on the basis of the Sarala Das' *Mahabharata* that the then society of Odisha worshipped the Sun God as one of the principal deities and that Sun-worship had gained considerable prominence and popularity in that society.

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Formation and Promotion of Farmer Producer Organization- A Scheme for the Upliftment of Farmers

Dr. Sunil Kumar Das

Introduction:

The small and marginal farmers (SMFs) do control the agricultural land holdings in the country as around 85% of the land holdings of the Country belong to them. The difficulties in access to production technology, availability of quality inputs at reasonable prices, credit, custom hiring, seed production, value addition, market access etc. during production and post production stages are experienced by these SMFs. As reported by the National Bank for Agriculture and Rural Development (NABARD) and Small Farmers' Agri-Business Consortium (SFAC), problems encountered by the SMFs can be mitigated by organizing them into Producer Organization. Hence, in order to overcome these difficulties, SMFs jointly form the Farmer Producer Organisation (FPO) taking farmers as members, which has been considered as the most efficient and suitable institutional mechanisms to minimize cost of production, enhance productivity per unit, assist better market linkage. The creation of FPOs will not only facilitate in enhancing income of the farmers but also help in improving rural economy and bringing job opportunities for rural youth. Considering the importance of FPOs for the sustainable economic development of rural India, the Government of India has approved to form and promote 10,000 FPOs by 2023-24. The

FPO is incorporated/ registered either under Part IX A of Companies Act or under Co-operative Societies Act of the concerned States.

Objectives of the Scheme

- To provide extensive based accommodating environment for formation of new 10,000 FPOs in order to facilitate vibrant and sustainable development of income oriented farming for achieving overall socio-economic development and welfare of agrarian communities.
- To increase productivity through use of resources efficiently, lucrative and sustainable manner and higher returns can be realized through better liquidity and market linkages for their produce.
- To provide reinforcement and support to new FPOs in all aspects of its management including inputs, production, processing and value addition, market and credit linkages and use of technology etc. up to 5 years from the year of formation.
- To provide efficient capacity building to FPOs in order to develop agriculture-entrepreneurship skills and make the

FPOs economically viable and self-sustained beyond the period of support from government.

Features of Farmer Producer Organization:

The characteristics of FPOs are given below:

- Principal producers collectively join hand together to form a FPO.
- It is a registered body with legal status.
- Producers are the shareholders in the organization.
- The member of the group is benefited from the FPO.
- The profit generated out of the activities is partly shared among the producers and remaining retained in the share capital and reserves.
- The minimum shareholding members at the time of registration are fifty.
- The main product or produce is traded by the FPO.

Guiding Principles for Assistance

The philosophies underlying the scheme for support is as follows:

- Support will be provided to any FPO registered under any Statute/legally.
- It is the producers who are benefited with the support under the scheme.
- The group of people/society should be involved.
- The agricultural activities or other activities linked to agriculture like fisheries, animal husbandry is provided with financial support under the scheme.

- The activities like capacity building, registration, business planning, MIS development, connection to value chain, administrative expenses of promoting agency, certification, advertising, monitoring of progress and such other item of expenses required for promotion of FPOs are supported under the scheme.

Broad Services and Activities to be undertaken by FPOs

As per the necessity the FPOs provide and undertake the following major services and activities for their development:

- (i) Supplying the inputs like seed, fertilizer, pesticides and such other inputs at reasonably lower wholesale rates.
- (ii) Producing essential machinery and equipment required for agricultural production like cultivator, power tiller, sprinkler set, thresher, weeder machine, combine harvester on custom hiring basis for members to reduce the per unit production cost.
- (iii) Providing value addition service like cleaning, assaying, sorting, grading, packing, processing and other services on charge basis at reasonably cheaper rate.
- (iv) Undertaking higher income generating activities like seed production, bee keeping, mushroom cultivation etc.
- (v) Undertaking bunching of smaller lots of farmer-members' produce and adding value to make them more marketable.
- (vi) Facilitating market information about the produce for judicious decision in production and marketing area.

(vii) Facilitating logistics services such as storage, transportation, loading/un-loading etc. on shared cost basis.

(viii) Marketing the aggregated produce in the marketing channels and offering better and remunerative prices with better negotiation.

Strategy for Formation of FPO and Identification of Cluster Area

It is the Produce Cluster Area on the basis of which formation and promotion of FPO is made. The produce cluster area for the purpose of FPO formation and management thereof means a geographical area wherein agricultural, organic and allied produce and natural farming or of almost similar nature is grown / cultivated by leveraging economies of scale in production and marketing.

Produce cluster area is to be identified with the input of District Level Monitoring Committee (D-MC), State Level Consultative Committee (SLCC), other Ministries/ Departments of Government of India and the States as well as with recommendations of Implementing Agencies with input from Cluster-Based Business Organization (CBBO) and suggestions of relevant Government of India Organizations.

CBBOs will undertake Feasibility Study in assigned clusters which will include the following:

(i) Diagnostic study including Baseline survey to find out produce and socio-cultural similarity, existing gap and potential activity, interventions in terms of infrastructure, services, etc. These are required in the value chain of agricultural and horticultural produce including post-harvest management and marketing. Baseline survey should also identify current situation of farming, small, marginal and landless

farmers for aggregation, to identify minimum geographical area for potential interventions etc.

(ii) Prospective Business Plan in order to establish a fit case for formation of an economically sustainable FPO.

The minimum farmer-members' size of 300 shall be eligible to form an FPO in Plain areas, whereas the size of 100 members for North-Eastern and Hilly areas (at a height of 1000 meter or above MSL) including such other areas of UTs can form the FPO.

Farmer of 15-20 members with almost same interest are to be mobilized from Farmer Interest Group (FIG), Self Help Group (SHG), Farmers Club (FC), Joint Liability Group (JLG), Rythu Mitra Group. Such 20 or more groups from a produce cluster area or a village/ cluster of neighboring villages based on certain commonalities can be considered to form an FPO with a minimum farmer-members size of 300 to be eligible under this scheme in plains area, whereas 7-8 groups with a minimum farmer-members size of 100 can form an FPO in Hilly (at a height of 1000 meter or above MSL) and North Eastern regions. To make the FPO more effective and inclusive, small, marginal and women farmers/women SHGs, SC/ST farmers and other economically weaker categories etc. are included as members.

However, to make the FPOs economic sustainable and profitable, average membership size of 500 farmers in plain areas and 200 farmers in Hilly and North-Eastern regions are considered to be made. The minimum membership norm per FPO can be revised by the Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW) with the approval of Union Agriculture Minister. However, efforts will be made to form on an average two FPOs in at least

each of potential 5,000 blocks covering all blocks in the country out of existing around 7,000 blocks.

The FPOs while adopting cluster-based approach for produce or produce mix, will also focus on “One District One Product” approach for development of product specialization. FPOs will be encouraged for promoting, processing, branding, marketing and export of the product for better value realization in case the product of agriculture produces has been declared for that district. There may be more than one cluster for one product in one district or more. The FPO may have additional product and service on one hand and engaging themselves in enough activities throughout the year on the other hand, in order to diversify risk and enhance returns and so as to make an FPO economically sustainable. Furthermore, FPOs can associate themselves at district level, State level and National level for the product identified as per their requirement for processing, branding and marketing.

The formation of FPOs in aspirational districts may be prioritized through intense awareness programmes and the FPOs may be made economically sustainable through adequate support, handholding, training & skill development. Efforts may be made to form & promote at least 1,500 FPOs i.e., 15% of the total targeted 10,000 FPOs in next 5 years in aspirational districts with at least one FPO in each block of aspirational districts of the country. Besides, the formation and promotion of FPOs in the notified tribal areas in the country may be prioritized for promoting the forest and minor forest produce by the tribal communities. The benefits of quality input, technology, credit and value addition, processing and market access should reach the tribal community and North-East Region through the Scheme in co-operation with Tribal Affairs Ministry, Department of

Development of North Eastern Region (DONER) and North Eastern Council (NEC).

The benefits of any scheme of Government of India, such as Credit Guarantee Fund and advisory services from National Project Management Agency (NPMA) can be extended to the existing FPOs, if not availed earlier under the Scheme. The registered FPOs not provided funds under any other schemes and not yet started operation will also be covered under the Scheme.

National Project Management Agency (NPMA)

The National Project Management Agency (NPMA) will be set up at national level by SFAC through transparent manner for providing overall project guidance, data maintenance through integrated portal and information management and monitoring. In order to provide overall guidance at all India level, the technical team with five areas of specialization in Agriculture / Horticulture, Marketing and Processing, Incubation Service Provider, IT/MIS and Law & Accounting will assist the NPMA.

Implementing Agencies

Three Implementing Agencies, namely SFAC, National Cooperative Development Corporation (NCDC) and NABARD shall be responsible to form and promote FPOs and to make the FPOs economically sustainable in uniform and effective manner so as to achieve the target of formation of 10,000 new FPOs in 5 years. In this context, SFAC will form and promote those FPOs to be incorporated under Part IX A of Companies Act, NCDC will form and promote those FPOs to be registered under any Co-operative Societies Act of the States and NABARD will form and promote those FPOs which are registered either under Part IX A of Companies Act or registered under any Co-operative Societies Act of States.

Besides, the above, the State/ UTs desirous to have its own implementing agency may approach DAC & FW with details about the State/UT, its agency, activities and experience of the agency etc., and DAC & FW will consider the proposal on experiences and existing manpower required for formation and promotion of FPOs in the region.

In due course of time, DAC&FW may identify and assign other additional Implementing Agencies to cover various sectors and geographical locations in order to form 10,000 FPOs as per the need of the programme.

Considering the existence of the Implementing Agencies' in the States/Regions/ Districts/Produce Clusters, the year-wise indicative target for Implementing Agencies, their human resource and also their area of specialization are to be tentatively allocated by National Level Project Management Advisory and Fund Sanctioning Committee (N-PMAFSC) in consultation with the Implementing Agencies. However, the targets may be interchangeable on requirement basis.

Duties and Responsibilities of Implementing Agencies:

- (i) While working closely with CBBOs, it may be ensured by the Implementing Agencies that CBBOs perform their activities to make FPOs economically sustainable.
- (ii) It may be ensured by the implementing agencies that regular data entries on integrated portal with respect to details of respective FPOs are made by the CBBOs.
- (iii) Implementing Agencies can operate through their MIS portal till Integrated Portal is put in place to ensure uniformity of database on FPO. Once national level Integrated Portal managed through National Project Management

Agency (NPMA) is put in place, Implementing Agencies will have to ensure interoperability with Integrated Portal to ensure smooth data transfer and operate in coordination with Integrated Portal design and requirement.

- (iv) Implementing agencies to monitor that Credit Guarantee Fund (CGF) as per the established procedure are managed and maintained by NABARD and NCDC.
- (v) The rating tools to assess and promote the FPOs in terms of level of activity, economic viability and sustainability etc. are formulated by the implementing agencies in consultation with DAC&FW.
- (vi) Implementing Agencies will prepare Annual Action Plan, prescribed Utilization Certificate and submit to DAC&FW in advance for consideration of N-PMAFSC.
- (vii) Implementing Agency will coordinate with concerned Value-Chain Organization(s) regarding stages of formation and promotion of FPOs by those organizations as assigned by DAC&FW/ N-PMAFSC.
- (viii) On the basis of documentary proof from time to time as well as requirement of Equity Grant, implementing agencies will channelize the claim of FPOs to N-PMAFSC for payment.
- (ix) With the prior approval of DAC&FW, other Implementing agencies may create their monitoring and data management units for FPOs to manage the growing volume of FPOs and their activities.

Cluster- Based Business Organizations (CBBOs)

As per the targets for produce clusters, full or part of the State or region will be allocated by N-PMAFSC. Then Cluster-Based Business Organizations (CBBOs) will be established by the

implementing Agencies at the State/Cluster level to form and promotion of FPOs as per their requirements. The Implementing Agencies will apply due diligence to ensure that professionally competent CBBOs are transparently engaged and have experience in promotion and professional supports to FPOs.

a) The number of CBBOs in a State is based on geographical area, produce clusters, cropping pattern, etc. Even one CBBO may serve more than one State as per requirement. However, on the basis of available human resources, past turnover and work experience etc., CBBOs should be given work.

b) On the basis of professional experience and exposure in formation of FPOs in agriculture and allied sector, the CBBOs should provide support to the FPOs.

c) The CBBOs should be supported with five categories of specialists from the domain of (i) Crop husbandry; (ii) Agri. marketing / Value addition and processing; (iii) Social mobilization; (iv) Law & Accounts; and (v) IT/MIS in agriculture & agriculture marketing. Besides, the CBBOs should have requisite number of other technical and supporting staff from their own offices in respective States or from offices of respective Implementing Agencies, which have selected them.

Duties and Responsibilities of CBBOs:

a) As per guidelines of the Scheme and as suggested by the NPMA, the CBBOs will help to identify the cluster and implementation of the programme.

b) The work of group formation, regular meetings, baseline survey, cluster finalization, community mobilization, and value chain study are performed by the CBBO. However, for identification of proper produce cluster and

mobilization of members, the CBBOs may seek the assistance of Local Bodies, wherever required.

c) Assisting in registration of FPOs and capacity building of Board of Directors (BoDs) with regard to their duties, responsibilities and controlling capital and equity.

d) Training and capacity buildings of FPOs/ farmer group, wherein identification of training needs, development of training modules, conducting basic training workshops and exposure visits are done by the CBBOs.

e) Bringing all the members of the FPO together in the society, planning and implementing the commercial Plans inclusive of acquiring land, mobilizing equity capital, input management, adoption of proper and good agricultural practices through knowledge sharing, aggregation of produce, quality management, assaying, processing, packaging, supply chain development and marketing and market linkages with buyers/ processors/exporters, trading, export etc as may be necessary to ensure long-term sustainability of FPOs.

f) Assisting in regular interface with stakeholders like various Government Departments, Financial Institutions, Training, Research and Development Institutions at the cluster level.

g) Assisting the FPOs in availing Equity Grant and Credit Guarantee Facility as per need and growth.

h) Expediting facility for production, marketing and processing infrastructure facility by the FPO, as may be necessary, to develop the business for long-term viability.

i) Facilitating traceability, compliance and global market connectivity.

- j) Reviewing and observing the field team to perform as per the target.
- k) Apprising and circulating the information to the farmers through market and crop advisory.
- l) Coordinating in submitting progressive statement on all specified target activities to the NPMA at regular interval.
- m) It is ensured by the CBBO that the targets of the program are achieved.
- n) Assisting compliance issues of FPO including their capacity building in the subject.
- o) Assisting NPMA and Implementing Agency in collection of data/information and generation of the Management Information System (MIS) report in the required data sheets.
- p) Assisting Implementing Agency and NPMA in rating of FPOs as may be necessary.
- q) Assisting in federating FPOs when necessary for business growth and expansion.
- r) Assisting FPO in proper financial management and utilization of fund and accounting and timely submission of returns and certificates.
- s) CBBO will assist all sort of support for the implementation, administration and monitoring of the project.
- t) CBBO being an advisory body consisting of various stakeholders including state government representative, Non-Governmental Organizations (NGOs), Resource Institutions (RIs), Krishi Vigyan Kendras (KVKs) or any other support institutions will provide dynamic direction for the implementation of the scheme.

Budgetary provisions

The scheme on formation and promotion of 10,000 FPOs with budgetary support of Rs. 4496.00 crore is to be implemented till 2023-24. Besides, additional liability of Rs.2370.00

crore for period from 2024-25 to 2027-28 is to be provided for five years for FPOs. The total budgetary requirement of Rs. 6866.00 crore for FPOs to be met from overall allocations of DAC&FW upto 2027-28.

FPO Formation & Incubation Cost

The maximum of Rs. 25 lakh per FPO for support or actual expenditure whichever is less to be provided towards formation and Incubation cost of CBBO for five years from the year of formation. The maximum support includes cost towards undertaking baseline survey, mobilization of farmers, organizing awareness programmes, conducting exposure visits, professional hand holdings, incubation, cost of engaging CBBOs and other overheads cost. There is also a provision for cost of NPMA towards manpower, establishment, travel and advisory and maintaining MIS portal. It is inclusive of provision towards cost for development of appropriate overall ICT based MIS web portal for the Scheme.

FPO Management Cost

The financial support as per actual but subject to the limit of Rs. 18 lakh per FPO is granted under the scheme during three years from the year of formation of FPOs. The financial support is not meant for reimbursing the entire administrative and management cost of FPO, rather it is provided to make the FPOs sustainable and economically viable. The FPO has to manage their financial support from their own business activities from the fourth year onwards of formation. The indicative financial support broadly covers the following:

- (i) Salary of its Chief Executive Officer (CEO)/Manager maximum up to Rs.25000/month and Accountant maximum up to Rs.10000/month.

- (ii) One time registration cost up to maximum of Rs.40000 or actual whichever is less.
- (iii) Office rent of maximum up to Rs.48,000/year
- (iv) Utility charges of electricity and telephone charges of office of FPO maximum up to Rs.12000/year
- (v) One-time cost for minor equipment inclusive of furniture and fixture for maximum up to Rs.20,000 / year
- (vi) Travel and meeting cost of maximum up to Rs.18,000/year, and
- (vii) Miscellaneous expenses on cleaning, stationery etc. maximum up to Rs.12,000/year.

Any expenditure of operations, management, working capital requirement and infrastructure development etc., over and above this, will be met by the FPOs from their financial resources.

FPO requires some professionally equipped Manager/CEO to administer its activities and day to day business with a sole objective to make FPO economically sustainable as farmers cannot handle the activities. It is the geographical spread of business operation, diversity of activities and volume of business, which decides the engagement of the number of professional staff. However, an FPO should have minimum one CEO/Manager and an Accountant. Accountant to look after its day to day accounting work. Based on requirement, FPO can engage other staff also.

The CEO/Manager is to be appointed by the executive body of the FPO who should be either graduate in agriculture / agriculture marketing / agri-business management or BBA or equivalent. Locally available professionals with 10+2 and preferably diploma in agriculture /

agriculture marketing / agri-business management or in such other related areas may be preferable. The accountant should have educational qualification of 10+2 with Mathematics as a compulsory subject or alternatively with Commerce or Accountancy background. If any members of the FPO meet the above criteria, they may be considered preferably in the selection process.

Under the scheme, financial support towards salary of CEO/Manager up to @ Rs. 25,000/- per month and of Accountant up to @ Rs.10,000/- per month with annual increment up to 5% is to be provided from the earmarked financial support for first 3 years only. Thereafter, FPOs will manage from their own resources to pay the salary of CEO/Manager and Accountant. In order to create interest of good professional activities of CEO/Accountant, the FPO may also offer higher payment with their own sources of funds on above of Govt. support. One CEO will provide full time services to one FPO at a time only. It will be duty and responsibility of respective BoDs and CBBO that quality of services is rendered by CEO for developing the business for sustainability of the FPO.

One time registration cost: Under the scheme, the registration cost of incorporating FPOs under Companies Act or registering under Co-operative Societies Act will be reimbursable up to a limit of Rs. 40,000/- or actual, whichever is less; and remaining, if any, will be borne by respective FPO.

FPO will forward the periodic utilization certificate for FPO management cost received and utilized as may be necessary to Implementing Agency through concerned CBBO.

Provision for Equity Grant

Producer members' own equity supplemented by a matching Equity Grant from

Government, which is required to strengthen financial base of FPOs and help them to get credit from financial institutions for their projects and working capital requirements for business development. The Equity Grant is nothing but the matching grant upto Rs.2,000 per farmer subject to maximum of Rs.15.00 lakh per FPO. This Equity Grant is not in the form of government participation in equity, but only as a matching grant to the FPOs as farmer members' equity. Therefore, Rs.1,500 crore with DAC&FW is proposed in the scheme to cover all the 10,000 FPOs, if maximum permissible equity is contributed to all 10,000 FPOs.

Objectives of Equity Grant: The objectives of Equity Grant are to (i) make the FPOs sustainable and viable; (ii) increase the solvency capacity of the FPOs; and (iii) enhance shareholding of members to increase their ownership and participation in their FPO.

Eligibility Criteria for FPOs: An FPO fulfilling following criteria can apply for Equity Grant under the Scheme-

- (i) It shall be a legal entity as per para 2 (farmer- producers' organization incorporated/ registered either under Part IX A of Companies Act or under Co-operative Societies Act of the concerned States and formed for the purpose of leveraging collectives through economies of scale in production and marketing of agricultural and allied sector) of this guidelines.
- (ii) It has raised equity from its Members as laid down in its Articles of Association/ Bye laws, as the case may be.
- (iii) The number of its individual shareholders is as per the terms and condition of the Scheme.
- (iv) As per the Agriculture Census carried out periodically by the Ministry of Agriculture, Government of India, half of its shareholders are

small, marginal and landless tenant farmers. However, preference will be given to women farmers' participation as its shareholders.

- (v) One member should not hold more than 10% of total equity of the FPO.
- (vi) A farmer can be member in more than one FPO with different produce clusters but he/she will be eligible only once (for any one FPO that he/she is a member) for the matching equity grant up to his/her share.
- (vii) There shall be adequate representation of women farmer member(s) and there should be minimum one woman member in the BoD and Governing Body (GB) as the case may be.
- (viii) The duly constituted Management Committee is responsible for the business of the FPO.

Implementation & Monitoring Mechanism

There is a well institutionalized three tiered structure at National, State and District level for effective implementation and monitoring of formation and promotion of FPOs, summary of which are given below:

National Level

The N-PMAFSC constituted in DAC&FW will coordinate the activities of the implementing agencies and decide the policy guidelines in the matter for better outcome of the Scheme.

State Level

A State Level Consultative Committee called SLCC is constituted in mobilizing the farmers offering various services relating to production and post-production and also closely and periodically review the developmental and functioning including constraints faced by FPOs.

District level

A District level Monitoring Committee (D-MC) is constituted for overall coordination of implementation of scheme in the district including the cluster development and challenges faced by FPOs.

Evaluation of the Scheme

In order to evaluate the performance of the scheme with reference to its objectives, the mid-term (4th year) and end-term evaluation will be done in terms of the following:

- (i) No. of FPOs formed and registered;
- (ii) No. of farmers mobilized category-wise;
- (iii) Quantum of Equity Grant provided and No. of FPOs covered;
- (iv) Quantum of Credit Guarantee provided for credit linkages including volume of loan availed for working capital;
- (v) No. of training programmes conducted for capacity building and No. of persons trained and
- (vi) Business turnover of the FPOs.

Appropriate third party Consultant / Agency or any of the implementing agency, if required will be hired by DAC&FW for transparently undertaking the study as well as mid-term and end-term evaluation of the scheme and evaluation of the report, which will be shared with DAC&FW and also among the other Implementing Agencies. DAC&FW may modify the Operational guidelines on the basis of the suggestions and findings in the report. Besides, DAC&FW may at any time suitably modify the scheme to achieve the objective as envisaged, If exigency arises in the interest of the scheme.

Conclusion:

Farmer/Producer wise data on impact on agriculture with regard to enhanced yield, production, cultivated area, irrigated area and cropping intensity can be obtained through FPOs. Besides, additional area can be brought under cultivation through investment in land leveling. Further, improvement in quality of the produce at the production, harvesting, and storage level can be achieved on account of training and capacity building of the farmers/producers through FPOs. The information on training with regard to number of trainings, number of people trained, type of skill development training could be assessed and impact of training on package of practices can be studied. Not only better price for the produce can be obtained but also rejection of the produce can be reduced. Reduction in migration can also be achieved through formation and promotion of FPOs.

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Barapahar

Dr. Bhubaneswar Pradhan

Odisha is somehow unparalleled to a large extent,
The rivers, hills, forests, falls and caves the content.

It does include for the natural pretty that bears,
The hills of “Barapahar” a vast source of joy forever.

Dancing of peacocks and twittering of wild birds, Wandering
of beasts and blowing of cold wind there.

“Debrigarh” which sings the history of Surendra Sai,
“Barabakhara” attracts all to please their eyes.

The Mahanadi here surrounds as a place of boating,
One can enjoy the sight of wild bulls fighting.

Deer, Leopards, Bear, Wild boar and also Elephants,
Have made the forest a place of true enjoyment.

“Patharasini” the deity is to be worshipped here,
All elements of ecotourism the place does bear.

Very often it attracts the tourists far and near,
The towering peaks make everybody more cheer.

In the border district of Bargarh in our state,
A great natural beauty lies to be ours a vast estate.

To make it spread with in the people’s minds,
Perseverance is also needed of several kinds.

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