



Lockdown Special Effects for the First Wave of COVID-19 Pandemic on the Flow of Journey, Development and Livelihood of Digha Coastal Tourism Townscape in West Bengal

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Abstract

COVID is the dignified buzzword throughout the world for about one and half years. About all economies are facing a display of difficulties twisted from this crisis. Digha coastal *tourism cum townscape* in West Bengal is one tourism hotspot experiencing newer urban entity as Khadalgobra Census Town. Whereas, April- June is the vigorous periods for this tourism landscape, this time of 2020 has been the *eluviations of economy* and life earning. The slip-way and directionless tourism industry has moved into a *state of stun and suspect* because of 10 weeks of lockdown situation here. Tourist infrastructure and atmosphere reflect a wasteland look as pandemic upshot. Consequently, the industry and associates have been faced on the *massive economic loss* of more than 1000 crore rupees thrashing the joy of journey and development. The study shows, above 30000 people who are directly or indirectly employed in the tourism and allied sectors, are in the jeopardy of *loosening job* shaking and decelerating their livelihood. Hence, the industry directly needs *life sustain and liquidity* to stay alive from **COVID crisis**. Therefore, this study tries to enlighten the ground truth of the socio-economic costs for COVID outburst here and find out the promising *pathways* to rescue it from the *edge of disruption*.

Keywords: *COVID first waves, lockdown, eluviations, loosening jobs, life sustain, edge of disruption.*

1. Introduction:

The outbreak of COVID-19 has impacted nations in an enormous way, especially the nationwide lockdowns which have brought social and economic life to a standstill. A world which forever buzzed with activities has fallen silent and all the resources have been diverted to meeting the never-experienced-before crisis. There is a multi-sectoral impact of the virus as the economic activities of nations have slowed down. This COVID-19 pandemic affected the manufacturing and the services sector—hospitality, tours and travels, healthcare, retail, banks, hotels, real estate, education, health, IT, recreation, media and others. The economic stress has started and will grow rapidly. While lockdown and social distancing result in productivity loss on the one hand, they cause a sharp decline in demand for goods and services by the consumers in the market on the other, thus leading to a collapse in economic activity. However, lockdown and social distancing are the only cost-effective tools available to prevent the spread of COVID-19 [3].

Tourism is a backbone of economy for many countries of the world. Tourism is a big source and always helpful in generating revenue and a mean of foreign exchange [14]. In general, Tourism is interlinked with various supportive services, like, transport network to tourist destination, affordable hotels, catering facilities, reliable tour operators, transportation for local sightseeing, entertainment facilities, consumer goods at reasonable prices, souvenir shops, etc. Positive actions on part of all those tourism enterprises promote tourism leading to high degree of employment and income generation through multiplier effect. In case of Digha- Shankarpur area, fishing is found to be a very significant additional source of employment generation. It is estimated that about 15000 persons are employed in tourism and its related services. There will be a steady growth of employment opportunity because of the remarkable trend of growth of tourist inflow in the study area.

Tourism is becoming the backbone of economy for many countries of the world. Tourism is a big and favourable source in generating revenue by means of foreign exchange [8]. Tourism is such flourishing sector of a country that not only triggers economic growth but also generates more employment opportunities and opens up multi-dimensional avenues of socio-economic and cultural development. This scenario is not much different in our country also. Tourism contributes 10-12% to total GDP of our country (10-12%) which is really a big proportion. COVID-19 is spreading rapidly at an unprecedented scale across continents and has emerged as the single biggest life threatening health risk in the world which has never faced in modern times. The tourism industry is the worst affected due to the COVID crisis, internationally. The World Tourism Organization (UNWTO, 2020) estimations depict a fall of 20–30 per cent in international tourist arrivals. These Millions of people associated with industry are likely to lose their jobs [24]. In India, the travel and tourism industry is flourishing and is contributing sizably to the economy. The FICCI-Yes Bank report titled ‘India Inbound Tourism: Unlocking the Opportunities’ described India as a tourism powerhouse and the largest market in South Asia. Tourism in India accounted for 9.2 per cent of GDP and had generated US\$247.3 billion in 2018, with the creation of 26.7 million jobs. Currently, it is the 8th largest country in terms of contribution to GDP [12]. According to the report, by 2029, the sector is expected to provide employment to nearly 53 million people. Foreign Tourist Arrivals (FTAs) crossed 10 million in 2017. However, the COVID pandemic has restricted international mobility and the revenues generated by this sector will take a major toll on the GDP growth rate. It may bring a downfall of 0.45 per cent in the growth rate of GDP [3].

Apex sectoral body Federation of Associations in Indian Tourism & Hospitality (FAITH) on doubled the loss guidance for India’s tourism sector to Rs. 10 lakh crore on account of impact of COVID-19 pandemic. The earlier forecast, which was shared with the government in March 2020, had put tourism’s economic value at risk at around Rs 5 lakh crore [19].

Digha - Shankarpur area is one of the most well-liked seashore destinations of research, recreation and resorting in terms of travel and tourism over South Bengal Basin in West Bengal. The region has been paying attention over 20 lakh tourists on an annual average scale which is screening a tremendous budding drift with time. It is 187 km from Kolkata and described as the Brighton of the East [1]. Digha has a low gradient with a shallow sand beach and gentle waves [11]. The beach extends 7 kms in length. The charming scenic beauty of this beach is complemented with casuarinas plantations along the coast. The sea at Digha is calm and shallow for about a mile from the beach making it ideal for swimming [9].

This sector is no way related to tourism, but truth relics that this industry incorporates plenty employment prospect to not only the home people of the Digha-Shankarpur-Mandarmoni area, but also the outsiders excluding the region. Nevertheless, sea fish is an added attraction of Digha tourism [7]. There are two important sites with two different activities- Shankarpur have two jetties with loading and unloading facilities of trawlers and fishing boats and Mohana at Digha operates wholesale auction activities. Digha is a beautiful beach resort reflecting a potential coast line of about 12 km. of its own (Udaypur to Digha mohana) [1]. Originally, Digha is known as Beerkul, means ‘Brighton of the East’ (National Informatics Centre Archived, 17th Feb, 2006, Retrived 2nd April, 2006) in one of Warren Hasting’s letter (1780AD) to his wife. English tourist John Frank Smith came Digha in 1923 and charmed with its beauty. He lived here and after independence he proposed to Dr. Bidhan Chandra Roy, first Chief Minister of West Bengal to make it a tourist resort [6]. Small Digha town is crowded with hotel and it is the main business at Digha. Throughout the year it is crowded with tourists. Mainly in January & December and any other holiday huge tourists come at Digha. Recently, Digha is not popular only as one of the finest beach sections of the world, but it is equally important and fashionable for its natural beauty having the potentiality from tourism background. Since ninety’s decade it has been emerged as an important tourist destination of Bengal which has been dignified at its peak point of tourism journey currently.

Digha is now realized and well valued that advance in tourism industry is the creator, operator and controller of employ and earnings not only for tourism enterprises, but to the entire region with high multiplier effect on the general economy of state.

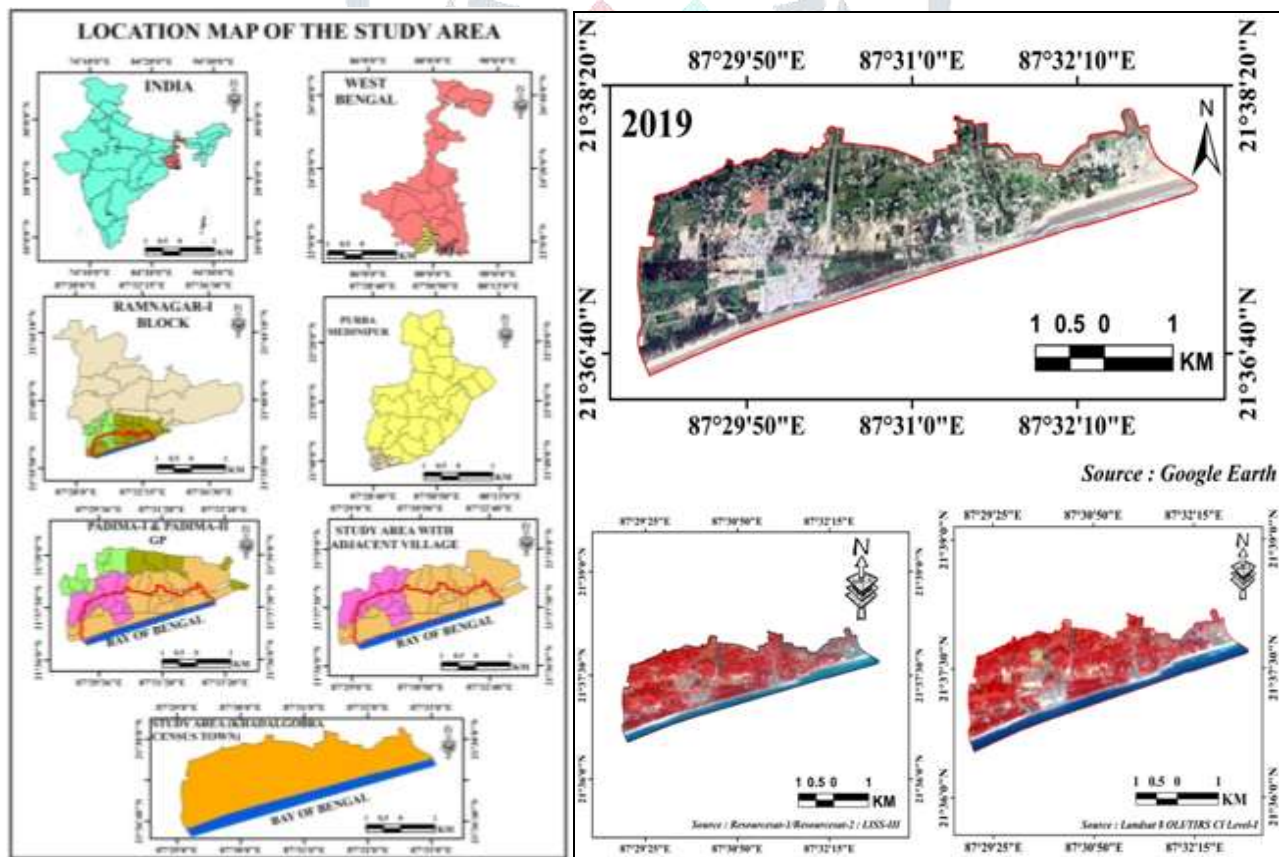
This research paper has focused on the COVID-19 issue in Digha tourism townscape of West Bengal and its impact on the regional economy and society. This paper is very significant to draw the attention of the policy

makers and thinkers because the tourism and allied sectors are worst affected by the COVID-19 crisis. Digha is one of the dignified tourism hotspot not only in West Bengal but also in the whole eastern India. It is rich with various tourism resources and lakhs of tourists arrive annually. It contributes to a large proportion to the regional and national GDP. Now there is no visibility of cash inflows found in this regional tourism industry due to a large scale bankruptcies, business closures which will lead to job losses across the tourism townscape and its buffer with hinterlands. The industry in the region has gone numb from a lack of any umbrella direction from the government or without any fiscal and monetary support. According to local industrial body, the tourism industry is now going through a state of economic shock and disbelief as there were no effective announcements to give the life support of this industry as well as the livelihood of the people dependent on it. More than 10 weeks of constant discussions come to a naught and industry has gone directionless [25]. Hotels, restaurants and resorts have a deserted look due to the pandemic. The hoteliers, who have already incurred huge losses, don't expect that the industry will revive soon. Hence, this study is very much pertinent to make clear to estimate livelihood and journey impacts of COVID-19 outburst on tourism and related economy of Digha tourism cum townscape on coastal landscape.

2. Objectives:

- To investigate the lockdown influenced status and scenario of tourism industry and allied sectors by the first wave of Global COVID-19 in the study area;
- To estimate the state of economic stun and suspects as the distressed impacts on tourism industry;
- To look over the institutional roles and responsibility for recovering the state of socio-economic shock of Digha tourism industry;
- To find out the new pathway for life sustain and liquidity in livelihood and new mass momentum on the track of journey of this coastal tourism townscape.

3. Location of the Study Area:



Map-1: Location Map of the Study Area and Map- 2: Satellite Images of the Study Area

Digha urban region is actually a reflection of rural landscape over Bengal Coast. It has been evolved through the process of Tourism development and coastal urbanization. Astronomically, it is located in between $21^{\circ}38'20''$ N - $21^{\circ}36'40''$ N latitude and $87^{\circ}29'10''$ E - $87^{\circ}32'40''$ E longitude. Environmentally, this region is the transformation of rural ecology to urban environment. Geomorphologically, it is the western most trips of Midnapore as well as Bengal Coast which includes the Rasulpur-Pichhabani Sub-basin over South Bengal Basin with the finest sedimentological character of beach formation. Geologically, it is the recent Quarternary formation

having coastal sediments and alluvium (6000-8000 BP) [4] [5]. Administratively, it is the rural landscape including Padima –I and II Gram Panchayats of Ramnagar-I CD Block under Contai Sub-division of Purba Medinipur district in West Bengal, India. In 2011, Digha has earned her urban status as Khaldalgebra Census Town.

4. Materials, Methods and Methodology:

The fundamental methods and methodologies taken for the survey and analyses are given in the following.

Table No.-1: Methods and Methodology for the Study

Major Stages	Methods	Tools & Techniques	Remarks
Pre-field Stage	Study Area Selection	Discussion with Expertise/ Resource Persons/ Academicians/ Others Taking Help from Previous Papers of the Authors	1. Primary thinking, literature review, problem selection, objectives formulation, work planning and preparation for field survey and research work have been considered from critical point of view. 2. Thinking about alternatives and its selection in case of failure of any specific methods or techniques in data collection or getting the absurd/ unexpected result/ outcome during study.
	Problem Selection		
	Formulation of Problems		
	Statement of the Problem	Offline/ Library Research	
	Literature Review	Online Literature Review	
	Research Designing	Cultivation of Research Problem and Literature Review	
	Objectives Formulation		
	Preparation of Data Collection Tools & Techniques	Sampling Techniques Fixation Survey Schedule/ Questionnaire, Field Book and Note Book Preparation Mouza Maps, Corresponding Toposheets, Google Earth, IRS LISS-III, LANDSAT Images and other Base Maps from relevant sources	
Field Stage	Data Collection	Primary	1. Systematic and Stratified Random Sampling and Purposive and Chunk Sampling Techniques have been applied to collect primary data. 2. Offline and online library research, e-source analysis and Manual and digital literature platform survey have been emphasized to collect the secondary data.
		Secondary	
Post Field Stage	Data Processing & Analysis	Data Organization	• Data Organization, Compilation and Processing, Mapping Analysis, Result Discussion, Interpretation Recommendations Fixation • Making the Final Draft of Report/ Paper
		Data Compilation	
		Data Calculation & Presentation	
	Mapping Analysis	Google Earth, IRS LISS-III, LANDSAT Images & Arc GIS	
	Photographic Analysis	Photo Selection, Photo Editing, Photo Arrangement (Microsoft Word, Paint, Photo Maker & Photoshop Software)	
Result & Discussion	Vivid Analysis and Draw Outcomes		

5. Analysis and Interpretation:

5.1 General Statement about Digha Tourism Landscape:

5.1.1 General Demography:

There are 24 villages in the study area where most of the areas are having similar kind of population growth rate beside few exceptions. Tremendous population growth rate has been found at Jagaibasan, Palsnandapur, Gadadharpur in the last decade. Some villages have negative growth rate namely, Aitli, Jatimati and Begundiha due to submergence under the water after 2001. The villages namely Khaldalgebra has the highest number of

population .Khadalgobra is the oldest locality which incidentally forms the core of Old Digha town; hence it is also the most congested part of the project area. The next highly populated and congested area is PurbaMukundapur-Mirjapur village. Locationally this area is in advantageous position due to the nearness to Digha, Shankarpur and sea at the same time, and majority of the population in these areas are related to the fishing during monsoon season. Less or no population has been found at Begundiha, Digha, Raypur and Nilpur which are mostly submerged under the sea water. Jatimati and Saripur are the newly settled area under DSDA urban Area.

Table No.-3: Trend of Population Growth

Sl. No.	Name of Village	Village Wise Total Population		
		Total Population(2001)	Total Population(2011)	Total Population (2019)*
1.	Padima	1311	1458	1656
2.	Duttapur	591	812	1210
3.	Gadadharpur	348	588	912
4.	Bhagibaharampur	812	970	1183
5.	Champabani	746	1026	1404
6.	Palsandapur	116	210	337
7.	Ratanpur	718	926	1315
8.	Bilamria	1287	1516	1877
9.	Jatimati	2133	2133	2753
10.	Saripur	-	290	329
11.	Khadalgobra (CT)	4381	5344	7578
12.	Ghersai	727	901	1383
13.	Gobindabasan	803	1007	1519
14.	Somaibasan	157	269	420
15.	Gangadharpur	299	359	441
16.	Atili	91	42	57
17.	JagaiBasan	48	102	175
18.	Maitrapur	1031	1204	1579
19.	Mirjapur	307	362	435
20.	PurbaMukundapur	2436	2766	3657
21.	Begundiha	0	0	0 (Depopulated)
22.	Digha	0	0	0 (Depopulated)
23.	Raypur	3	0	0 (Depopulated)
24.	Nilpur	0	0	0 (Depopulated)
	Total	18345	22285	30220

Source: Census of India-1991, 2001 & 2011, GPs and CD Block Level Data-2011 & 2019 and Report of DSDA, 2019 [6] [7] [11]

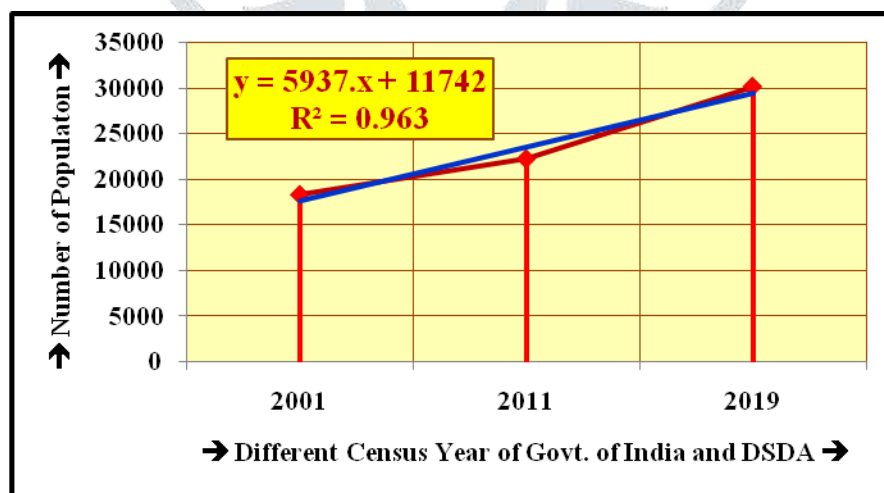


Figure-1: Population of the Study Area throughout the Time

The Figure-1 and Table-2 shows the increasing scenario of total population of urban, rural and buffer areas of the Khadalgobra Census Town and Digha Rural Region under DSDA. This scenario indicates the blooming scenario of the urban journey and its potentiality over time. The population has been increased over time as the tourism development is the prime initiative to accelerate this population growth. Immigration of interior rural people for drawing the opportunity of residence and employment and invasion of outsiders in terms of business and commercial activities, both are reflected as the driving causes for this population growth over

time. Interestingly, after 2011, the population of this tourist cum rurban hotspot over Bengal coast has been increased drastically due to the initiatives and opportunities from the newly formed Government mainly. Side by side, the Age-sex Pyramid in Figure-2 reflects that the active and independent people are greater than inactive or dependent population here which is very much identical to any tourism cum urban entity.

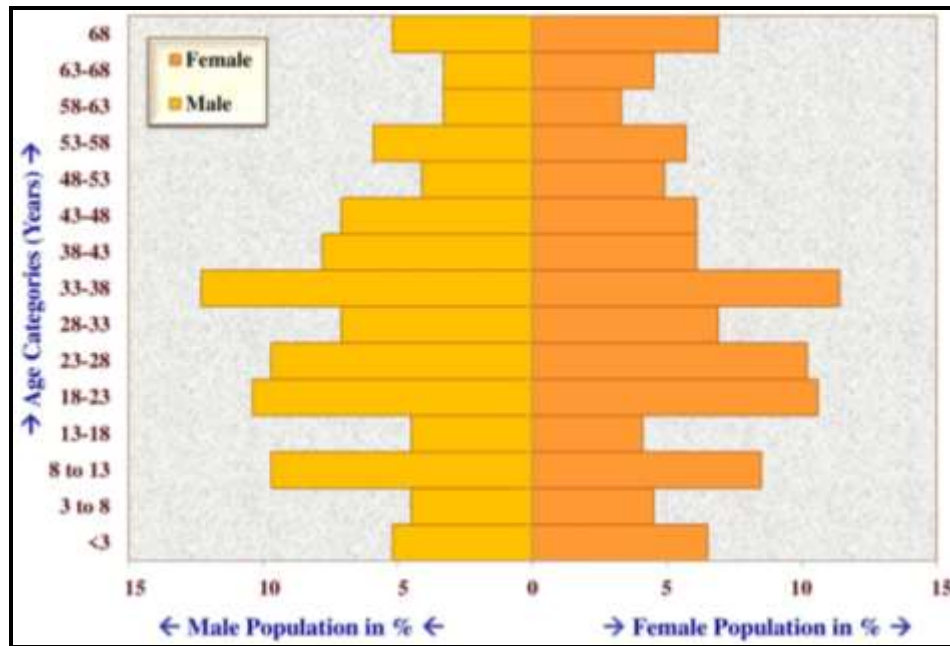
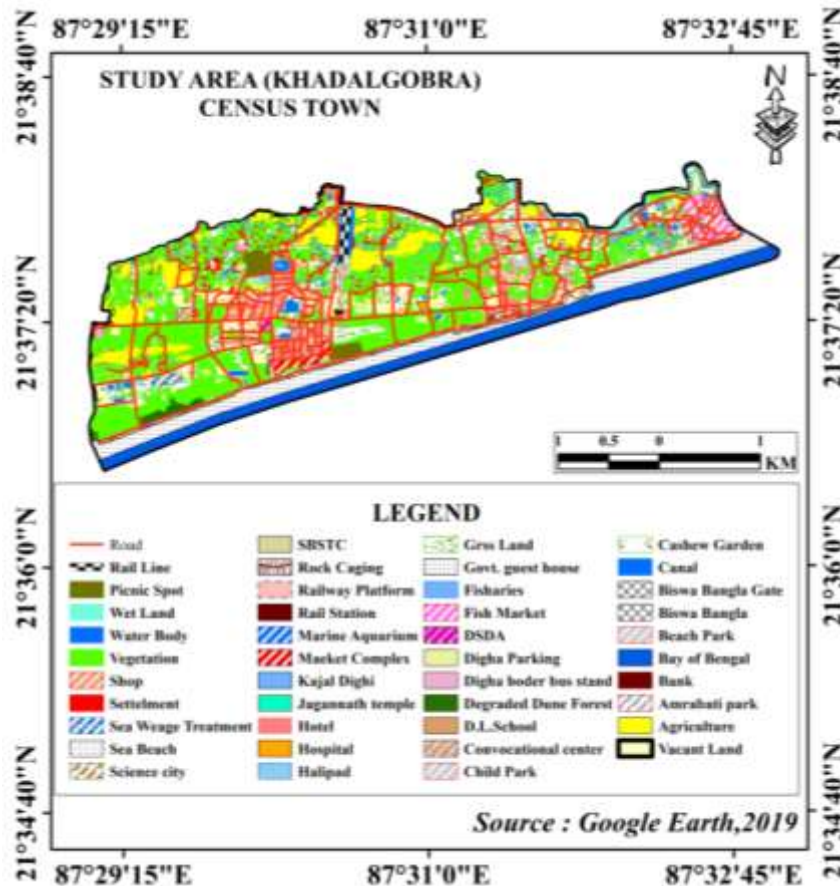


Figure-2: Age-sex Pyramid in the Study Area, 2019-20

5.1.2 LULC Scenario influenced by Tourism in the Study Area:



Map No. - 3: LULC Map in Digha Tourism Townscape, 2019

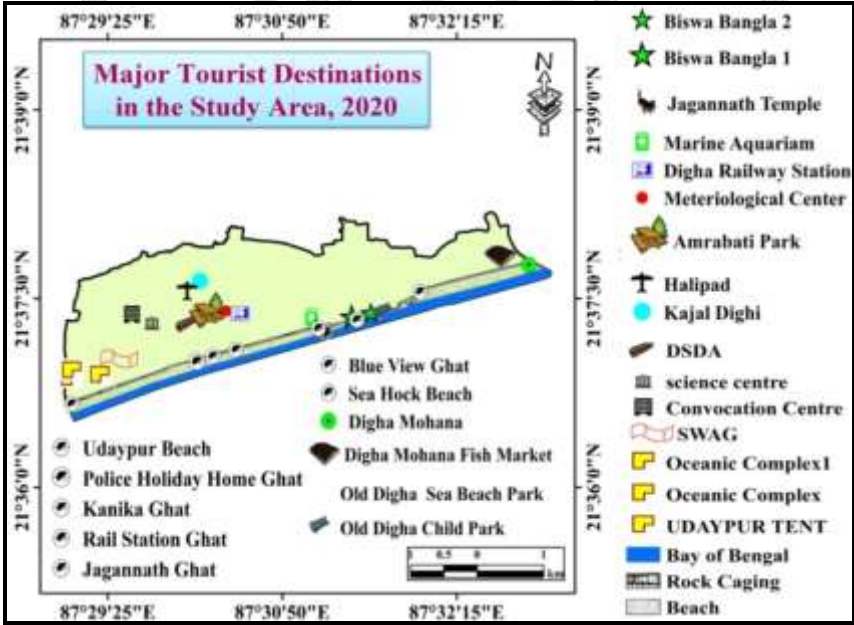
The Map No.-3 shows the LULC scenario in the Study Area in 2019. The generated data reflects the different anthropogenic features and land uses have been dominated over physical features breaking the monotony of natural set up. Interestingly, the vegetation cover has been increased over time, but the density and coverage of

forest cover has been decreased. The grassland has been also expanded here. Further, the amount and distribution of agricultural and vegetable lands have been squeezed over time whereas hotels and resorts, market, transport and institutional entities have been increased in fabulous way. This scenario indicates the development of tourism and urbanization in the study area throughout the time.

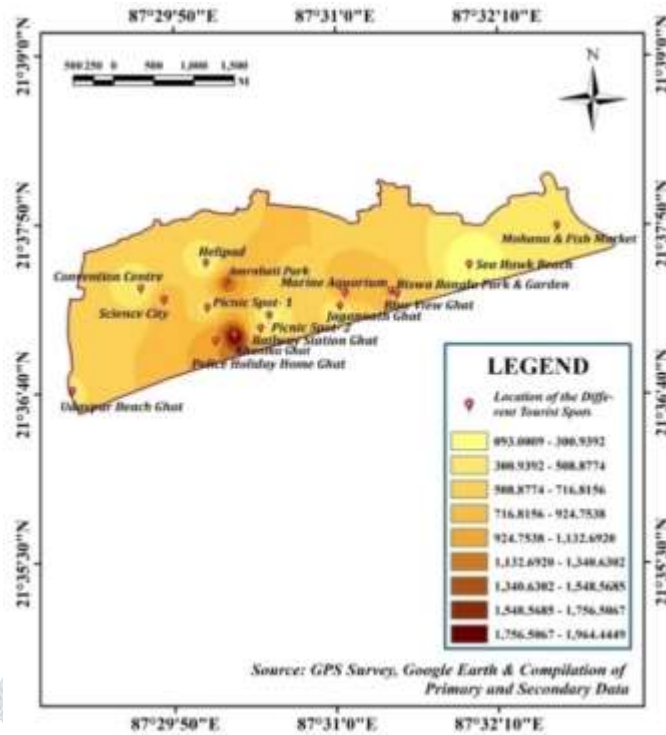
5.1.3 Tourist Destinations and Flow in the Study Area:

		Table No.-4: Tourists in Lakh in Different Years																																					
Years		2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018		2019													
Tourist	Yearly	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Total											
		Daily	3641	3636	5	3808	3800	8	4189	4175	14	6978	6967	11	6751	6734	17	7252	7227	25	7449	7419	30	7652	7614	38	7551	7521	30	7849	7822	27	8052	8027	25	8559	8529	30	8890

Source: Secondary Data from DSDA, 2019



Map No.-4: Major Tourist Destinations in the Study Area



Map No.-5: Annual Average Magnitude of Tourist Flow per day in the Study Area

Table No.-4 shows the temporal figure and flow of domestic and foreign tourists in the study area. The data reveals the increasing magnitude of flow here from 2007 to 2019 which significantly reflects the upgrowing importance of this tourism cum townscape over time. The tourist flow at the different important tourist destinations and spots (Map No.-3) is reflected from the above diagram which has been prepared on the basis of tourist spot survey during the field study in the target region. At least 15 tourist destinations have been selected for assessing the tourist flow at those places. All of the bathing ghats along with marine aquarium, science city, Amravati Park, Biswa Bangla Udyan, Kaju Garden, etc. have been considered to estimate the magnitude of tourist flow in the study area. A steady increasing rate of tourist flow is found constantly from 2007 to 2019.

5.2 Economy and Employment Opportunities created by Tourism and Allied Industry at Digha:

5.2.1 Livelihood: Digha is the townscape and coastal tourism landscape of 24 mouzas of spatial entity where tourism provides huge scope for income generation in a satisfactory amount. A large number of people earn their livelihood in different segments associated with tourism and hospitality. Above 30000 of local people of Ramnagar CD Blocks and their livelihood are directly influenced by this tourism industry.

5.2.2 Employment in Hotels/ Guest Houses/ Holiday Homes:

Table No.-5: Total Hotels in Digha Tourism cum Townscape		
Sector	Name of Hotels / Lodges	Total Seats
Private Sector	277	8813
Government Sector	37	1128
Unauthorized Uses	195	2546
Total	509	12487

Source: Field Survey, 2018-2020 & DSDA Report, 2019-2020 [6] [7] [11]

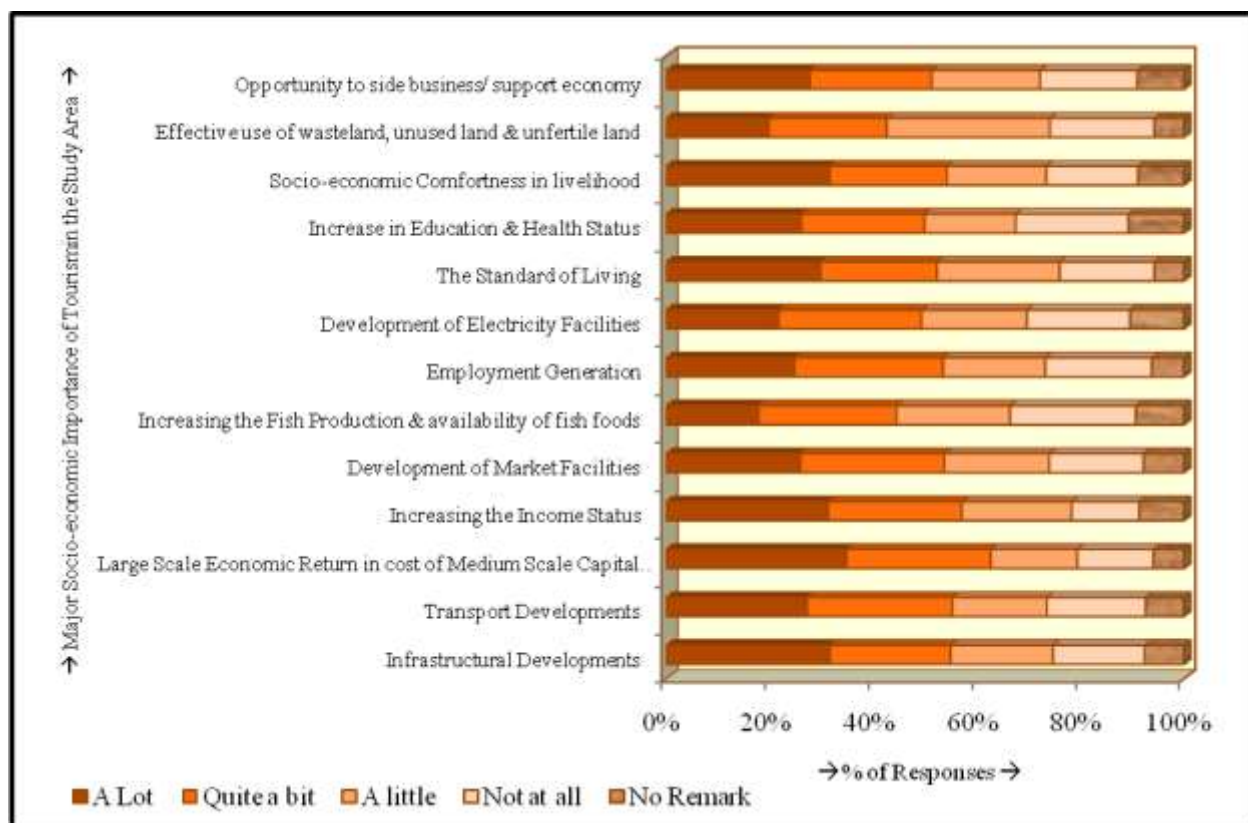


Figure No.-3: Importance of Tourism Development in the Study Area

Source: Field Survey and Perception Study, 2018-2020

One of the most important segment of tourism industry in Digha is the hotel sector (which also includes guest houses and holiday homes), and it has vast potentiality for employment generation and earning foreign exchange. A comprehensive hotel survey has been conducted with a structured questionnaire in the area to collect information on number of hotels, number of beds, type and nature of accommodation, catering facilities, availability of basic amenities, like, source of water supply, sewerage system, garbage disposal etc. According to report of DSDA, in 2019, total number of tourists of Digha was estimated to be 32.45 lakh. Hence per day tourists (resident tourists who needed lodging facility) worked out to be about 8890. Per day non-resident tourists for Digha was 6840 in 2019. The number of tourists of both resident or non-resident increased significantly (about 25 per cent) due to the introduction of direct train services from Kolkata and some other places of West Bengal and India to Digha. Note that the resident tourists are about 50 per cent of total tourists. Information contained in the table shows that at present more than 13000 beds exist in 509 hotels. It shows that the available capacity can cater the lodging needs of the resident tourists. Near about 15000 of employees are directly and indirectly engaged to hotel sector whereas 60-70 percent is casual in nature as per the information from Hotel Owner's Association.

5.2.3 Employment in Transport Services:

Two types of transport services are linked with tourism- (i) from place of origin of the tourists to tourist destination and (ii) transport services within tourist destination for local sightseeing and/ or for pleasure trips. In Digha the first type of services is provided by direct trains from Kolkata, Vishakhapatnam and some other places. Besides, some long distance express bus services are provided by state transport and private operators from different places to Digha.

Long Distance Buses:

State Transport: South Bengal State Transport Corporation and Calcutta State Transport Corporation operate near about 100 buses (200 trips) every day from different places to Digha. These buses have the capacity of 52 seats each. Taking an average of 4 employees including cleaner and helper per bus, the number of direct daily employment works out is about 400 persons.

Private Bus service: About 95 express private buses with an average seating capacity of 55 persons come to Digha every day from places, like, Kolkata, Barasat, Bagda, Namkhana, Bahrapur, Asansol, etc, with an estimated total trips of 170 per day. The number of direct daily employees is found to be 380.

Local Bus Service: About 105 private buses operate daily from places, like, Mecheda, Kukrahati, Geonkhali, Haldia, Nandigram, Rasulpur, Debra, Kharagpur, Egra, etc to Digha. They make 210 trips per day. These buses provide employment opportunity to 420 persons.

Transport services at Digha for local sightseeing: There are three modes of transports available to the tourists. These are taxi, motor van and rickshaw. As reported by the Taxi Owners Associations, 135 taxis and small car are operating in Digha, providing an employment of about 370 persons per day. About 1400 motor vans provide daily local transport services in old and new Digha. This mode provides 2800 employments per day. Not only that short distance transport facilities and services have been providing by more than 600 rickshaws here.

5.2.4 Employment in Informal Sector Economic Units:

Like other tourist destinations, a good number of informal sector economic units having small shops (kiosks) are operating in Digha beach to cater the needs of the tourists. These shops of informal economic units are reflected on and along the both sides of 9 link roads from Digha foreshore road stretched from Old Digha to Udaypur covering New Digha.

Vendors: Data generated through the survey revealed that 2937 unorganized informal sector economic units (Kiosks, vendors, hawkers and alike) are selling goods of different types, like, stationery shops, ice cream parlors, tea stalls, restaurants, toy shops, cashew nut selling shops, tiffin centers, cold drinks and fruit juice stalls, fast food centers, key ring shops, oyster shops, imitation selling shops, handicraft shops, fish food shops, shoe repairing and selling shops, etc. Total number of employees in those shops is estimated to be about 4500.

Sl. No.	Name of Zones	Number of Vendors	% of Vendors
1.	Old Digha Sector	1018	34.7
2.	New Digha Sector	1855	63.2
3.	Udaypur Sector	64	2.1
	Total	2937	100.0

Source: Field Survey, 2018-2020 & DSDA Report, 2019-2020 [6] [7] [11]

Hawkers: About 500 hawkers are earning their breads through hawking over Digha sea beach. This section is the most vulnerable and poor in the study area.

5.2.5 Employment in Licensed Shops:

Survey report revealed that besides the informal economic units as aforesaid, there are 3327 licensed shops are also selling goods of daily needs in the area. Total number of employees in these shops is estimated at 5000.

Sl. No.	Name of Zones	Number of Shops	% of Shops
1.	Old Digha	810	24.3
2.	New Digha	1447	43.6
3.	Udaypur	27	0.8
4.	Other Different Markets	1043	31.3
	Total	3327	100.0

Source: Field survey, 2018-2020 & DSDA Report, 2019-2020 [6] [7] [11]

5.2.6 Employment potentiality of fishing industry as the stimulator of tourism in Digha area:

This sector is directly and indirectly related to tourism and fact remains that this industry provides ample job opportunity to the local people of the area. Not only is that sea fish food also another attraction of Digha tourism. At the Mohana (estuary) of Digha, There are more than 60 fish auction units with about 300 commission agents are working at this auction centre under the control and supervision of Fish Owners Association comprising of about 2550 members. The Centre is located over 25 acres land where all trading activities are carried out. An International Auction Centre has been constructed by the Fisheries Development Corporation whereas it is the largest regional auction centre. It is the main fish landing centre of Digha having whole sale market, auction centre, fish processing facilities. Digha Fishermen and Fish Traders' Association plays the pivotal role to control whole of the fishing industry including a lot of registered members of about 1250 boats, about 15000 associate fishermen and another 15000 associates in ancillary services. The average daily transaction is of Rs. 500 crores from 500-700 MT of fish. Annual export is about 150,000MT of fish which earns the Rs.of 550 Crore during a season. Other than Digha Mohona, fishing activity is profusely found in Udaypur beach. This beach is one of the key centers for fishing. Both large scale and small scale fishing activities are noticed here. More than 30000 persons are directly employed in fishing and selling activities. Beside these, thousands of people are also engaged in storing, transportation activities, retail trade and ancillary industries, like, ice factory, fish processing, etc. Adding the employment figures in ancillary activities, total number of employment in fishing sector crosses the 50000 marks.

Fishing by unorganized fishermen: The field survey revealed that small fishermen in unorganized sector operate 140 boats in a group to do fishing manually near sea shore every day. It is estimated that more than 2600 persons are directly engaged in this unorganized sector of fishing activities.

Table No.-8: Comprehensive Employment Scenario related to Tourism and Allied Sectors in the Study Area

Directly related to Tourism Sector			Indirectly related to Tourism Sector			Related to Other Allied Sectors rather than Tourism		
Types of Employee	Nature of Employee	Number of Employee	Types of Employee	Nature of Employee	Number of Employee	Types of Employee	Nature of Employee	Number of Employee
Hotel, Lodge, Resort and Restaurant Employees	Mostly Unorganized/ Informal	15000	State Transport Employee	Formal mostly	400	Govt. Transport Sector (Officials)	Formal	~35
Vendors	Informal	2937	Private Long Route and Local Bus Service Employee	Informal	800	Local and Regional Administration like Police Stations, GPs, Water Supply and Irrigation Dept., Forest Dept., SHG Office, etc.	Mostly Formal	~190
Hawkers	Informal	500	Various Goods & Commodities Suppliers to the Hotels and Shops	Informal	278	Fishing & Selling	Mostly Informal	
Licensed Shop Keepers and Workers	Mostly Unorganized/ Informal	5000	Small and large entrepreneurs, contractors and capitalists in different tourism and other dimensions	Informal	198	Fish Processing, Manufacturing, Trading & Transporting	Mostly Informal	~45000
Employees in Local Transport like Trackers, Auto, Van, Motor Van, Rickshaw, etc.	Informal	3770	Different kinds of servicemen related to tourist dimensions	Informal	152	Fish Farming, Farmers & Veg. Cultivators	Mostly Informal	194
Tourist Administration like DSDA and others	Formal	123	Labour Organizations and Political Workers	Informal	174	Cashew Processing and Manufacturing	Mostly Informal	~250
Tourist Institutions like Marine Aquarium, Amaravati Park, Science City, Meteorological Centre, Helipad Ground, Convocation	Mostly Formal	187	Recreational and Sexual Workers	Informal	200	Handicraftsmen, Artisan, Manufacturer, Workman, Mechanic, etc.	Informal	~340

Centre, etc.								
‘Nulia’, Coast Guards, Photographers, Tourist Guiders, Begers, etc.	Informal	~580	Different Construction activities and labour force	Informal	1800	Various service holders in health, education, electricity and other govt./ private sectors	Informal	~285
Travel, Tourism & Hospitality	Mostly Informal	~150	Informal Fishing related to Tourism	Informal	2600	Forest and livestock related activities	Informal	~134
Total		28247	Total		6402	Total		46428
Directly and indirectly engaged people in Tourism Industry = 34849					Allied Sectors = 46342			
Directly and indirectly engaged total employees in Tourism Industry and allied sectors in the study area = 81077								
About 37,500 (~46.3%) employees (within the Ramnagar-I and II CD Block) are local and residual is regional (15677 within the Purba Medinipur District~19.3%) and outsiders (27900 outside the District~34.4%)								
Source: Compilation of Secondary Data (DSDA, Digha Hotel Owners’ Association, Fish Owners’ Association, Fisheries Development Corporation, Various Labour’s and Workers’ Union, Market Unions, Different Tourism and Institutions, BDO, GPs, etc.) and Primary Data (Field Survey, 2018-2020)								

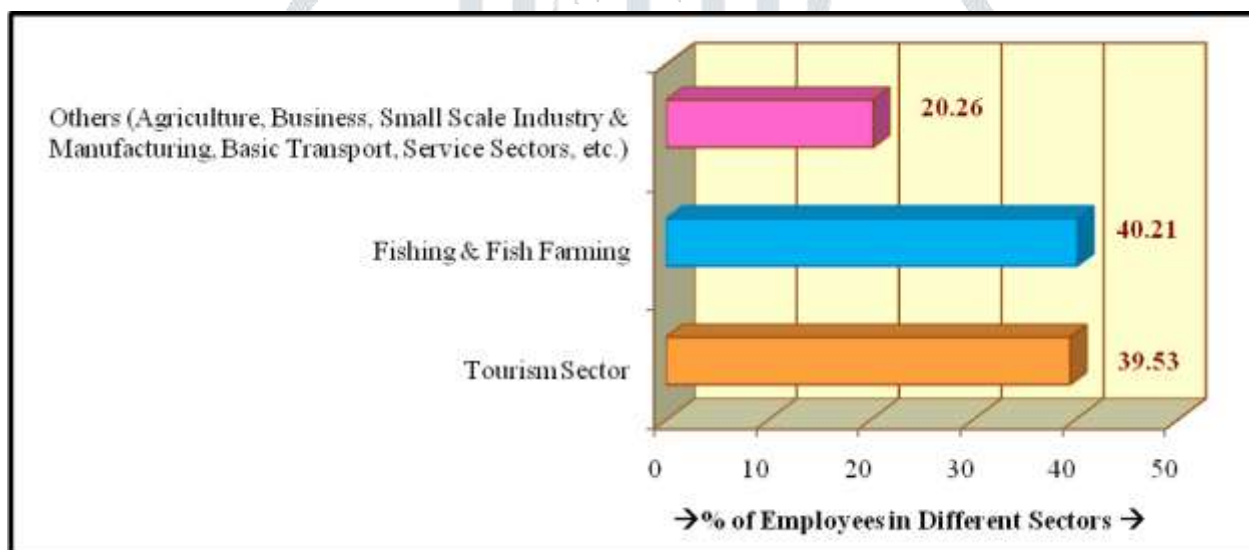


Figure No.-4: % of Employees engaged in different sectors

5.3 Lockdown Schedule for COVID Outbreak in the Study Area:

The corona virus infection or COVID-19 outbreak is one of the biggest medical challenges to humankind in recent times. “Lockdown” is an emergency protocol, which basically means preventing public from moving from one area to the other. In this scenario, all educational institutions, shopping arcades, factories, offices, local markets, transport vehicles, airports, railways, metros, buses, etc., are completely shut down, except hospitals, police stations, emergency services such as fire station and petrol pumps, and groceries [22]. Lockdown can be a significant and effective strategy of social distancing to tackle the increasing spread of the highly infectious COVID-19 virus. At the same time, it must have elevated degree of socio-economic impact on the life and livelihood throughout a nation [2].

The lockdown scenario influenced the study area is given in the Table No.-2.

Phases of Lockdown	Duration	State of Lockdown in the Study Area
1 st Phase	23 rd March-14 th April, 2020	Completely lockdown along with the state
2 nd Phase	15 th April – 30 th April, 2020	
3 rd Phase	1 st May – 31 st May, 2020	
4 th Phase	1 st June – 30 th June, 2020	The zones is categorically under ‘A’ affected zones and fallen into sensitive lockdown region.
5 th Phase	1 st July – 31 st July, 2020	Conditional lockdown to avoid the pandemic outbreak due to huge gathering and interaction in tourist place.
6 th Phase: Extended	2, 5, 8, 9, 20, 21, 27, 28 & 31 August, 2020	West Bengal government announced the extension of the weekend lockdown in the state wherein only essential

Phase having selected days		services would be allowed to operate. All public and private transport is banned.
	Lockdown is extended in containment zones in West Bengal till September 30 and 7 th , 11 th and 12 th complete lockdown in the state	Indirectly lockdown due to shutdown of source regions, feeding zone and hinterland of the region.
Source: Govt. Officials, Daily News Papers, Media Sites & Regional Notification, March-September, 2020		

Once a very small seaside village along the Bay of Bengal coast is now becoming as one of the most important tourism hotspots with all the major urban facilities in the state of West Bengal. The rural scenario has been changed dramatically. All tourism centric developmental activities have been done to make this place into an economic giant also. But, now the COVID-19 outbreak is now just shutting down the economy of this region. It looks like a desert [22]. It is one of the worst crises ever to hit the tourism industry of this region impacting all its geographical segments - inbound, outbound and domestic, almost all tourism verticals - leisure, adventure, heritage.

5.4 Socio-economic Impact of COVID-19 Outbreak on the Study Area:

The above discussion clearly depicts the number of people dependent on tourism industry at Digha. This pandemic actually brings the curse in the present and future lives of that number of huge population. The most vulnerable groups are those who are engaged in unorganized sectors and daily bread earnings. One thing should always keep in mind that the economic crises are visible but the social and psychological crises are not always visible. These invisible crises are actually destroying the life of mankind. In the following sections the authors are trying to estimate these immitigable losses as much as possible because of the limitation of short survey period and prevailing lockdown situation which is going on even now in West Bengal.

5.4.1 Perceptions from Different Sectors of Region regarding the Socio-economic Cost of COVID-19 Outbreak and Its Lockdown Situation:

Major Socio-economic Costs	Perceptions/ Responses from Different Regional Sectors in the Study Area												Average	Average (%)
	Hotel & Resort Sector	Travel & Transport Sector	Vendor/ Hawker Sector	Tourist Worker Sector	Market Sector	Handicrafts & Manufacturing Sector	Fish Farming & Agriculture Sector	Trade, Commerce & Service Sector	Fishing Sector	Household Sector	Construction & Labour Force Sector	Tourists & Others		
Job Loss & Uncertainty	46	42	50	50	43	44	41	44	45	42	45	42	44.5	89.0
Economic Uncertainty & Insecurity	47	47	48	48	46	46	44	45	47	46	45	44	46.1	92.2
Increasing Poverty & Marginalization	39	48	49	46	41	45	41	39	43	44	46	39	43.3	86.6
Collapsing Market, Economy & Tourism Systems	49	44	48	47	50	45	43	50	47	41	41	42	45.6	91.2
Turndown Growth & Development	50	48	47	46	50	47	46	50	49	45	44	45	47.3	94.6
Healthcare Crisis & Insecurity	39	47	48	43	40	41	42	41	42	43	45	40	42.6	85.2
Socio-Psychological Stress	42	48	48	47	43	45	45	45	46	46	45	43	45.3	90.6

Socio-cultural Disruption & Stress	39	42	46	42	37	41	40	39	42	43	44	42	41.4	82.8
Social Inequalities & Segregation	36	35	40	41	36	34	36	38	43	39	45	38	38.4	76.8
Change in Lifestyle	44	45	45	44	46	47	46	45	45	46	45	44	45.2	90.4
Socio-economic Insecurity & Unsafe Livelihood	43	41	43	42	42	45	43	43	45	44	46	42	43.3	86.6
Diluting Tourist Flow & Potentiality	48	48	46	47	46	45	42	44	43	43	41	47	45.0	90.0
Average	43.5	44.6	46.5	45.3	43.3	43.8	42.4	43.6	44.8	43.5	44.3	42.3	44.0	88.0
Average (%)	87.0	89.2	93.0	90.6	86.6	87.6	84.8	87.2	89.6	87.0	88.6	84.6	88.0	
N=600	N_{HR} = 50	N_{TT} = 50	N_{VH} = 50	N_{TW} = 50	N_M = 50	N_{HM} = 50	N_{FA} = 50	N_{TS} = 50	N_F = 50	N_H = 50	N_{CU} = 50	N_{UI} = 50	N = 600	N% = 100

Source: Telephonic Interview during Lockdown and Field Survey after Lockdown, 2020

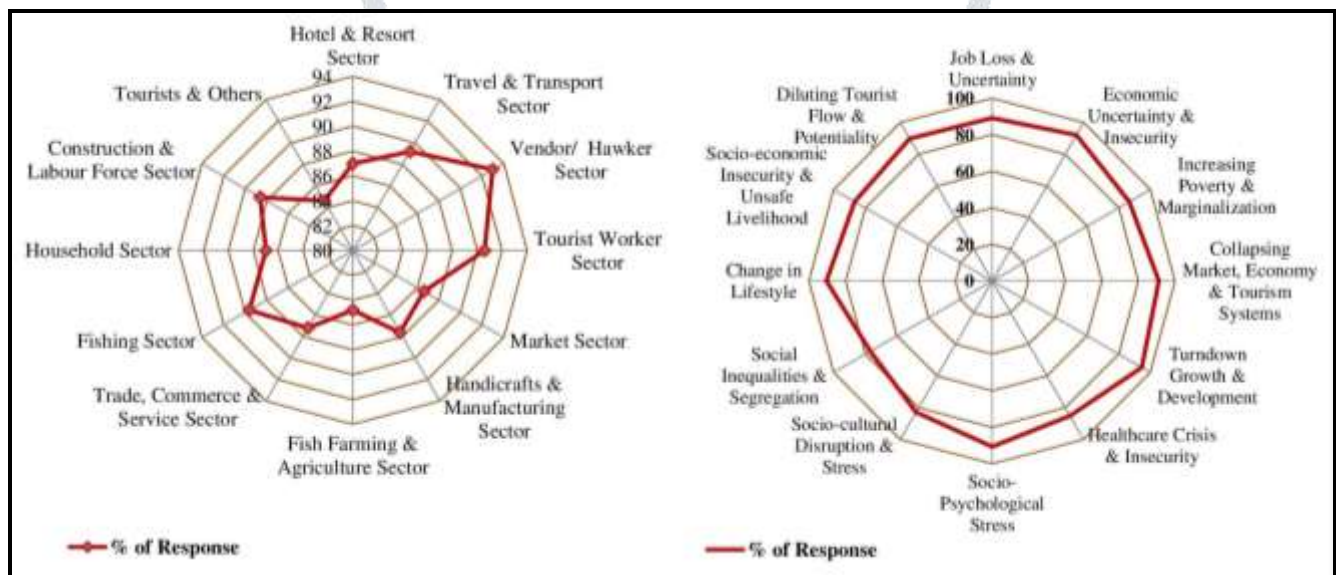


Figure No.-5: Perceptions from Different Sectors of Region regarding the Socio-economic Cost of COVID-19 Outbreak and Its Lockdown Situation

Table No.-9 and Figure-5 show the perception on different socioeconomic costs as per various sectors relating tourism in the study area. In most of the cases of sectors and socio-economic costs, the magnitude of perception is at higher scale (> 80%) whereas total 600-respondents taking 50 from each sector have put their suffering perceptions in the field.

5.4.2 Estimation and Assessment of the Employment and Job Crisis due to the Impacts of COVID-19 Outbreak in the Study Area:

Table No.-10: Estimated Number of Employees faced on Job Crisis

Sl. No.	Name of Different Sectors Related to Tourism and Allied Industries	Estimated Number of Employees faced on Job Crisis
1.	Hotel Sector	~14400
2.	Travel, Tourism & Hospitality (Agency & Organization)	~150
3.	Market (Shops)	~4560
4.	Market (Vendors)	~2680
5.	Hawkers	~500

6.	Intra-transport (Trackers, Auto, Toto, Rickshaw, Motor Van, Small Car, etc.)	~3600
7.	Coast Guards, Nulia, Photographers, Tourist Guiders, etc. (employed as per casual basis through organization, institution and agency)	~580
8.	Small Scale Manufacturing, Art Crafts and so on	~340
9.	Cashew Nut Processing and Food Processing	~250
10.	Fishing and Selling, Fish Processing and Manufacturing, Fish Marketing, Transporting and Trading	~37700
11.	Informal Fishing Related to Tourism	~2450
12.	Distributers/ Suppliers, Service Man, etc.	~ 380
13.	Others	~ 370
Total		67960

35,335 (~52%) employees (within the Ramnagar-I and II CD Block) are local and residual is regional (12225 within the Purba Medinipur District ~18%) and outsiders (20400 outside the District ~30%)

Source: Compilation of Secondary Data (DSDA, Digha Hotel Owners' Association, Fish Owners' Association, Fisheries Development Corporation, Various Labour's and Workers' Union, Market Unions, Different Tourism and Institutions, BDO, GPs, etc.) and Primary Data (Field Survey, 2018-2020)

Table No.-11: Affected Employees/ People from Job/ Professional Background engaged in Tourism and Allied Sectors

Regional Existence of the Employees/ People engaged in Tourism and Allied Sectors	Total Number of Employees engaged in Tourism and Allied Sectors		Estimated Employees faced on Job Crisis		Estimated Number of Employees faced on Job Loss		Estimated Number of Employees faced on Job Uncertainty		Estimated Number of Employees faced on Less Job Loss/ Uncertainty due to Formal Base or Other Economic Support		% of Employees with respect to Grand Total	% of Employees faced on Job Crisis with respect to Its Total	% of Employees faced on Job Crisis with respect to Grand Total
	Number	%	Number	%	Number	%	Number	%					
Local Employees (within the Ramnagar-I and II CD Block)	37520		35335	43.58	12074	14.89	23261	28.69	2185	2.69	46.28	94.18	51.99
Regional Employees (within the Purba Medinipur District)	15677		12225	15.08	4456	5.50	7769	9.58	3452	4.26	19.33	77.98	17.99
Outsider Employees (outside the district and state)	27880		20400	25.16	7985	9.85	12415	15.31	7480	9.23	34.39	73.17	30.02

Total	81077	67960	83.82	24515	30.24	43445	53.58	13117	16.18	100	81.78 (Average)	100
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Source: Compilation of Secondary Data (DSDA, Digha Hotel Owners' Association, Fish Owners' Association, Fisheries Development Corporation, Various Labour's and Workers' Union, Market Unions, Different Tourism and Institutions, BDO, GPs, etc.) and Primary Data (Field Survey, 2018-2020)

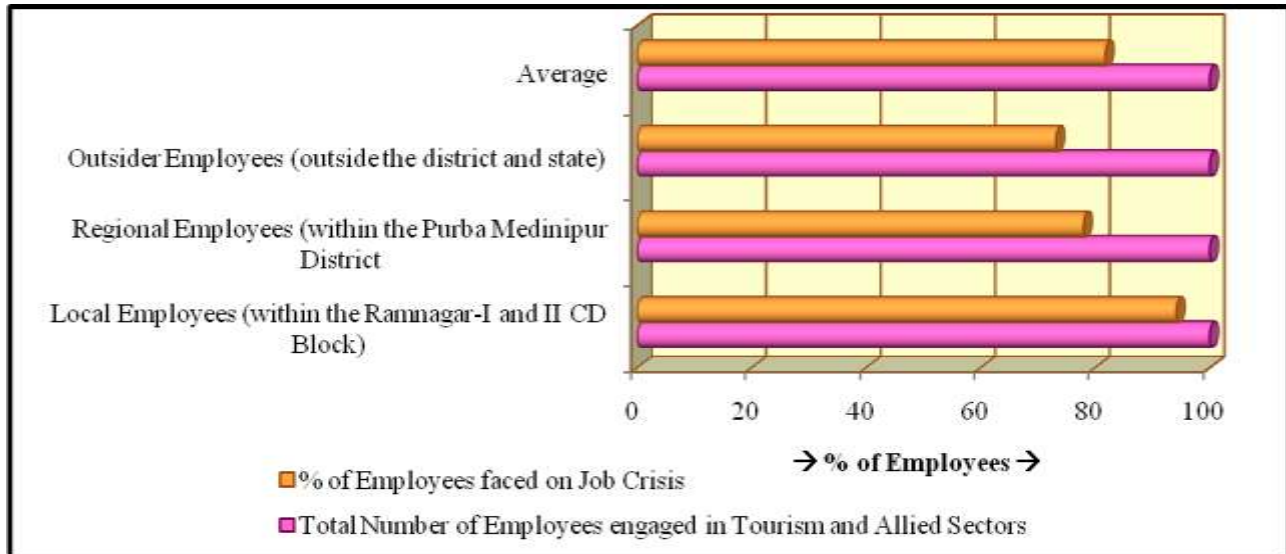


Figure No.-6: Shared Employees faced on Job Crisis (w. r. t. Grand Total) in Tourism and Allied Industries at the Study Area

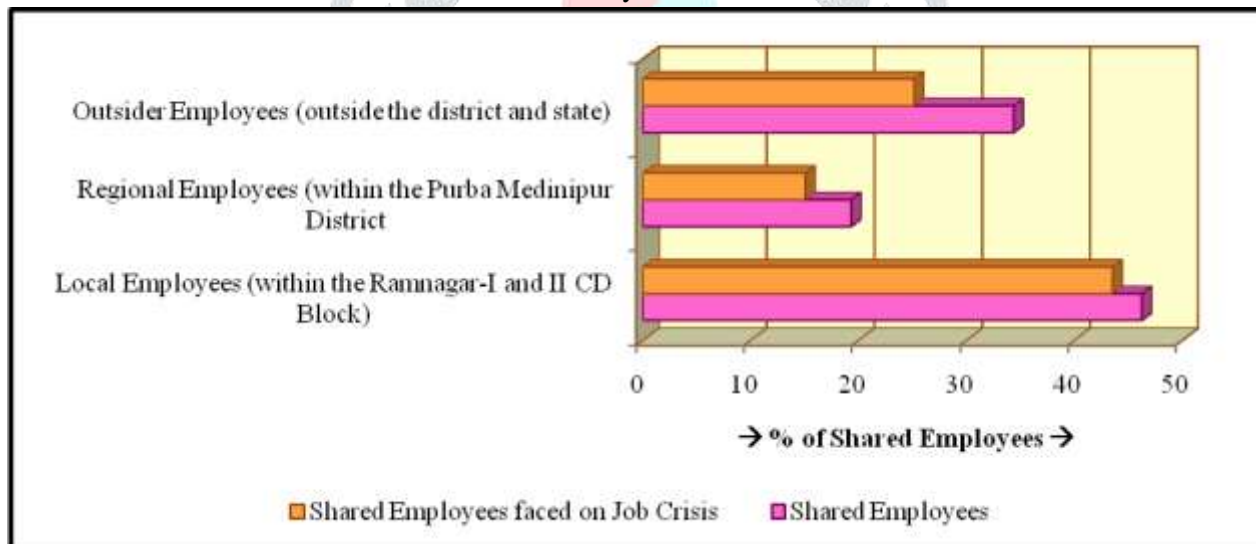


Figure No.-7: Shared Employees engaged and faced on Job Crisis in Tourism and Allied Industries at Study Area

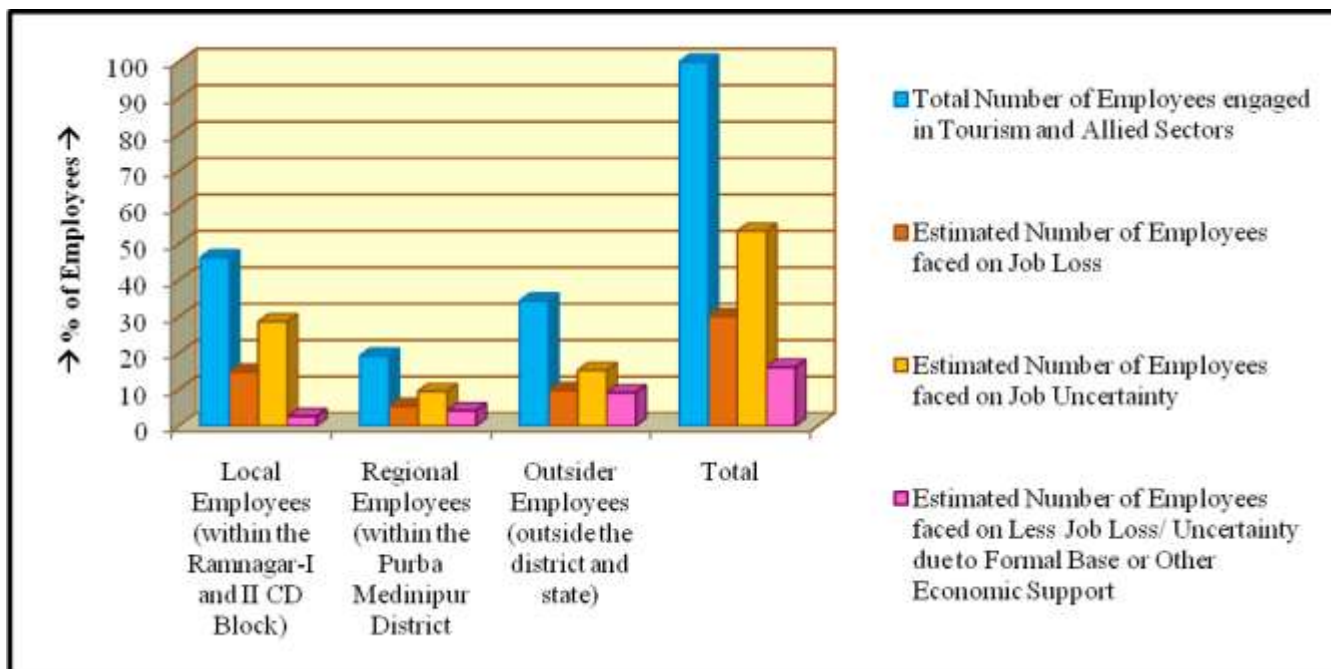


Figure No.-8: Estimated Employees faced on Various Job Crisis in Tourism and Allied Industries at Study Area

The above data and prepared diagrams based on survey and institutional report reveals that more than 30,000 employees in tourism industry and another 30000 of allied industry have faced the acute crisis of employment and life earning. The designated authorities also don't know when this situation will become normal.

5.4.3 Estimation and Assessment of the Economic Shock due to the COVID-19 Outbreak in Study Area:

Table No.-12: Estimated Economic Loss at the Tourism and Allied Industry in the Study Area

Sl. No.	Name of Different Sectors related to Tourism and Allied Industries	Income Loss (Rs./- in lakh) for 3-months of lock down and unopened situation
1.	Hotel Sector	53365
2.	Travel, Tourism & Hospitality (Agency & Organization)	7909
3.	Market (Shops)	2345.7
4.	Market (Vendors)	1091.2
5.	Hawkers	115
6.	Intra-transport (Trackers, Auto, Toto, Rickshaw, Motor Van, Small Car, etc.)	1118
7.	Coast Guards, Nulia, Photographers, Tourist Guiders, etc. (employed as per casual basis through organization and agency)	288.8
8.	Small Scale Manufacturing, Art Crafts and so on	101.8
9.	Cashew Nut Processing and Food Processing	62.5
10.	Fishing, Selling, Processing, Manufacturing, Transporting and Trading	64500
11.	Informal Fishing related to tourism	
12.	Others (Distributers/ Suppliers, Service Man, etc.)	178
13.	Govt. Loss from Different Tourism & Allied Industry related Sectors	14500
	Total	145575 (1455.75 crores)

35,335 (~52%) employees (within the Ramnagar-I and II CD Block) are local and residual is regional (12225 within the Purba Medinipur District ~18%) and outsiders (20400 outside the District ~30%)

Source: Compilation of Secondary Data (DSDA, Digha Hotel Owners' Association, Fish Owners' Association, Fisheries Development Corporation, Various Labour's and Workers' Union, Market Unions, Different Tourism and Institutions, BDO, GPs, etc.) and Primary Data (Field Survey, 2018-2020)

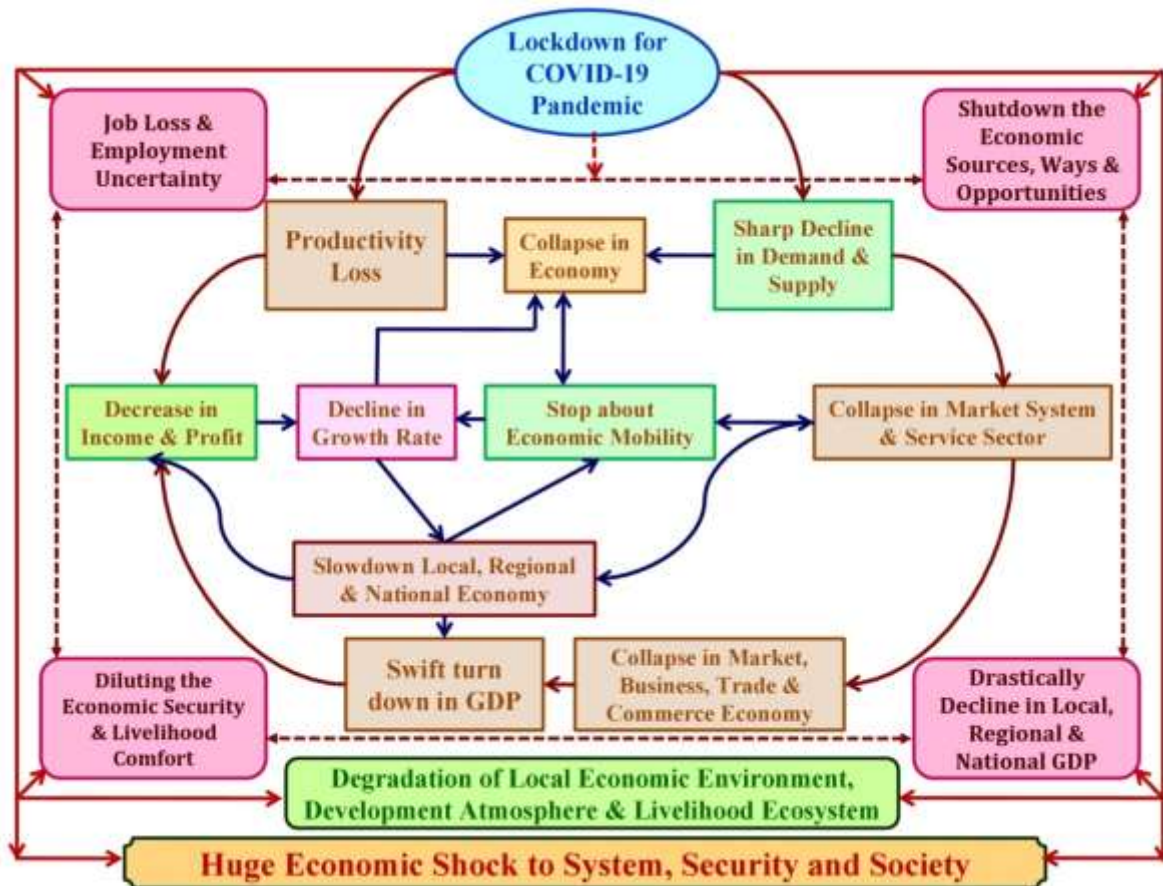


Figure No.-9: Huge Economic Shock to the System, Security and Society in the Study Area

The above Table No.-12 has been prepared from field survey, telephonic interview, face to face interview maintaining the social distance and institutional report reflects the state of economic shock in different sectors like hotel, market, transport, hospitality, manufacturing, art and crafts, tourism services, etc. of tourism industry and also in allied industry like fishing and fish food manufacturing. Estimation and assessment of income loss shows severe drowning situation of about all sectors. But, hotel, transport, fishing and market are the mostly affected segment of this industry in the study area. Not only that about 5600 of local households and 2150 households of surrounding regions have been suffered from their livelihood due to this heightened scenario of COVID-19 outbreak. The economy of this region has totally been shuttered.

5.4.4 Social impact:

The poor and marginalized sections of the society are the main victims of this deadly virus attack. The fear of unemployment, poverty, incapability to maintain the social distancing, fear of disease, no such hope from administrative levels etc. make their lives disastrous.

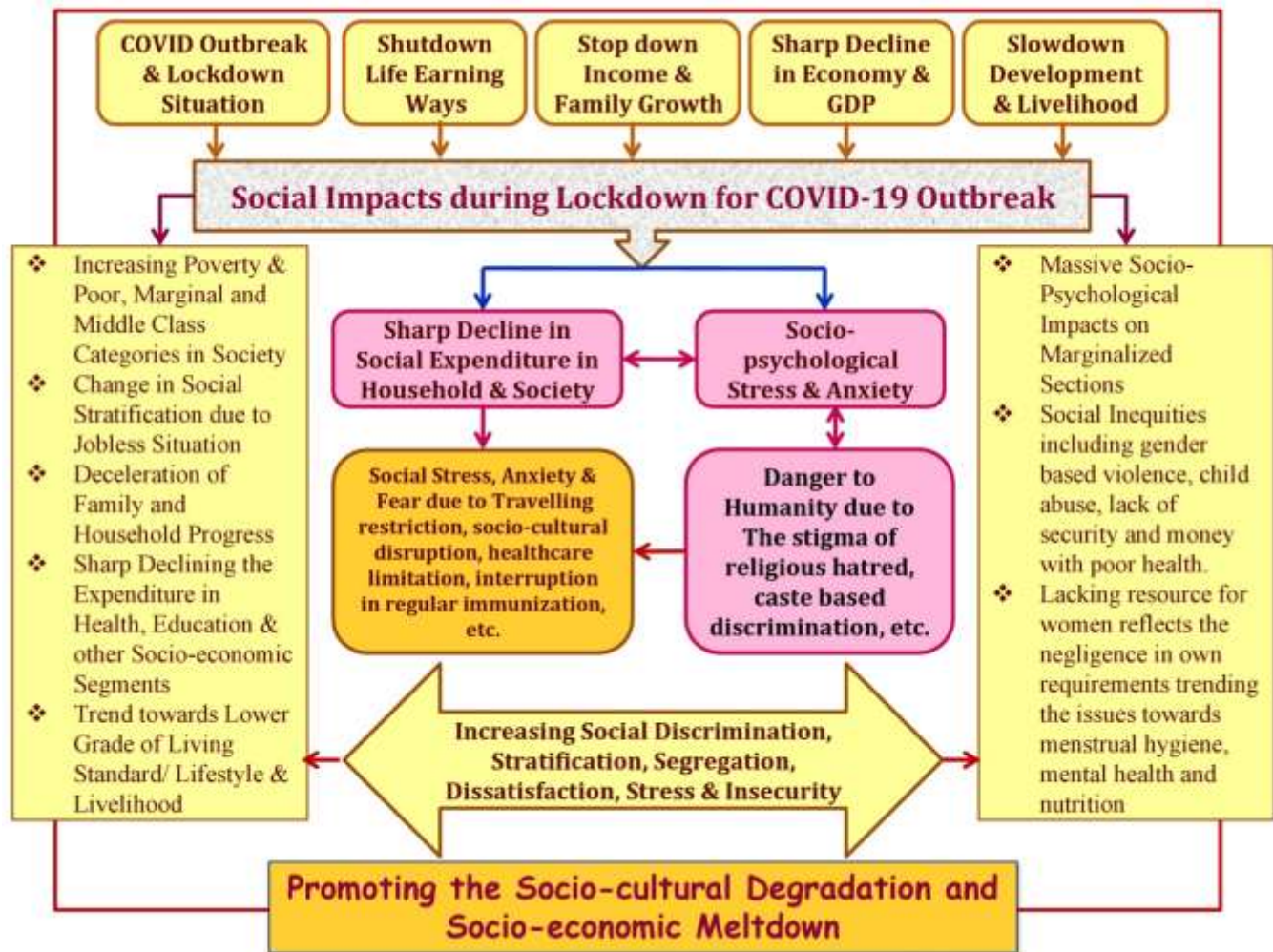


Figure No.-10: Socio-cultural Degradation and Socio-economic Meltdown in terms of Social Impacts of COVID-19 Pandemic in the Study Area

The various visible social impacts resulted from the survey cum investigation are listed below:

- Massive Psycho-social Impacts on Poor and Marginalized Sectors:** The crisis in terms of economic costs leads to massive psycho-social impacts on marginalized sections, women and children has been huge in this area.
- Higher Physical and Mental Health Risk of Women Community:** Women are at greater risk from both the physical and mental health perspectives due to loosening of job and uncertainty of family income and declining expenditure in household health purpose. Lacking resource for women reflects the negligence in own requirements trending the issues towards menstrual hygiene, mental health and nutrition in the list of livelihood priority.
- Social Inequalities and Unsafe Livelihood:** Poor and substandard families of unsafe scenario draws the social inequities including gender based violence, child abuse, lack of security and money with poor health.
- Social Stress in Communal Life and Livelihood:** Travelling restriction, socio-cultural disruption, healthcare limitation, interruption in regular immunization, shutting down occupational sources, etc. results the anxiety and fear in terms of social stress among the people by lock down.
- Incapacitated hospitals and distressed primary healthcare:** There are significant reasons behind so much distress among the people for a disease which could be prevented with a little care and precaution.
- The stigma of religious hatred, caste based discrimination affecting humanity:** In appearance of this situation, the less informed and biased media as well as people with vested interests tried to damage the social fabric of the area and left a big social impact in the fight against corona virus.
- Multi-dimensional Socio-economic Issues trapping single to society and Bottlenecked Livelihood:** The issues of health, the rapid decline of economy, shortage of medicines, sanitizers, masks, and other essentials, poverty, unemployment has undoubtedly taken centre stage and each has left a mark on the lives of people.
- Daily Wage Earners, Social Distancing and Reality of Socio-economic Security in Livelihood:** While upper class and upper caste people are able to create a safety net around them, the daily wage earners are victimized by the harsh social distancing provisions in the absence of adequate social safeguards. Social locations of the marginalized classes results in more oppression and exploitation without intersecting

endeavours and understanding of the nature of continuous process of social segregation. Therefore, the deep seated apathy towards the marginal sections hit hard by the widespread Covid-19 outbreak and will reproduce otherness among haves and have not.

- i) **Inadequate Investment, Poor Infrastructure and Insufficient care lacking to Socio-economic Reconstruction and Rejuvenation:** Large investment, vigorous infrastructure and sufficient care towards local livelihood, tourism and allied sectors and development stability are not enforced from govt. and policy makers for the strengthening turndown livelihood, economy and development.

6. Recommendations:

The study area included of West Bengal as well as India is now fighting at the level best against this fatal disease. No such pathways have yet been discovered by the so called decision makers in the society. This is the period to call for everyone to act socially more responsible and adhere to our duties to our society. Here, few suggestions to lower down the pain of particularly weaker sections of the tourism influenced society for this region are cited below:

1. Government and professional NGOs should provide some kind of job or cash in hand to relief depended people (More than 30% people) for their nourishment of livelihood.
2. In COVID crisis situation, the informal sectors have become more vulnerable. Government should provide them immediate relief because they found themselves literally jobless overnight whereas they contribute significantly to the economy in both output and employment.
3. Each and every political party should mobilize its volunteers for distributing relief to the COVID victims without considering any political colour.
4. Since social distancing has become a global catchphrase in the wake of COVID pandemic, the advantaged specific rich and upper middle class communities are behaving to fit flawlessly while many marginalized sections are vulnerable to impending damage. Govt. as the safeguard should consider the fact to strengthen the deprived in self of social sustainability.
5. In the reality of a long late and a little bit of Govt.’s economic relief package armed with short-sighted planning and no innovative ideas, Govt. must have the honest responsibility to defend the social vulnerabilities frightening out of the social distance measures and meet with large scale hunger in the study area along with the state and nation.

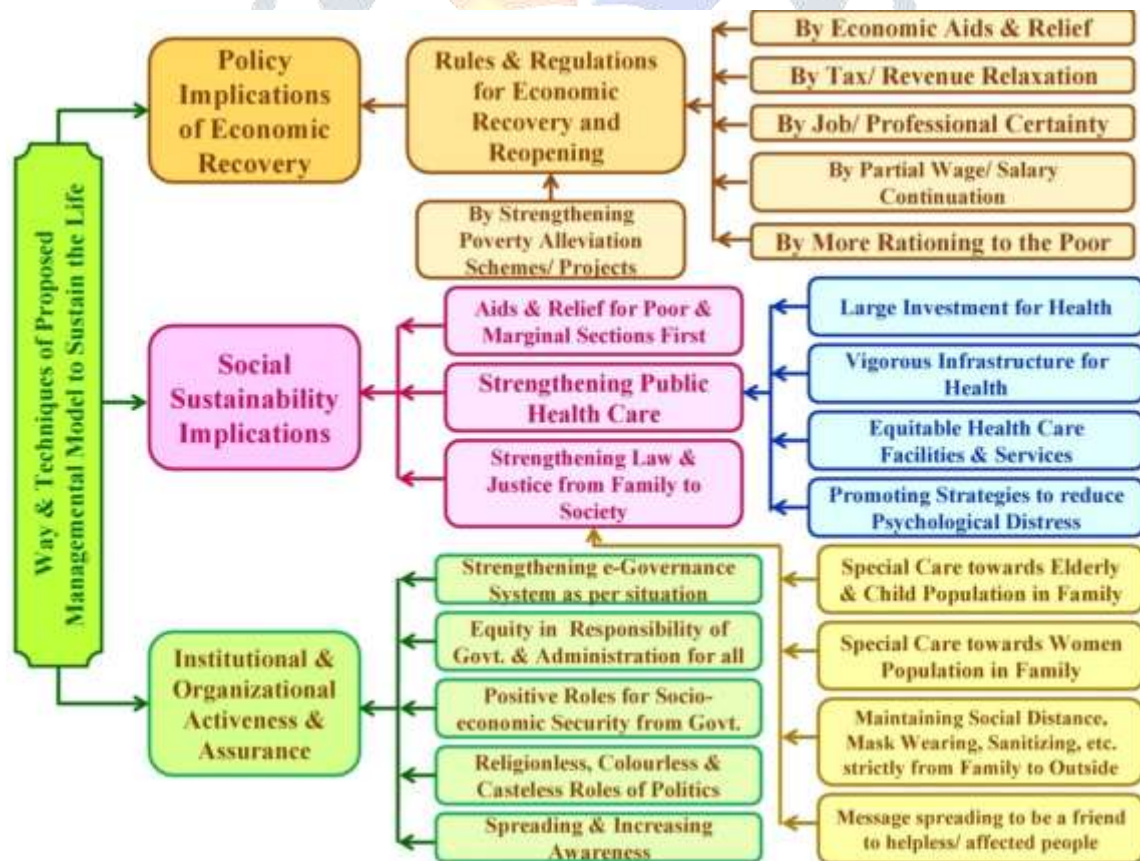


Figure-11: Proposed Model for Sustaining the Life, Livelihood and Development from the Devil Socio-economic Impacts of COVID Pandemic in the Study Area

6. As the voice throughout the nation, "If we don't die of the corona virus, we will die of hunger" has already raised from the track of the poor and unstable contract workers amidst safe distancing policies, the whole idea of social distance should be considered with adequately addressing the livelihood of the region.
7. Needy people should be prioritized as the focus on the social setbacks for a healthy start which is extremely important.
8. Policy is the need of the hour as the essential response to the pandemic as well as health and contracted economy.
9. Improvement of strategies to deal with the circumstances is vital to trim down the psychological and social suffering among communities.
10. Policy makers should give emphasis to the outsized investment, strong infrastructure and plenty think about towards other patients for the strengthening of public healthcare considering health issue.
11. Long term planning and collective efforts of individuals, communities, governments, national and international organizations to fight against this invisible deadly virus are required.
12. While the unparalleled circumstances has emerged a huge break and smash up to the economy during phases of lockdown, the state will have to attempt its way through it, by foreword of economic measures and actions. As the national government envisions, defense and fortification of both lives and livelihood are needed.
13. The fiscal doings must start on steadily after viewing of the employment power related to this sector. Stringent defensive procedures should be implemented by the tourism industry in order to defend the strength of this economy.
14. Whereas plan, policy, rules, strategy and reforms should be well thought-out by the responsible government sufficiently to rescue and recover this economy relating tourism industry, the depended societies and influenced communities have an equivalent and identical responsibility in drawing the balance and stability.
15. The norms of social distancing, avoiding or cancelling gatherings, and use of masks and sanitizers should be the means of living till we are able to wipe out the virus. During this moment, the economy is placed with social manners of human race, so the liability of bringing back fiscal battle is not of administration single-handedly.

7. Conclusion:

India is the 7th largest country of the world and rich with various tourism resources and millions of tourists arrive annually, which contributes to the country's GDP. The need of the hour is to take early steps to overcome the present slowdown in tourism industry by analyzing its long term impacts at the earliest [14]. The message is loud and clear that this industry that contributed at least 10 per cent of GDP, employs more than 10 per cent of our people - this industry is going to be on its own and needs to take care of it. We need an approval to start functioning. For the tourism industry which is built on the ability to help people be out and about it is a cataclysmic event and for the next many quarters we are going to be locked in a battle for survival. Hence, India's tourism needs life support, liquidity to survive Covid crisis [13]. The strengthening and enveloping COVID-19 pandemic has distorted the booming economy of the region in erratic and uncertain. But it drastically indicated that the recent recession seems mainly dissimilar from downturns of the previous which had shuddered the regional cost-effective life earning and economic base and order. Whereas all of the nations carry on to be aware of the extent of the virulent disease, it is unquestionably the want of the time to get ready for an outlook and opportunity which are sustainable, structurally more feasible for livelihood and functioning in terms of life and its way. Philosophically, each catastrophe draws a distinctive chance to move around on the pathway undertaken for the progress of an individual, society and community. This deadly disease reflects a lucid memo for the regional financial system to accept sustainable developmental models, which are based on self-reliance, inclusive frameworks and are environment friendly. In final word, tourism industry in the region is going to face a big disaster and this disastrous situation will continue till the COVID-19 situation normalizes. Short term pain to this industry in the study area may create the bigger challenges in its face. All cash inflows, job and bread earning opportunities of the industry have completely frozen and the situation looks unlikely to improve anytime soon. Officials and heads of travel and tourism sectors tell a uniformly dismal story of cancelled bookings from March, 2020 leading to "complete paralysis" by lockdown. The industry has come to a standstill as the crisis has hit its nerve centers -the airlines, roadways and railways whereas all the segments like inbound, outbound, domestic, leisure, cruise, adventure, conference, corporate meetings, etc. have been hit resulting one of the worst crises here. To overcome this situation, the tourism sector and the policy makers should go through proper management and planning to restart their activities and the industry urgently needs life support and liquidity to survive COVID crisis by the kind hands cape of government and institutions. Hence, we, all should have to act with proper responsibility supporting and co-operating each other to put off the fall down of socio-economic happiness cum wellbeing in the study area.

Acknowledgement:

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