

# Socio-economic impact of Dhamra port project on local economy: an assessment

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## Abstract

**Objectives:** The study attempts to analyse the impact of the Dhamra port project on socio-economic lives of different categories of people and various changes that has been witnessed in the local economy.

**Methods/Statistical Analysis:** The study is based on primary data collected from 140 project affected households. The structured questionnaires have been used to collect the necessary data by conducting a household survey based on the purposive sampling technique. The sampling households have been categorised in accordance with their vulnerabilities.

**Findings:** The development of the infrastructure project for achieving higher growth of international trade has threatened the socio-economic lives of local people. The people those who have contributed and facilitated the location of the port project have been displaced from their habitats (physically) and from livelihoods (economically) in the process of development. They are supposed to be included in the development agendas of the country but excluded in the process. The compensation they receive for contributing the location of the port project is hardly sufficient to maintain their existing standard of living.

**Application/Improvements:** The necessary measures should be promulgated and implemented keeping the project affected people in the forefront especially those who are contributing to the development projects by losing their physical assets such as land and fishing as their source of livelihood.

**Keywords:** Impact, Assessment; Dhamra port; Local Economy; Livelihood.

## 1. Introduction

The infrastructure development a form of physical capital, in recent years, has played a significantly proactive role in the progress of economies. It aids the smooth functioning of an economy and provides scale and agglomeration economies giving a fillip to the productivity and efficiency of the economy. The transport sector mobilises the factors of production by diversifying the production base, expanding trade and intertwining the resources and markets into an integrated development process [1]. The international transport of merchandised goods is predominantly carried out by the modes of airways and waterways however; the maritime transport has played a crucial role in the transport sector of India's economy over the years. Approximately 95% of the country's trade by volume and 70% by value are carried on through maritime transport [2]. In order to hasten the growth momentum, colossal investment and sophisticated technological know-how is necessary to develop good port in order to move the merchandised goods cost effectively. This is far-reaching affair for the public sector on account of paucity of huge capital. Thus, it invites private sector to invest in the port sector offering different concession agreements for a stipulated period of time. The private sector participation in the development of ports in India is encouraged through two models: under the first model; the private sector can exclusively build and operate the facilities and after completion of the concession period transfers it to the concerned port authority. The second model envisages the involvement of the private sector through joint venture projects [3]. With the obsessive pursuit of achieving higher growth rate, Government of India (GoI) seems to have extended a slew of incentives in terms of concession to encourage the private sector to invest.

Dhamra port has been developed with the new governance model of BOOST, one of the variants of BOT model which has been adopted in India to increase private financial participation in the creation of port infrastructure/superstructure without changing the landlord structure of the concerned port. The Dhamra port is located in the Bhadrak district of Odisha state between two major ports i.e. Haldia in north and Paradip in south (Figure 1). The study analyses the situation before the commencement of the construction of the port and it's the various necessary requirements for construction of the port including the carrying out the environmental impact assessment (EIA) and obtaining the environmental clearance from the authority and so on. The Government of Odisha signed a MoU with a Singapore-based International Seaports Ltd. (ISPL) on 31<sup>st</sup> March, 1997 for substantial development and expansion of the Dhamra port project. It is mandatory by law that before construction of such mega infrastructure project, it is necessary to conduct the environmental impact assessment (EIA) of the area where port is going to be situated.

Figure 1. Location of Dhamra port



Source: [www.dhamraport.com](http://www.dhamraport.com) [4]

Therefore, ISPL hired a private consulting firm, Kirloskar Consultants Ltd to conduct an Environmental Impact Assessment in October 1997. The ISPL signed a concession agreement with Government of Odisha on 2<sup>nd</sup> April, 1998 to develop the port at Dhamra with world class infrastructure facilities on BOOST basis. The Odisha government accorded formal rights to Singapore-based ISPL for its substantial expansion and development in the coastal district of Bhadrak. The period of concession from the official date of commencement is 34 years, after which the port reverts back to government ownership. The Dhamra Port Company Limited (DPCL) was formed in the year 1998 as a special purpose vehicle (SUV) for smooth implementation of the project. On May 5<sup>th</sup> 1999, ISPL signed a deed agreement, by which it has transferred all its rights and obligations to Dhamra Port Company Limited (DPCL) under the concession agreement for the implementation of the project. Since the project was plagued with delays in execution process, the two foreign companies, i.e. Precious Shipping of Thailand and Stevedoring Services of America left the consortium in 2002 leaving L&T (Larsen & Toubro) as the lone member of ISPL. However, in October 2004, Tata Steel signed an agreement with L&T to develop the port as 50:50 joint ventures through the Dhamra Port Company Limited (DPCL).

The master plan for the Dhamra Port provides for a total of 13 berths. In the first phase, Dhamra port is having two fully mechanised berths of around 700 m with capacity of 27 Million Tonnes Per Annum (MTPA) and 62 km rail line connecting Dhamra port with Bhadrak on the main Howrah-Chennai line. The Dhamra port is one of the deepest all weather sea ports in India with a draught of 18 m which can handle cape size vessels up to 180 000 DWT.

The construction activities of the port commenced in March 2007 and the port started its commercial operation during May 2011. However, L&T and Tata Steel, neither of which had experience in running ports sold their stakes to the Ahmedabad-based Adani Group for an enterprise valuation of ₹ 5,500 crores on June 22, 2014. The Dhamra port project in Odisha is going to become the gateway of economic prosperity for the state as it has a significant location advantage over its counterparts on the eastern coast. The mineral heartlands of the country (Odisha, Jharkhand, Chhattisgarh and West Bengal) are in close proximity to Dhamra port and it will attract a number of small and large industries in the periphery, and in this way it will foster development of the region. A number of steel plants, thermal power plants and mineral based industries are located in these states and many more mineral based industries are coming up.

## 2. Research Objectives, Methodology and Data sources

The objective of this study is to understand impact of the location of the port on the different categories of people who have been directly or indirectly affected. It has also analysed the impact of the port on the various socio-economic issues of the people in surrounding area of the port. The study has used data from primary sources to materialise the above objectives. The primary data has been collected by carrying out household survey using questionnaire method in the Dhamra port area, particularly focusing on the Dosinga village. The purposive sampling technique has been adopted to choose the Dosinga village for analysis purpose and this is the most affected village of total 74 affected villages for the location of Dhamra port project. The Dhamra port project has acquired land from 74 villages. However, the displacements of the people have taken place from 18 villages. Out of these 18 villages, Dosinga village is the most affected village in which all the people from this village have been displaced by losing their either agricultural or homestead land or both. The location of Dhamra port has caused the displacement of the households and more than 52 % of the displaced households belong to Dosinga village. Therefore, Dosinga village has been chosen for the study. The study has selected a representative sample of 140 households for the analysis. The port has affected the socio-economic life of the people in the surrounding area. However, the lives of some of the households have become more vulnerable compared to others. Considering vulnerability as criteria of the households, the collected 140 sample households have been categorised as:

1. Displaced households (DHs) - These households are those who have lost homestead land and home. Total 319 households have been declared as displaced households and the study has taken into account 80 sample households (48% of total displaced households of Dosinga village) for analysis.
2. Government encroacher households (GEHs) - These are those households who did not have any legal entitlement over land but used to stay in the government land. Total 31 households have been declared as government encroacher households and the study has collected 20 sample households for analysis.
3. Private encroacher households (PEHs) - These households did not have also any legal entitlement over land where they used to stay. Officially that land was in the name of another person. Total 39 households have been declared as private encroacher displaced households out of which this study has taken 20 households for analysis.
4. Land Loser Households (LLHs) – These households are those households who have not been displaced but lost their agricultural land for the port project and this study has taken into account 20 households for analysis.

The 140 sample households of different categories are the representative sample of the total universe mentioned in the each category of affected households. This study has also extended the interview and discussion with others respondents including non-displaced households, company employees, port workers working in the construction activities of the port, officials of Dhamra Port, Rehabilitation & Periphery Development Advisory Committee (RPDAC) members, the secretary of the fishermen and affected leaders who raised the voice against the port and suffered jail sentences. The study has also undertaken the focused group discussion with the fishermen of the villages of Ravindra Nagar and Amar Nagar whose livelihood has been severely affected by the port. In this backdrop, this study inquires into the above questions with reference to the evidence that has emerged from the Dhamra Port Project.

This paper is organised as follows: Section 2 deals with background in which the Dhamra Port has been developed and its locational advantage. Section 3 describes the impact of Dhamra Port on different categories of the people. Section 4 examines various the impacts experienced in the construction as well as operation of the port on surrounding areas. Section 5 is the conclusion.

### 3. Impacts of Dhamra port development on different categories of people

The development and location of Dhamra port has brought different kinds of impacts to the livelihoods, social condition and standard of living of different categories of people. These impacts on different kinds of people have been presented below.

#### 1. Impacts of port on displaced households

The displaced households have been adversely affected by the location of the port project. They are given compensation of ₹1 lakh per acre of agriculture land. However, the household could not purchase the lost amount of land with their given compensation due to rapid appreciation of land price in the surrounding area. Even if they have received compensation for their homestead land, agricultural land, and other physical assets but that is inadequate to maintain their standard of living intact after displacement. The number of household could not cope with the rising price of land and therefore moved out of that area and settled in different area where they could purchase a viable piece of land with their compensation amount. They respond that

“The compensation amount for one acre of land was hardly sufficient to purchase even 1/5<sup>th</sup> of 1 acre of land because the land prices in the surrounding area appreciated rapidly. So, what is the use of getting money when it could not be used to acquire an asset like a viable sized piece of land, which, given their skills, is the only asset capable of generating a livelihood?”

Apart from land, they lost some other assets such as trees and ponds which were also sources of earning for the households. The compensation they got for these assets is equivalent to the returns in terms of value of the yields for the period of two years. Until now, 73% of displaced households did not get employment which was promised to them. The agitation that the mode of development has caused amongst the displaced can be gauged from their emotive responses about their experience. Respondents have stated that:

“Whatever we lost due to port could not be compensated by anybody. The company has taken away everything except our lives. If company would have taken away that, then we would not have to worry about anything about our maintenance.”

#### 2. Impact of port on non-displaced households

Even though, this category of people has not been displaced, but they have been the victim of the location of the port directly or indirectly. Even if they have not lost their land but have become deprived of their occupation of fishing and use of coastal belt land. They are facing the problem of coal dust which is affecting the ponds, trees, cloths, houses. The non-displaced households view that

“The displaced households are not at all worse off because they got R&R assistance for being displaced households, compensation for agriculture land, homestead land, and tree, pond and other assets. With the compensation amount, they left this place and went to other areas where they could purchase larger amount of land with the compensation amount. In this way their condition has improved far better than previous situation. We are the real sufferers of the location of the port because we did not get any compensation, rather lost the opportunities and facilities of common grazing lands and access to coastal belt area, cremation grounds for dead bodies, fuel for cooking, and common water bodies for catching fish for our self-consumption. Company has occupied everything. Where are the benefits? After the development activity, if we allow the livestock for grazing freely in the open fields, there is fear of accidents if the cattle stray into the rail line. On the top of it, this coal dust is damaging so much. Even though we are not considered as displaced households, but we are worse-off than the displaced household.”

### 3. Impact on the encroached households

Of all the project affected households, the households staying in the government land had to face serious trauma in course of their displacement from their habitation. The people those who had entitlement over land (displaced household category), they vacated the land by getting the notification. Some of the government encroached households vacated land and in return the government offered them 4 decimil of land for habitation in the nearby village called *Vishalipada*. However, some of the government encroached households did not vacate their land due to meagre amount of 1 lakh of ex-gratia compensation. The government officials told the encroached households to vacate the land so that the construction work could progress, but they insisted on not leaving the land in exchange with the meagre compensation. As a result, they had to suffer imprisonment. The police force was summoned and they were arrested including both men and women. Total 102 people were accused and around 50 people including children were arrested with the pretext of people's misbehaviour and physical assault to the officials. Those who were leading the protest they have been detained more number of days. This agitation produced no result because there was no spokesman to represent the demands on behalf of the government encroached households. In their absence, bulldozers were used to demolish their houses. When people were released from the jail after 22 days, they found their houses demolished and their furniture and other household belongings buried in the ground and they could not recover it. Unfortunately, during the same period while they were rendered homeless and therefore risked unprotected exposure to vagaries of nature that the displaced households had to steer through a storm accompanied with heavy downpour. They were not given polythene covers or any other form of alternative materials for temporary accommodation or for self-protection faced with such an upheaval condition where they could not stay-put and assert a claim to their homesteads, they were compelled to leave their land permanently. Those who were fortunate enough to have received some polythene covers to protect themselves, it proved too inadequate for any effective protection in the backdrop of a massive storm and a heavy downpour. In this way, the government land encroached displaced households have undergone severe difficulties and troublesome situation. This is the inhuman side of the development in the present scenario which cannot be presented as succinctly in terms of observable and refutable facts but can be provided only as experiences, narratives and descriptions.

Although both the government and private encroached households vacated land but their source of earning have been affected severely after port occupied the fishing ground. They have received ex-gratia amount of 1 lakh as compensation and nothing more. However, they went for strike demanding the compensation of 2.36 lakh and employment in the port on par with the displaced households, but their voice is not heard. Only they are given false promise to solve their problem. The government encroached displaced household responded that "although, we got ex-gratia 1 lakh, but the officials and middlemen took around ₹ 20, 000 saying that they have helped them to get this ₹ 1 lakh".

### 4. Impact on land loser households

The condition of land losers has become worse off because the cultivation of those lands were their sole occupation for earning livelihood. The land losers are those who have lost all agriculture land or large portions of it (2/3<sup>rd</sup> of total land) without being displaced from their homestead land. The agricultural land was only means of survival. But when government acquired those lands for port purpose their situation became precarious. The land loser households responded that

"If at all they were to be displaced households, they would have been the beneficiary of getting employment in the port, R&R assistance and other benefits. There is very less possibilities to get employment for the land loser because the displaced households, who are deserved to get employment as per the law, are finding difficult to get employment in the company, then what to speak of the land losers. The company is not bound to give employment to the land loser. Even, the displaced households are getting employment in the company with great difficulties; i.e. they have to go for strike, approaching the leaders and so on. We expected that if port would come then we will get job and maintain life peacefully. But, after port came, we are not getting job in the port and are forced to go outside to work, then what is the use of sacrificing land at the least cost. We gave the land with some expectation of employment, but we are not getting any opportunity to work.

When we were having lands we used to work in our own agricultural land and now with the absence of these, we are hesitating to work in other's fields as labourers keeping the prestige and self-respect in view. At one point of time we used to hire labourers to work in our own fields and now it is uncomfortable for us to be hired as labourers to work on other's fields".

### 5. Impact on fishermen

This location of the port has significantly affected the fishermen of the region. As the residents of coastal area, the main occupation of the people in this area was fishing. Before location of the port the coastal area was open and vacant and therefore, women and children and other family members were easily accessing the sea and in this way they were earning their livelihood. Generally, the women in the fishing communities are considered as earning member of the households. They earn money by catching fish in nearby shore. With the location of the port, the company acquired the land and constructed the cement wall both side of the port with such a height that nobody can enter into port occupied area. This area was being used for drying the fishes, for grazing the cows, collecting the firewood and docking the boats. When entry into coastal belt have been restricted, the women and children engaged in fishing are rendered unemployed. This has made the fishermen to give up the fishing occupation and sell their boats. Now, fishing is not possible in this area anymore because the company is doing dredging activities, fishes are not staying in that area. That area has been dug so much that fishing nets are touching the bottom part and therefore fishes are sneaking out. Those who have to do fishing they have to go to a distance place to catch fish which is time consuming and risk involving. As a result, the households are selling their boat and giving up the occupation of fishing. Still, those who have not sold their boats and continuing the fishing they have to dock their boat in another place called talchua which is three kms distance from their residence. In docking their boat they are having fear in the back of their mind that somebody may remove the anchor and drift the boats.

When fishing ground was close to the residence of the fishermen, women used to earn at least ₹ 150 to ₹ 200 per day. Now, since they are docking their boat three kms away women earning has stopped because it is becoming awkward for them to go to a long way for fishing and drying the fishes. The port authority has not taken any initiative for the employment of these women. Instead of reaping benefits from the development of the port, they are becoming unemployed. They express that

"Daria amar maa, jiban and jibika (sea is our mother, life and source of livelihood). If our mother and our right on mother are snatched away from us, how can we survive"?

### 6. Impact on the labourers

People in this area are primarily dependent upon the sea and agricultural land. When the company acquired major portion of land from this area for the port and railway project in which people used to work as agricultural labourers it has impact on the people who used to be engaged as agricultural labourer. As it observed that out of 140 households, 16 households are engaged in the cultivation. Out of these, five households responded that paddy cultivation has decreased around two quintal per acre. With the given monsoon, use of fertilisers and pesticide, the paddy cultivation has decreased; therefore, the households believe that it is because of coal dust and insects coming from the usage of lights in the port. As a result, the output of this area from the agriculture has not only decreased but the people's occupation as agricultural labourers also ceased. Now wage rate has increased from ₹ 100 in 2007 to ₹ 250 for a female agriculture labour and from ₹ 150 to ₹ 350 is per man for agricultural activities. If more amounts of lands are there for cultivation then there is need of more agricultural labourer and vice-versa. There is a lack of availability of agricultural labourer in this area because they are going to work in the construction activities of the port. The government encroached households didn't own any land but used to stay on government land, therefore, most of them work as agriculture labour both before and after displacement occurs.



#### 4. Spill-over impact of Dhamra port project on surrounding area

Apart from the impacts of location of the port on various classes of people ports are having several other spill-over impacts in the surrounding areas.

##### 1. Impact of Dhamra port on agriculture production

The environmental condition and the nature of soil of this area are conducive only for the cultivation paddy. The location of port has decelerated the production of paddy. The lights used by the port at night are attracting different kinds of insects to this area and they are spreading into the agricultural lands surrounding the port area and affecting paddy cultivation. These insects are eating the crops and destroying the production of paddy. As a result, output of paddy has marginally decreased. In order to protect the paddy from the attack of insects, the farmers of the local area are using more quantity of pesticide and fertiliser which is leading to increase the cost of cultivation. Moreover, the availability of labourer is scarce because most of them are engaged in the second phase construction activities of the port. These factors are motivating the local people either giving up the cultivation or giving their lands to encroached families for cultivation for share cropping. It is found that 10% household from non-displaced families have sold their land near the port area with high price and purchased larger amount of land at less cost in other area where good cultivation of paddy is happening with that same amount.

##### 2. Scarcity of common property resources

After port has taken over the common property resources such as burial ground, grazing land, playground, forest land and so on, there is scarcity of such resources. Before port came into place people were releasing their livestock such as cows and oxen to graze on community resources freely. Usually, the cows used to go to the area of sea shore for grazing. Total 20.31 acres of grazing land and 0.38 acres of burial land have been taken by the company [5]. But after the construction of the port, these lands have been blocked by the DPCL; forest lands have become areas of restricted entry and grazing or other public use is now construed as trespassing. So the number of livestock has decreased due to lack of grazing ground. Similarly with regard to the burial land, people used to bury the dead body in the river bank. After the location of the port, the company has occupied and blocked the shortcut route to sea and not yet provided the land for burying the dead bodies. As a result people are forced to bury the dead bodies in their homestead land or sway it into the sea through the distance route without any restriction. Sometimes, they are making strike for the burial land but their voice is unheard.

##### 3. Environmental impact of coal dust

The most important harmful negative impact is pollution from the coal dust. When the north wind blows, the air carries the coal dust from the place where the unloading of coal from ships takes place. The coal dust is spreading in the surrounding areas including ponds, trees, houses etc. This dust forms one thick layer in the pond water. As a result people are not able to use pond water. When the people are drying cloths outside of house or any open place, those cloths are becoming black because coal dust is sticking to the wet cloth and as a result it is damaging their cloth and they are not able to use the cloth for long time. They have to spend more money to wash and iron the cloth. The coal dust is also spreading to the leaves of trees and inside the house and so on. The households responded that "we are literally eating coal dust. In this matter even though people have given complain to the port company, they have promised to come up with some solution but nothing has done yet".

##### 4. Impacts on ecology

Port development can create a wide range of impacts on the ecology and environment. The operation of the port is causing damage water pollution, loss of fishery in that area. The Dhamra port site is located about 13 km. away from the Gahirmatha Marine Sanctuary which is the largest sea turtle rookery in the world. Every year lakhs of sea turtles come to the offshore waters of Gahirmatha for nesting. Local people and fishermen of that area used to come across the turtle during the peak season of congregation (November-January).

Nowadays, people are not able to see the turtle. Since there is no such incident in the surrounding area, except the location of port, it is expected that operation of the Dhamra port and its resultant activities of dredging, noise pollution, cargo handling and other disturbances are preventing the turtle to come to that area.

### **5. Increasing dependence on the market**

Prior to the construction of the port, people used to depend less on the market, especially to meet their food requirements as compared to the current situation. They had ponds and easy access to sea for consumption of fish but now, the shortcut route to access sea has been blocked. At present the households are not having pond. They used to grow vegetable in their homestead land. Now, that opportunity has also been ceased because they have purchased a small piece of land for habitation purpose only where growing vegetable or digging pond is not possible. In this way people's dependence on market has become greater than before. They also used to collect firewood for fuel purpose from the forest land through short route which has been occupied and blocked by the company now. Now, the households are using coal as fuel. They are collecting this coal from the train wagons. After the coal is unloaded, whatever coal remains in the wagon, the households collect it for fuel purpose.

### **6. Impact of Dhamra port project on real estate**

With the commencement of operation of Dhamra Port, the State government announced master plan area of Dhamra comprising 57 villages in Bhadrak District. Dhamra is emerging as a port town. This town will be bounded by Mantapada, Nachhipur, Kalibindha, Dhirsahi, Utarsahi, Banichua, Bijipur and Kumara from north, River Dhamra from South, Bay of Bengal from East and Mantei River from West side. All the 57 villages have been carved out from Chandbali Tahasil. The master plan area of Dharma would spread over six gram panchayats such as Bansada, Karanjmal, Kaithkhola, Dhamra, Jagula and Dosinga. Dhamra has attracted investments from other sector as a ship making company and a pellet manufacturer have already scouted for land to set up their respective projects near the place.

There has been creation of speculation in the real estate market surrounding the Dhamra Port area. When port was proposed, the land price was 1 lakh per acre of agricultural land with which the company purchased from the households. But, after port has come into existence, everybody is speculating that there is going to be so many industries, power plants and other commercial and development activities. This has caused the current market value has reached to 13 lakh per acre of land. This thirteen lakh is fixed by the bargaining power between real estate companies and individual land owners. However, till now no such substantial development has taken place centring on the Dhamra port although first phase of operation of the port started since May 2011. This is so due to inadequate of roadway and railway transport facilities. The future developmental activities will require a huge chunk of land. This has created speculation market and caused to appreciate the land price rapidly.

The impact of Dhamra port on land price was quite impressive. Before port came into existence land price was very low. After port came into effect, land price started soaring up. Some of the real estate companies are also purchasing land to take advantage of the speculation of rising land price further. The people are selling land to the real estate companies in accordance with the government valuation. The government valuation of the land is revised once in every two year. All the companies are purchasing land from the master plan areas. About five years ago, Dharma area which was termed as a non-descript area, has seen its land prices climbing exponentially because of location of the port. Closer is the land to the port; higher is the value of land. For instance, villages namely Paiksahi, Oramal and Amar Nagar are relatively close to the location of the port and therefore, the government valuation of the land is more than 10 lakh per acre. Besides, proximity to tourist destination like Bhitarkanika is an added advantage for emergence of the urban centre.

While the expected increase in land prices suggests positive expectations of growth in the area but it seems that those who have sacrificed their land they are not the beneficiaries nor do they have a share in this growth. This appreciation in the land price does not offer any benefit the project affected household whatsoever especially those who have lost their land at very low cost of 1 lakh. Rather, those households who are having lands in the surrounding area, they are becoming more advantageous with the appreciation of the land price.



## 5. Conclusion

In the neo-liberal development scenario, the development of such huge infrastructure project is being developed in such way that the entire livelihoods of the project affected households are at stake. In this scenario of development, the fruit of such port project development is carried out with the obsession of enhancing the international trade and thereby growth of the nation. However, it challenges the socio-economic life of the remote and marginalised section of the people who are supposed to be the part of the neo-liberal agenda. Although Dhamra port is considered as minor port but its impacts are indeed a major. This project has become detrimental to the project affected people of different categories. The developments of such projects are creating such a situation that sustainable development is challenged. It causes the displacement of majority of poor people physically from their habitat and economically from their source of livelihood. The development of Dhamra port project have deprived the people not only from their habitats with meagre compensation but from the grazing land, burial land and coastal belt land used for drying fish and docking boats. The establishment of the port has affected adversely all categories of people regardless of whether they are beneficiary of the development of ports. It has also caused the fishermen to lose their traditional occupation of fishing, decrease in the production of paddy, unemployment of fishery women and so on. The effects of such developmental projects have to be questioned that whether it serves the purpose and objective of 'sustainable and inclusive growth' which excludes the marginalised sections of the society.

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The Publication fee is defrayed by Indian Society for Education and Environment ([www.iseeadyar.org](http://www.iseeadyar.org))

[Cite this article as:](#)

Kedarsen Sahoo. Socio-economic impact of Dhamra port project on local economy: an assessment. *Indian Journal of Economics and Development*. June 2019, Vol 7 (6), 1-9.

Received on: 18/12/2018

Accepted on: 27/06/2019