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Social and environmental impact assessment of Guru Gobind Singh Refinery Bathinda- A case study of village Kanakwal

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Abstract

This study is related with Social and environmental impact assessment. In this research social and environment impacts of Guru Gobind Singh Refinery Bathinda (Punjab) on village Kanakwal district Bathinda Punjab are studied. Data related to study was collected through both primary as well as secondary sources. 190 residents of village Kanakwal were interviewed. Interview schedule, focused group discussion and observation methods were used to collect data from both male and female respondents of different ages. The main objective of this study was to know environmental and societal impact on people because of the project, so that negative effects can be reduced and positive impacts can be enhanced. People of village Kanakwal face many environmental and social problems. Old people, children and pregnant women face more problems than other people. Animals are also effected with the bad impacts of refinery. So, Refinery is harmful for human life in Kanakwal village.

Keywords: Social and environmental impact assessment, human life, environment impacts.

Introduction

Change is the law of nature. Change in a planned manner is called development. Development is a multi-coloured process. People are directly or indirectly effected by development projects. Every type of development directly affect the life of people for whom this development plan is made. Negative effects of any newly evolving development planning or development project can be avoided or minimised by collecting information about its would be effects, prior to initiation. According to Burtland Report, “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

We can understand that, the kind of effect a development policy would have on society through the process of social impact assessment. Through the process of Impact assessment we can be evaluated the future impacts of any project even before it is started.

At present in very advanced organizations the assessment of social impact for planned processes has become mandatory. According to Council for Social Development, it is very significant to gather information on what kind of social impacts any development project is bearing the society. Through the process of social impact assessment possible bad effects can be minimised and good effects be enhanced. The assessment of social impacts provides a blue print for driving a social change.

“Social Impact Assessment includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.”

“The process of identifying the future consequences of current or proposed action.” Hindustan Petroleum Corporation has built it with the help of Mittal Energy Limited. This Refinery has been built with a cost of 21,500 crore rupees. It is an example of Public Private Partnership [9]. The government of Punjab through this Refinery wanted to make the state hub of petroleum production. The surrounding population had tall hopes that they would get employment out of the project. So they gave their land for the Refinery. After the success of this Refinery, which

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will increase the rate of industrialisation in Punjab, and state's economy will progress.

Materials & Methods

Data was collected through both primary as well as secondary sources. Information regarding total population of the village, geographical area was collected from different web based sources, Knowledge about Social Impact Assessment was collected from related books and previous studies of Social Impact assessment, Information about Guru Gobind Singh Oil Refinery was collected from websites etc. The study was completed in two phases. Firstly, Doctors, Patwaries, School Teachers, Anganwari Workers (Early Childhood Care and Education Centre's workers) and important persons from the village were interviewed. In the second phase 190 residents of village Kankwal was interviewed. Interview schedule, focused group discussion and observation methods use to collect data from both male and female respondents of different age group.

Results & Discussions

The process of establishing Guru Gobind Singh Oil Refinery in Bathinda districts started in 1996-97. The project required lots of land. Therefore the decision to acquire land of four villages namely Raman, Ramsarn, Fullokhari and Kanakwal alias Rattangarh was taken and the process completed in 1998.

Table 1: The detail of the Land acquired for the Project.

Name of the Village	Total land of the village (in acres)	The total land acquired (in acres)	Agricultural land out of the total land acquired (in acres)	Number of the land owners of acquired land
Raman	5,687	10.4	10.4	10
Ramsarn	1,424	405	405	360
Fullokhari	2,947	288	50	280
Kanakwal/Rattangarh	2,937	1,288	0	690
Total	12,995	1,991.4	465.4	1340

Source: Patwarkhana, Rama Mandi village, Bathinda, Punjab.

Most of the land acquired was of Kanakwal village. A pipeline from Mundra (Gujrat) to Guru Gobind Singh Oil Refinery's place was placed. According to the right to way, the management committee of the Guru Gobind Singh Oil Refinery acquired the land for pipeline and paid for the same as per law.

Different Impacts of Guru Gobind Singh Oil Refinery

The establishment of the Refinery has not just effected only a single aspect of an individual's life but its establishment has born many impacts on environmental, social, economic, and political life of people.

Environmental Impacts

The establishment of the Refinery has bad impacts on the environment of the village. The sulphur plant in the Refinery was on the side of village Kanakwal, Which emits a foul smell of gases all the time and causing many problems for the villagers.

The village people have to face many health problems due to the pollution from the Refinery. Old people, pregnant women and new born children have face more health issues than

others. Women are suffering from problems like conceiving and many of them reported about their miscarriages. Skin diseases, eye diseases and allergy are major problems to new born babies. Old people are facing problems of asthma, blood pressure, eye problems, skin diseases, palpitation and nocturnal sleeplessness. Thirty percent of the village population has trapped in various diseases caused by the Refinery. According to a local doctor the cause of these diseases is the increasing pollution, the refinery has become a threat to human existence.

The pollution from the Refinery is also adversely affecting the crop production. The yield is reducing. As per a news report in Punjabi Tribune Malwa (one of the three geographical regions of Punjab) edition, "the flame from the Refinery mars the wheat crop." The ash coming from its chimneys blackens the cotton crop. The yield and price of the crop produced here is reducing.

There are adverse effects of the pollution on trees also. During the research, it was observed that the trees in village have come in the fold of pollution. There were webs on the trees. The Neem tree, that is believed to be bitter, too had insect webs. According to village people, the impact is more adverse on old trees. They are withering.

The pollution from the Refinery has not only adversely affected the human health but animal also. There is emerging conceiving problem in animals and miscarriage as well. Animals' milk is also being affected. The quantity of milk given by them has reduced. Therefore, animals are also falling victims of the Refinery's pollution.

Social Impacts

Not only the environment but also social life of the villagers has also been largely affected by the establishment of the Refinery. People have to face health problems because of the increase in pollution. People were facing many problems living in the village many of them have left the village and moved to other places. People whose land was acquired for the Refinery have bought land in other areas. Therefore, they had to migrate from the village. Therefore, the villagers have to leave their village because of the establishment of Refinery. All the habitants of Kanakwal village have demanded rehabilitation of their village from the government.

Refinery has redefined villager's relations. People of other villages do not prefer to marry their sons and daughters and even acquaintances (kith and kin) do not like to stay in the village. They do not want get affected by the pollution from the Refinery. The Refinery is adversely affecting relations among the people and unity is vanishing away. It has divided the entire village into two groups whereas one side is favouring the unit while the other is against it. The former group believes that there is no problem because of the Refinery.

The Refinery has positively influenced the education of villagers. Most of the young students want to study engineering so that they can get jobs in the Refinery. They want to get good jobs after completing good educations. The primary occupation of the villagers is agriculture. That has reduced due to land acquisition. For this, it has become necessary for villagers to study to get engaged tertiary sector. The trend for education in villagers are alarming rate. The money gained by selling land to the Refinery is being invested in education.

A number of migrant labourers shifted to the village when the Refinery was being constructed and now they are permanently

staying at in this village only. People had rented their homes to them for stay. These people have influenced the village relations and fraternity also. On the arrival of the immigrant labourer the occurrences of thefts in the village seems to be more.

Village people got lot of money by selling their land to the Refinery. A few of them used it wisely but some did not. The consumption intake of alcohol increased and started using other drugs as well. Hence, the drug menace has increased in the village due to the money obtained from the unit.

Economic Impacts

Refinery has also influenced the economic condition of the village. The main occupation of the localities was agriculture. Their land was acquired for the project. That has influenced the masses' vocation. The agricultural work has reduced. A few of villagers have started working in the Refinery. Many people acquire more land at other places after selling their land to the Refinery. Which shows the improvement in their economic condition. But people who did not used their wealth wisely and the labour class got negatively affected. Farmers whose land was completely acquired for the Refinery and who did not know any other occupation bought land in other places and moved to there. The pollution from the Refinery has lessen the crop yield that has added to the economic adversity of residents.

Villagers have demanded rehabilitation of their entire village to the government. The government has not answered the demand yet. Villagers boycotted the election for that including Block Samiti, Zilla Parishad and Panchayat elections. The village has no panchayat for that reason. The village is divided in two groups while the one is demanding rehabilitation of the village and the second group is against the relocation. The Second group says that the purpose of establishing such projects is to develop the country.

These projects increase the process of export to other countries that enhances the trade and brings more foreign exchange in the country. It improves the economy of a country. But the question that arises here is that how these projects can be made more beneficial and the disadvantages of such projects for public life be minimised? How and where such projects be established that peoples' life is least affected and not all of them need be relocated or rehabilitated. What kind of development projects be framed that they do not spring any kind of social, economic and environmental problems or least of them have to be faced?

But when developmental projects are chalked out these things were not given due weightage. Therefore, people living nearby localities have to face many problems due to such huge projects. As it, has been observed in this research that people have to face many social, economic, political and environmental problems because of Guru Gobind Singh Refinery. Guru Gobind Singh Refinery conducts medical camps for the health benefits of local people. Uniforms, shoes, school bags, books, stationery items were given to students studying in government school of the village by the Refinery. Refinery management committee has installed water filter for clean water and a fridge for cool drinking water. A Training Centre in order to train the village girls has also been opened. However, villagers did not accept the facilities provided by the Refinery.

Based on foregone results and discussion, it can be concluded that government should make it obligatory that an impact assessment studying both advantages and disadvantages are

done on prior to establishing development projects. It should be seen that what kind of the social, economic and environmental influences a project would bear. In the light of such assessment, development policies should be framed and implemented in such a way that localities, do not have to face the problems the kind of Kanakwal people are facing. On the basis of study's findings it can be said that the Refinery has become a threat to the lives of people around and the situation requires honest interventions to repair the damage.

Suggestions

Based on this study and problems faced by the people of Kanakwal village a few suggestions are extended for the accountable authorities due to Guru Gobind Singh Oil Refinery:

1. The village *Kankwal* should be rehabilitated at some other place so that people can get relief from their problems.
2. Gasses emissions and foul smell from the Refinery should be controlled.
3. The flora and fauna, along with surrounding ecosystem should be properly taken care of.
4. Refinery authorities should look after the trees getting affected by the pollution and plant as much trees in the surrounding areas as possible.
5. Make a veterinary hospital with proper human and non-human facilities for domestic as well as stray animals, functional. So that the health of these poor speechless beings be also taken care of. Volunteers can be recruited for bringing ill or injured stray animals to the vet.
6. Farmers should be given proper training on how they can secure their crops and animals from the ill effects of the pollution.
7. Refinery can fund research focussing on ecological and genetic changes in humans and animals.

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