THAR COAL PROJECT AND COMMUNITY PARTICIPATION CAPACITY

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ABSTRACT

Thar coal field area is spread 9100 square Kilometers in Thar Desert area of District Tharparkar Sindh province of Pakistan. The desert area is totally different area of Pakistan due to very limited income generating opportunities, food insecurity, scant water resources, lack of health facilities and low literacy rate. However economic activities depend on the monsoon rain and the major source of income is livestock rearing and agriculture. Hence, a substantial number of people are seasonally migrated in search of food and fodder. The discovery of Coal in 1988 is highlighted at national and international level as a sixth largest lignite coal reserves in the World. For the purpose of coal extraction, Government of Sindh and Pakistan initiated Thar coal projects without local consent of indigenous people of Thar coal field area and such act has a negative impact on the development process. This research paper is to find out the local consent in the shape of community participation in the Thar Coal Development project. The Study reveals that community awareness and participation is recorded at the lowest level whereas complete negligence of females and just 3% male participated. Moreover, the major source of information is media, rumors and NGOs.

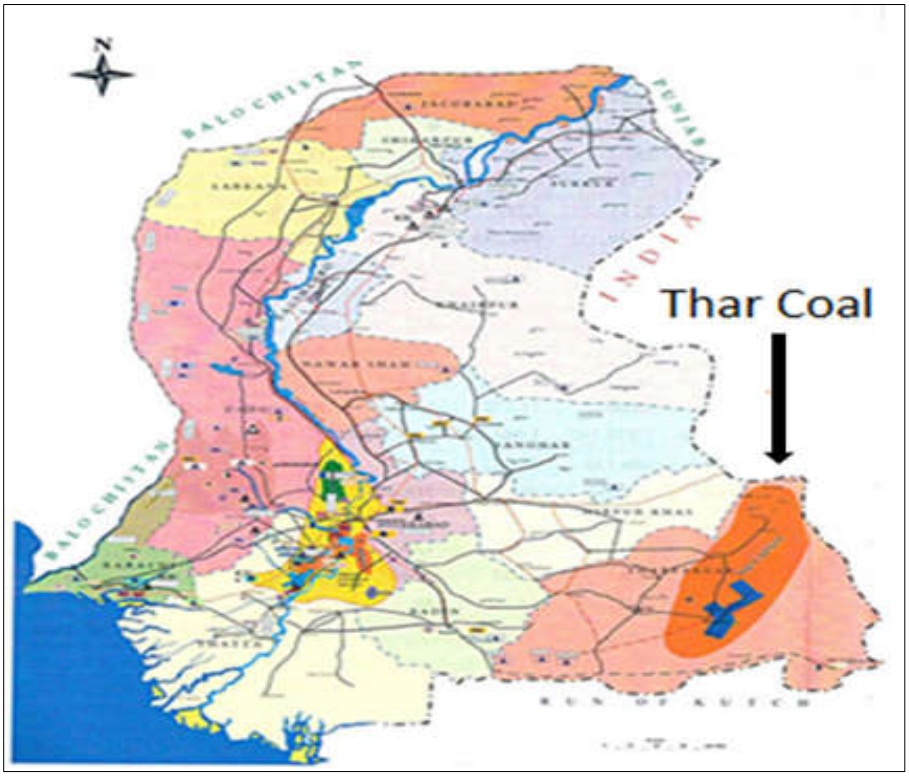
Keywords: Assessment, Awareness, Community Participation, Consultation, Environment, Stakeholders

INTRODUCTION

Tharparkar district lies in the south-eastern part of Sindh province of Pakistan. Its population 1,649,661 souls (Census Report of Pakistan, 2017) spread over 19838 square kilometers. The land comprises on nearly 99% desert and 1% barrage[1] areas. The current boundary has come into existence on December 2, 1990. It was bifurcated into 2 Districts i.e. Mirpurkhas District & Tharparkar District @ Mithi. The head quarter of Tharparkar was established at Mithi which is situated at the distance of 150 Kilometers south/east of Mirpurkhas and 437 Kilometers distance from Karachi. It is situated at 24-26 North latitude and 69-51 East Longitude. The boundaries of this District are as under; in the north: Mirpurkhas & Umerkot Districts, in the east: Barmer & Jessalmer District of India, in the west: District Badin and the south: Runn of Kuchh of India (Gobind, 2006).

[1] The land of agriculture which is cultivated through irrigation canals

FIGURE-1
THAR COAL FIELD AREA OF SINDH PROVINCE



Source: Geological Survey of Pakistan, 2013

The socioeconomic condition of this district uniquely depends on seasonal rain because 99 percent is barani[2] land. The rain is expected in the 2nd week of June up to 15th August, which is alone beneficial for sowing purpose. Further 2-3 more runs require at some interval which are essentially required for maturity of crops in Thar Desert of Sindh province of Pakistan. During the rainy season the people of Thar are too much busy at their fields. After 2-3 days of rain, mushrooms appear in plenty of quantity which is an important source of protein for local communities. The district is divided into desert area (4731089 acres) and barrage area (59936 acres). Similarly, crops are also different in both areas. As the crops of desert areas are Jowar, Bajra, Mung, Korar/Moth, Tir and Sesame are cultivated whereas, the crops of barrage areas are cotton, sugarcane, wheat and chilies. According to Agricultural census of Pakistan (2008-09) that Guar and Bajra produced in

[2] Rain feed land

the largest quantities that of other districts of Sindh province. On the other stream, due to shortest irrigated area and existed in the tail of the water courses, the lowest production of cotton, sugarcane, wheat and chilies in the district Tharparkar. The crops are cultivated on the organic method. After some days of the land of desert is converted into green grass. In addition rainy water accumulated in Tarai[3] which were looked like a pond or a small lake. This water fulfils the need of human and as well as animals till it will be finished. People collect some pastoral and vegetables after rain to preserve till next season to come. A fodder tree Kandi[4] has importance as its leaves are useful for animals' feeding and its peas are eaten as vegetable even preserved till next season and also gifted to kith and kin. But in the absence of seasonal rains then the poverty is the fate of the people of the area. In this situation, Government of Sindh declared occurrence of drought in the district after 15th August. When the time comes, the significant number of people migrates from the desert area to barrage areas due to their livestock and own survival.

The population of Tharparkar bifurcates into 60% Muslims and 40% Non-Muslims and belongs to different communities but their sources of income and living standard are paralleled. The Chounra[5] structure is most common throughout the district which has a quality to protect them in summer season from scorching heat and maintains a cool atmosphere inside it. The main resources of their livelihood are Agriculture and livestock. Interestingly, the population of Tharparkar is 914291 (Census Report of Pakistan, 1998) souls whereas; the population of livestock is 4619941 (Livestock Census Report of Pakistan, 2006) which is five times more than human population. These species are goats, cows, sheep, camels, horses, buffalos and donkeys.

LITERATURE REVIEW

Coal is found in every continent in over seventy countries throughout the world. The total estimated coal reserves are over 984 billion tones of proven coal reserves worldwide. This means that there is enough coal to last us over 190 years (PPIB, 2004). Data reveals that top ten countries of the world are generating electricity from the coal. The highest percent of coal generated country is South Africa which fulfills its 93% required electricity and followed by Poland 90%, China 79%, Australia 76%, Kazakhstan 70% and India 69% (WCA, 2013).

The different categories of economies in the world are utilizing their natural resources (coal) to fulfill their electricity need but it is surprisingly

[3] Water accumulated in basins which were looked like a pond or a small lake.
[4] Kandi is a name of tree (Prosopes Ginerasia).
[5] It is built on mud plastered platform and conical roof are covered with scrub and grass.

that Pakistan has a huge quantity of natural energy resources (Coal) which is total 184.658 billion tons (GSP-1992). However, more than 99% of total coal deposits of the country (184.123 billion tones) are existed in Sindh. But unfortunately we are generating 0.10 percent of electricity from coal (PPIB, 2004).

According to Mughal, Murtaza (2009) the value of Thar coal reserves 25 Trillion United State Dollar (USD) which can generate required electricity of Pakistan for next 100 years and also save 4 Billion USD in oil import bill. In addition, only 2 percent of Thar coal reserves will produce 20,000 megawatts for next 40 years. There is a huge difference in rate of coal generated electricity and individual power plants. Coal generated electricity produced at 5.67 Pakistani Rupees (PKR) per unit which is 4.40 PKR lesser threat of individual power projects. He also estimated that only invest 420 Billion PKR at the initial level and earn 1220 Billion PKR from tax only (Murtaza, 2008).

According to Shamsuddin Shaikh, Thar coal can sustain the production of 100,000 megawatts of electricity for more than two centuries (Shaikh, 2016). The present energy crises caused losses of 230 PKR and create 400,000 people jobless in Pakistan. On the other hand, Thar coal reserves (Lignite Coal) have potential to produce 100,000 MW against 536 million tons of lignite coal per year (Samar, 2012). Coal currently costs only paisa 50 to 60 per Kwh of electricity, which is far cheaper than the furnace oil. Pakistan spends Rs. 66 billion on the import of furnace oil. The country can save at least Rupees five billion per annum by utilizing domestic coal (Samo, 2009).

RESEARCH METHODOLOGY

A multistage sampling plan has been used to select households. There are two main reasons why a research would rather prefer cluster sampling than other methods of sampling (Levy, Lemeshow, 2008). Firstly, it is easy to access and secondly it is suitable for selecting a sample. The survey costs are becoming the important parameter of a survey (Gonzalez, Eltinge, 2010, Krosnick *et.al.,* 2015). In this paper, survey costs in cluster sampling design are investigated because these designs often lead to the lowest survey costs (Daniel, 2012).

The respondents were selected from the households which included village elders, traders, agriculture-related people, livestock breeders, government officials, teachers, students and etc. The total sample size is from the Thar coal field area of District Tharparkar is 290. The sample has been taken from Thar Coal Block-II of Thar Coal field area of district Tharparkar. The total population of Thar Coal Block-II is 7590 with 1249 households. The total sample size is 290. The sample size is appropriate at $\pm$5% error

rate, 95% level of confidence, with 50% of response distribution from the population.

TABLE-1
SAMPLE SELECTION FROM BLOCK-II WITH POPULATION PROPORTION

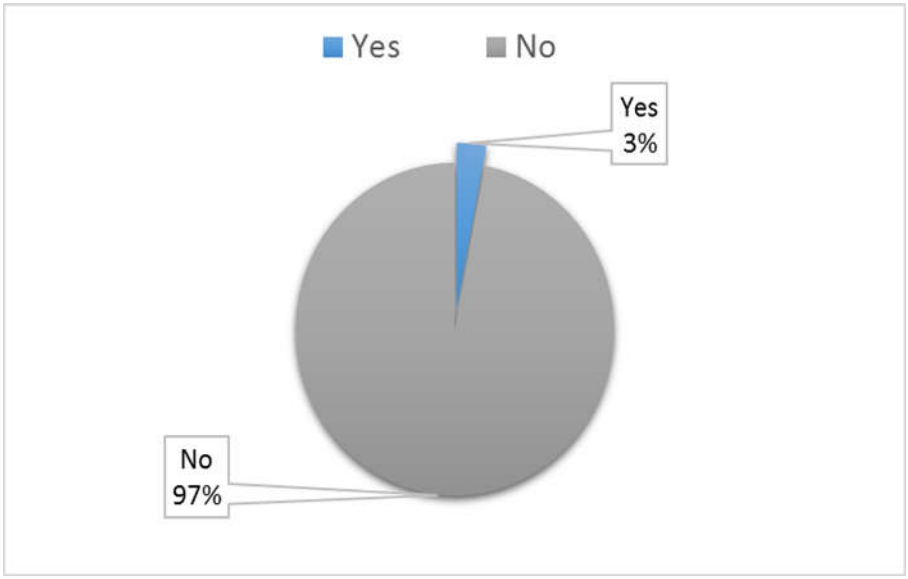
District	Total Blocks	Selected blocks	Popu-lation	House holds	Proportion	Sample
Tharparkar (9,14,291 population, census 1998)	**12**	Block II	7,590	1,249	100%	290
Total	**12**	**1**	**7,590**	**1,249**	**100%**	**290**

Source: Study Survey, 2012

RESULTS AND FINDINGS

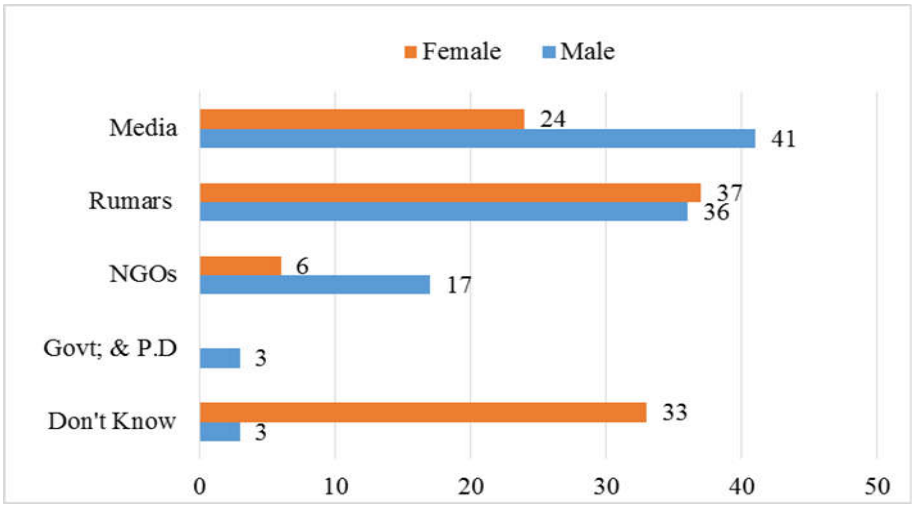
Community participation is regarded an extremely important in the large development projects, especially when the people lost their ancestral land, home, common property and services, income generating opportunities and their cultural identity on at risk. This can be initiated through a community participation process among major stakeholders of the development project. The Stakeholders are those persons or groups who are directly or indirectly affected by a large development project, as well as those who may have interests in a project and/or have the ability to influence its outcome. Stakeholders may include locally affected communities, individuals and their formal and informal representatives, national or local government authorities, politicians, religious leaders, civil society organizations and groups with special interests, the academic community, or other businesses (IFC, 2012). A public participation process therefore includes a variety of stakeholders with varying degrees of power. The main objective of the community participation is to create decision making process among all stakeholders. Stakeholders provide concrete project information, which reveals the local wisdom regarding project outcomes and supporting in the formation of mitigation measures against adverse impacts of mega projects. But sadly, hardly only 3 percent respondents were participated in Thar Coal project Block II consultation meetings. These meetings had organized by Government of Sindh and Project Developers. Interestingly, none of the woman had participated in the stakeholders meetings at any level. However, women have completely different opinions and observations regarding this project.

FIGURE-1
COMMUNITY PARTICIPATION OF THE STUDY AREA (%)
N=290



Source: Study Survey, 2012 (Channa, 2016)

FIGURE-2
ACCESS OF INFORMATION ABOUT THAR COAL ACTIVITIES (%)
N=290



Source: Study Survey, 2012 (Channa, 2016)

Figure-2 states the overall community participation in coal development activities that only nearly 3% of male respondent's participation in two meetings organized by the Government of Sindh and Project Developers. Whereas, Female respondents did not participate even 33% females have not knowledge about coal reserves in their fields. The major source of information about Thar coal project is Media, rumours and local NGOs.

CONCLUSION AND RECOMMENDATION

The Illiteracy, low standard of education, lack of health facilities and poverty keep them unaware of the discovery of coal as 33% female respondents and 3% male respondents don't know about coal reserves. The major sources of information regarding coal reserve are media, Non-Governmental organization and rumors. Whereas, the role of project developers and local government of Sindh is not sufficient in the context of availability of coal reserves and coal development (extraction) impacts which can be positive and negative on local communities. Some practical steps should improve community participation in the development process. Such as:

1. Project developers disclose all the potential adverse impacts and its mitigation measures in Sindhi language and disseminate in all stakeholders significantly among local community of Thar Coal field area.
2. Project developers also develop and disseminate the benefits of Thar coal and its positive impacts on the people of Thar coal field area.
3. Develop and disseminate a public document regarding Thar coal project information in local language that manage high expectations of the community and also clear them wrong perception about the project.
4. The meaningful information document shows the scale of displacement, income generation activities and compensation for lost assets with a time frame.
5. Displacement is a very sensitive issue and it needs to count local languages and dialects, cultural sensitivity, gender, poverty, ethnicity, literacy levels, local methods of disseminating information within and among community members.

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