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Original Article

'Religious identity and coal development in Pakistan': Ecology, land rights and the politics of exclusion



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ABSTRACT

This paper examines the role of religious identity in the context of a coal development project in District Tharparkar, Pakistan. Research was conducted in six rural communities located in the vicinity of the coal project. The results obtained are important for two reasons. First, they provide insights into the heterogeneous composition of communities based on religious identity, which explains contrasting perceptions toward project development. Second, they entail a practical dimension that suggests that in the process of assessment, development and management of coal resources, differences related to religious and community identity must be recognized and taken into account to minimize community conflict.

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1. Introduction

The complex relationship between people and environment, and how people define and value the environment in a multidimensional context, has often been categorized by phrases such as 'sense of place', 'place attachment' and 'place identity' (Cantrill, 1998; Cheng et al., 2003). This relationship is not just limited to the physical attributes of the environment but also includes psychological and emotional values assigned to the place. According to Ryden:

Through extensive interaction with a place, people may begin to define themselves in terms of [...] that place, to the extent that they cannot really express who they are without inevitably taking into account the setting that surrounds them as well. [Ryden, 1993, p. 76, as cited in Stedman, 2002]

We explore this premise using a case study of Hindu and Muslim communities of the Thar Desert in Pakistan which have coexisted peacefully for centuries. Pakistan's District Tharparkar (Thar Desert) lies close to the Indian border (Fig. 1), where coal development is escalating in the midst of unusual demographics.

Pakistan is facing a power short-fall of around 6000 MW. primarily due to an explosive population growth rate and rising industrial demand (IPRI, 2013; PPIB, 2008; Rahman, 2011). Currently, the role of coal is almost negligible, despite 175 billion tons of indigenous coal reserves lying beneath the Thar Desert (Geological Survey of Pakistan, 1992, as cited in Sindh Development Review, 2009). Experts believe that development of the Thar coal deposits will reduce the country's dependence on expensive imported oil and will significantly reduce the stretching gap between demand and supply (Rahman, 2011), and thus help to extricate the country from an acute energy crisis. Development of the Thar Desert's coal reserves, however, can potentially disrupt the peaceful coexistence between the region's Muslim and Hindu communities, with the former making up more than 40 per cent of the District's population (Suthar, 2012). Resource development can accentuate dormant fractures in communities. A planning process that ignores multifaceted community dynamics and the role of religion that underpins differences in perceptions of the development can potentially expose the region to inter-community conflict.

This study was undertaken against the context of escalating ethno-religious tensions at the national level, with the aim of

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Fig. 1. Map of Pakistan identifying District Tharparkar (Thar Desert).

Source: Environmental and Social Impact Assessment (2013), Sindh Carbon Energy Limited.

broadening understanding of how in such fractured conditions, resource development can accentuate differences in perception of place-linked religious identity.

2. Resource development and ethno-religious conflict

Existing literature in the social sciences is replete with studies which seek to understand the complex factors responsible for shaping community conflict, particularly in developing countries, and more specifically in developing countries with significant extractive industries (Humphreys, 2005; Nnoli, 1998). Scholars caution that communities with embedded horizontal inequalities are extremely prone to conflict, especially when they are based on ethnicity and religion (Christian et al., 1976; Gurr et al., 1993; Nafziger and Auvinen, 2002). Many countries have experienced catastrophic social and economic impacts, and indigenous natural resource wealth has become synonymous with conflict due to a combination of local inequalities and lack of governance (e.g., ACCORD, 2009; Keen, 1998; Peet and Watts, 2002; Ross, 2004; UN, 2001).

Several scholars believe conflict is a pervasive and inevitable phenomenon (Burton, 1987; Okoh, 2007), and is a symptom that may help in diagnosing root problems predicated on "social values of welfare, security [and] justice" (Burton, 1987, p. 138). While appreciating this important role of conflict, our research seeks to identify ways to minimize escalation of conflict and to develop constructive pathways that bring sustainable socio-economic growth to impoverished areas, especially those fractured by religion or ethnicity. In this paper, we consider extractive resource development in a polarized ethno-religious context and how community perceptions about resource development are shaped by such differences. In particular, the rise of Islamic fundamentalism and its impact on resource nationalism deserves attention and we sought a case site where such an analysis could be undertaken by comparing opinions from Muslim and non-Muslim residents.

Many studies argue that multi-ethnic societies are more prone to resource-conflicts (e.g. Gurr et al., 1993; Huntington, 1993; Tadjoeddin, 2007; Wimmer et al., 2009), since discrimination of one group could fuel differences among group identities. For

example, the recent demolition of the centuries-old 'Shri Rama Pir' Hindu temple in Karachi, Pakistan, and the 'Durga Mata' Temple in Choryo, Tharparkar, carried out in the name of development, has accentuated the perception of resource-based conflicts in the region.

There is no doubt religion can play an important role in amplifying conflicts in various countries, however, causality in this regard is complex. For instance, Fearon and Laitin (1996) in their study of interethnic cooperation claim that most multi-ethnic societies are peaceful. Why then does religious conflict erupt in some multi-ethnic societies, but not in others? Our focus on District Tharparkar helps to answer this question. It is the only region in Pakistan where Hindus and Muslims still live in a relatively harmonious relationship despite the rampant rise of religious conflict across the rest of the country. How then might this harmony be maintained in the presence of resource development?

Various scholars suggest social, political and economic inequalities between different groups can account for stoking up conflict. This implies that religion, discrimination and social exclusion alone are insufficient to account for conflict, but when combined with economic inequalities which can be 'instrumentalized' by some, local-level conflict between the resource industry and the community, and between communities is more likely (Brown and Langer, 2010; Stewart, 2008; Stewart and Brown, 2007; Østby, 2007; Mancini, 2005), leading to a higher probability of conflict. Thus, cultural and religious differences can be accentuated by economic, social and political inequalities. Stewart (2009) further argue that natural resource development pronounces regional inequalities especially when resource development occurs in "ethnically or religiously distinct regions of a country", with those at the bottom of the socio-economic scale more likely to perceive that they will not be the primary beneficiary of a project development (p. 17).

In our case study, an additional cleavage must also be added: the sub-caste system within the Hindu faith, which leads to greater persistence of social and economic inequalities. The pervasiveness of caste stratification is an important feature of Pakistani Hindus. For instance, the Tharparkar castes of Bheel, Menghwar and Kholhi

are commonly known as 'Dalits' or 'scheduled' castes (a legal term) and are the poorest of the poor. Because the Hindu population is always embedded in its ubiquitous caste system, it is relatively difficult for them move toward any positive social or physical change. In Hindu communities, the caste system hinders their social mobility within a social network. Thus when "cultural differences coincide with economic and political differences between groups: this can cause deep resentment that may lead to violent conflict" (p, 222). Mandelbaum (1970, as cited in Mines, 1972) notes in his study that compared to Hindus, Muslim communities and their caste organizations are less rigid; therefore, for Muslims, it is much easier to mobilize both socially and physically within or outside social network. Various newspapers, human right activists and independent analyses provide evidence that Pakistani Hindu scheduled castes are the worst victims of discrimination and social exclusion not only from Hindus (high caste such as Rajput and Thakur) but also from some members of Muslim communities.

3. Hindu and Muslim coexistence in Tharparkar

District Tharparkar extends from Cholistan to Nagarparkar in Pakistan, and in India, from Southern Haryana to Rajasthan. It is one of the most densely populated deserts in the world with 1.2 million inhabitants (EIA, 2012). According to the last Census of Pakistan's population, conducted in 1998, District Tharparkar has the largest Hindu population in the country and, most importantly, it is the only region in Pakistan where Hindus make up a significant proportion of the population (more than 40 per cent) (Pakistan Hindu Council [http://www.pakistanhinducouncil.org/]; Suthar, 2012) compared to just 5.5 per cent, or 1.7 million of the national population (according to 1998 population census).

For centuries, the desert has been home to both Hindu and Muslim communities, with both religious groups further differentiated by tribal and caste systems (Ihsan, 2001). The Population Census of 1854 reveals that before the partition of India and Pakistan, Hindus comprised 60.5 per cent of total District Tharparkar population (cf. Ibrahim, 2005). Fieldwork provided an opportunity to visit the ancient Hindu and Muslim mythological and heritage sites in the region of Nagarparkar, about 120 km from the town Mithi. More than 20 heritage sites date back to 1375 AD: the Jain temples of Hindu mythology were built between 1375 and 1499 AD, a telling sign that the region once had a significant Hindu population with socio-economic influence. Another site attraction is Bhudesar Mosque, built in 1505 AD. The architecture of Hindu and Muslim constructions is profoundly similar, reflecting the cultural mosaic and historical coexistence between these two distinct identities.

Muslim tribes include the Sama, Dars, Halipota, Hingora, Rajar, Bajeer, Juneja, Lanja, Rahimoon, Janjhi, Hajam, Sameja, Sangrasi, Chohan, Dohat, Vessar, Channa, Noone, Otha, Saand, and Sheedi. Hindu castes include Bheel, Kohli, Menghwar, Thakur, and Suthar (EIA, 2012). Following partition between India and Pakistan in 1947, the district was named Tharparkar, and in 1992 the town Mithi was positioned as an economic and administrative center for the District. During, and soon after, partition a significant Hindu population migrated to India, however, the fenced border still remains socially fluid because on both sides people share the same language, religion (Hindu) and culture, with deep family ties across Rann of Kuch. Clearly, the Hindu community has had a significant social, economic and political influence over the region.

The assertion that resource developments often lead to the eradication of a 'sense of place' is well established in the academic literature (Windsor and McVey, 2005). Nevertheless, the Hindu minority in the Thar region considers this area their last stand of preserving their identity through a connection with place. Indeed,

had it not been for this strong connection with the land and its ecology, many of the residents may have moved to India during partition. In this vein, Tharparkar can be viewed as an 'autonomous space' where the concentration of the Hindu population has not only enabled it to organize but has also provided a space to sustain social and political being (Khan, 2007). There is no doubt Pakistan's Hindu community is one of the most marginalized minorities, the current ongoing religious and sectarian-based violence increasing its sense of insecurity. Consequently, it has been reported that during the last few years thousands of Hindus have migrated to India. During fieldwork in Tharparkar, the lead author, Muhammad Makki, met two families which had recently migrated to India because of the current situation and pronounced religious and ethnic conflict within the country. However, there are organizations, such as the Pakistan Hindu Welfare Association, Karachi Hindu Gymkhana, and Pakistan Hindu Panchyat, which aim to organize Hindus and represent and highlight their identity issues in social and political spheres.

The organization of the dominant Hindu population in District Tharparkar cannot be explained in terms of Hindu versus Muslim identity alone. It also requires an understanding of sub-caste stratification within the Hindu community, which further shapes social and economic relations with the Muslim community. Through an understanding of these community dynamics, we are able to understand the situational gravity and intensity of impacts resulting from coal project-induced displacement and resettlement. Unfolding these community dynamics within their geographic and social context, helps us understand why some Hindu communities perceive the coal project development negatively and while others view it positively. For instance, in Tharparkar, the social distance between Bheel, Khohli (scheduled castes) and Rajput, Sukaar and Thakur (high castes) is significant. In the caste system, scheduled castes are considered 'untouchables', and thus marginalized in terms of social, economic, political, and physical exclusion in segregated and isolated housing. For example, a community elder representing an upper caste told Muhammad Makki that one of the many reasons to segregate a particular scheduled caste was the real or imagined perception that this caste group feeds on dead animals and "there is no way we can share the land or Paro [a territory within a village]".3

This explains why the scheduled castes are mainly settled in the most remote areas of the District, in scattered Ghots (villages) and lacking physical and communication infrastructure. For example, in the studied village of Magho Bheel, where the Bheel caste resides, it is highly unlikely that people from another caste will live there. Similarly, the community of Sonal Beh is the home of Rajputs, considered one of the most powerful castes both politically and socially. This physical and social segregation of scheduled castes clearly identifies this element of marginalization and discrimination within Hindu community, and it is also apparent to outsiders such as Muslims. Furthermore, over the centuries, the caste system has been 'internalized' (Goffman, 1963): one is born scheduled, will live and die scheduled, which has led these lower castes to isolating themselves in the remote areas of the District where they can at least ensure and secure their lives. For scheduled Hindu castes, religious identity results in discrimination and marginalization on two fronts: within the religion because of their 'untouchable' status, and by being Hindu in the Muslim-dominated region and country.

Despite different religious identities, the harsh desert environment has laid the foundation of livelihoods that have fostered positive coexistence between Hindus and Muslims (Hasan, 2010), unlike many other parts of the country that have been scourged by

³ Parsoon Vikia, villager from Seenhar Vikia, personal communication, March 21, 2012.

ethno-religious violence. Centuries of coexistence between Hindus and Muslims have produced a mosaic culture between these two distinct religious identities and one can notice Muslims adopting some of the characteristics of their Hindu neighbors. Indeed, Muslims participate in local Hindu services and rituals, and other important ceremonies. In District Tharparkar, both Hindus and Muslims share and maintain similar values, which are mainly intertwined with the ecology of the desert environment. In contrast, elsewhere in the country Hindus and Muslims are not always as closely integrated.

The District's desert environment, with limited economic opportunities, means that for many communities, survival is a struggle. Tharparkar is considered the most food-insecure, impoverished and marginalized region in Sindh Province (Herani, 2002; Suthar, 2012). More than 90 per cent of the District's population depends on rain-fed subsistence pastoral agriculture and livestock husbandry. Three or four seasonal droughts in a decade are common for the region (Suthar, 2012). A lack of economic opportunities and remoteness of the region have contributed to widespread unemployment, as there are no industrial or agricultural opportunities. This marginal situation has attracted various national and international developmental organizations to the region; however, there is hardly any noticeable development on the ground. Coal development, therefore, could be the future of the deprived region.

Externally induced change can break the human bond between people and the environment upon which their livelihoods depend, regardless of whether identities are rooted in ethnicity, religion, geography or culture (Christian et al., 1976; Kurth, 2001). However, we suggest that religious identity in particular can potentially sharpen conflict over access to resources such as water and land, and can exclude some from access to newly created employment opportunities brought about by coal developments.

Administratively, the land in Tharparkar is categorized into three main types based on use: private housing land; private agriculture land (together accounting for around 33 per cent, or 4.8 million acres of the total desert area); and common land, referred to as 'Gaucher' in the local language (EIA, 2012; Suthar, 2012). Common land is State property, but land has long been an integral part of communities' livelihoods, and used for agriculture and grazing.

Apart from being integral to their pastoral livelihood, the desert is an institution that explains the communities' existence and identity (social, ideological and political). In District Tharparkar, the attachment to the desert is symbolized by the historic character of Marvi in Thar folklore and has also been dramatized on national TV, exploring the theme that the desert belongs to the Thari and the Thari belong to the desert (a resident of Tharparkar is known as Thari). The story of Marvi "refers to a character whose yearnings for her native homeland while she was held captive were so strong that they give birth to one of the most popular and beloved folklores of the region, and has been immortalized by the poet Shah Abdul Latif Bhatae" (EIA, 2012, p. 5). Thus, place has "a way of claiming people" (Kemmis, 1990, p. 119).

Sentimental attachment to the desert also assigns social value. For example, it was revealed during fieldwork that it is common amongst Thari, to perceive those who migrate or resettle as being of lower social standing ('Rool' or 'Landplan': local slang for immigrant or settler). The caste dimension within the Hindu community contributes to this kind of social rule. Nevertheless, depending upon the rain and available resources to sustain livelihoods, a large portion of the population migrates seasonally to Sindh's 'barrage area' along the Indus River (Herani, 2002; Suthar, 2012). Between February and April, the Bheel and Kolhi Hindu subcaste communities migrate annually with their livestock to the proximate irrigated region, to wait the arrival of the Monsoon (EIA, 2012).

The development of coal resources could cause both physical and economic displacement. For instance, Thahriyo Halipota, one of the villages where our research was conducted, comes under Block II (Table 1), allotted to Sindh Engro Coal Mining Company, to develop 95.5 km² for coal extraction. It may displace 3200 people over the life of the project (EIA, 2012; Rahman, 2011). Those displaced could, for example, occupy lands temporarily left unattended by the Bheel and Kolhi Hindu communities during their seasonal migration in search of water.

People living in the more remote Tharparkar are the most vulnerable due to seasonal droughts and a lack of access to irrigation water. Most of the Hindu population that resides in remote areas of Tharparkar mainly belongs to the scheduled castes. Although scheduled castes do have access to common land, owned by the State, they have no legal entitlements and land allotments. The land is mainly 'Barani' (rain-fed), and livelihoods are marginal due to the frequency of droughts. Livestock, which can be moved, is their main source of income.

Nevertheless, outside influences may contribute toward changes in the caste system. In his study of social transition in District Tharparkar, Hasan (2010) notes that the two recent wars between India and Pakistan (1965 and 1971) caused the region going through a social revolution, which collapsed its Hindudominated feudal system. Both countries occupied vast areas of desert Thar: Pakistan in 1965 and India in 1971. The dispute over the territory saw the Hindu-dominated feudal system losing its grip over scheduled castes. For some, this change was a positive experience. During an informal conversation with a resident from the town Mithi, who belongs to Kohli caste (a scheduled Hindu caste), it was explained that the wars of 1965 and 1971 provided the Hindus with an unimaginable opportunity to break from the Hindu feudal elite, who had steered their lives for centuries. However, the impacts of coal project development may lead to fewer positive outcomes, especially for the Hindu community, than was the case with the territorial wars examined by Hasan (2010). Briefly put, our study indicates that the influx of migrants and the influence of religious evangelism spurred on by resource development could negatively alter the social ethos of this area and lead to community conflict. Of particular concern are the impacts on scarce water resources, and the physical, social and economic displacement of communities. Ironically, the complex web between the resource industry, conflict and religion-based identities is still not on Pakistan's national agenda.

Compared to the Hindu population, the Muslim communities are not intensely defined by caste stratifications. However, to some extent, divisions within the Muslim population are evident. For instance, the people involved in the brick kiln industry, often known as 'the Pathar' and 'Hari', work under a debt bondage (arguably a form of modern slavery), and are the most marginalized group within the Muslim community (Ercelawn and Nauman, 2004; Kara, 2012; Shah, 2007). These differences between Hindus and Muslim, suggest that Muslim respondents are more likely to accept resettlement and displacement, as they are relatively 'homogeneous' with the Muslim population, thus, allowing them

Table 1Studied communities and coal blocks.

| Communities | Coal Block | Companies | |
|---|--|---|--|
| Seenhar Vikia Thahriyo Halipota Sonal Beh Bhavay Jo Tar Magho Bheel | Block I Block II Block III Block II | Global Mining Company of China Sindh Engro Coal Mining Company Cougar Energy Ltd. Sindh Engro Coal Mining Company PEPCO-UCG | |
| Ranjho Noon | Block VI | Oracle Coalfields | |

to mobilize socially and physically within and outside of the social context of the Tharparkar.

Coal project-induced displacement can further result in social and economic displacement, primarily because of loss of access to existing physical resources (private and common land, religious sites), and the dismantling of social institutions (especially for Hindu scheduled castes whose remote segregated housing somehow ensures their social being in an autonomous space). both of which are crucial for sustaining the livelihoods of local communities. It is important, therefore, especially in the case of relocation, that communities continue to have access to all resources which are important to sustain their livelihood. In this vein, our scoping study suggests three key issues that accompany coal development and project induced development: (1) loss of land, which may result in social exclusion of the marginalized communities; (2) a fear of religious difference because of Muslim dominated inward migration; and (3) the influence of 'outsiders' who will further shift the economic and cultural balance that can widen horizontal inequalities.

4. Method and results

The research was conducted during March–April 2013 with the collaboration of the Sukaar Foundation, a local non-government organization. Data were collected in six rural communities of District Tharparkar (Fig. 2) through a structured face-to-face survey supplemented with focus group discussions. Surveys were

conducted with 121 respondents, and included male and female members of the Hindu and Muslim communities. To understand the structured theme areas of the survey in greater detail, additional qualitative data were collected from 10 focus group discussions with a total of 129 participants.

The survey aimed to capture community perceptions on the Thar coal project. Methods were designed to capture both perceived positive and negative impacts associated with the project's development. These included local job opportunities, infrastructure and community development, project-induced displacement and resettlement, environmental impacts and socio-cultural impacts.

Prior to data collection, the communities were visited to establish proximity to the coal fields. Table 1 lists the selected communities representing each coal block, and the various national and international resource companies operating in each block. A pilot survey with 15 respondents was conducted in the community of Thahriyo Halipota to ensure that questions were designed effectively, culturally sensitive and relevant to the local setting.

4.1. Results

The survey collected data from 121 respondents, of whom 62 per cent were male and 38 per cent female; 61 per cent were Hindu; and 39 per cent were Muslim. Table 2 indicates that in the villages of Bhavay Jo Tar and Seenhar Vikia, only men participated

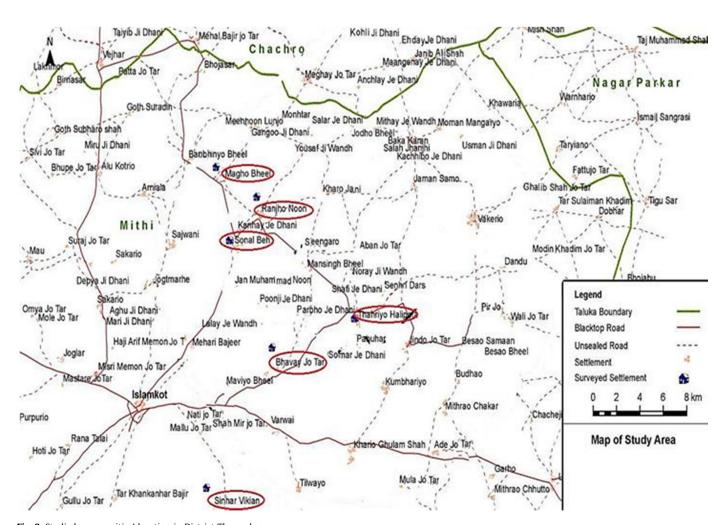


Fig. 2. Studied communities' location in District Tharparkar.

Source: Environmental and Social Impact Assessment (2013), Thar Coal Block VI Lignite Mining Project. Sindh Carbon Energy Limited.

Table 2Communities by religion and by gender.

| Frequency | | Religion | | | | Total |
|-----------|-------------------|------------------------|--------|---------------|--------|-------|
| | | Hindu (<i>n</i> = 74) | | Muslim (n=47) | | |
| | | Male | Female | Male | Female | |
| Community | Sonal Beh | 14 | 10 | 0 | 0 | 24 |
| | Ranjho Noon | 7 | 1 | 1 | 8 | 17 |
| | Magho Bheel | 11 | 15 | 0 | 0 | 26 |
| | Thahriyo Halipota | 0 | 1 | 10 | 11 | 22 |
| | Seenhar Vikia | 0 | 0 | 17 | 0 | 17 |
| | Bhavay Jo Tar | 15 | 0 | 0 | 0 | 15 |
| Total | | 47 | 27 | 28 | 19 | 121 |

in the survey; this is because the community elders would not allow contact with the women. The table also indicates that each village is dominated by a single religion. The exception is Ranjho Noon, possibly because it is located close to District Tharparkar's business center Mithi, and this village hosts a 'village women

handicraft' industry that provides income opportunities for both Hindus and Muslims.

Overall, the community perspective on the Thar coal project development tended to be influenced mainly by (1) terrestrial proximity to the coal fields, (2) gender composition, and (3) religious identities or composition. This paper focuses on the role of religious differences which are most likely to contribute to possible conflict. Figs. 3 and 4 suggest community attitudes toward the development are complex: respondents perceived both positive and negative impacts. All of the villages recognize that there are negative impacts associated with its development, and this is especially so for Hindu-dominated communities (e.g., Bhavay Jo Tar and Sonal Beh). To this end, distinct religious identities appear to influence respondents' attitudes and perceptions toward project development.

Fig. 3 indicates that the majority of respondents in four of the six communities perceive positive benefits from the development for the region. In two villages, Bhavay Jo Tar and Sonal Beh, both of which are Hindu communities, the majority of respondents did not perceive positive benefits for the region, while 82.4 per cent of

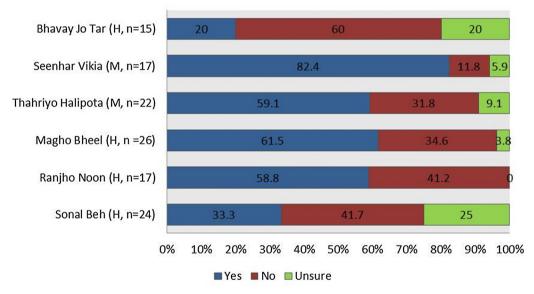


Fig. 3. Communities: Will the development have positive impacts for the region? (Percentage).

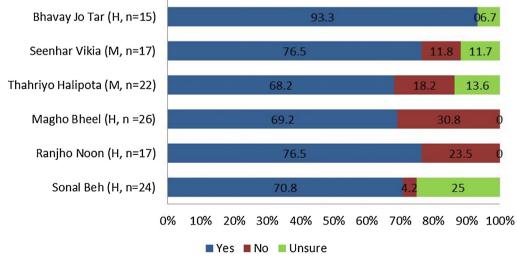


Fig. 4. Communities: Will the development have negative impacts for the region? (Percentage).

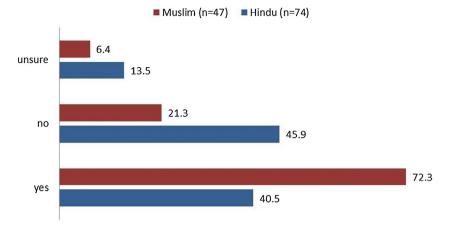


Fig. 5. Religion: Will the development have positive impacts for the region? (Percentage).

respondents from the Muslim village Seenhar Vikia perceived positive benefits from coal development.

Fig. 4 suggests that the majority of respondents in all the villages recognized that coal development will also be accompanied by negative impacts.

Figs. 5 and 6 explore more specifically the relationship between religion and perception toward the development. Fig. 5 shows that a greater proportion (72.3 per cent) of Muslim respondents perceived positive benefits for the region, while 45.9 per cent of Hindus did not perceive positive benefits for the region. Fig. 6 confirms the results in Fig. 4 and shows that negative impacts are recognized by both religious groups.

Survey results (Fig. 7) indicate that local job opportunities, and improved community development and infrastructure development were rated as the most significant benefits for the region in the case of both groups (Muslims 40.9 per cent and Hindus 50.5 per cent). Many ongoing developmental activities such as road and other infrastructure development were positively recognized by both Hindu and Muslim respondents. Yet, a significant number of survey participants felt that these developments are primarily to facilitate and serve the industry and its partners, and there is greater need to focus on community and rural development to ensure regional sustainable development.

The analysis revealed that the potential contribution of coal development was perceived more positively in the community of Magho Bheel (Fig. 3), which is a Hindu populated community. We explain this strong positive perception as follows. First, Magho Bheel

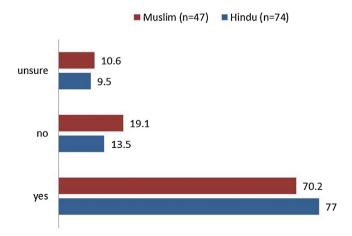


Fig. 6. Religion: Will the development have negative impacts for the region? (Percentage).

is the only community which has been exposed to the current resource development: an Underground Coal Gasification (UCG) Pilot project. Although the experimental nature of the UCG site is unlikely to result in significant local employment or create other positive ripple effects in the region, Magho Bheel has, nevertheless, reaped significant benefits. For instance, around 40 members from the community have been employed on daily wages and now have access to clean potable water facilities. Secondly, the community is the home of a scheduled caste that has suffered from both social and economic exclusion. The UCG project, therefore, has offered them a unique economic opportunity right in their backyard.

Respondents were also asked if there were any ways that acceptance of the project can be enhanced to ensure maximum benefits to the region from coal development. The question was open-ended and suggestions provided by the respondents were unprompted. Although a large proportion responded that the project will be associated with range of social and environmental impacts, there were also numerous suggestions from the respondents which were themed accordingly (Fig. 8). The most frequent suggestions were: (1) 'project development should be on uncultivatable land' (and avoid both private and common land); (2) 'avoid displacement and resettlement'; (3) 'improve communication and consultation with the local communities'; and (4) 'enhance community economic development'.

Fig. 8 shows that Hindu and Muslim respondents differed in their levels of concern, with Hindu respondents indicating greater concern with the potential negative impacts of resource developments. For instance, 29.9 per cent of Hindu respondents suggested that resettlement or displacement should be avoided as a result of any project, compared to Muslims (16.4 per cent). Both Hindu and Muslim respondents suggested that local communities should be given priority in direct and indirect project-generated jobs. A lack of company-community communication and consultation was also a concern identified in both the focus group discussions and the survey. The respondents suggested that there is great need to improve the communication between the local communities and companies, and that therefore, a participatory approach should be adopted capable of addressing the multifaceted issue of displacement and resettlement. Lastly, both groups emphasized the need to avoid project development on private and common land; however, this was more of concern for Hindu respondents more than Muslims (12.3 per cent and 4.5 per cent, respectively). This difference can be attributed to most of the Hindu population, particularly the scheduled castes, being settled on land to which they have no legal claim. Not surprisingly, there was concern among Hindu respondents of becoming potentially 'landless', with no claims to compensation in the event of displacement.

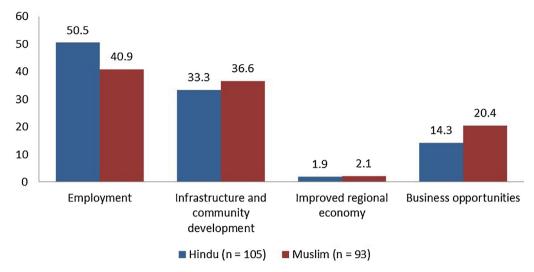


Fig. 7. Religion by opportunities, percentage (multiple responses, n = 91).

Contrasting patterns emerged on perception of negative impacts. The results suggest that Hindu communities are more wary of the risks of being exposed to the potential impacts of mining, and thus perceive development as a potential threat (Fig. 9). The following three points summarize the responses:

- 1. Project-induced displacement and resettlement were considered the main concerns by both groups. Hindu and Muslim responses were comparable (31.7 per cent and 34 per cent, respectively).
- 2. Social disturbance and risk to community safety because of various factors related to the project, including influx of 'outsiders', were identified by Hindu respondents (31.2 per cent) as a major concern compared to Muslim respondents (17.6 per cent).
- 3. Every Hindu respondent mentioned potential friction among the communities based on ethno-religious identities as a primary concern. In contrast, Muslim respondents did not perceive this to be a sensitive or significant social issue to be considered.

4.2. Findings from focus group discussions

4.2.1. Perceived positive impacts

Focus group discussions focused on both the positive and negative impacts of the project development, such as local job

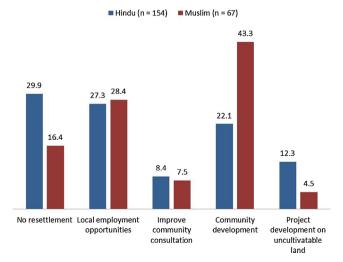


Fig. 8. Religion by suggestions, percentage (multiple responses, n = 111).

opportunities, community development, infrastructure development, resettlement, and intercommunity conflict associated with the escalating coal project development, and supplements the issues raised in Figs. 7 and 8. All of the participants seemed to recognize that the Thar coal project development will augment both regional and national development. The respondents generally accepted that the development of both UCG and coal deposits would potentially move the country out of its energy crisis; however, any development should not come at a cost of local communities.

The potential contribution of coal development was perceived more positively in Magho Bheel, a Hindu populated community. It is the only community currently exposed to a UCG experimental project site, as mentioned earlier. Around 40 members from the community have been employed on daily wages and now have access to clean water. One female participant reflected on the development:

I don't know what will be happening in the future but I'm happy that many men of our community have some jobs and we can see them when the sun sets. Otherwise, to earn some money they had to go either Mithi or Karachi, not for days but for months. So, being a wife and mother I'm happy and I am sure every woman of Magho Bheel is.⁴

In the case of physical infrastructure, the entire now has an improved and extensive road network, and communities have far better access to remote and other regions. During the focus group discussions, participants explained that local communities should be the first to benefit from the project, and is the only way they will embrace it completely. Key passages from interviews include the following:

Being an elder of Ranjho Noon, I understand that we will be paying some cost in order to welcome the coal project, and we do realize that there won't be all good coming in, but its companies' and state's responsibility to mitigate the impacts and ensure that national development shouldn't be at the cost of a Thari.⁵

Yes, we have seen quite a lot development in the region, which couldn't be possible without the coal project. Who could think there would be carpeted roads and airport in Tharparkar, and

⁴ Murdan Bheel, villager from Magho Bheel, focus group discussion 02, March 23, 2013.

 $^{^{5}}$ Himayat Ali, villager from Ranjho Noon, focus group discussion 05, April 09, 2013.

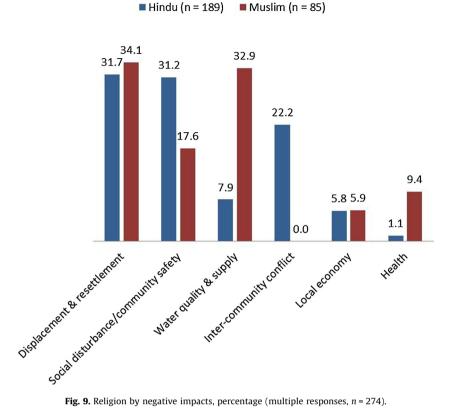


Fig. 9. Religion by negative impacts, percentage (multiple responses, n = 274).

we highly regard this. But question is this development for whom? Our needs are much more complicated: we need hospitals, schools for children, clean water, and sustainable livelihood. And we have raised so many hopes towards this project and frankly our dreams would be shattered if this project doesn't go further as this seems the only option left for us.6

4.2.2. Perceived negative impacts

The focus group discussions reveal that any physical or economic displacement of the local communities in Tharparkar is likely to result in significant deterioration of livelihoods and social exclusion of the Hindu community. The issue of resettlement and mining-induced displacement was the major concern identified by the residents interviewed. The economic and sentimental attachment to the land was made very clear during the discussions. Participants expressed concern that their deep attachment to land would be threatened by mining-induced displacement and resettlement. For example, participants from the community of Ranjho Noon stated:

I can't tell you exactly how long we have been living here, but certainly for centuries. So how can we simply move on leaving our elders' graves behind? It's not possible and not as simple as you think. There are so many cultural, religious and caste issues also involved, and it will be a disaster in case of resettlement or displacement.

People primarily depend on rain to rear their livestock, and are often subject to severe droughts. Their subsistence means they must have access to both private and common land; any territorial displacement will result into massive economic displacement for the local communities. As one residents of Sonal Beh explained in an interview: "we only know livestock rearing, fetch water and how to produce agriculture out of desert ... We don't have any other skills".8

The participants supported the idea that there is greater need to establish a mechanism, not only for resettlement, but also for economic rehabilitation, to ensure sustainable livelihoods for the affected communities. It was suggested that local communities should not be left too exposed to companies, which have power and money and can influence a legal system that will almost certainly lead to mass infringements. During discussions, it was suggested that the only way to discourage an asymmetric relationship between companies and communities from developing is to involve and engage inhabitants throughout the process of planning and implementation of resettlement or displacement.

A number of initiatives have been taken by the Sindh Coal Authority to plan for resettlement process. To this end, an information and description session was organized in Mithi town to present the model of new villages to house those to be resettled. A focus group discussion's participant of the Bhavay Jo Tar community shared his experience of the information session:

[it] was just like telling Thari people what to do and what will be done to them without any input from the local communities, and without even mentioning how displaced communities will sustain their livelihoods.9

The above mentioned concern spawned a very fruitful discussion on how companies and government can mitigate the impacts related to the resettlement issue and enhance the level of

⁶ Visian Shankar, villager from Thahriyo Halipota, focus group discussion 06, March 22, 2013.

⁷ Lasho Noon, villager from Ranjho Noon, focus group discussion 05, April 09, 2013.

⁸ Roznana Ram Chand, villager from Sonal Beh, focus group discussion 01, April

⁹ Kharo Daso, villager from Bhavay Jo Tar, focus group discussion 03, March 24,

project acceptance. Several suggestions were made during the discussion sessions in particular. Notable examples include:

- 1. Private lands (33 per cent of the total land) and cultivatable land (13 per cent of the total land) should not be mined. Communities should have access to the necessary resources on which their subsistence depends (e.g. pasture land).
- 2. Relocation should be within the District Tharparkar because of local attachments to the land, and to avoid any social exclusion of Hindu community that may lead to conflict.
- 3. Landholders should be compensated for a loss of economic and environmental resources due to the displacement.
- 4. A participatory resettlement and compensation plan should be developed with intensive community consultation to address the potential impacts on land-connected communities.
- A mechanism should be established for monitoring the social and economic rehabilitation of the local communities with the help of local NGOs.

In addition, during focus group discussions, representatives from the Hindu community identified religious based-conflict as one of their main concerns. For instance, Hindu participants from Sonal Beh community (Hindu Rajputs) explained that:

We all have fears of one another [Hindus and Muslims] whether we accept it or not, and yes, I do get afraid sometimes that the coal project might stoke communal conflict [...] where everybody will be in a quest for a greater share.¹⁰

In Bhavay Jo Tar focus group participants also raised concern that peaceful coexistence of religious identities could face challenges from outsiders in the context of coal project development:

There is no doubt that our Muslim brothers have played an incredible role towards sustaining the peaceful environment. But when the coal people will be here, the power dynamics will be changed and then certainly Hindus will be exposed to the 'outsiders' who absolutely don't understand how we have preserved the relationship between Hindu and Muslim.¹¹

Through centuries we [Hindu and Muslim] have learnt that our survival in this desert is only possible through cooperation, but economically motivated outsiders would never understand this unwritten agreement. And, as soon they will enter Thar Desert, the religious identities will be pronounced.¹²

Both the results from the survey and focus group discussions suggest that the desert is cultural and the locus of both Hindu and Muslim identities. However, in the eyes of the Hindu population, any land detachment could not only lead to economic loss but might also lead to social exclusion and erode the feeling of authenticity provided by the desert to sustain a harmonious relation with Muslim neighbors. To this end, treating resettlement as a homogenous process in the only region in Pakistan where Hindus comprise most of the rural population—of which more than 60 per cent belong to scheduled castes—invites catastrophic consequences.

5. Discussion and conclusion

Although the Thar coal project is associated with a range of social and environmental impacts, our research conducted in Tharparkar indicates that concerns have little to do with the technical aspects of project development itself. They are rather largely related to sense of place and religious identity that fuel fears of exclusion. The divergence in perspectives between Muslims and Hindus on the salience of the project may seem of concern, since environmental resources are shared by the two communities and their livelihoods are intertwined. Both faiths in their regional manifestations exhibit anthropocentrism with some measure of environmental ethics directed toward water and food scarcity. With respect to ecological norms, there is no particular pantheism in either Hindu or Muslim traditions in either of these areas. The divergence in views, therefore, requires a more complex explanation.

The research suggests that the difference in views toward resource development between Hindus and Muslims in Tharparkar is best explained by the eco-regional identity that is linked to a fear of exclusion within the broader national fabric of Pakistan. A fear of migration into the area spurred on by resource development will dilute the Hindu community. However, the ultimate root of such fears may be that the Hindu community has gained an ecological identity from the Tharparkar desert, in a country in which they are otherwise a persecuted minority. Our conception of ecological identity in this context is informed by the literature on the "ecology of place" and how dependence in particular ecosystem imbues identity (Billick and Price, 2011).

The environment has thus given them a feeling of authenticity which has allowed for positive relations to develop with their Muslim co-inhabitants of the desert. Ecology has thus provided a bonding force in an otherwise-fractured ethno-religious national state-of-affairs. Yet, the data from Magho Bheel community also show that such fears of exclusion and opposition to the project can change fairly quickly once there has been some positive experience of the engagement with a developer. Concerned opposition to resource development does not usually emerge from an ossified view of pristine natural conditions. Rather, such opposition is often a result of a lack of trust and a perception of shrinking geographic space to assert an ecological identity. If concerns about such exclusion can be appropriately addressed, there is a greater chance for acceptance.

In addition, it is important to consider that most of the Hindu population settled in the district's remote areas belongs to scheduled castes and in most cases, 'land access' is informal without any legal entitlements. This issue was repeatedly raised during the focus group discussions. During discussions some residents explained that the land has been their home for centuries, but that still, they are not legally entitled to any allotments. The implication is that in the event of project-induced displacement, coal mining companies would not be legally bound to compensate or resettle the displaced communities.

The existing policy and legal framework, which includes the Land Grant Policy 1986 and 2000, and the Land Acquisition Act 1984, does provide some support with regard to land rights, land acquisition, compensation and rehabilitation. However, there is greater need to develop displacement and resettlement strategies that take into account the heterogeneous composition of the local communities based on religion and marginalized castes within the Hindu community.

Resource development in such a heterogeneous cultural context requires far greater care in planning to ensure that a marginalized community is not further disempowered. Alternatives for migration or resettlement for such communities are far less defined by economic factors and more so by ecological space. The same logic applies to the observation that indigenous communities are often found to oppose mining projects in areas where they may be vulnerable and dependent on environmental legitimacy as compared to those indigenous communities that can assert economic sovereignty (Ali, 2009).

The That Singh, villager from Sonal Beh, focus group discussion 01, April 12, 2013. Haleem Sing Jo-Tar, villager from Bhavay Jo Tar, focus group discussion 03, March 24, 2013.

 $^{^{12}}$ Vikram Dar, villager from Bhavay Jo Tar, focus group discussion 03, March 24, 2013.

As minerals become scarce, companies will continue to be attracted to remote parts of the world in search of deposits. Energy needs in rapidly developing countries with burgeoning populations like Pakistan will also necessitate a quest for domestic resource reliance. Yet, such efforts at resource extraction must not neglect the importance of ecological identity of communities in resource regions. In areas of pre-existing ethno-religious conflict, the onus for ensuring that resource extraction does not accentuate division lies with the developer and the government. This paper has not sought to evaluate specific corporate policies or government efforts in this context but has rather presented the findings of a baseline survey of perceptions which may serve as a foundation for further investigation on how views of corporate behavior or policy intervention might change as this region develops. Communal harmony must remain a planning objective for such projects, and this study validates the hypothesis that shared ecological identity plays a dominant role in maintaining such concord in an otherwise fractured societies.

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