



Dasu Hydropower Project:

Critical view of the WAPDA led Social Impact Assessment

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Cover Image:

Dasu Hydropower Project (2015). <https://tribune.com.pk/story/938342/work-delayed-as-issues-remain-unresolved>

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Abbreviations

ESMP	Environment and Social Management Plan
GoP	Government of Pakistan
DHP	Dasu Hydropower Project
FPIC	Free Prior & Informed Consent
ha	Hectare
KPK	Khyber Pakhtunkhwa
RAP	Resettlement Action Plan
PRA	Participatory Rural Appraisal
SAF	Social Analysis Framework
SIA	Social Impact Assessment
WB	World Bank

Introduction

This critical appraisal uses Smyth and Vanclay,'s (2017) social analysis framework (SAF) to analyze the social impact assessment (SIA) carried out for the Dasu Hydropower Project (DHP)¹. The SIA was commissioned by Water and Power Development Authority (WAPDA) of the Government of Pakistan (GoP) to fulfill legal regulations of GoP and the World Bank (WB). The SIA of the project started in 2011 and was completed in 2014 by a team of 'Independent Consultants' namely Mr. Reitse Koopmans, Mr. Mohammad Omar Khalid and Mr. Hans van Zon (WAPDA, 2014). The consultants had the mandate to enlist the services of relevant experts in other fields to help them fulfill their 'legal' mandate. The consultants produced Environment and Social Impact Assessment (ESIA), Environment Management Plan (EMP) and Resettlement Action Plan (RAP). The SIA forms a part of ESIA which is a 374-page document containing 10 chapters.

The contents of ESIA cover a wide range of topics. It begins by outlining a historical perspective on endemic energy shortage in Pakistan and situates the need for DHP in the imperative of country's development needs. It then lays down legal and administrative framework that necessitated ESIA before describing the project in detail and giving the baseline demographic, climatic and economic data. It mainly discusses the SIA in chapters 7 and 8 which is followed by environment and social management plans (ESMPs) and stakeholder consultations and disclosures.

This analysis is structured as follows. The next section gives an overview of the SIA which is followed by description of the context in which SIA was conducted. The section after that analyzes the SIA on an analytical framework proposed by Smyth and Vanclay, (2017) before concluding the analysis.

¹ The Water and Power Authority, Pakistan conducted SIA in 2014 which can be found at

http://documents1.worldbank.org/curated/en/292581468087557145/pdf/E44160V10R_EVIS00Box385162B00PUBLIC0.pdf>.

SIA overview

The analysis of the SIA reveals a technocratic orientation (Taylor et al., 2004) in conducting of SIA. The SIA was conducted by remaining within the legal framework of the country and it also respected the cultural moorings of the affected population. The free prior and informed consent (FPIC) (Vanclay, 2003) in terms of dam or no dam was not solicited. The community engagement remained tokenistic on Arnstein's (1969) ladder of participation, and the consultants could not empower the community through alteration of the pre-existing power structures (Glucker et al., 2013). The land acquisition and the resettlement left much to be desired and severed the communities without a meaningful proposition for re-employment and resettlement of the displaced people. In addition, the SIA could not advocate adequate compensation against compulsory acquisition of land and could not provide ongoing mechanisms to avoid construction on sites prior to payment of formal compensation. The cultural objects were, however, protected though society paid a high emotional cost in terms of submersion of graves of their ancestors. In short, the SIA, as of now, seems to have missed an opportunity for transformation of the area and affected population through employment generation and improvement of their socio-economic indicators.

Context

The DHP is located on the Indus River in the Khyber Pakhtunkhwa (KPK) province of Pakistan, which is a country in South Asia (Fig-I). The DHP is \$4.3 billion World Bank funded dam project involving construction of a 4,320MW hydropower plant on the Indus River near Dasu town in Kohistan District of KPK province, Pakistan. The Kohistan districts straddles the remote mountainous terrain in the upper Indus valley and has a low population density due to its steep and rocky slopes (Fig-II). The district is predominantly rural and, according to the 2017 census its population stood at 784,711 persons with a population density of 63 persons/km². The population of sub-district Dasu, that houses the dam, was 222,282 persons within 28880 households at the time of last census (PBS, 2017). Most of the population is ethnic

Pashtun and Islam is the dominant religion in the area. Males (55%) dominate the females (45%) not only in numbers but also in decision making spheres. There are higher gender disparities in terms of education, health, and employment. The literacy rate in the district is 30% which is even lower for females. The patriarchal set up leaves little room for participation of women in household decisions more so in social and political life. The district has lowest per capita income in the province (PBS, 2017).

The construction on the dam started in 2017 and its first phase is scheduled to complete in 2023. The project has affected 34 villages on the left and right bank of the river Indus, dislocated 767 households, 6953 persons and uprooted more than a hundred shops. The project has also resulted in compulsory acquisition of 4643 ha of land besides depriving the population of 143 ha agricultural and 280 ha grazing land. The project has also inundated 16 graveyards and a 400-year-old mosque.



Fig-I: The location of Pakistan in South Asia. Source <<https://geology.com/world/pakistan-satellite-image.shtml>>

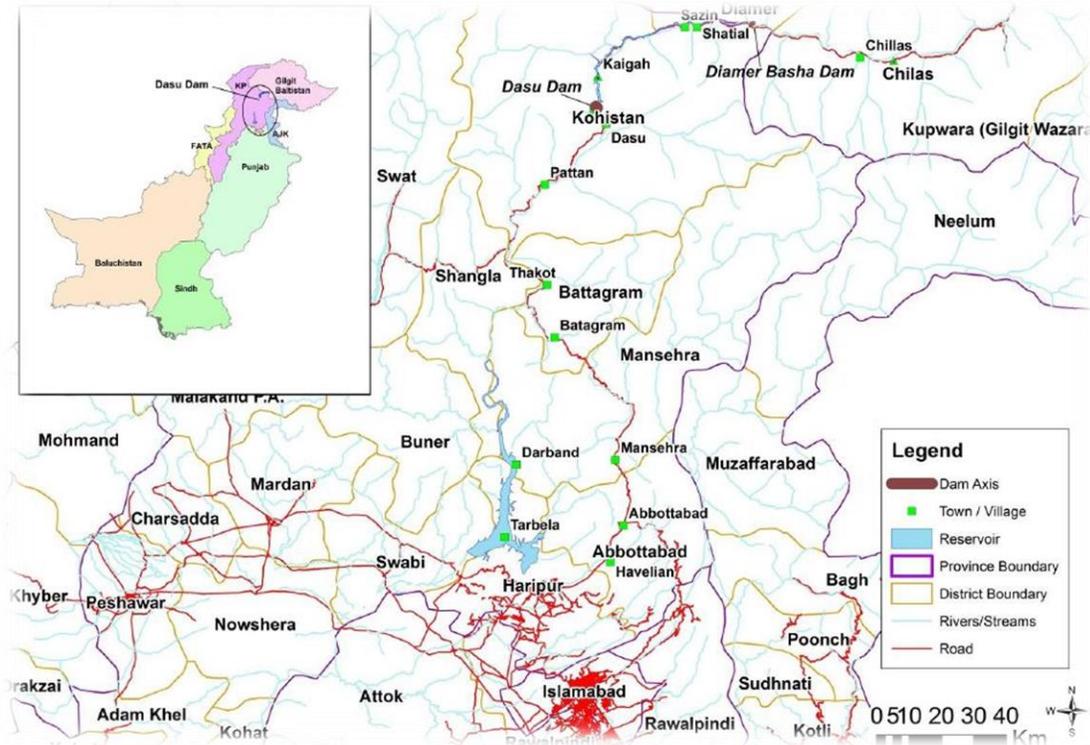


Fig-II: The location of the dam in Kohistan district of KPK. Source: (WAPDA, 2014).

Analysis

This manuscript used Smyth and Vanclay's (2017) SAF for analysis of the SIA. Smyth & Vanclay advocate the use of such framework both in conducting and analyzing the SIAs. The well-being of the affected communities is at the core of such framework, and it also acknowledges the well-being of individual members which may sometimes be voiceless and marginalized within highly stratified societies. Smyth and Vanclay (2017) envision the human well-being around eight themes (Fig-III) that involve i) people, ii) community, iii) culture and religion, iv) Livelihood Assets and Activities, v) Infrastructure and services, vi) Housing and business structures vii) the living environment and the viii) land and natural resources. The next section analyzes the SIA for DHP under these eight themes.

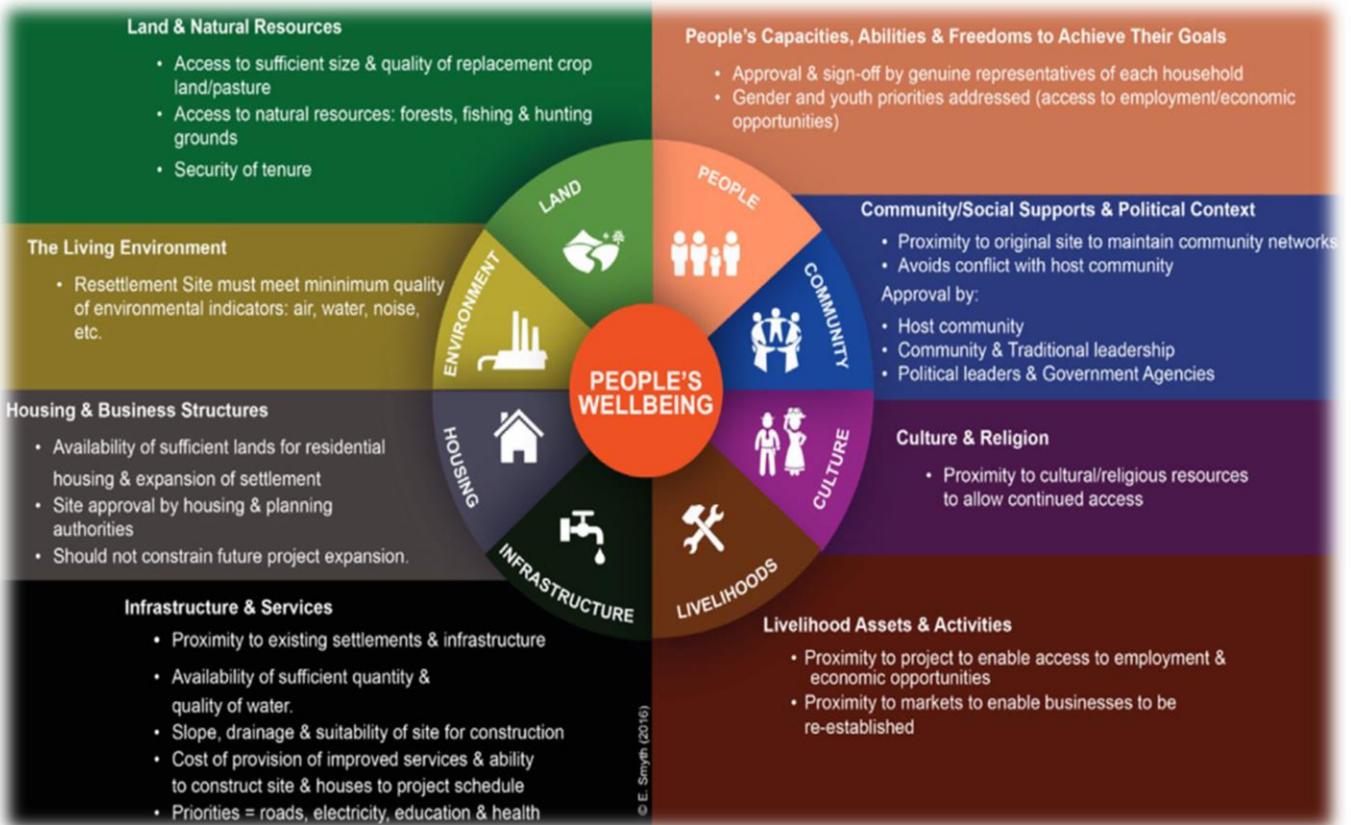


Fig-III: Smyth and Vanclay's (2017) analytical framework. Source: Smyth and Vanclay (2017, p.74).

i) People

The people seem to have no meaningful choice in determining the project outcomes. The SIA mentions “a no dam option”, but such a choice was not available to the population during community engagement phase. The consultants conducted Participatory Rural Appraisal (PRA) to engage community but elicited people’s choice in selecting the appropriate dam and relocation sites only. Three choices were presented to the community for siting the dam from which one was ultimately ‘ticked’ by the community. Moreover, the community was consulted through pre-existing traditional village assemblies (*jirgas*) of village elders. These assemblies never enlist women as members and seldom have youth amongst its ranks. The community was contacted through focus group interviews, jirga meetings and survey questionnaires

for triangulation of baseline data. There were four meetings of the *Jirgas* which enlisted a participation of ‘community representatives’ for eliciting opinions on resettlement, compensation against land acquisition, and employment generation etc. However, though there was a total participation of around 2300 people at different stages of the SIA yet none of the women participated in these assemblies except 250 of them who were only involved through survey questionnaires for assessment of health-related baseline data. Such arrangements often entrench the pre-existing disadvantages to the already marginalized segments of the societies (Cernea, 2000; Glucker et al., 2013).

Also, the SIA does not specify how the community was informed of the project design and outcomes. With only 30% literacy rate in the area the SIA does not go beyond indicating that the feasibility report of the project was disseminated in the area after translation into the local language in 2009. The FPIC is, thus, missing in the SIA along with a true participatory and empowering community engagement design. The cumulative impact of such practices might result in exacerbating the emic marginalization in the population and correspond to a tokenistic engagement on Arnstein’s (1969) ladder of participation and compromise the social license to operate.



Figure: A jirga of the tribal elders. Kohistani, S (2016).

<https://www.thethirdpole.net/en/energy/tribal-protests-halt-work-on-pakistans-dasu-dam/>

ii) Community

The project did result in severance of the local community. However, due to the peculiar nature of the dwelling structures and climatic conditions that necessitate construction of more than one homes at varying altitudes, the displacement impacts on community might be mild. The people in the area own more than one Kutcha (made of wood, stone etc.) or Pucca (made of concrete and steel etc.) houses, perched on mountain slopes, at various altitudes to cope the severity of climatic conditions. So, in the PRA, 90% of the people opted to stay in the area and move to higher altitudes instead. Only 10% of the affected population opted to move out into other farther and more developed areas. However, the socio-economic profile of the staying and leaving population is missing in the SIA which could have afforded a nuanced understanding of the process.

iii) Culture and Religion

The population is predominantly Muslim and home to a cultural heritage dating back to 5th century BC. The consultants enlisted the services of archaeological experts to protect objects of cultural significance. The PRA and the baseline survey indicated potential harm to 400-year-old mosque some 20,000 rock carvings (petroglyphs) in the project area. The ESMP provides for disassembly of the mosque artwork and relocation to higher altitude with the community. So, there seems no major threat to religious practices. Similarly, the ESMP provides for fencing of the petroglyphs which are not in danger of submersion by the project. In addition, ESMP provides for stone pitching of graves in 16 graveyards that would be submerged by the reservoir of dam. The loss of these graveyards and the emotional cost attached to it cannot be fathomed nor can be recompensed.

iv) Livelihood Access and Activities

Only 26 percent of the affected population is employed. Most of the employed workforce is self-employed in small scale agriculture, pastoral grazing of animals on the banks of river Indus and only a few are shopkeepers selling merchandise. The population will be deprived of the pastoral grazing opportunities at the lower altitudes in winter and there would be no agricultural practices at lower altitudes either.

The ESMP mentions relocation grant for small scale businesses and payment of compensation against acquisition of 143 ha agricultural land and 280 ha grazing land. It also provides for employment of locals in the project in the ESMP and recommended imparting technical training to youth population for employment in the project. However, as of 2019 the compensation issues which mainly involve below market compensation against land were still lingering and resettlement process of the dislocated population had not been completed (Dawn 2019). Similarly, the SIA and the ESMP do not mention the fate of unemployed as it made the land or business ownership as a sole criterion for compensation. Also, a web search for follow up on vocational training of the youth did not yield any results. This corroborates Vanclay,'s (2017) apprehension that such involuntary resettlements can leave the affected populations impoverished.

v) Infrastructure and Services

One of the positive aspects of the SIA is the provision of infrastructure and services at the relocated site. The project besides uprooting the affected community could sever links between villages through inundation of connecting bridges. The ESIA and RAP provide for alternative connecting linkages along with provision of infrastructure and service such as roads, water, sanitation, and other community facilities including schools and mosques, at the resettled site. A news items appearing in several newspapers confirm that the project proponent is following up on the provision of infrastructure and services at higher altitudes where population has

opted to resettle (Devex, 2020). Though the emotional cost of dislocation cannot be appropriately recompensed, yet provision of infrastructure and services can provide some succor even if at a lower rung in the mitigation hierarchy (Vanclay, 2002).

vi) Housing

The SIA did not take an advocacy role or endeavored to empower communities in terms of provision of shelter. The project did cause involuntary dislocation of the population and deprived them of their houses, but the SIA did not recommend alternative accommodation to the affected population. Monetary compensation was considered sufficient against the loss of dwellings and people were left on their own to build houses after relocation. Notwithstanding below market compensation, the SIA neither elaborates the criteria for determination of compensation nor indicates the fate of squatter settlers and homeless in the resettlement process. It is also silent on which terms the land for dwellings will be allotted in the resettlement process. The issue of land titles is so complicated that the WB had to press for earlier resolution of the same in 2018 (Dawn, 2018). The world Bank recognizes the right of squatter settlers to resettlement (World Bank, 2015) but the SIA is silent on the issue.

vii) The Living Environment

The SIA analyzes and provides for management of project induced implications for the living environment. Taylor et al., (2004) argue that ‘all environmental alterations have social implications’ (p. 57). The mutual correlation of impacts between the social and environmental realms is not lost on the consultants. The SIA analyzes, plans, and provides for management of impacts to air, water, soil, flora, and fauna because of the intervention. It also provides elaborate guidelines for reduction of ecological impact to the area due to influx of workers to the project site. Moreover, it provides for management of indirect impacts to the grazing pastures at higher altitudes because of resettlement of population and the cattle to these altitudes.

viii) Land and Natural Resources

The project resulted in compulsory acquisition of 4643 ha of land including the land previously used for agricultural purposes. The agriculture in the area is subsistence farming, which is done on small, terraced farms on mountain slopes which are quite difficult to level. The SIA, however, did not broach provision of alternate terraces for agricultural purposes, the establishment of which could have been possible, at least in Vanclay,'s (2017) conception, using project's machinery and equipment. This could have reinforced the social license to operate. Paradoxically, the SIA seems to be set within the confines of the local law (Land Acquisition Act, 1894) which provides for compensation as per a predetermined schedule set arbitrarily by the government agencies. Consequently, the disputes vis-à-vis land compensation are still lingering and have, in the past, resulted in the protester's blocking the entry of the workers to the project site (Sadaqat, 2016).

Conclusion

The SIA is a mixed bag of strengths and weaknesses. The analysis used Smyth and Vanclay,'s (2017) SAF for appraisal of the SIA conducted for DHP. The SIA is strong in its analysis, planning and prescription of management strategies vis-à-vis protection of cultural heritage of the affected communities, provision of infrastructure and services to resettled communities and protection of the living environment. However, it leaves room for improvement in terms of eliciting broad based engagement of community in its PRA and, thus, risks exacerbating emic marginalization. It also failed to propose market-based compensations to affected landlords and remains silent on the issue of resettlement of landless people. It is also silent on provision of ongoing strategies for monitoring the implementation and evaluation of the project. Thus, it ends up being deemed as a technocratic exercise which fulfilled the regulatory obligation of the GoP and the WB and failed empower the community.

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