

THE IMPORTANCE OF ADOPTING SUSTAINABLE PRACTICES & COMMUNITY PARTICIPATION IN POWER PROJECTS

ENGR. SIKANDAR ALI ABBASI¹, ENGR. WAZIR MUHAMMAD LAGHARI²,

DR. GUL MUHAMMAD BALOCH³

¹Department of Energy & Environmental Engineering, Dawood University of Engineering & Technology, Karachi, Pakistan

abbasisikandar12@yahoo.com

²Department of Electrical Engineering, Balochistan University of Engineering & Technology, Khuzdar, Pakistan

niaz1111@yahoo.com

³Department of Public Health, School of Medicine, Taylor's University, Malaysia

gul.baloch@taylors.edu.my

ABSTRACT. Attaining sustainable development is one of the greatest challenges facing Pakistan today. A challenge that can only be met by developing and deploying confidence among the people. Transparency in project activities at all stages and other measures will also enhance its social and economic growth. By adopting sustainable practices and sensible policies, we mean that project activity should be economically viable, socially acceptable and environment friendly. In order to achieve this objective, there must be a continued commitment to encourage and ensure the community participation. Since Pakistan is an energy deficient country, it has to initiate power projects on a large scale in the near future. Therefore, it is the need of the hour to tackle these projects in a sustainable way, so that it can be benefited to the maximum possible level and have the least adverse effects on community and the environment. Thus, careful planning, efficient implementation, standardized operational practices and community participation are the key parameters which ensure the positive impacts on economy, prosperity and the well being of our people. This paper pinpoints the potential environmental hazards due to project activity and emphasizes to adopt sustainable approaches in power projects with community participation.

Keywords: Environmental Hazards; Sustainable Practices; Environment Friendly; Community Participation

1. **Introduction.** By providing electrical energy, power plant projects help to increase productivity and improve the quality of life for the people. However they have the potential to harm some natural ecosystems, introduce new hazards to human life, increase disease vectors, worsen pollution problems, and cause population shifts (Government of Pakistan, 1986). Human migration to urban centers causes lot of social, environmental and economic problems. However by the participation of local community, the extent of hazards can be reduced to appreciable level. This is the objective needed to be highlighted for obtaining the sustainable economic growth.

The notion of community participation is gaining considerable attention as an operative approach in community development which boosts community involvement (Craig & Mayo, 2004). Atkinson and Willis (2005) state community involvement as “combined influence of a community’s commitment, resources and skills that can be deployed to build community strengths and address community problems and potential opportunities”. Community monitoring is one of the components of community participation process by which community members supervise and monitor project activities in their areas on their own and make effective decisions for better project implementation (Barreto et al., 2006).

2. Techniques for communicating with the community. There are some techniques for communicating with the community which are summarized in table 1 (Safdar, Muhammad Hussain et al, 1996). The type and timing of community involvement is given in table 2. Key requirements of a good partnership are given in table 3. Reasons to consult with community are given in table 4.

3. Discussion. Like other projects, power projects are commissioned and operated by three parties.

- 1) Planning and Development Department.
- 2) Executing Agency (Including the Engineers).
- 3) Private Sector/Contractors.

In all the phases of the project, the community is not considered as a party of worth listening and discussing with. The officials and contractors have misconception that community has nothing do with project and it is merely their job and wisdom to carry out and complete all the phases of the project. This is the basic mistake and misconception. According to celebrated statement by land ethics “A thing is right when it tends to preserve the integrity, stability and beauty of community”. It is wrong when it tends to be otherwise (Hugh W.Ellsaesser,1992). Neglecting this area fetches a lot of social, environmental, psychological and economic effects. Baloch & Ali (2015) state that to make a community as an essential partner, the participation of the community in the projects be encouraged.

A. Potential Hazards

When the projects are completed without consulting the local community, they are sometimes proved to be counterproductive, because it is the local community which has lengthy experience and possess a traditional knowledge regarding sustainable utilization of any resource.

Following are some of the main impacts.

1. Constructional Impacts

- a) *Soils:* Constructional activities include the clearing of vegetation, grading, excavation and the creation of spoil piles, can induce soil erosion.
- b) *Water Quality:* Sedimentation due to soil erosion can decrease waste assimilative capacity of water way, adversely affect aquatic life, increase downstream water purification costs, and encourage downstream flooding by decreasing speed of the flow. The spray of herbicides to control the growth of vegetation in transmission line corridors may adversely affect water quality if herbicide enter the ground and stream water through run-off. Thus polluting the water on which our entire economic system and life depends (EPA Journal).

2. Operational Impacts

- a) The impacts of transmission lines and their corridors can have adverse effects on local terrestrial ecosystem, and the feeding and migration patterns of local wild life.
- b) Habitat can be disrupted.
- c) Large birds of prey can be electrocuted when perched on the transmission line if their wing tips touch a grounded tower. Little is known concerning the effects of lines and corridors on species of small birds.

3. Social and Psychological Impacts

Since there are different communities in different areas, so sometimes their interests are confronted with each other. The development activity of any particular area for one community might harm to its neighboring community. So when the project is initiated, sometimes neighbored raise objections on it; this is how the

conflicts are created between the two communities. Secondly the community, for which the project is initiated, is not fully aware about the details. Hence they feel isolated and when any disagreement appears, they react in an unreasonable way, thus creating a confusing situation. This situation is the outcome of such conflicts and generates social and psychological impacts.

B. Benefits of Community Participation

Following are the benefits, if community participation is ensured during entire activity of the project

- a) Accessibility of public will increase the chances of transparency, thereby improving the quality of work.
- b) Un-necessary delay due to disputes between the parties, can be avoided.
- c) Community participation will promote the social acceptance of the project in the community and avoid costly modification or abandonment of project at later stage.
- d) Mutual trust and respect among all partners will emerge.
- e) The diversity of good understanding of common values, goals and objectives can be achieved.
- f) Potential areas of conflict are pin pointed.
- g) The comfort level of decision makers is raised.

4. Conclusion. On the basis of above facts, it is concluded that the sustainable practices are very important for reducing the expected environmental and psychosocial hazards. The sustainable economic growth and be achieved with the participation of the community. Unfortunately this aspect has not been given due consideration in our country which has costed us in terms of waste of time, money, energy and often resulted in social conflicts.

5. REFERENCES

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Table 1.

TECHNIQUES FOR COMMUNICATING WITH THE COMMUNITY

<i>Public Communication Techniques</i>	<i>No: of People reached</i>	<i>Ability To handle Specific issues</i>	<i>Degree Of TwoWay Communication</i>	<i>Information / Education</i>	<i>Identify Problems and Values</i>	<i>Get Ideas/ Solve Problems</i>	<i>Get Feed - back</i>	<i>Evaluate</i>	<i>Resolve Conflict/ Obtain Consensus</i>
Public Hearing	2	1	1		X		X		
Public Hearing	2	1	2	X	X		X		
Informal Small Group Meetings	1	2	3	X	X	X	X	X	X
General Public Information Meetings	2	1	2	X					
Presentations to Community Organizations	1	2	2	X	X		X		
Information coordination seminars	1	3	3	X			X		
Operating field offices	1	2	1		X	X	X	X	
Local planning visits	1	3	3		X	X		X	
Information brochures and pamphlets	2	2	1	X					
Field trips and site visits	1	3	3	X	X	X			
Public displays	3	1	2	X			X	X	
Model demonstration projects	2	1	2	X			X	X	X
Material for mass media	3	1	1	X					
Response to public inquiries	1	3	2	X					
Press releases Inviting comments	3	1	1	X			X		
Letter	1	3	1			X	X		

requests for comments									
Work shops	1	3	3		X	X	X	X	X
Advisory Committies	1	3	3		X	X	X	X	
Task Forces	1	3	3		X	X		X	
Employment of Community Residence	1	3	3		X	X			X
Community Interest Advocates	1	3	3			X		X	X
Ombudsman or representative	1	3	3		X	X	X	X	X
Public review of assesment decisions	2	3	1	X	X	X	X	X	X

1 = Low
 2 = Medium
 3 = High
 X = Capability

TABLE 2.
TYPE AND TIMING OF PUBLIC INVOLVEMENT

Stages of Project Development	Public Involvement Technique	
	<i>Small Project</i>	<i>Large Project</i>
Preliminary assessment of Project concept	1. Informal Contact with major interest groups	1. Brochures 2. Information Displays
Formation of Alternative	1. Informal meetings 2. Workshops	1. Advisory Groups 2. Questionaries
Evaluation of impacts and alternatives	1. Letters 2. Interviews	1. Public meetings 2. Workshops
Project implementation		1. Advisory groups

TABLE 3.
KEY REQUIREMENT S OF GOOD PARTNERSHIP

1.	“Community” means enormous array of individuals and groups.
2.	Mutual trust and respect among all partners.
3.	The diversity of good understanding of common values, goals and objectives.
4.	Individual and collective responsible behavior.
5.	Mutual recognition and acceptance of other rights, interests and aspirations.
6.	Development and implementations of mutually agreed rules and procedures for conducting public consultations.

TABLE 4.
REASONS TO CONSULT THE COMMUNITY

1.	The Community is informed.
2.	Different view points are brought forward.
3.	The concerns aroused by the project are identified.
4.	Potential areas of conflict are pin pointed.
5.	Trust and mutual respect are fostered.
6.	The comfort level of decision makers is raised.