



EFFECT OF NEW BUSINESS OPPORTUNITIES ON CHANGE IN LIVING STANDARD - A STUDY OF KALISINDH THERMAL POWER PROJECT

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Abstract:

Every person is unique in this world. Their personal characteristics such as gender, age, marital status, work experience, education etc. may differ for different person. These personal characteristics influence their career. They get benefits from the business opportunities developed in environment due to construction of any project. As they cash the opportunities, they change in their income status and henceforth their standard of living. People with different personal characteristics may have different abilities to plan and execute the same work in a different manner. In this study relation between personal characteristics and change in living standard has been analyzed. Kalisindh Thermal Power Project is constructed near village Undal in State Rajasthan. Due to construction of this project business opportunities developed for petty contractors / traders / service providers. This paper presents the findings emerged from analysis of developed business opportunities for people with different personal characteristics. A survey has been carried out for gathering required information from petty contractors serving for this power plant as well as petty traders and petty service providers to the people living in township of this power plant. During survey a structured questionnaire was filled. Convenience sampling method is used for selection of sample. Statistical tool used for the analysis is multiple regressions.

Keywords: *Multiple Regression; Convenience Sampling; Business Opportunities; Work Experience; Petty Contractors.*

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1. Introduction

Development always has an impact on people living in its vicinity as well as people living far from project. Every project opens a lots of business opportunities for petty contractors / petty

service providers / petty traders. It depends upon personal characteristics of them, how they utilized these opportunities for development or expansion of their business. Personal characteristics such as gender, age, education, marital status, native district, work experience etc. influenced their average monthly income and change in their income status, henceforth their living standard too.

Gartner (1988) and Shane & Venkataraman (2000) defined entrepreneurship as focus on emergence. They suggested that entrepreneurship research should deal with early stage phenomena, such as how opportunities are detected and acted upon, or how new organizations come into being.

Kalisindh Thermal Power project is constructed near village Undal in Rajasthan. Due to construction of this project business opportunities developed for petty contractors, petty traders and petty service providers. Here in this study relation between personal characteristics of petty traders / contractors / service providers and change in their living standard during last 5 years have been analyzed. This paper present the findings emerged from the analysis.

2. Literature Review

Schultz (1959) asserted that formal education increase an entrepreneur's cognitive abilities to better evaluation of opportunities.

Becker (1964) stated that human capital was not only the result of formal education, but included experience and practical learning that took place on the job, as well as non-formal education, such as specific training courses that were not a part of traditional formal educational structures.

Bourdieu (1983); Loury (1987); Coleman (1988; 1990) opined that social networks provided by extended family, community-based or organizational relationships are theorized to supplement the effects of education, experience, and financial capital.

Evans and Leighton, (1989); Bellu, Davidsson and Goldfarb, (1990); Davidsson, (1995); Honig, (1996); Gimeno, et al., (1997); Reynolds, (1997) demonstrated a range of results regarding the relationship between education, entrepreneurship and success, with education frequently producing non-linear effects in supporting the probability of becoming an entrepreneur, or in achieving success. They stated that formal education is one component of human capital that may assist in the accumulation of explicit knowledge that may provide skills useful to entrepreneurs.

Weick (1996) stated that previous knowledge plays a critical role in intellectual performance. It assists in the integration and accumulation of new knowledge, as well as integrating and adapting to new situations.

Shane and Venkataraman (2000) emphasized that entrepreneurship consisted of two related processes, discovery of entrepreneurial opportunities, and exploitation¹ of such opportunities.

Alvarez & Busenitz, (2001) opined that the individual's ability to recognize opportunities, both independently and within the parameters of the firm (corporate entrepreneurship), is a resource worth developing.

Akpan (2002), concluded in his study that privatization of the power industry can allow the management of privatized enterprises full freedom to realize their optimum potential and led to more productive employment and economic growth.

Fiet (2002) found that the alertness of group discovered more opportunities than did the systematic search group, but the systematic search group discovered opportunities that were more likely to lead to wealth creation.

Grimsey & Lewis (2004) developed a framework which can assess ongoing business viability and capacities of the contractor to meet requirements for the term of the contract.

Baron (2006) investigated in his study that how entrepreneurs identify opportunities for new business ventures.

Short et.al (2010) stated that opportunity is a central concept within the entrepreneurship field. Without an opportunity, there is no entrepreneurship. A potential entrepreneur can be immensely creative and hardworking, but without an opportunity to target with these characteristics, entrepreneurial activities cannot take place.

Pauget and Wald (2012) described that in addition to project management techniques and complementary skills, relational competence, i.e. the ability to actively create and develop collaborative relationships is an essential asset for managing project networks.

Daniel, B. (2015) outlined a number of opportunities and challenges associated with the implementation of Big Data in the context of higher education. He concluded in his paper future directions relating to the development and implementation of an institutional project on Big Data.

Okoro & Chikuni (2017) discussed the overall power sector reforms as well as they evaluated the opportunities and challenges there from. They said constant power supply is the hallmark of a developed economy.

3. Objectives

The study is dedicated to following objectives:-

- To study relationship between personal characteristics of Petty Contractors / Traders / Service providers and change in their living standard during last 5 years.
- To study strength of relationship and association between change in income status and change in standard of living during last 5 years.

4. Rationale

Business opportunities developed for petty contractors / petty traders / petty service providers due to construction of any project during its construction phase as well as in its operational phase. People having different personal characteristics may have different ideas for grab these opportunities. Kalisindh Thermal Power Project is constructed near village Undal, Rajasthan. No study has been carried out to find out developed business opportunities for people of different personal characteristics serving for this power project. This research is to analyze relationship and association between their personal characteristics and change in living standard due to construction of Kalisindh Thermal Power Project. The researcher has gone through tremendous amount of literature available related to this field of study but very little research in this field has been carried out till now. This study is an endeavour to plug this gap.

5. Hypothesis

Following hypotheses have been formulated and tested for this study:-

H₁: “There is no significant relationship and association in respondents’ gender and change in living standard during last 5 years”.

H₂: “There is no significant relationship and association in respondents’ age and change in living standard during last 5 years”.

H₃: “There is no significant relationship and association in respondents’ native district and change in living standard during last 5 years”.

H₄: “There is no significant relationship and association in respondents’ marital status and change in living standard during last 5 years”.

H₅: “There is no significant relationship and association in respondents’ work experience and change in living standard during last 5 years”.

H₆: “There is no significant relationship and association in respondents’ education and change in living standard during last 5 years”.

H₇: “There is no significant relationship and association in respondents’ occupation and change in living standard during last 5 years”.

H₈: “There is no significant relationship and association in respondents’ average monthly income and change in living standard during last 5 years”.

H₉: “There is no significant relationship and association in respondents’ change in income status during last 5 years and change in living standard during last 5 years”.

6. Research Methodology

The descriptive type of research is used for this study. After construction of Kalisindh Thermal Power Plant, for maintenance purpose of various areas in plant, petty contracts awarded to various firms. People got the opportunity for trading of petty goods as well as providing the petty services to people living in the vicinity. This is indirect economic impact of construction of this power project. Required information has been gathered from petty contractors / petty traders / petty service providers by filling a structured questionnaire during survey. As all petty contractors belong from the same background, convenience sampling method considered appropriate for selection of petty contractors during survey.

Approximately 20 % from the population of petty contractors were included in the sample. Population of petty traders and petty service providers were very less, hence included 100% in sample. Table 1 presents the summary of total no. of samples collected from petty traders, petty contractors and petty service providers.

Table 1: No. of samples collected from Petty Contractors / Traders / Service providers

Description	No. of Individuals
Petty Traders	12
Petty Contractors	19
Petty Service Providers	07
Total	38

Internal consistency of the variables has been identified through reliability analysis. Cronbach alpha value of the scale is shown in table -2. Which is greater than 0.8. It shows adequate internal consistency. Statistical tool used for the analysis is multiple regression model tests.

Table 2: Reliability Statistics

Developed Business Opportunities	Cronbach Alpha
Petty Contractors /Petty Traders /Petty Services Providers	0.809

7. Regression Analysis

Developed business opportunities for petty traders / contractors / service providers have been analyzed by using statistical tool regression. Regression analysis can be used to predict the dependent variable from the independent variable. The slope and y intercept are incorporated into the regression equation. The intercept is usually called the constant, and the slope is referred to as the coefficient. Here linear regression is used to examine the relationship between one dependent and one independent variable or multiple independent variables. Here in this study multiple regression model test has been applied for finding relationship and association between respondents' personal characteristics and change in living standard during last 5 years. Respondents' personal characteristics such as Gender, Age, Education, Marital Status, Native District, Work Experience, Occupation and Average Monthly Income and change in Income Status during last 5 yrs. are considered as independent variables. Whereas change in Living standard during last 5 years is considered as dependent variable.

7.1. Multiple Regression Model: Dependent Variable – Change in Living Standard During Last 5 Years

Multiple Regression model test has been applied between respondents' personal characteristics and change in living standard during last 5 years for analyzing relationship and association between respondents' personal characteristics and change in living standard during last 5 years.

Table 7.1.1 presents the summary of multiple regression model test applied between independent variables (Occupation, Age, Education, Marital Status, Work Experience, Gender, Native District, Average Monthly Income and change in Income Status during last 5 yrs.) and dependent

variable i.e. change in Living Standard during last 5 yrs. The R value is 0.858. This value shows the relationship between the independent variables and dependent variable. R^2 is the coefficient of determination. It presents percentage variation in the dependent variable explained by the independent variable. Here R^2 value is 0.736, which represents the variability in the relationship between independent variables and change in Living Standard during last 5 yrs is 73.6%. It infers that 73.6% of the variance in the dependent variable can be explained by the regression equation. The other 26.4% is unexplained. This variability score confirms that researcher can include some more statements and dimensions in the study in order to eliminate or list the 26.4% variability, but the statements or the dimensions should be able to represent the 26.4% variability. The adjusted R^2 is an alternative R^2 . Its value can be less than or equal to R^2 . Adjusted R^2 value shows that how efficiently and effectively the model was generalized and what is the probability that adjusted R^2 value can be quite closer or similar to the R^2 value. Here the difference between the adjusted R^2 value and R^2 value is $(0.736 - 0.651 = 0.085)$ is 8.5%. This value confirms that there is only 8.5% possibility of deviation in result in case of sample change.

Table 7.1.1: Multiple Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.858 ^a	0.736	0.651	0.20225	0.736	8.683	9	28	0.000
a. Predictors: (Constant), Occupation, Age, Education, Marital Status, Work Experience, Gender, Native District, Average Monthly Income, change in Income Status during last 5 yrs.									
b. Dependent Variable: change in Living Standard during last 5 yrs.									

From table – 7.1.2, it has been observed that F score is 8.683, which is significant at the level of 0.01. It confirms the significance of the relationship between dependent variable and independent variables. Hence it can be concluded that there is significant relationship and association in change in Living Standard during last 5 years and considered independent variables (Gender, Age, Education, Marital Status, Native District, Occupation, Work Experience, Average Monthly Income and change in Income Status during last 5 years).

Table 7.1.2: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.197	9	0.355	8.683	0.000 ^b
	Residual	1.145	28	0.041		
	Total	4.342	37			
a. Dependent Variable: change in Living Standard during last 5 yrs.						
b. Predictors: (Constant), Occupation, Age, Education, Marital Status, Work Experience, Gender, Native District, Average Monthly Income, change in Income Status during last 5 yrs.						

From the table – 7.1.3 it can be observed that there is no significant relationship and association in dependent variable and all considered predictors except change in Income status during last 5 years. It can be observed from the table – 4.30.3 that there is significant relationship and association in change in Income status during last 5 years and change in Living Standard during last 5 years. Beta value represents the count of standard deviation. Higher the Beta value reflects the positive and strong correlation between dependent variable and independent variable. Here Beta value for change in Income status during last 5 years is 0.836. Hence positive correlation and association can be concluded in between change in Income status and Living standard during last 5 years.

Table 7.1.3: Coefficients of Regression Model

Model	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.419	0.474		0.884	0.384
Gender	-0.006	0.148	-0.007	-0.038	0.970
Age	0.095	0.098	0.126	0.963	0.344
Native District	0.010	0.123	0.013	0.078	0.939
Marital Status	-0.064	0.238	-0.031	-0.270	0.789
Work Experience	0.030	0.042	0.121	0.717	0.479
Education	-0.012	0.017	-0.080	-0.692	0.494
Occupation	-0.033	0.082	-0.068	-0.404	0.689
Average Monthly Income	-0.028	0.025	-0.175	-1.133	0.267
Change in Income Status during last 5 yrs.	0.692	0.088	0.836	7.830	0.000
a. Dependent Variable: change in Living Standard during last 5 yrs.					

Further observations from table – 7.1.3 have been described here under:-

- 1) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' gender and change in living standard during last 5 years is -0.038, which is not significant. It means that there is no significant relationship and association in respondents' gender and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' gender and change in living standard during last 5 years” is not rejected.**
- 2) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' age and change in living standard during last 5 years is 0.963, which is not significant. It means that there is no significant relationship and association in respondents' age and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' age and change in living standard during last 5 years” is not rejected.**
- 3) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' native district and change in living standard during last 5 years is 0.078,

which is not significant. It means that there is no significant relationship and association in respondents' native district and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' native district and change in living standard during last 5 years” is not rejected.**

- 4) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' marital status and change in living standard during last 5 years is -0.270, which is not significant. It means that there is no significant relationship and association in respondents' marital status and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' marital status and change in living standard during last 5 years” is not rejected.**
- 5) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' work experience and change in living standard during last 5 years is 0.717, which is not significant. It means that there is no significant relationship and association in respondents' work experience and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' work experience and change in living standard during last 5 years” is not rejected.**
- 6) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' education and change in living standard during last 5 years is -0.692, which is not significant. It means that there is no significant relationship and association in respondents' education and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' education and change in living standard during last 5 years” is not rejected.**
- 7) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' occupation and change in living standard during last 5 years is -0.404, which is not significant. It means that there is no significant relationship and association in respondents' occupation and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' occupation and change in living standard during last 5 years” is not rejected.**
- 8) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' average monthly income and change in living standard during last 5 years is -1.133, which is not significant. It means that there is no significant relationship and association in respondents' average monthly income and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in respondents' average monthly income and change in living standard during last 5 years” is not rejected.**
- 9) It can be observed from the table – 7.1.3 that T value of relationship and association in respondents' change in income status during last 5 years and change in living standard during last 5 years is 7.830, which is significant at the 0.01 level. It means that there is significant relationship and association in respondents' change in income status during last 5 years and change in living standard during last 5 years. In the light of this the null hypothesis namely **“There is no significant relationship and association in**

respondents’ change in income status during last 5 years and change in living standard during last 5 years” is rejected.

7.2. Correlation between Change in Income Status and Standard Of Living during Last 5 Years

Correlation can indicate only presence and absence of relationship. It does not indicate the nature of relationship between variables. Pearson correlation was applied between change in income status and living standard in last 5 years for finding strength of their relationship and direction of association with each other.

Table 7.2 presents the summary of correlation test. It can be observed from table 7.2 that correlation coefficient is positive between Income status and standard of living. It infers increase of one variable will results increase in other too and decrease in one variable will reflect as decrease in other variable. From table it can be observed that the Pearson correlation coefficient r value is 0.827. This value shows the relationship between the change in income status and living standard during last 5 years. The coefficient of determination r^2 indicates the proportion of variation in the scores that can be predicted from the relationship between the variables. Here r^2 value is $(0.827^2 = 0.683)$ 68.3%, which represents the variability in the relationship between change in income status and living standard during last 5 years is 68.3%. It infers that 68.3% of the variation can be predicted from the relationship of variables. The other 31.7% is unexplained.

Table 7.2: Correlation between Change in Income Status and Standard of Living during last 5 years

		Income Status comparison in last 5 years	Living Standard comparison in last 5 years
Income Status comparison in last 5 yrs.	Pearson Correlation	1	0.827 ^{**}
	Sig. (2-tailed)		0.000
	N	38	38
Living Standard Comparison in last 5 yrs.	Pearson Correlation	0.827 ^{**}	1
	Sig. (2-tailed)	0.000	
	N	38	38

Further it can be observed from the table 7.2 Correlation between income status and standard of living found significant at the level of 0.01. It means there is significant, strong positive correlation between change in income status and living standard during last 5 years.

8. Conclusion and Suggestions

The study revealed that respondents’ personal characteristics such as gender, age, marital status, native district, education, work experience, occupation and average monthly income has no significant impact on change in their living standard during last 5 years due to business opportunities developed for petty traders, petty contractors and petty service providers in vicinity of this power project. Whereas there is significant relationship and association found between

change in income status and change in standard of living. There is strong and positive correlation between change in income status and change in standard of living.

People living in vicinity of power project may also try to avail such business opportunities irrespective of their personal characteristics. By availing business opportunities they can also raise their income status henceforth living standard too. As people residing in villages located near to the plant grow, their village will grow too.

9. Limitations of the Study

- The study is limited to the petty contractors / traders / service providers engaged in Kalisindh Thermal Power Plant only; therefore findings cannot be extended to other areas. However, few findings are common, which can be extended in other areas too.
- For collecting primary data from petty contractors for the study, Non probabilistic convenience sampling has been used and it has its own limitations.
- Results cannot be generalized.

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