

# ECONOMIC IMPACT OF A THERMAL POWER PROJECT ON THE NEIGHBOURHOOD – A CASE STUDY OF KALISINDH THERMAL POWER PROJECT

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## ABSTRACT

*Kalisindh Thermal Power Project is located near village Undal in State Rajasthan. For construction of this power project land of nearby villages viz Devri, Motipura, Nimoda, Singhanian and Undal was acquired. When any project starts, it always impact on nearby area in so many ways. This paper presents the findings about benefits of this Thermal Power Project on villagers of nearby villages. A survey has been carried out on people living in these villages through a structured questionnaire to collect data. As there was not much difference in background of villagers, hence convenience sampling considered appropriate for collection of data. Frequency, percentage, simple arithmetic mean and ANOVA are the statistical tools used for the analysis. With help of this study, it has been concluded that major benefits available for villagers are Employment Generation, Business Opportunities, Skill Development, Onsite Training, Reviving the Economy, Real Estate Speculation, Infrastructure Development like Roads, Shops etc and Facilities Development like ATM, School, Bank, Dispensary etc.*

**KEY WORDS :** ANOVA, Convenience Sampling, Employment Generation, Reviving the Economy, Skill Development.

When any project commissioned, it always have an impact on social and economical well being on people living in vicinity. New project gives benefits to people living in vicinity during in its construction phase as well as in its maintenance phase after commissioning. Main benefit of new project is employment generation for people living in vicinity as well as for people belongs from other areas also. Kalisindh thermal power plant is also an example of the same. It is located near village Undal approximately 15 km far from District Jhalawar. For construction of this thermal power plant land of five villages i.e. Devri, Motipura, Nimoda, Singhanian and Undal were acquired by paying compensation to villagers. A research on socio-economic impact of Kalisindh thermal power project has been carrying out. As a part of this research, Benefits available for villagers' of these five villages has been analyzed. This paper presents the findings. Many firms got directly benefited due to construction of this Thermal Power Project while few got indirect and induced benefits from this Power Plant.

## LITERATURE REVIEW

Few reviews from available good deal of literature related to this work mentioned as below:-

Berger (1977) reported by the first year of construction, over half of the original businesses in Valdez had been purchased by individuals not local to the community and during construction all new businesses (a total of 135 in the Valdez area) were operated by non-locals As a consequence, the price of land rose dramatically. Employment income and employment structure also changed drastically during construction.

Edwards Mary (2000) opined a socio-economic impact assessment examines how a proposed development will change the lives of current and future residents of a community. The indicators used to measure the potential socio-economic impacts of a development are Changes in community demographics, Results of retail/service and housing market analyses, Demand for public services, Changes

in employment and income levels and Changes in the aesthetic quality of the community.

Bičík et. al (2001) described the major land-use changes in Czechia over the past 150 years, with a focus on the social forces driving these changes. Sources of land-use data were also discussed. Though economic development is seen as the key impact on land use before 1945, under communism (1948–89), the importance of political decisions was crucial. The post-war period is analysed in greater detail as this was the era of the most significant landscape changes. The most recent period encompassed a return to market conditions, resulting in environmentally favourable land-use changes.

Kumar and Rao (2001), stated that the Indian economy today is highly prone to industrial pollution and is making compliance decisions in order to meet environmental standards. Environmental regulations impose significant costs upon industry that are fairly high and, therefore, require economic justification. They estimated the economic benefits of air quality improvement. These estimates range from one to two percent of monthly income.

Altinbilek (2002), described in his study the contribution of dams to Turkey's economy. He dealt in his paper with the role of dams in development. The need for dams, the purpose of large-dam building, major benefits and social and environmental considerations are dealt with.

Nouni et. al (2008) indicated in their study that renewable energy-based decentralized electricity supply options (such as micro hydro, dual fuel biomass gasifier systems, small wind electric generators and photo voltaic) could be financially attractive as compared to grid extension for providing access to electricity in small remote villages.

Caldés et.al (2009), estimated the socio-economic impacts of increasing the installed solar thermal energy power capacity in Spain. Using an input–output (I–O) analysis; they estimated the increase in the demand for goods and services as well as in employment derived from solar thermal plants in Spain under two different scenarios: (a) based on two solar thermal power plants currently in operation (with 50 and 17 MW of installed capacity); (b) the compliance to the Spanish Renewable Energy Plan (PER) 2005–2010 reaching 500 MW by 2010. They found that the multiplier effect of the PER is 2.3 and the total employment generated would reach 108,992 equivalent full-time jobs of 1 year

of duration. Despite this is an aggregated result, this figure represents 4.5% of current Spanish unemployment. They concluded that the socio-economic effect of the PER's solar thermal installed capacity goal is remarkable.

Bernard (2010), reviewed in his study trends in rural electrification over the past 30 years in Sub-Saharan Africa. He found, that knowledge of the impact of this has only marginally improved: low connection rates and weak productive utilization identified in the 1980s remain true today, and impacts on such dimensions as health, education, or income, though often used to justify projects, are largely undocumented. Indeed impact evaluations are methodologically challenging in the field of infrastructures and have been limited thus far. Nevertheless examples of recent or ongoing impact evaluations of rural electrification programs offer promising avenues for identifying both the effect of electricity per se and the relative effectiveness of approaches to promoting it.

Egypt Suez Thermal Power Plant Project ESIA Summary (2010) predicted that the power plant will provide a net positive socio-economic impact through the provision of employment opportunities and attraction of economic investment into the area. In addition, the use of local labor (95% during construction), will maximize these positive impacts through the development of the local skill base and will also generate increased demand for local services, materials and products.

Zhao et. al (2010), stated that Chinese electric power industry has adopted Build–Operate–Transfer (BOT) approach in a number of projects to alleviate the pressure of sole state-owned investment. The Chinese government has taken enormous efforts to create an environment to facilitate the application of BOT approach in electric power projects. Moreover, the growing attention on the sustainability issues puts the traditional major source of electricity – thermal power project under more strict scrutiny. They identified 31 success factors under 5 categories for Chinese BOT electric power projects.

Pokale W. K. (2012) stated the effect of power plants on the socio-economic environment is based on three parameters, viz. Resettlement and Rehabilitation (R & R), Effect on local civic amenities and Work related hazards to employees of the power plants. The development of civic amenities due to the setting up of any power project is directly proportional to the size of the project. The same has been observed to be the

highest for the coal based plants followed by the natural gas based plant and lastly the hydroelectric plant. The coal based plant has the highest number of accidents due to hazardous working conditions.

## OBJECTIVE

This study is dedicated to a single objective of analysing available benefits for villagers' living in vicinity of KaTPP.

## RATIONALE

Kalisindh Thermal Power Project is located near village Undal, in state Rajasthan. Few more villages are also situated in vicinity of this Thermal Power Project. No study has been carried out to discover benefits for villagers' living in vicinity as impact of this Thermal Power Project. This research is to analyze benefits available for residents of villages located near to the Kalisindh Thermal Power Project. This study is also seeking the relation of villagers with employees working in this 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 a venture to plug this gap.

## HYPOTHESIS

For this study Hypothesis framed and tested are mentioned as under:-

H<sub>01</sub>: "There is no significant difference among the villagers with respect to Employment Generation due to construction of power plant".

H<sub>02</sub>: "There is no significant difference among the villagers with respect to developing the Business Opportunities in vicinity of power plant".

H<sub>03</sub>: "There is no significant difference among the villagers with respect to Reviving the Economy".

H<sub>04</sub>: "There is no significant difference among the villagers with respect to Opportunity for Skill Development".

H<sub>05</sub>: "There is no significant difference among the villagers with respect to Opportunity for Onsite Training".

H<sub>06</sub>: "There is no significant difference among the villagers with respect to Real Estate Speculation in vicinity of power plant".

H<sub>07</sub>: "There is no significant difference among the villagers with respect to Infrastructure Development (Roads, Shops etc.)".

H<sub>08</sub>: "There is no significant difference among the villagers with respect to Development of facilities like ATM, Bank, School and Dispensary".

## RESEARCH METHODOLOGY

The nature of research used in this study is descriptive. A survey has been carried out for analyzing impact of this thermal power plant on nearby villages by filling a structured questionnaire. Convenience sampling has been used for selection of villagers. Convenience sampling has been used not only for ease of research but also for the reason is justifiable because villagers are almost on the same background. Internal consistency of the variables identified through reliability analysis. Table – 1 shows Cronbach's alpha value of the scale was found to be greater than 0.7. This shows adequate internal consistency. Statistical tools used for the analysis are frequency, percentage, simple arithmetic mean and ANOVA.

## DATA ANALYSIS AND FINDINGS

Findings emerged as the result of Data Analysis are mentioned as under:-

### BENEFITS OF THERMAL POWER PROJECT

When any new project develops in any area then communities living in vicinity of that project as well as from other areas also get benefits such as Employment Generation, Development of Business opportunities, Skill Development, Onsite training, Reviving the Economy, Infrastructure development like Roads, Shops etc., Development of Facilities like ATM, bank, Dispensary etc.

Table – 2 and 4 shows that many villagers of all five villages agreed for getting benefit of Employment Generation and Reviving the Economy. It infers that many villagers of these villages are working in different areas of Kalisindh Thermal Power Plant.

Table – 3, 8 and 9 show that villagers of only Singhania and Undal agreed about development of Business Opportunities, Infrastructure Development like Roads, Shops etc and Development of Facilities like ATM, Bank, Dispensary etc. Villages Singhania and Undal are very near to the Mega Highway. Hence get more development benefits in comparison to other villages.

Table – 5 and 6 show that only few villagers of all five villages agreed about benefit of Skill development and Onsite training. It infers that villagers of these villages do not possess professional qualification as required for working in Power Plants. Unskilled workers have fewer chances for skill development at site.

Table – 7 shows that villagers of all villages except Nimoda agreed about Real Estate Speculation after construction of Kalisindh Thermal Power Plant. Village Nimoda is little far from this Power Plant. Also very few villagers of Village Nimoda lost their land for construction of this power plant.

### INTERPRETATION OF ANOVA

Interpretation of the ANOVA table is described as under:-

#### EMPLOYMENT GENERATION

Table – 10 shows that f value of interaction between the villages and Employment Generation is 4.164 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to Employment Generation. In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to Employment Generation due to construction of power plant” is rejected.

Further observations from table – 11 are as follows:

i) Significant difference is found between the villagers of village Devri and Motipura at 0.05 level. Mean score of village Motipura is higher than that of Devri, so it can be concluded that more villagers of Devri are getting benefit of Employment Generation due to construction of power plant.

ii) Significant difference is found between the villagers of village Motipura and Nimoda at 0.01 level. Mean score of village Motipura is higher than that of Nimoda, so it can be concluded that more villagers of Nimoda are getting benefit of Employment Generation due to construction of power plant.

iii) Significant difference is found between the villagers of village Nimoda and Singhanian at 0.01 level. Mean score of village Singhanian is higher than that of Nimoda, so it can be concluded that more villagers of Nimoda are getting benefit of Employment Generation due to construction of power plant.

iv) Significant difference is found between the villagers of village Nimoda and Undal at 0.01 level. Mean score of village Undal is higher than that of Motipura, so it can be concluded that more villagers of Nimoda are getting benefit of Employment Generation due to construction of power plant.

#### DEVELOPING THE BUSINESS OPPORTUNITIES IN VICINITY OF POWER PLANT

Table – 10 shows that f value of interaction between the villages and Developing the Business

Opportunities is 12.138 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to developing the Business Opportunities. In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to developing the Business Opportunities in vicinity of power plant” is rejected.

Further observations from table – 11 are as follows:

i) Significant difference is found between the villagers of village Devri and Singhanian at 0.01 level. Mean score of village Devri is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian are getting benefit of developing the Business Opportunities in vicinity of power plant.

ii) Significant difference is found between the villagers of village Devri and Undal at 0.01 level. Mean score of village Devri is higher than that of Undal, so it can be concluded that more villagers of Undal are getting benefit of developing the Business Opportunities in vicinity of power plant.

iii) Significant difference is found between the villagers of village Motipura and Singhanian at 0.01 level. Mean score of village Motipura is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian are getting benefit of developing the Business Opportunities in vicinity of power plant.

iv) Significant difference is found between the villagers of village Motipura and Undal at 0.05 level. Mean score of village Motipura is higher than that of Undal, so it can be concluded that more villagers of Undal are getting benefit of developing the Business Opportunities in vicinity of power plant.

v) Significant difference is found between the villagers of village Nimoda and Singhanian at 0.01 level. Mean score of village Nimoda is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian are getting benefit of developing the Business Opportunities in vicinity of power plant.

vi) Significant difference is found between the villagers of village Nimoda and Undal at 0.01 level. Mean score of village Nimoda is higher than that of Undal, so it can be concluded that more villagers of Undal are getting benefit of developing the Business Opportunities in vicinity of power plant.

vii) Significant difference is found between the villagers of village Singhanian and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhanian, so it can be concluded that more villagers of



Singhania are getting benefit of developing the Business Opportunities in vicinity of power plant.

### REVIVING THE ECONOMY

Table – 10 shows that f value of interaction between the villages and Reviving the Economy is 3.043 with degree of freedom 4, which is significant at the 0.05 level. It means that there is significant difference in the villagers with respect to Reviving the Economy. In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to Reviving the Economy” is rejected.

Further observations from table – 11 are as follows:

i) Significant difference is found between the villagers of village Motipura and Nimoda at 0.01 level. Mean score of village Motipura is higher than that of Nimoda, so it can be concluded that more villagers of Nimoda agreed about Reviving the Economy.

ii) Significant difference is found between the villagers of village Motipura and Singhania at 0.05 level. Mean score of village Motipura is higher than that of Singhania, so it can be concluded that more villagers of Singhania agreed about Reviving the Economy.

iii) Significant difference is found between the villagers of village Motipura and Undal at 0.05 level. Mean score of village Motipura is higher than that of Nimoda, so it can be concluded that more villagers of Nimoda agreed about Reviving the Economy.

### OPPORTUNITY FOR SKILL DEVELOPMENT

Table – 12 shows that f value of interaction between the villages and Opportunities for Skill Development is 0.521 with degree of freedom 4, which is not significant. It means that there is no significant difference in the villagers with respect to Opportunities for Skill Development. In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to Opportunity for Skill Development” is not rejected.

### OPPORTUNITY FOR ONSITE TRAINING

Table – 10 shows that f value of interaction between the villages and Opportunity for Onsite training is 1.145 with degree of freedom 4, which is not significant. It means that there is no significant difference in the villagers with respect to Opportunity for Onsite Training. In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to Opportunity for Onsite Training” is not rejected.

### REAL STATE SPECULATION IN VICINITY OF POWER PLANT

Table – 10 shows that f value of interaction between the villages and Real Estate Speculation is 38.104 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to Real Estate Speculation. In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to Real Estate Speculation in vicinity of power plant” is rejected.

Further observations from table – 11 are as follows:

i) Significant difference is found between the villagers of village Devri and Motiura at 0.05 level. Mean score of village Motipura is higher than that of Devri, so it can be concluded that more villagers of Devri agreed about Real Estate Speculation in vicinity of power plant.

ii) Significant difference is found between the villagers of village Devri and Nimoda at 0.01 level. Mean score of village Nimoda is higher than that of Devri, so it can be concluded that more villagers of Devri agreed about Real Estate Speculation in vicinity of power plant.

iii) Significant difference is found between the villagers of village Devri and Undal at 0.01 level. Mean score of village Undal is higher than that of Devri, so it can be concluded that more villagers of Devri agreed about Real Estate Speculation in vicinity of power plant.

iv) Significant difference is found between the villagers of village Motipura and Nimoda at 0.01 level. Mean score of village Nimoda is higher than that of Motipura, so it can be concluded that more villagers of Motipura agreed about Real Estate Speculation in vicinity of power plant.

v) Significant difference is found between the villagers of village Motipura and Undal at 0.01 level. Mean score of village Undal is higher than that of Motipura, so it can be concluded that more villagers of Motipura agreed about Real Estate Speculation in vicinity of power plant.

vi) Significant difference is found between the villagers of village Nimoda and Singhania at 0.01 level. Mean score of village Nimoda is higher than that of Singhania, so it can be concluded that more villagers of Singhania agreed about Real Estate Speculation in vicinity of power plant.

vii) Significant difference is found between the villagers of village Nimoda and Undal at 0.05 level. Mean score of village Nimoda is higher than that of

Undal, so it can be concluded that more villagers of Undal agreed about Real Estate Speculation in vicinity of power plant.

viii) Significant difference is found between the villagers of village Singhanian and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed about Real Estate Speculation in vicinity of power plant.

### **INFRASTRUCTURE DEVELOPMENT (ROAD SHOPS ETC)**

Table – 10 shows that f value of interaction between the villages and Infrastructure Development (Roads, Shops etc.) is 205.535 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to Infrastructure Development (Roads, Shops etc.). In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to Infrastructure Development (Roads, Shops etc.)” is rejected.

Further observations from table – 11 are as follows:

i) Significant difference is found between the villagers of village Devri and Singhanian at 0.01 level. Mean score of village Devri is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Infrastructure Development (Roads, Shops etc.).

ii) Significant difference is found between the villagers of village Motipura and Singhanian at 0.01 level. Mean score of village Motipura is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Infrastructure Development (Roads, Shops etc.).

iii) Significant difference is found between the villagers of village Nimoda and Singhanian at 0.01 level. Mean score of village Nimoda is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Infrastructure Development (Roads, Shops etc.).

iv) Significant difference is found between the villagers of village Singhanian and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Infrastructure Development (Roads, Shops etc.).

### **DEVELOPMENT OF FACILITIES LIKE ATM, BANK, SCHOOL, DISPENSARY**

Table – 10 shows that f value of interaction between the villages and Development of facilities like ATM, Bank, School and Dispensary is 235.524 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to Development of facilities like ATM, Bank, School, and Dispensary. In the light of this the null hypothesis namely “There is no significant difference among the villagers with respect to Development of facilities like ATM, Bank, School and Dispensary” is rejected.

Further observations from table – 11 are as follows:

i) Significant difference is found between the villagers of village Devri and Singhanian at 0.01 level. Mean score of village Devri is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Development of facilities like ATM, Bank, School and Dispensary.

ii) Significant difference is found between the villagers of village Motipura and Singhanian at 0.01 level. Mean score of village Motipura is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Development of facilities like ATM, Bank, School and Dispensary.

iii) Significant difference is found between the villagers of village Nimoda and Singhanian at 0.01 level. Mean score of village Nimoda is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Development of facilities like ATM, Bank, School and Dispensary.

iv) Significant difference is found between the villagers of village Singhanian and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhanian, so it can be concluded that more villagers of Singhanian agreed with benefit of Development of facilities like ATM, Bank, School and Dispensary.

### **CONCLUSION AND SUGGESTIONS**

Every project gives various benefits to people living in vicinity. Major benefits available for villagers due to construction of this power plant are Employment Generation, Business Opportunities, Skill Development, Onsite Training, Reviving the Economy, Real Estate Speculation, Infrastructure Development like Roads, Shops etc and Facilities Development like ATM, School, Bank, Dispensary etc. Many firms get directly benefited from this power plant while some get indirect benefits.

Professional Institutions may open their branches in these villages so that children of villagers can get professional qualification for working in power plant.

Government can also open a hospital near to the villages so that villagers can get benefit. Traders can also avail the opportunity to expand their business and also generate employment opportunities for local villagers. Firms can take an initiative to open ancillaries required for this power project.

### LIMITATIONS OF THE STUDY

Major limitations of this study are mentioned as under:-

- The study is limited to the people living in villages located near to the Kalisindh Thermal Power Plant only; therefore findings may not be valid for other areas. However, it may indicate some common benefits.
- For collecting primary data from villagers, non probabilistic convenience sampling has been used in this study. It has its own limitations.
- Results cannot be generalized.

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### APPENDIX

Table – 1:

Reliability Statistics

Name of Village	Cronbach Alpha
Devri	0.735
Motipura	0.771
Nimoda	0.724
Singhanian	0.757
Undal	0.809

Table – 2:

Employment Generation

Village	Yes (%)	No (%)
Devri	32	68
Motipura	13	87
Nimoda	48	52
Singhanian	24	76
Undal	23	77

**Table – 3:****Developing the Business Opportunities**

Village	Yes (%)	No (%)
Devri	0	100
Motipura	2	98
Nimoda	0	100
Singhanian	32	68
Undal	15	85

**Table – 4:****Reviving the economy**

Village	Yes (%)	No (%)
Devri	32	68
Motipura	15	85
Nimoda	48	52
Singhanian	36	64
Undal	35	65

**Table – 5:****Opportunity for skill development**

Village	Yes (%)	No (%)
Devri	14	86
Motipura	11	89
Nimoda	13	84
Singhanian	14	86
Undal	20	80

**Table – 6:****Opportunity for onsite training**

Village	Yes (%)	No (%)
Devri	4	96
Motipura	6	94
Nimoda	2	98
Singhanian	12	88
Undal	8	92

**Table – 7:****Real estate speculation**

Village	Yes (%)	No (%)
Devri	80	20
Motipura	62	38
Nimoda	0	100
Singhanian	66	34
Undal	17	83

**Table – 8:****Infrastructure development (Roads, Shops etc)**

Village	Yes (%)	No (%)
Devri	0	100
Motipura	0	100
Nimoda	0	100
Singhanian	88	12
Undal	7	93

**Table – 9:****Development of facilities like ATM, Bank, School, Dispensary**

Village	Yes (%)	No (%)
Devri	0	100
Motipura	0	100
Nimoda	0	100
Singhanian	90	10
Undal	7	93



**Table – 10 : ANOVA**

		Sum of Squares	Df	Mean Square	F	Sig.
Good relations with people working in plant	Between Groups	.000	4	.000	.	.
	Within Groups	.000	248	.000		
	Total	.000	252			
If relations are not good, then reasons	Between Groups	.000	4	.000	.	.
	Within Groups	.000	248	.000		
	Total	.000	252			
Employment Generation	Between Groups	3.187	4	.797	4.164	.003
	Within Groups	47.446	248	.191		
	Total	50.632	252			
Developing the Business Opportunities	Between Groups	3.819	4	.955	12.138	.000
	Within Groups	19.509	248	.079		
	Total	23.328	252			
Reviving the economy	Between Groups	2.625	4	.656	3.043	.018
	Within Groups	53.486	248	.216		
	Total	56.111	252			
Opportunity for skill development	Between Groups	.263	4	.066	.521	.720
	Within Groups	31.325	248	.126		
	Total	31.589	252			
Opportunity for onsite training	Between Groups	.288	4	.072	1.145	.336
	Within Groups	15.570	248	.063		
	Total	15.858	252			
Real Estate speculation	Between Groups	23.759	4	5.940	38.104	.000
	Within Groups	38.660	248	.156		
	Total	62.419	252			
Infrastructure Development (Road, Shops etc)	Between Groups	29.880	4	7.470	205.535	.000
	Within Groups	9.013	248	.036		
	Total	38.893	252			
Development of facilities like ATM, Bank, School, Dispensary	Between Groups	31.277	4	7.819	235.524	.000
	Within Groups	8.233	248	.033		
	Total	39.510	252			

**Table – 11: Post Hoc Tests : Multiple Comparisons**

Dependent Variable	(I) Village Name	(J) Village Name	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Employment Generation	Devri	Motipura	-.19234*	.08886	.031	-.3674	-.0173
		Nimoda	.15826	.08936	.078	-.0177	.3343
		Singhanian	-.08000	.08748	.361	-.2523	.0923
		Undal	-.08667	.08375	.302	-.2516	.0783
	Motipura	Devri	.19234*	.08886	.031	.0173	.3674
		Nimoda	.35060*	.09072	.000	.1719	.5293
		Singhanian	.11234	.08886	.207	-.0627	.2874
		Undal	.10567	.08520	.216	-.0621	.2735
	Nimoda	Devri	-.15826	.08936	.078	-.3343	.0177
		Motipura	-.35060*	.09072	.000	-.5293	-.1719
		Singhanian	-.23826*	.08936	.008	-.4143	-.0623
		Undal	-.24493*	.08572	.005	-.4138	-.0761
	Singhanian	Devri	.08000	.08748	.361	-.0923	.2523
		Motipura	-.11234	.08886	.207	-.2874	.0627
		Nimoda	.23826*	.08936	.008	.0623	.4143
		Undal	-.00667	.08375	.937	-.1716	.1583
	Undal	Devri	.08667	.08375	.302	-.0783	.2516
		Motipura	-.10567	.08520	.216	-.2735	.0621
		Nimoda	.24493*	.08572	.005	.0761	.4138
		Singhanian	.00667	.08375	.937	-.1583	.1716
Developing the Business Opportunities	Devri	Motipura	.02128	.05698	.709	-.0910	.1335
		Nimoda	.00000	.05730	1.000	-.1129	.1129
		Singhanian	.32000*	.05609	.000	.2095	.4305
		Undal	.15000*	.05371	.006	.0442	.2558
	Motipura	Devri	-.02128	.05698	.709	-.1335	.0910
		Nimoda	-.02128	.05817	.715	-.1358	.0933
		Singhanian	.29872*	.05698	.000	.1865	.4110
		Undal	.12872*	.05463	.019	.0211	.2363
	Nimoda	Devri	.00000	.05730	1.000	-.1129	.1129
		Motipura	.02128	.05817	.715	-.0933	.1358
		Singhanian	.32000*	.05730	.000	.2071	.4329
		Undal	.15000*	.05497	.007	.0417	.2583
	Singhanian	Devri	-.32000*	.05609	.000	-.4305	-.2095
		Motipura	-.29872*	.05698	.000	-.4110	-.1865
		Nimoda	-.32000*	.05730	.000	-.4329	-.2071
		Undal	-.17000*	.05371	.002	-.2758	-.0642
	Undal	Devri	-.15000*	.05371	.006	-.2558	-.0442
		Motipura	-.12872*	.05463	.019	-.2363	-.0211
		Nimoda	-.15000*	.05497	.007	-.2583	-.0417
		Singhanian	.17000*	.05371	.002	.0642	.2758
Reviving the economy	Devri	Motipura	-.17106	.09435	.071	-.3569	.0148
		Nimoda	.15826	.09488	.097	-.0286	.3451
		Singhanian	.04000	.09288	.667	-.1429	.2229

Real Estate speculation	Undal	.03000	.08893	.736	-.1451	.2051
		.17106	.09435	.071	-.0148	.3569
		.32932*	.09632	.001	.1396	.5190
		.21106*	.09435	.026	.0252	.3969
	Motipura	.20106*	.09046	.027	.0229	.3792
		-.15826	.09488	.097	-.3451	.0286
		-.32932*	.09632	.001	-.5190	-.1396
		-.11826	.09488	.214	-.3051	.0686
	Nimoda	-.12826	.09101	.160	-.3075	.0510
		-.04000	.09288	.667	-.2229	.1429
		-.21106*	.09435	.026	-.3969	-.0252
		.11826	.09488	.214	-.0686	.3051
	Singhania	-.01000	.08893	.911	-.1851	.1651
		-.03000	.08893	.736	-.2051	.1451
		-.20106*	.09046	.027	-.3792	-.0229
		.12826	.09101	.160	-.0510	.3075
	Undal	.01000	.08893	.911	-.1651	.1851
		-.18298*	.08021	.023	-.3410	-.0250
		-.80000*	.08066	.000	-.9589	-.6411
		-.14000	.07896	.077	-.2955	.0155
	Devri	-.63333*	.07560	.000	-.7822	-.4844
		.18298*	.08021	.023	.0250	.3410
		-.61702*	.08189	.000	-.7783	-.4557
		.04298	.08021	.593	-.1150	.2010
	Motipura	-.45035*	.07691	.000	-.6018	-.2989
		.80000*	.08066	.000	.6411	.9589
		.61702*	.08189	.000	.4557	.7783
		.66000*	.08066	.000	.5011	.8189
	Nimoda	.16667*	.07738	.032	.0143	.3191
		.14000	.07896	.077	-.0155	.2955
		-.04298	.08021	.593	-.2010	.1150
		-.66000*	.08066	.000	-.8189	-.5011
	Singhania	-.49333*	.07560	.000	-.6422	-.3444
		.63333*	.07560	.000	.4844	.7822
		.45035*	.07691	.000	.2989	.6018
		-.16667*	.07738	.032	-.3191	-.0143
	Undal	.49333*	.07560	.000	.3444	.6422
		.00000	.03873	1.000	-.0763	.0763
		.00000	.03895	1.000	-.0767	.0767
		.88000*	.03813	.000	.8049	.9551
	Devri	.06667	.03651	.069	-.0052	.1386
		.00000	.03873	1.000	-.0763	.0763
		.00000	.03954	1.000	-.0779	.0779
		.88000*	.03873	.000	.8037	.9563
Infrastructure Development (Road, Shops etc)	Motipura	.06667	.03714	.074	-.0065	.1398
		.00000	.03895	1.000	-.0767	.0767
		.00000	.03954	1.000	-.0779	.0779
		.88000*	.03895	.000	.8033	.9567
	Nimoda	.06667	.03736	.076	-.0069	.1403
		-.88000*	.03813	.000	-.9551	-.8049
		-.88000*	.03873	.000	-.9563	-.8037
	Singhania					

Development of facilities like ATM, Bank, School, Dispensary	Undal	Nimoda	-.88000*	.03895	.000	-.9567	-.8033
		Undal	-.81333*	.03651	.000	-.8852	-.7414
		Devri	-.06667	.03651	.069	-.1386	.0052
		Motipura	-.06667	.03714	.074	-.1398	.0065
		Nimoda	-.06667	.03736	.076	-.1403	.0069
		Singhanian	.81333*	.03651	.000	.7414	.8852
	Devri	Motipura	.00000	.03702	1.000	-.0729	.0729
		Nimoda	.00000	.03722	1.000	-.0733	.0733
		Singhanian	.90000*	.03644	.000	.8282	.9718
		Undal	.06667	.03489	.057	-.0021	.1354
	Motipura	Devri	.00000	.03702	1.000	-.0729	.0729
		Nimoda	.00000	.03779	1.000	-.0744	.0744
		Singhanian	.90000*	.03702	.000	.8271	.9729
		Undal	.06667	.03549	.062	-.0032	.1366
	Nimoda	Devri	.00000	.03722	1.000	-.0733	.0733
		Motipura	.00000	.03779	1.000	-.0744	.0744
		Singhanian	.90000*	.03722	.000	.8267	.9733
		Undal	.06667	.03571	.063	-.0037	.1370
	Singhanian	Devri	-.90000*	.03644	.000	-.9718	-.8282
		Motipura	-.90000*	.03702	.000	-.9729	-.8271
		Nimoda	-.90000*	.03722	.000	-.9733	-.8267
		Undal	-.83333*	.03489	.000	-.9021	-.7646
	Undal	Devri	-.06667	.03489	.057	-.1354	.0021
		Motipura	-.06667	.03549	.062	-.1366	.0032
		Nimoda	-.06667	.03571	.063	-.1370	.0037
		Singhanian	.83333*	.03489	.000	.7646	.9021

\*. The mean difference is significant at the 0.05 level.