

Research Article

**WINDFALL EFFECTS OF OIL AND GAS DISCOVERY ON ECONOMIC  
CONDITIONS IN DISTRICT KARAK, PAKISTAN**

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**Abstract**

The present study was conducted to find out the windfall effects of oil and gas discovery with reference to social development in district Karak, Khyber Pakhtunkhwa, Pakistan. The primary data for the study was collected from district Karak. The simple random sampling technique was adopted for selection of six village councils including Amankot, Sam Banda, Hayatabad, Bargyi, Jatta Ismael Khel and Sanda Khurram from three union councils including Gorgori, Terri, and Jatta Ismail Khel of Tehsil Banda Daud Shah District Karak, Khyber Pakhtunkhwa, Pakistan. The data was collected through an interview schedule from 376 sampled respondents. The inferences were drawn through univariate and bivariate modes of analysis. A significant association was found between social developments and exploration of gas and oil has led to the emergence of new era of development ( $p= .000$ ), free gas provided to local consumers ( $p= .000$ ), revenue collected from gas is being spent on the welfare of locals ( $p= .000$ ), at the same time People were able to meet their daily requirements due to availability of jobs from gas exploration. There is a need that the government may fix a quota regarding jobs for local inhabitants of concerned areas. This may further enhance a spell of prosperity and happiness in the area.

**Keywords:** Oil, Gas, Unemployment, livelihood, Social Development.

**INTRODUCTION**

The word petroleum used for oil and gas collectively, and regarded as fossil fuels because it is theorized (hypothesized) that both were formed from the buried dead body of animals and plants million years ago died (Chapman & Sheehan, 2003). Natural gas is a mixture of dissimilar substances, such as methane gas, alkane, carbon dioxide, nitrogen and helium, which are used for different purposes such as heating of room, cooking of meals (food), formation/production of electricity and to use as a fuel in transport purpose. It is also used in the process of making plastics and other organic substances and for running different machines in factories (Stellman, 1998). Oil is a greasy fluid and a mixture of alkanes, nitrogen, cycloalkanes, sulfur, iron etc. (Sivansankar,

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2008). Oil may have different colors i.e. yellow red, green, and mostly dark brown (Guarina & Medjimurec, 2014).

The segment of oil and gas is divided into two activities. One is upstream activities (industry) which is related to the process of exploring, making and to transporting of oil and gas to the dispensation facility, where unwanted substances can be removed. The other is downstream activities which are related to making, sharing process, and selling of hydrocarbon goods (Barclays Bank, 2015). Energy plays an important role in economic development of a country because most of the invention, distribution, and consumption activities of a country are relying over energy (Fatima, 2018). From the very beginning, natural gas has been used as a mean of electricity, Natural gas declare itself positively and often forcibly as an advantageous primary source of energy, that is why it is used instead of oil now a day (Rolo et al., 2008). Natural gas has got more significance because it is environment friendly source of energy as it emit less carbon dioxide as compared to coal etc., due to which the chances of pollution of environment are very less (Shahbaz et al., 2014). These benefits are inviting various states towards the use of natural gas as an alternate mean of energy production (Apergis et al., 2010). Oil has first position as a source of energy in world, while natural gas is on second position (Cabral et al., 2013).

States such as Qatar, Bahrain, Oman, Kuwait, Saudi Arabia, and the United Arab Emirates (UAE) made a council known as Gulf Cooperation Council (GCC). Although these states are differing from one another in population and also in territories, but they are situated nearer to one another in Middle East. Therefore, they are dependent on one another for international security, needs, protection and trade especially oil and gas sector (Gulf Cooperation Council, 2016). These six nations have a large amount of oil and gas, which is a main source of their economy and they export their extra oil and gas to other countries on a comparatively lower price. Moreover, Qatar, Kuwait, UAE, and Saudi Arabia are the main supporters of the Organization of the Petroleum Exporting Countries (OPEC) that came into being in 1960. Here, oil and gas, especially oil occurring in large amounts, so oil is a great source of energy and economy, environment friendly, have higher heating capacity and is cheaper than the other resources. However, oil burning emits more carbon dioxide as compare to gas, which harm environment and ecosystem. This organization make safe and sure, continuous supply, feasibility price of oil and gas for the importing and exporting countries in the market (OPEC: Brief History, 2016).

The people who live in areas where natural resources occur, have been effected negatively (Collier, 2003). In some countries like Tanzania, where natural resources occur in abundance, still majority of people are poor. In short no people get off full advantages from the natural resources and the rest of the people are deprived by them through social reason of poverty. This problem mostly occurred in African countries at the time of Colonialism and Imperialism. But the imperialist cannot be criticized forever for the backwardness prevailing presently and in future. Now a day Tanzania is in the state of development, with imperialist techniques. The imperialist tries to give pleasure to the people by the use of power (Ibid, 2014). In fact, from 2000 to 2008 increase in the prices of oil were for purpose to bring development in GCC states. But additionally it compelled the government to spend some of the savings on subsidies, social activities and to boost the growth and development, just like Saudi Arabia spend more resources on education to reduce the burden of jobless (Factbook: Saudi Arabia, 2016).

Assessing windfall effects of oil and gas discovery with reference to economic effect in district Karak, Khyber Pakhtunkhwa, Pakistan has been focused on this research study. Moreover, to probe the economic and developmental effects of discovery in the study area which has been left by the researchers unnoticed so far, was the motivation for conducting this research focusing on Pashtun community of District Karak, Khyber Pakhtunkhwa, Pakistan, as the universe of the study.

## **LITERATURE REVIEW**

Coopers (2015) stated that the oil and gas companies hire many people from around the world. These are commonly jobs of high-pay due to which people are able to live above the usual income, use inside the community and provide different taxes for the development of governments. The manufacturing industry provides the employment opportunities to the host communities for inexperienced and low experienced labour. In addition, where the manufacturing of rough oil and natural gas is ready in onshore sites, petty subcontractors from the side of the host and connecting communities are commonly given primacy after pre-qualification.

Perryman (2014) stated that the financial advances of oil and gas discovery events (with multiplier impacts) are expected to consist of just about US \$1.2 trillion in gross product for each year and round about 9.3 million stable contracts of job and occupation in the United States. Rahman (2004) stated that oil and gas have established the essence of the world saving for about one hundred years and considered for about half of mankind's main energy supply.

EIA (2013) reported that the oil and natural gas play a very important role in the development of Libyan economy, which representing nearly 96 percent of revenue in the shape of taxes etc. Libyan Government, in the year 2012, it raised up to nearly 98 percent (about \$4 billion for every month) of all export and trade revenue. Energy Information Administration (2013) reported that the same is the case with the economy of Kuwait and is highly dependent on oil and natural gas activities, and 95% of overall trade earnings is due to oil and gas activities Government received profits in shape of taxes due to which its GDP also raised due to oil and gas activities.

IEA Publications (2014) circulated an information about the growing of the rough oil and natural gas manufacturing industry over the previous some years which has been impressive. The main cause for the growing is due to the development in machinery, which has facilitated to expose past unrecoverable assets in shale and hidden offshore places to the finding of new assets.

Kleinhenz and Smith (2011) reported that the overall amount of financial effects of rough oil and natural gas creation on the host land or community particularly for developing countries may be well expressed through effects: which may be direct, indirect, and induced. The direct effects are related to the jobs, profession, labour income as well as significance added to the oil and gas manufacturing industry. While indirect effects are related with the similar standard but happening through the supply chain because of rough oil and natural gas manufacturing activities. Induced effects are related to jobs, profession, labour income, and significant addition stemming from domestic expenditure of labour and owner's revenue received which may because directly or indirectly through rough oil and natural gas manufacturing events. Rough oil and natural gas manufacturing activities may be found to create vast financial donations, which help both the host nations as well as citizenry.

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Robert (2008) stated that it is the notion of Balochi that with the discovery of natural gas and oil a change has been occurred in the attitude of the federal government towards the concerned provinces people has been considered meaningless. The profitable jobs were occupied from outside the province; local people were generally hired in low-end careers and on daily wages.

Karl (2007) expressed that Oil and gas production industries cause hazards for the communities and also create opportunities for which they shall be motivated by main shareholders such as government, supervisory body and machinists. Africa has traditionally been identified, as an area with plentiful natural assets but levels of poverty are very high but the case is opposite with Africa, these advantages are insignificant. Unluckily, the positive opinions incline to be harmful in actual sense. These negatives contain slower as compare to expected development, obstacles to financial expansion, reduced social prosperity programs, poverty, discrimination and unemployment. Moreover, “countries reliant on oil as their main means for growth are categorized by poor governance and a high level of corruption, rent seeking culture, frequently shocking financial, health and social consequences for the local people, and high occurrences of clash and war. Shortly, countries that are totally dependent on oil and gas for their living finally become among the most financially worried, the most undemocratic countries in the world”.

Collier and Paul (2007) stated that after 1980s the notion that natural assets richness is one of the bless to encourage financial development has become a question because some countries having more natural resources failed to succeed; the occurrence of oil and gas and other natural resources can bring an adverse financial results. Socioeconomic incidents just like resource curse irrational and emotional performance of the elite which stimulates weak resource administration; and rent searching political actors. So when these natural resources just like oil and gas are used by them for their own purposes then it will raise a negative financial development, price increase, low savings, high level of unemployment, high level of uncertainty, further there will be high level of corruption and poverty, and no human progresses.

Muneer & Asif (2007) stated that oil and natural gas play the role as lifeline in the development of Pakistan and thus it is economically dependent to a significant level on oil and gas for economic development. Moreover, most of the people have jobs in oil and gas industries.

Intikhab (2007) states that the economy of oil and gas is under the control of militants. Manufacturing of oil and gas on marketable basis in the area happened in July 2004 when Chanda field started working in district Kohat. After that in January 2005, one oil and gas field also started working on commercial basis at the city of Gurgury and Makori in district Karak. During rising power of Taliban as well as Al-Qaeda components in the regions of Khyber Pakhtunkhwa closest with Waziristan, financial activities also changed in the region of Karak and Kohat. However, local people up till now acquired financial profits of the oil and natural gas of their regions, benefits produced by the rising financial activities are observable. However, the locals and provincial governments are doubtful about how to acquire those profits. Currently, the provincial government seems to get benefits of local and overseas investments—just like investment spending by different oil and gas companies. The visible example is of the MOL Pakistan Oil and Gas Company, which has invested Rs220, million in Karak district. This is because of the company that many local people are at jobs and what they earn from the company they invest in other economic activities.

Collier and Hoeffler (2002) stated that those activities which are related to oil and gas have a great effects on people's socio-economic activities. Safety of the local people and security of food are usually affected. Different disease such as heart attack and cancer have raise due to inadequate safety measurers of oil and gas activities.

Burger (1997) states that oil spills can also have long-term negative financial impacts by injuring fisheries, due to which decrease occurs in fisher folk and have a negative consequence on livelihood of people which are related to fisheries, polluting fishing equipment, and decreasing fish stores. People are upset to eat those fishes that are bare to oil spills, which can further hurt very much the market related to fish occupation. Oil spill only in Alaska resulted an estimated income loss of \$135 million in a single season. Thus most of the fishermen became jobless due to oil spill.

Doyle (1994) reported that oil and gas also play an important role in world occupations. Nearly two or more than two billion dollars per day comes from one hand to another in petroleum businesses worldwide. Moreover, the livelihood of most people is because of oil and gas activities.

## METHODOLOGY

The study was conducted in district Karak, Khyber Pakhtunkhwa, Pakistan. At first stage Banda Daud Shah Tehsil was selected randomly then three union councils (UCs) were selected from the selected Tehsil namely, Gurgori, Teri and jatta Ismael khel respectively, furthermore two villages of each selected UCs were selected for data collection on random basis. The head of each household was the potential respondent for this study. To determine the sample size of the present study proportional allocation formula was used. Out of total 15198 population of the forementioned villages, a sample of 376 heads of households were the determined selected sample for getting information on the basis of criteria ,adopted by Sekaran (2003). The selected sample was proportionally distributed as outlined by Coohran (1977). Shown further through formula, designed by Chaudry and Kamal (1996) as follows:-

$$n_i = n \cdot N_i / N$$

Where,

n= sample size of total population

n<sub>i</sub> = sample size of each group

N<sub>i</sub>= No of the respondents in each group

N= total population

The study is a combination of both secondary and primary data. The secondary data was collected from all the available sources i.e. from literature, while for primary data, a comprehensive interview schedule was designed for collection of data. Methods of data analysis. After the collection of data, it was first coded and then entered in computer by using SPSS software for analysis. All relevant statistical tools i.e. frequency and percentage distribution were carried out. Furthermore, to measure the effects of dependent variable social development upon independent variable economic effect bivariate analysis was conducted. Bivariate analysis was carried out to measure the association between dependent and independent variable. In the present case the dependent variables were induced and cross tabulated with independent variable namely economic

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effects, through application of  $\chi^2$ -test statistics. The formula used to compute Chi-square is as following:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

Where  $\chi^2$  is chi-square,  $O_{ij}$  is observed frequencies in with row and  $j$  th column.  $E_{ij}$  is expected frequencies in  $i$  throw and  $j$  th column whereas  $r$  is number or rows and  $n$  is number of column. The large summation sign,  $\Sigma$  (capital sigma), tells us to compute the fractions for each cell and then sum over all cells to get.

### FINDINGS AND ANALYSIS

This section is comprised of the analysis of data through its in-depth interpretation. It included the uni-bivariate analysis and the relative interpretation of each. Uni variate focuses on explanation through frequency distribution of the data. The bivariate is based on cross tabulation of the dependent to independent variable whenever inferences are drawn through  $\chi^2$ - statistics.

#### **Economic Effects**

Economy is the backbone of any system for the development, both in human resources and infra-structural development. A Strong economy usually brings prosperity and harmony, if corruption is not prevalent.

Table 1 indicated the results pertaining to economic effects and disclosed that 82.7 percent amongst the respondents replied yes, 10.9 percent replied no while, 6.4 percent had no idea about the statement that exploration of gas and oil has led to the emergence of new era of development. It could be inferred from these findings that exploration of oil has brought a positive change in the development of local people and area. All such development continuously enhances the chances of access to the basic amenities of life for the people. However, these findings were not supporting the conclusion of Karl (2007) who stated that the consequences of oil and gas in Africa was opposite to the expectation and one can observe poverty and unemployment on high level as before oil and gas exploration, moreover there was no development.

Similarly, 78.5 percent of the respondents replied yes that free gas is provided to local consumers, while, 20.4 percent negated it and only 1.1 percent expressed ignorance. These facts showed that majority were enjoying free gas which is one of the expensive commodities being provided to people of other parts of country with high rates. These results revealed that royalty rights were enjoyed by the people of the study area for domestic use of this precious commodity. These findings were in support to the findings of Klare (2001), who argued that authority or a gas exploration across the globe provides gas to the local affected as a policy dynamics which necessitates the provision of local commodity to locals on priority ground, without any costs. This right of people has also been guaranteed in the 18<sup>th</sup> amendment of the 1973 constitution of Pakistan. Such provisions are usually enjoyed by people in most OPEC member countries.

Similarly, 20.5 percent of the respondents answered yes to the statement that revenue collected from gas is being spent on the welfare of locals, 71.3 percent answered with no while 8.2 percent could not responded. The study findings are also supported by Karl (2007), who disclosed that the exploration of oil and gas are very fruitful for the host community. On one hand it provides jobs to local community while on other side it generates revenue from oil and gas companies, which

are further used for wellbeing of local people. Application of their supporting packages in the shape of finances and lend usually improve status of the community with provision of jobs, scholarships for students, welfare programs for the elders and infrastructural development.

The study further disclosed that 32.2 percent of the respondents supported the statement that oil and gas companies hire many people from the local community, 64.4 percent answered no while 3.5 percent answered didn't know. These findings reflected that provisions of jobs for the locals are always on card; however, meeting the selecting criteria could be on the reason of low local representation in the jobs. Basically, the jobs in most of such activities required technical knowledge, essential for operating the heavy machinery. Cooper (2015) findings also elaborated these findings that oil and gas exploration usually accelerate the jobs prospects in the area of exploration for local people.

Similarly, 11.4% percent of the respondents were in favour of the statement that free of cost gas is provided to local industries, 87.0 percent were not in affirming of the statement while 1.6 percent did not know about the statement. These facts showed that, local people were not provided with free gas for their industries. As supported by the finding of Pulido (1996), who argued that explorative bodies provide gas for the affected as well as local people. He says that most of the local people of OPEC related countries enjoy free of cost gas. This gas is for domestic use and not for commercial activities in country.

Likewise, 34.0 percent of the respondents were in favour of the statement that provision of jobs to the locals has improved their life standard. While 60 percent did not favour the statement, 5.6 percent did not know about the statement. Based on these findings it could be concluded that, the local people were able to get jobs in the oil and gas companies, since their life standards were not changed due to low salary, no extra facilities with low job profile. So the authorities should provide such facilities to local people which may improve their living standards. These findings were closely related to the findings of Ross (1999), who argued that due to oil and gas discoveries local people got more opportunities for getting jobs and jobs as a source of earnings can bring improvement in the standard of living of local people.

Furthermore, 31.4 percent of the respondents were of the view that people are able to meet their daily requirements due to availability of jobs from gas exploration, 60.6 percent negated and only 8.0 percent expressed ignorance. Based on these findings it could be attributed that, exploration of oil and gas should play a major role in the fulfilment of the basic needs, but most of the local people who are working in oil and gas companies are not able to fulfil their requirements of daily use. These findings were closely related with the findings of Doyle (1994), who stated that most of the people are working in oil and gas industries, some of the people have opened small businesses run by oil and gas and thus they are able to meet their daily requirements.

Similarly, 63 percent of the respondents answered yes to the statement that revenues of oil and gas will help to cover the debt at national level, 20.2 percent answered no, while 16.8 percent answered did not know. Based on these findings it could be deduced that the exploration of oil and gas is like an acceleration tool in the development of economy of a country and helps in the minimization of national debts. As Scott (2013) stated in his findings that because of oil and gas discovery a significant amount of revenues is collected, which is used to cover the national debt.

**Table 1: Economic Effects**

No	Statements	Yes	No	Do not Know	Total
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1	Exploration of gas and oil has led to the emergence of new era of development	311(82.7)	41(10.9)	24(6.4)	376(100)
2	Free gas is provided to locals	294(78.2)	78(20.2)	4(1.1)	376(100)
3	A portion of revenue collected from gas is being spent on welfare of locals	77(20.5)	268(71.3)	31(8.2)	376(100)
4	The oil and gas companies hire people from local community	121(32.2)	242(64.4)	13(3.5)	376(100)
5	Free of cost gas is provided to local industries	43(11.4)	327(87.0)	6(1.6)	376(100)
6	Provision of jobs to locals by oil and gas companies has improved their life standard	128(34.0)	226(60.1)	22(5.6)	376(100)
7	People are able to meet the daily requirements due to availability of jobs from gas exploration	118(31.4)	228(60.6)	30(8.0)	376(100)
8	The revenues of oil and gas will help to cover the debt at national level	237(63.0)	76(20.2)	63(16.8)	376(100)

**Bi-variate Analysis**

**Association between Social Development and Economic Effects**

Economic system speaks about consumption of goods and services within prescribed parameters. Social development indicates inclusion of every member to be equally supported towards acquisition of basic amenities of life.

Table 2 discovered the association between social development and economic effects and indicated that a highly significant association ( $P=0.000$ ) was found between exploration of gas and oil leading to the emergence of new era of development with social development. It could be deduced from the findings that exploration of gas and oil had led to the initiation of a new era of social development with hopes of improvements in livelihood and subsequent rise in life standard. However, Karl (2007) intimated otherwise and disclosed that in Africa the exploration of gas and oil is a major tool of hurdling prosperity. It further added to the miseries of people stuck with conservative mind, and class based society as a resultant factor of unemployment, discrimination at micro level and poverty at macro level respectively.

In addition, a non-significant association ( $P=0.087$ ) was found between free gas is provided to local consumers and social development. These findings reflect that although gas is explored but locals had not been given it free of cost. Based on these findings it would be attributed that the rights of royalty of the universe area was neglected by the virtue of lack of access and utilization of gas free of cost or with minimum taxation. These findings negated the work of Klare (2001), who argued that influential agencies try their best to provide free gas for domestic use to the locals,

labourers in gas factories on a similar passion, as being enjoyed by the people of OPEC countries inhabitants.

Furthermore, a highly significant association ( $P=0.000$ ) was expressed between revenue collected from gas is being spent on the welfare of locals and social development. Based on these findings it could be deduced that revenue collected from gas has been spent on the welfare of the local people such as making of hospitals and other economic benefits to the local dwellers. These findings were also supported by Karl (2007) who disclosed that the occurrence of oil and gas can accelerate social progress, financial growth, brings jobs to the local people in a country. All this may be possible if oil and gas are used in a judicious way. On the other hand industries of oil and gas provide billions of dollars in the form of revenue to local government which are further used for the welfare of local people. These welfare projects include education, health and other allied branches of human development leading to professional excel.

Similarly, a highly significant association ( $P=0.000$ ) was found between oil and gas companies hire many people from the local community with social development. This information spells over the creation of jobs opportunities to the locals. Intervention of exploration has given an opportunity to the locals and worker in their activities both as skilled and unskilled workers. Based on these findings it could be divulged that community was placed to work and involved in the company in their local area leading to a prosperity and healthier economic situation of the local community members. These results were further supported by Coopers (2015) who argued that the manufacturing industries of oil and gas provides employment chances to the local people and thus hire so many peoples which further rise their capabilities, making them competitive both at national as well as at international level.

Similarly, a highly significant association ( $P=0.000$ ) was confirmed between free of cost gas is provided to local industries and social development. Beside jobs, local people had also availed this precious commodity for their local industry free of cost. Based on these findings it could be deduced that free of cost gas should be provided to the local members to live their social life in more easy way by the virtue of royalty rights. However these results were in contrast with the finding of Pulido (1996) who disclosed that it will be very harmful for gas companies and a country to provide free gas to local industries, because gas companies play the major role in the countries revenue.

In addition to the above findings, a highly significant association ( $P=0.000$ ) was existed between provision of jobs to the locals has improved their life standard with social development. Based on these findings it could be concluded that due to gas exploration the community people were indulged in the gas company as an employee resultantly the standard of social and economic indicators of life has been shifted to better as fulfilling the prerequisites of a standard and healthier life. These findings are supported by Ross (1919) who discovered that local people are lucky who have found jobs in oil and gas industries because of these jobs they are able to receive good salaries, allowances, as well as grants due to which their standard of life has been improved as the people of Ghana. Moreover, before getting of these jobs they were not able to afford all those different things which they have now due to oil and gas discoveries. Even due to oil and gas discoveries the life standard of common people has been improved. The living population has increased due to

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immigration to the oil and gas field plants, more people are dependent on vehicles and the pick and drop for the driver has been increased.

Similarly, a highly significant association ( $P=0.000$ ) was found between people are able to meet the daily requirements due to availability of jobs from gas exploration and social development. As like the preceding outcome people are able to meet their daily prerequisites of social life affairs as findings of Doyle (1994) suggested that a lot of people are able to get good jobs and they can get good salaries due to which they can fulfil their basic needs of daily life.

Moreover, a significant association ( $P=0.014$ ) was found between revenues of oil and gas will help to cover the debt at national level and social development. Based on these findings it is deduced that the persistence of oil and gas is a generating tool of economy of any country and helps in minimization of the debts as Jen (2013) articulated in his findings and suggested that revenues due to oil and gas discoveries may help the country to cover its debt. Sometime, these discoveries make the country so strong economically that it can give oil and gas to other countries on debt as well.

**Table 2: Relationships between Economic Effects and Social Development**

Statements	Perception	Social development			total	Chi-Square (P-Value)
		Yes	No	don't Know		
Exploration of gas and oil has led to the emergence of new era of development	Yes	152(40.4%)	26 (6.9%)	0 (0%)	178 (47.3%)	$\chi^2=30.932$ (0.000)
	No	158(42.0%)	14(3.7%)	23(6.1%)	195 (51.9%)	
	Don't know	1(0.3%)	1(0.3%)	1(0.3%)	3(0.8%)	
	Total	311(82.7%)	41(10.9%)	24(6.4%)	376(100%)	
Free gas is provided to locals	Yes	133(35.4%)	45(12.0%)	0(0.0%)	178(47.3%)	$\chi^2=8.131$ (.087)n
	No	158(42.0%)	33(8.8%)	4(1.1%)	195(51.9%)	
	Don't know	3(0.8%)	0(0.0%)	0(0.0%)	3(0.8%)	
	Total	294(78.2%)	78(20.7%)	4(1.1%)	376(100%)	
A portion of revenue collected from gas is being spent on welfare of locals	Yes	62(16.5%)	114(30.3%)	2(0.5%)	178(47.3%)	$\chi^2=58.362$ (.000)
	No	15(4.0%)	151(40.2%)	29(7.7%)	195(51.9%)	
	Don't know	0(0.0%)	3(0.8%)	0(0.0%)	3(0.8%)	
	Total	77(20.5%)	268(71.3%)	31(8.2%)	376(100%)	
The oil and gas companies hire people from local community	Yes	104(27.7%)	74(19.7%)	0(0.0%)	178(47.3%)	$\chi^2=111.875$ (0.000)
	No	17(4.5%)	165(43.9%)	13(3.5%)	195(51.9%)	
	Don't know	0(0.0%)	3(0.8%)	0(0.0%)	3(0.8%)	
	Total	121(32.2%)	242(64.4%)	13(3.5%)	376(100%)	
Free of cost gas is provided to local industries	Yes	32(8.5%)	145(38.6%)	1(0.3%)	178(47.3%)	$\chi^2=16.318$ (0.000)
	No	11(2.9%)	179(47.6%)	5(1.3%)	195(51.9%)	
	Don't know	0(0.0%)	3(0.8%)	0(0.0%)	3(0.8%)	
	Total	43(11.4%)	327(87.0%)	6(1.6%)	376(100%)	
Provision of jobs to locals by oil and gas	Yes	109(29.0%)	60(16.0%)	9(2.4%)	178(47.3%)	$\chi^2=113.420$ (0.000)
	No	19(5.1%)	163(43.4%)	13(3.5%)	195(51.9%)	

companies has improved their life standard	Don't know	0(0.0%)	3(0.8%)	0(0.0%)	3(0.8%)	
	Total	128(34.0%)	226(60.1%)	22(5.9%)	376(100%)	
People are able to meet the daily requirements due to availability of jobs from gas exploration.	Yes	100(26.6%)	63(16.8%)	15(4.0%)	178(47.3%)	$\chi^2=102.278$ (0.000)
	No	18(4.8%)	162(43.1%)	15(4.0%)	195(51.9%)	
	Don't know	0(0.0%)	3(0.8%)	0(0.0%)	3(0.8%)	
	Total	118(31.4%)	228(60.6%)	30(8.0%)	376(100%)	
The revenues of oil and gas will help to cover the debt at national level.	Yes	127(33.8%)	24(6.4%)	27(7.2%)	178(47.3%)	$\chi^2=12.522$ (0.014)
	No	109(29.0%)	51(13.6%)	35(9.3%)	195(51.9%)	
	Don't know	1(0.3%)	1(0.3%)	1(0.3%)	3(0.8%)	
	Total	237(63.0%)	76(20.2%)	63(16.8%)	376(100%)	

### CONCLUSION

The study concluded that due to the exploration of oil and gas the local area had witnessed the spell of development both in infrastructure and as human resource development which improved their life standard. The study further explored that provision of jobs to the locals has improved their life standard. The study further divulged that exploration of gas and oil has led to the emergence of new era of development. Furthermore, revenue collected from gas is being spent on the welfare of locals. The unemployment rate is very high at national as well as provincial level in Pakistan, so the government should fix a quota regarding jobs for the locals of the concerned areas. This may further enhance a spell of prosperity and happiness in the area.

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