
Impact of Plant Closures on Urban and Regional Communities: A Case Study of South Australian Gas Industry and its Workers

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Abstract:

Purpose: *This research paper has been compiled from the articles and journals of various scholars. The elements and factors, which affected the plant closure and its impact on the economical fields, are analyzed at depth.*

Design/Methodology/Approach: *The economic condition based on geographical scenario along with the case study on the Limestone Coast region of South Australia is vividly discussed. In other words, the paper has thrown down an in-depth analysis of the Pine plantations and Plan for the acceleration of electrical as well as industrial allocations and the role of gas on the Limestone Coast that had generated premium wine.*

Findings: *There were four scenarios planned prior to proceeding with the work as well. At the same time, it also found different stakeholders involved in agricultural practices as well. Hence, it has focussed on the overall mission of the company.*

Practical Implications: *The study had emphasized the methods and material of qualitative that had dealt with the case study of the Lime industry as well.*

Originality/value: *This study contributes by supporting that conceptual, strategic, and technical competencies have a significant relationship with competitive intelligence and is achievable to be used by governments in region and local economies.*

Keywords: *Regional economy, gas industry.*

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1. Introduction

The plants provide a livelihood to a huge number of populations in the region, in any state or country. The closure of plants results in loss of livelihood for those people and attributes go to large scale of displacement of workers that have an impact on both the developing and developed economy of a country. The sustainability of the rural and urban economy has been an area of significance for economists and the closure of plants affects the economies. The reasons for closure are important for research and also generate concerns about public policies in the region (Beer, 2018).

The researchers need to find how the communities respond to the closure, and what the effects on the labor market are. Other researches that need to be conducted are mainly on the impact of public policies and how effective is the labor market in assisting the labor. The major aspect of the research is an analysis of regional development, the reaction of the locals, policies, and market dynamics. This research directs on the extraction process, mining, and help locals in the particular region. The research will also project on the effects of the closure of the plant, both negative and positive, in the region. These are the changes in the economy, employment opportunities, diversity and demography, infrastructure, and the services for the concerned area.

The research is based on the closure of plants in an urban community, situated in Australia. The stakeholders have a lot of concerns regarding the closure and perspectives for strategies that would profit them. This paper includes the methods used for understanding development in society and the economy of the region locally and with respect to the country. How the supply chain will be affected, the labor requirements that need to be fulfilled, the benefits the regions would receive according to the state developed royalties for the public, and the corporate social responsibility that should be undertaken. All these methods will vary and help in defining its effectiveness in the region.

According to the concept of Staples Theory, the profit generated depends on the inputs and outputs of resource management and it promotes economic activities (Marcos-Martinez *et al.*, 2019). The driving forces in countries rich with resources are low when compared to the population. The change in the economy and the demography highlights on dynamics of the process. Resource-rich countries like Australia, New Zealand, and Canada have developed historically in all ways, food supply management, and the supply of minerals to other nations around the world. For a quite a long time Australia has been a chief export met if various natural resources such as coal and iron ore around the world, which earned it a title of World's quarry. From 2018, Australia suppressed Qatar in the export of natural gas. With the increased exports of natural gas, the price in the country rises from \$4 in 2012 to \$12 in 2018 per gigajoule. The increase in the price of gas in the domestic market has created pressure on the nation's economy. In other words, it can be said that to meet global demands, the manufacturing units are concerned about protecting

the supply for domestic purposes. The regions of resource extraction mostly struggle in maintaining the profits, especially during the initial phases.

Therefore, it is significant to consider the examples that will help to overcome this challenge (Witt *et al.*, 2018). This paper will focus on the best option available for the locals in the region of extraction and how the energy resources can be useful to the people and stakeholders related to the plant. The paper has examined the best possible ways for the development and growth of the region.

2. Literature Review

The literature review evaluates the whole report that is created by examining and scrutinizing the literature matters of the present context. The literature review portion is very essential in academic writings. It provides a vivid knowledge about the topic which comes along with the extracted part of various journals by different researchers. As a matter of fact, the literature review gives a clear concept of the theory and methodological ideas of the related context. On the other hand, it is to be remembered that the literature review cannot be treated as the original research work. It acts as a synopsis of the actual academic paper. The plant closure system is mostly benefitting the local host areas. They are gaining their resources by extraction. This is the most basic issue that leads the condition to reach a higher degree.

In Australia, these local host areas are very dominant in nature which causes the situation to change day by day. Such a plant closure system has great impact on the regional financial situation as well as on geographic scenarios. A case on this topic has been discussed in this context. The whole analysis and the fact of the case are reviewed lucidly. The occurrence of this case was at the Limestone Coast in South Australia. Various policies were evaluated out of it that acted upon the extraction and distribution of the gas in regional areas. It led to the formation of a new industry over there. Different plots and frameworks were constructed to structure the development of the current situation.

2.1 Factors Affecting the Plant Closure

According to Beer *et al.* (2019), the various research works on the huge range of plant closure furnished an affluent way to the debatable topics in scholarship and academic researches. It eloquently discusses the new steps and ideas which help to realize the method of a huge amount of dismissals which is having an interlinked connection with the plant's closure system. It gave birth to immense impacts over social, economic, geographical scales on the regional areas. It led to the postulation of new detailed debatable exercise of the data collection methodology. Further, a theoretical analysis has scrutinized experimental efforts that were embraced by the local workers. The scenario was developed from a framework of certain decision-making procedures. The most significant discussion lies in the fact that the whole

process of examination and testing required the merge of different policies of different communities that reached the ultimate depth of the analysis.

As per influenced by Markey *et al.* (2019) the ongoing process of the financial condition of the rural areas pursues to be the keenest region that attracts the specialists of geography and economy. This situation forced the development of semi-urban regions that emerged out of the grave in the last few decades. Ryser *et al.* (2019) also gave similar opinions describing the elements that cast their impact over the plant closure system.

Plummer *et al.* (2018) stated that the primary point and the main focal situation of the research was depended upon the changes and developments of the improving conditions of the local areas. The main factors that affected it were by newly developed policies and various acts that created the change in the marketing scenarios via different pathways.

According to the information given by, Ryser *et al.* (2019) most of the analytical works in this sector have the tendency to incline itself towards the quarters of the resources. These resources specifically identify the mining areas that have the duty for the extraction of energy which provides main advantages to the local community regions. Another factor affecting this scenario is the limit up to which the host area is spread for the extraction of the resources.

Measham *et al.* (2016) provided with the instances of the context of the current circumstances. The most vital roles were played by the mobility of the financial structure and the employment policies which carried the distribution of the income and maintaining the equality of sex discrimination. It is also involved with the account of demography, infrastructure quality, and services. The general discussion indicates the prominence of holding more and more advantageous situations in the host regions. This fact was broadly discussed during the inquiries of the parliamentary session. The House of Representatives Standing Committee on Industry, Innovation, Science, and Resources 2018 can be treated as a good instance in this regard. It escorted a variant set of stakeholders that put forward numerous perspectives of contrasting situations on proper mechanisms for retaining the advantages properly. It includes the social responsibilities of the corporate sectors, the supply chain industry of the local areas, and the need to hire laborers from local areas.

Staden and McKenzie (2019) endorsed various schemes to share and distribute advantages like the royalties given for areas by the state. The initiative focused on the allocation of public taxes to the local communities. It may or may not give rise to the summation and separation from the social responsibilities of the corporate sectors. The impact of these features has a tendency to balance between different contexts. The contexts depend primarily on regional economic situations.

2.2 Impact of Plant Closure on Regional Economy

The impact of plant closure mainly focused on settling communities like Australia. It mainly depicts the idea of centrally shape the financial condition based on the resource. The rural finances in the settling communities can grow to improve the histories which are already featured by the systems of usage of the land, infrastructures of institutions as well as the social and communal periods. These communal periods became progressive and it re-enforces itself that brings about the new outcome of remaining locked in and diminishing the flexibility to economic disturbances.

As stated by Fielke and Wilson (2017) that they identified the part and duties of the economic and political disturbances that resulted in the reconstruction as well as the opening of the new companies and industries in these areas. The farming sectors did not regulate anything in the early years, and this activated the line of connected alterations which was developed as a matter of huge compression of the cost prices, the arriving debts, the unity of the smaller assets, and also the diminishing factor of the population in the regions. The impact on the economy of the regional economy due to plant closure constructed some capable initiatives for improvements in the future. Such initiatives generally gave birth to various stakeholders. They discovered the upcoming elements and thus chose the most desirable and undesirable courses of action.

According to Lendel *et al.* (2019) the basic affair was required to consider the ultimate future plans of the industries among various other companies. A scenario to plan a medium-term of around a decade was established to control the suspension of the fracture of the hydraulic system, depending on the mobility. The writers made a very informative background material that composed the economy along with a chronicled and verified routine of the industries that had already emerged in the areas. The previous arrangement of the framework has consisted of a different variety of charts and tables which had very minutely accurate and precise representation in order to use for connecting with the stakeholders. The inputs from the experts of the communication system, the writers synchronized the raw materials into a sheet of information that was printed and shared with the stakeholders. It acted as an input of the next generation topic for the project works in the workshops.

2.3 Changes in Geographic Scenarios: The Role of Gas in the Limestone Coast Region of South Australia

The geographic scenario of the areas had to face immense changes because of the plant closure system. The economic geographers struggled a lot to develop the answer to the queries and suspicions that emerged from the applicability of the intervening policies in order to achieve the improvements in the regional areas. The most debatable point lies about the matter that up to which limits the policies about the improvement of the regions can be achieved with ease.

Plummer *et al.* (2018) raised the idea of whether these interventions will anyhow contribute to the assistance and help in the rural and semi-urban areas along with wider support on the structural system which primarily abstains the financial resilience in such areas. Most commonly the economists of these areas gave their primary focus and thus emphasized whether to realize the limit of its changing ability which is needed for the development of the new pathways indeed.

According to the reports of Ryser *et al.* (2019) the settler communities of the Australian regions and the related geographers debated that the focus to the primary structural needs can be needed prior to the upcoming economic plans to be implied because of the investments which are missed via new policies which support liberalism. It was further noticed that Australia was the producer of the highest amount of coal and iron ore. For this reason, the country gained a reputation as the quarry of the world.

Jaganathan (2018) mentioned in a journal that Australia even crossed Qatar as the highest producer of natural gas in the world. Since the export of this natural gas from Australia hovered the wholesale cost of the gas used for domestic purposes, its production rate increased all over. Grafton *et al.* (2018) commented that the demand for natural gas increased at such extent that the industry fell in shortage of production in the native markets.

As per the information, given by Long bottom (2019) the rise in sell prices of the domestic gases caused immense tension on different parts of the economic system as well as on the production sectors. Thus, it needs a worthy and affordable constant supply of energy. Stanford (2016) explained the fact in simple words, saying that the production businesses were shut down because of the entry of the great falls which crossed the sector. As the results of that Kalogiannidis (2020) mentioned that through proper business communication, business entities are able to enhance their organizational management and share the knowledge .

2.4 The Role of Gas in the Limestone Coast Region of South Australia

The case of the Limestone Coast of South Australia deserves a notable mention in history. It had brought about several changes in the concept and idea that was previously thought and exercised about the system. It had several effects on the economic condition of the people around, the workers' communities of the rural and urban areas.

The Limestone Coast of South Australia case is undoubtedly a very important event that can be always mentioned in this context in order to relate and narrate the facts more vividly. This area is one of the highly known places for the production of premium wine. Terra Rossa soil is present here that increased the richness of the production level. It is the primary base of the Coonawarra terroir as well as the stigmatized district of wine production. This area consists of the regional

government localities of Grant, Mount Gambier, Wattle Range, Robe, Naracoorte and Lucindale, Kingston, and Tatiara. Mount Gambier is the largest known town in this region. It is well known for its light faded blue lake of groundwater that resulted in itself to be turned as a tourist spot. Penola is another town of the region which is surrounded by the vineyards of Coonawarra.

The economic status of this region is diversified. There are several agricultural industries too, including a wide categorized range of farming industries, grazing livestock, and also dairy farming. Pine plantations are formulated by the forestry industry. Production of processed and packaged food plays a vital role here. The figure given below is the map of the Limestone Coast of South Australia. All the vital towns that resulted in the improvement of the economic system by its production quality and quantity are pointed out in it.

There are several other production businesses, like, food and fiber. However, they have not furnished much. For instance, Penola town had a chip factory. It was operated by a Canadian company, McCain. Unfortunately, the factory was shut down in December 2013. It happened because the input prices of the factory, raised much high, and thus the company could not bear the expenses any longer. The basic reason for such declinations resulted because of the withdrawal in the production rate of the manufacturing industries of the entire region. This had happened in two specific terms, namely, the share of gross regional product or GRP and in real terms. On the other hand, the utility of the agricultural groups made immense growth. Even the forestry departments came up with the highest donations in the whole area. According to Poruschi *et al.* (2020); the sectors of health and hygiene and social care aided the development of the economical condition simultaneously.

The Otway Basin is a well-known area of the South Eastern region in the Limestone Coast of South Australia. It is so famous for its huge resource of natural gas production. When followed according to the map given above, it is clearly visible the exact location of the basin. The geographical climate and other natural facilities featured the area and thus reached its extremism. There are several conventional production industries of commercial gas. The first such industry was developed at Kanook, which is located in the southern part of Penola.

After that Ladbrooke Grove field was constructed there. So, it is very obvious that this region gained much importance for its onshore gas industries. This causes a huge improvement. It is known that Kimberly-Clark came up to enact a very important position in order to develop and manufacture the South East Pipeline System (SEPS). This system linked gas producers with other industries. The paper mill of that is was thus served with energy supply much easily. There were other industries like the timber milling company, pulp, and paper milling factory, and also a commercial food preparation firm.

Image 1: Map of the Limestone Coast of South Australia



Source: Australia, 2020.

These set of enterprises were much helped and thus enhanced because of the sudden upbringing of the natural gas industries in that area. Gradually, the supply for domestic purposes in the local houses and markets became more and more favorable. The local businesses flourished and thus improved the financial state of the working communities. However, the Katnook Gas Plant was closed down in the last decade. But several other gas plants sprang up in the meantime. The users did not have to suffer for the closure. With the official closedown of the plant in 2013, the gas pipeline was connected to the interstate infrastructure of gas supply (Poruschi *et al.*, 2020). The Limestone Coast Region did not lose its productivity level. So, no harm came upon the economic condition of the workers' communities. The area was a mixture of rural, urban and sub-urban patches. The agricultural firms of the rural side thus kept its head up without affecting anyone. A similar situation had happened in other areas too.

As the domestic gas price started increasing around 2012, the government of this region started a new strategy, named, Plan for Accelerating Exploration (PACE) Gas Program. This strategical program is known to provide the affordability of the companies that develop and produce the gas. This program would encourage and thus improve the quality of production by the companies by obtaining new methods (Sandhu *et al.*, 2018). This would also help the generators of electricity, industrial users, and also the retailers in the province. The PACE gas program is granted for three allocation assignments to carry out the discoveries and inventions on the current plot at the Otway Basin.

As a matter of fact, these assignments gave their support in the new performances on the commercial production of the gas. The new performance thus came to be regarded as the 'conventional' gas. In the next years, Beach Energy started

constructing a new gas producing plant, called, Katnook. This plant had the capability to produce about 10TJ/day which can substitute the old plant facilities. Along with the aim of increasing the domestic supplies in the native companies, the features of the PACE also granted the requirement of the industries to propose the initial right to refuse to the local users.

2.5 Gaps in the Literature

The analyst has studied various articles and journals by different scholars in order to collect information about the plant closure in urban and rural communities. This subject is a very common research project among different analysts. Numerous projects are done over it. However, still there are some gaps in the literature on this topic. This gap can be well noticed in the writings of previous scholars. Maximum analysts and scholars primarily focused just on what caused the plant closure in these areas. Apart from this, in order to discuss this matter, secondary data is required to be collected and examined well. Suppose, it can be seen in the articles that only information about the alteration in the economic condition is mentioned with various graphs and tables. But the impacts of it are not clearly stated everywhere. So, this research project is done to get information about both the primary and secondary data analysis for enhancing authenticity.

2.6 Summary

After understanding the advantages of the local economic condition among the rural and urban communities from the extraction and collection of resources, this region turned out to be a primary area of attraction for both the geography and economy experts. The possibilities for the usage of the resources of this region caused to be valued a lot as it is aimed by numerous nations. One of the nations is Australia itself, as it is a great source of income through diversified economic conditions among the workers. The local scenario which is drawn by the Limestone Coast Region offered a better instance about the enhancement of the gas extraction process. It is thus taken into consideration that this industry would provide more and more employment facilities for the growth of the financial condition thus reducing the crisis level of the nation as a whole. The government should look into the matter to increase the supply of gas to the local users by improving the infrastructure of the industries. In fact, the provincial government authorities took initiatives to implement new policies to control the industries which are opened shortly. Such growth can even cause industries to face isolation. The local stakeholders should also take care of the matter properly for developing the distribution of natural gas among the local rural and urban working communities.

3. Material and Methods

The gas industry in Australia has been surrounded by various uncertainties in the development of the region and its economy (Sandhu *et al.*, 2018). The future aspects

should be considered as an alternative to the development of the basis of how the gas industry affects other sectors in the region. The stakeholders advised the company to analyze various scenarios that will be based on the qualitative and quantitative analysis of the potential developments of the industry in the area.

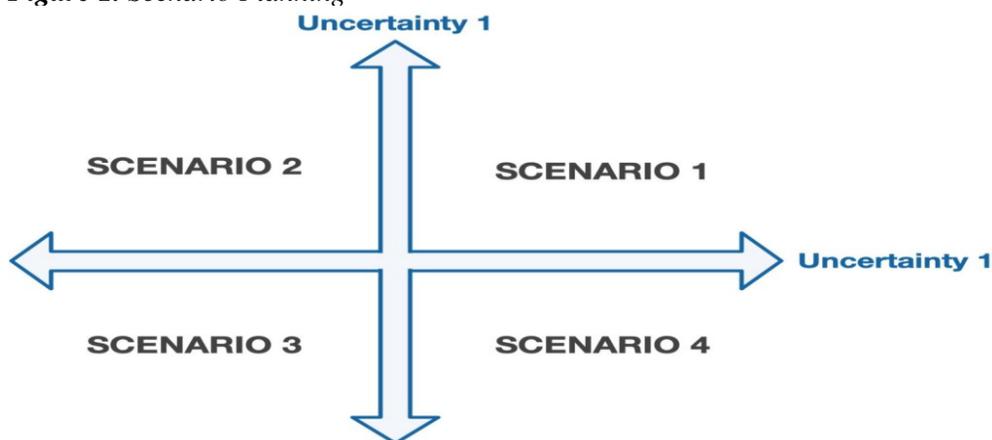
3.1 Qualitative Analysis

The qualitative analysis of an industry in a region helps to determine the situation by collecting the views from the people, their opinions, and what their demands are (Cabral *et al.*, 2020). This paper's qualitative analysis is based on the scenarios that will help the development of the region after the closure of the plant in South Australia.

Scenario planning:

Scenario planning is making presumptions about the future development of and how it will affect the process along with time. Specifically, it can be explained as identifying certain realities that can happen to the industry (Przeslawski, Miller, and Meeuwig 2016). It sounds like a simple process, but it requires considerable effort to build a set of assumptions that will be worthy to fit the industry (Figure 1).

Figure 1. Scenario Planning



Source: Przeslawski, Miller, and Meeuwig, 2016.

Here the industry has closed, and now the assumptions should be made on the basis of the available resources for development. According to the background, the scenarios have been drafted and introduced to the stakeholders for their inputs. The objectives of the planning are to analyze the possible outcomes for the gas industry that can develop in the region.

The scenarios that are taking into consideration are the investments for the local gas industry and economic diversity. The investments can be plotted over a graph with different combinations as:

- Increasing economic diversity vs good investment,
- Decreasing economic diversity vs good investment,
- Increasing economic diversity vs poor investments,
- Decreasing economic diversity vs poor investment.

The above four combinations will provide the required results and convey the path that should be followed to attain good growth in the region.

Stakeholders workshop:

Stakeholders' workshops are an excellent way to engage the stakeholders, the ones who are directly affected by the implementation or have or direct interest in the company.

In this research, the scenarios were listed and conveyed to the stakeholders for their insights on the assumptions made. The workshop went for a long time and all the points were briefly explained to them (McCabe, 2016). The primary motive of the workshop was to help the stakeholders reach an agreement regarding the scenarios designed and to find ways to avoid all the unwanted problems in the implementation of the strategies. The outcomes of the workshops were as different stakeholders were present differed. Everyone had their views and some of the suggestions are:

- Gas industry,
- Regional Development based locally,
- Manufacturing industry for packed food and milk products,
- Manufacturing industries for fibers and paper.

The representatives from forestry, agriculture did not attend the workshop. All the participants reflected their views on the assumptions and discussed the potential outcomes and ways to avoid any problems arising in the implementation of the strategies.

3.2 Quantitative Analysis

Quantitative analysis is the process of collection and evaluation of measurable data such as the profits, market shares in order to understand the performance of industries (Wen *et al.*, 2019). Quantitative analysis helps in making better decisions for the financial performance of a company and allows it to manage the finances based on the market demands.

Rise model:

RISE model is developed to guide the feedback process stands as Regional Industry Structure and Development. In this paper, this model is developed to characterize the assumed scenarios and explore the probable results. The RISE model here is a part of the qualitative analysis that helps in determining the structure, dependencies, and links between the industry and the locals of the region (Australia, 2020). The

approach has been useful in determining the economic effects in the region because of different projects that have been carried out in the past decade. The analysis of the input and output process of all the industries interconnect them with each other, as though the supply chain management. Sometimes the consumers for one industry, the output can be a part of another industry, the input, and vice versa. Thus, on the basis, if the RISE model principle, the effects of the processes will be revealed with time. The questions that are raised based on the scenarios are:

- how the economy will grow in the future, based on employment, manufacturing process,
- What will be the role if the regional resources,
- Other factors that can affect economic growth like the population.

The information received from the above concerns will contribute to the development of the regional economy as well as the country's economy.

Scenario parameterization:

Parameterization of a scenario helps to test any data and the expected values along with verification of the data (Pakyuz-Charrier *et al.*, 2018). In other words, parameterization can be defined as creating multiple trials for a single scenario, where each trial will consist of different assortments if the data parameters.

For the scenario, in this paper the diversity if the energy mix has a low limit and the gas supply and the extraction process add value to it. The expansion of the gas industry will result in the growth if the economy as there are numerous users. The investment for the development, the local industries, and mining services will provide be a significant element in the growth. Thus, the parameterization of the assumed scenarios uses the maximum and the minimum limit for the gas industry to provide the anticipated outcomes. The business for all scenarios will help all the individual industries in the region to develop along with the gas industry and the economy.

Communication with the stakeholders:

The whole process is developing the scenario, conveying the scenario to the stakeholders, taking up the analysis results, and then the implementation of the process should be informed to the stakeholders. The outcomes of the process, profits, and growth should be communicated with the stakeholders. The purpose of the presentation is to anticipate the outcomes that will help in developing the economy.

4. Results and Discussion

All the assumptions and the discussions on the scenarios with the stakeholders have led to some outcomes that can be considered for later implementation. Considering all the methods for development and economic growth in the area the probable results can differ.

Scenario analysis:

After conducting workshops with the stakeholders, the most considerable scenario identified by the stakeholder is the second scenario. The scenario characterizes the expansion of gas and other industries, which is desirable for the region as well as the economy. Though the economic growth will be slow at the beginning in the later phase, the economy will boost as desired. The scenario will also be helpful in providing gas to the local market at cheaper rates (Sangha *et al.*, 2019). Though during voting for the scenarios the stakeholders were concerned whether the investments in the gas industry will result in an expansion of the economy or not as the industry is local, there will be transportation charges which might not help in the reduction of the gas prices nationally. If the industry produces gas for local industries at affordable rates. But considering the history, the local gas supplies being unreliable, the stakeholders showed interest in the first scenario.

Along with the most desirable, the least desirable scenario is marked too. According to the votes of the stakeholders, the fourth scenario was considered the least reliable one. The stakeholders did not want the economy to shrink at the least. The economic shrink would lead the region to be resilient and the economic growth will be staggered for a long period (Sandhu *et al.*, 2018). The locals will have to face difficulties due to declining economic activity and this will lead to less investment in gas.

Considering the third scenario, the stakeholders have mixed views, as this scenario would introduce the use of current technology and innovation that would cost a price for which all the users are not ready. For example, in the dairy industry, had is used not just as an energy source but also as a part of the technology that helps to convert milk into powdered form. However, to continue the use of gas, the industries need to focus on the fact that they would be able to afford the gas prices with the addition of delivery charges along with profits (Chapman McLellan and Tezuk, 2016). As if the gas input in the industry is expensive then the industries would have to cut the cost in labor which in return would not be of much help in the region.

Going with the most desirable scenario, the second one, there are two difficulties that should be overcome, first being the availability of more reserves in the region and the second being to make the gas more available for the locals (Leviäkangas, Paik, and Moon, 2017). The stakeholders showed that government investments in the projects will be helpful in obtaining the desired outcomes from the situation. On the other hand, the industry can fulfill the additional gas supply by innovating an alternative method for the distribution prices, like the use of trucks for delivering in the local regions. Considering the large scale the gas industry can be effected on the grounds if fossil fuels in general.

Industry trends:

The economy is also affected by the demands in the market and the requirements of industries in order to fulfill the demands. Here, the value of the limestone has

increased from \$2.7 billion in 2000 to \$3.3 billion in 2017. According to Thomas-Noone (2019), considering the chronology of increment, the regional value of the place would rise to \$3.7 by 2030. The agricultural unit in the region has consolidated the economy by 37% in 2017. If agriculture, the forestry industry continues then it would add around 4% to the economic growth by 2030 in the region. Along with these, the healthcare industry has also shown growth and with the continued growth the industry would account for 8% if the economic growth by 2030.

Input and output ratio:

There is a significant difference between the scenarios considered. The scenarios, considered with growing economic growth show an increase in the gross rate in the region, and the emolument has also increased (Lenzen et al. 2017). Considering the other two scenarios where the economy is considered stagnant or decreasing, the gross development is very low for the region through the gross rate shows increment by 2%.

5. Discussion

The results so obtained by considering all the scenarios are, the increase in economic diversity directs toward the growth of the economy and increased employment in the region, along with increased investment in the gas industry. On the other hand, the decrease in economic diversity decreases investments along with higher unemployment and slow economic growth in the region.

The analysis of the methods has shown that the stakeholders and all the participants at the workshop were keen on the gas industry and investing in the industry seems to be beneficial for the economy and not only an expense (McCabe, 2016). The analyses also show that investment and technological advances along with innovations will help the gas industry to flourish and gain the market. With the increasing demand for natural gas in the global market, the domestic had in Australia had to bear the high prices of gas. Therefore, the investments in the gas industry will be a means to provide gas to the locals, though, in the beginning, there will be delivery charges applied. The growth of the gas industry and its supply chain management will help grow the regional economy.

As the gas industry is re-established, the Lime-Stone coals will get a new possibility to be recognized as a resource extraction region in Australia. The possibilities for a new portrayal are because of the involvement of the local infrastructure in the 1990s previous to the gas plant. With all the new possibilities and the scenario assumptions, the gas plant will expand to the gill potential. The state government has also been encouraging the gas industry to re-establish and local distribution of the gas.

According to research, the new regions for extraction should consider all the factors that will affect the extraction along with the impacts of the process on the region and

its surrounding. However, the scenario assumptions and the discussion over the outcomes will help the stakeholders to understand how they will be affected by the whole extraction process and identify the activities beforehand so as to get the best of the situation.

Acknowledging all the outcomes of the try situation, the narrative received is mostly positive and it is important to understand that regional development is a complex process and there are many elements to affect it. Although the gas plant is preferred, the Limestone Coast is recognized to be significant in overcoming the challenges and help in developing the infrastructure to avoid lock-in of the gas industry. The economy of the region depends on the global economy and demands. The milk factory in the region uses gas and exports the packed products to the global market too. With pandemics, it is impossible to predict what will be the future of the projector gas industry in the region.

The economic countries are now looking forward to changing and most of the nations are not more focused on the production industry and it has become one of the important sectors. Manufacturing is an important part of the production process along with innovations and technical advantages. For the production process energy is essential. As for the gas industry, the demand for supply is already in the market, and to fulfill all the requirements the gas plant will have to work on supply management. Thus, with sufficient demand in the market and the right involvement of technology the gas plant will grow along with increasing the economy of the region.

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