



**WORLD
SUSTAINABLE
DEVELOPMENT**

OUTLOOK 2019

**Making Science, Innovation and Research work
for the Sustainable Development Goals**



EDITED BY

ALLAM AHMED



INITIATIVES OF *TANFEEDH*: A NATIONAL PROGRAMME IN ENHANCING ECONOMIC DIVERSIFICATION IN SULTANATE OF OMAN

ABSTRACT

PURPOSE

The heavy dependence on the oil revenue has prompted the government of the Sultanate of Oman to formulate the diversification policies from oil to non-oil sectors. The government has introduced several national-level programmes and '*Tanfeedh*' is one such initiative. The *Tanfeedh* programme is derived from the Ninth Five Year Plan (2016–2020); it aims at enhancing economic diversification and works towards the sustainable development by linking the different sectors in Oman. The main aim of the research is to find out the various steps adopted to enhance the economic diversification under this programme; to identify whether these initiatives will develop the socioeconomic issues in Oman.

METHODOLOGY

This article attempts to test the significance of the programme and its effects on diversification policy in the targeted sectors, namely manufacturing, tourism, and logistics and enabling sectors, for instance, finance, the labour market and employment. Primary and secondary data are used and data analysis is done by using appropriate methods.



**DR. HEMAVATHY
NITHYANANDHAN***

Assistant Professor
Department of Business Administration
College of Applied Sciences
Ministry of Higher Education
Nizwa – Sultanate of Oman

Email: hema.nithyanandhan@gmail.com
hemavathy.niz@cas.edu.om

*Corresponding Author

During the 1970s, the excess oil crisis resulted in a huge rise in global oil prices. Between 1973 and 1981, the crude oil price increased from US\$2.04 per barrel in 1971 to US\$28.67 per barrel in 1980, and it further increased to US\$32.5 per barrel in 1981; also, the Iran–Iraq War reduced the oil production (Baroudi, 2001). On the other hand, Gulf Cooperation Council (GCC) countries started expanding their oil production and due to regional political disturbances in Iran and Iraq created a huge shortage, resulting in rising oil prices. The first oil boom from 1973 to 1981 made these GCC countries earn major oil revenue; thus, these countries became elite nations on the global front. The Sultanate of Oman, one of the GCC countries heavily dependent on oil exports, contributes to the major source of revenue. Nearly 60–70% of their Gross Domestic Product (GDP) relies on oil and natural gas sectors. The Oman economy seriously depends on the oil sector for its survival.

FINDINGS

Tanfeedh initiatives and the benefits attained as diversification policy show positive signs in the economy.

KEYWORDS

Tanfeedh; Diversification; Sustainable development; Sultanate of Oman; National programme

These countries were aware of their heavy dependence on the limited nature of their oil supplies and were concerned about the diversification from oil to non-oil sectors. Since then, diversification policies became one of the main aims of their developmental plans.

Joseph Schumpeter (1912) considered economic development as a structural transformation process in which innovation results in the emergence of new sectors and the role of primitive sectors will be transformed through this practice: He termed this phenomenon 'Creative Destruction'. As Pasinetti (1983) states this with the ideas of Marx in mind, that sustained economic development required constant internal transformation. Mere efficiency and growth would lead to unemployment and restraints on the demand side (Hartmann and Pyka, 2013).

Oman is considered one of the poorly diversified economies in GCC countries, even though a very large part of its GDP depends on the production and sale of oil to other countries. According to statistics, oil constitutes 33.9% of Oman's GDP, about 79% of government revenues, and 52.1% of the merchandise exports (NCSI, 2017). To alleviate the risk of the high dependence of the Oman economy on oil, the government has initiated many plans, which are reflected in Oman 2020 and 2040 strategies (Omer Ali Ibrahim, 2017). As the government's emphasis is more on the non-oil sectors, it will result in the decline of oil contribution to the GDP at current prices from 44% in 2011 to 30% by 2020. For example, the Oman 2020 strategy aimed at reducing the dependency on oil exports from the current 37.2% of GDP to 9% of GDP by 2020. The average contribution of natural gas activities will reach 2.4% by 2020 compared with the average contribution of 3.6% during the Eighth Five Year Plan (2011–2015). To diversify the economy, the government has framed policies and programmes and one such initiative is '*Tanfeedh*'.

LITERATURE REVIEW

In the research study done by Parveen (2017) titled "*Economic Diversification of Arab Countries, Issues, and Challenges*" an attempt was made to understand the rationale behind the diversification of Arab countries. This study attempted to evaluate the diversification by using macro-economic indicators, taking into account the factors of production to study whether the balanced regional development is achieved or not. This article concludes with the statement that the economic diversification project should focus on the economic and political stability in the Gulf region, and not only on fluctuating oil prices. According to Asra Mubeen (2017), diversification is needed to stabilise the Oman economy, to increase the revenue and to promote industrial development. Non-oil products and the tourism sector need to be encouraged to find an alternate source of income. The non-oil activities and their growth was 0.6% in 2016 and they are gradually increasing day by day.

A case study was done by Shayah (2015) in the United Arab Emirates (UAE); its emphasis was the contribution of the non-oil sector in the GDP being important for economic diversification. The UAE is one of the most diversified nations in the GCC; it focuses more on commercial trading and tourism and, thus, it has become one of the main sectors of economic development. According to Hartmann and Pyka (2013), their study titled "*Innovation, Economic Diversification, and Human Development*" portrays innovation and human development as the most important factors for economic diversification. This article analyses

the positive and negative effects of economic diversification on the social well-being of the people. The human development policy should go hand in hand with the industrial policy to enhance the economic diversification. Marzovilla (2014) examined the importance of GCC countries to launch an exchange rate system that suits the domestic economy: They proposed to either introduce a single-currency system or maintain their own national currencies. Failing to do this, the costs of monetary involvement will be a drawback for structural modifications. With so many threats encircled from internal and external factors, GCC countries, especially Oman, need a comprehensive diversification policy to overcome the current oil crises and to promote economic diversification in the future.

The government of Oman studied how developing nations such as Malaysia have transformed their economy and reduced unemployment in the course of time. The phase of economic diversification is remarkable with the Malaysian economic model (Hill, 2010). This study identifies schematic facts to embrace the country's rapid economic growth and structural change. The system is consistently transparent, especially for promoting trade and foreign direct investment through commendable macroeconomic management and implemented positive action programmes with regard to institutional development. Noh (2013) explains that Malaysia's potential to diversify its economy and to reduce its dependence on natural resources is determined by two elements; he demonstrated that the late entry of commercial oil production and the preceding existence of a booming private sector made it easy for Malaysia to diversify its economy and elude overdependence on natural resources. He also argued in his article that Malaysia followed an effective diversification strategy path to expand its economy.

Thillainathan and Cheong (2016) have stated that the implementation of the New Economic Policy (NEP) has seen a significant growth rate, and it evolves in many developing countries a trade-off between growth and distribution, where favourable action is taken. There are many positive as well as negative impacts. Thus, the Sultanate learned lessons from the global perspective, especially from the Malaysian economy model. The Oman economy wants to follow this approach and duplicating the original Malaysian model might not be apt for Oman's environment. The *Tanfeedh* programme is customised to meet the requirements of local demand.

OBJECTIVES AND DATA COVERAGE OF STUDY

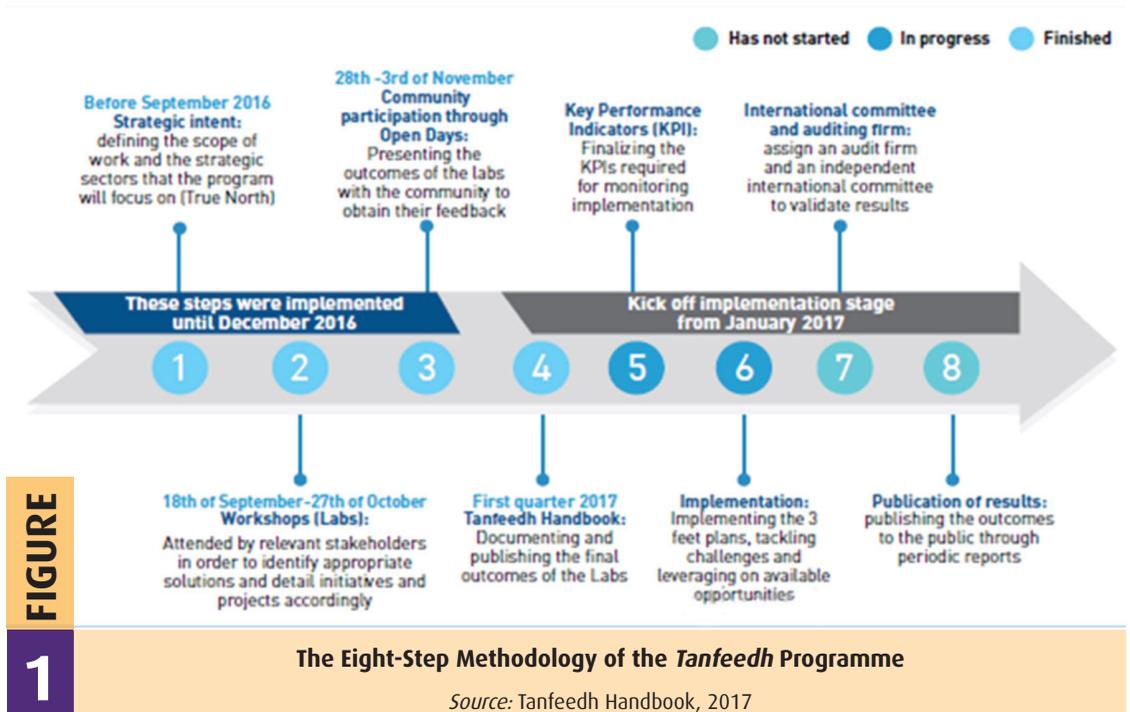
The specific objectives of this article are as follows: i) to explore the various methods adopted to enhance the economic diversification under the *Tanfeedh* programme; ii) to identify whether these initiatives will develop the competitiveness in terms of social and economic issues in Oman.

The objective of this study is to explore the *Tanfeedh* programme with the aid of secondary data. The data used for analysis in this article were collected mainly from the Central Bank of Oman's Annual Reports; Reports—Ministry of National Economy; World Bank and other sources such as websites and journal articles. The various data used in this study were obtained from the years 2006 to 2017. However, for statistical projections, the linear model will be observed till the year 2020 to study the outcome of this programme.

TANFEEDH: AN ECONOMIC INITIATIVE FOR DIVERSIFICATION

The Ninth Five Year Plan (2016–2020) derived an action-oriented national programme ‘*Tanfeedh*’ for enhancing economic diversification that aims at achieving the Sultanate’s vision by tackling the challenges and difficulties faced by the government, private and civil institutions in fulfilling the objectives of the Ninth Plan. The name *Tanfeedh* means ‘implementation’ in Arabic. This methodology was developed and customised for Oman based on the Malaysian economic model as a part of the Economic Transformation Program managed by the Performance Management and Delivery Unit (PEMANDU). Under the guidance of the experts of the PEMANDU, the *Tanfeedh* programme implements a systematic approach to economic growth in targeted economic sectors. This programme identified three economic diversification sectors, namely manufacturing, tourism and logistics, mainly to mechanise the diversification process. In addition to this, the programme has also identified two enabling sectors such as the labour market and employment as well as finance and creative financing sectors (Tanfeedh Handbook, 2017).

The *Tanfeedh* methodology involves decision makers from all the concerned private and public sectors to identify the various initiatives, objectives and Key Performance Indicators (KPI) needed to implement the comprehensive framework. Thus, there exists transparency and accountability in implementing the programme to assure growth in the economy. Therefore, the *Tanfeedh* programme adopts an eight-step methodology in alignment with the Malaysian model. The following Figure 1 shows the eight-step methodology:



The three main objectives of the *Tanfeeth* programme that have been set to be achieved by 2020 are as follows:

1. The programme aims at increasing Oman's GDP from 4.9 billion Omani Riyals (OMR) to 6.6 billion OMR from the targeted economic sectors (tourism, manufacturing and logistics) by the end of 2020.
2. To generate more than 80% non-government funded projects and lab initiatives.
3. The *Tanfeeth* initiatives need to create a minimum of 30,000 job opportunities for the local population.

The *Tanfeeth* programme adopts a methodical approach to support the Sultanate in the accomplishment of initiatives to succeed the goal of economic growth in targeted economic sectors. The methodology is based on collecting and analysing data and information in the focus sectors, identifying the challenges and obstacles to growth in the targeted sectors, and developing solutions to these challenges. Moreover, the approach specifies the authorities responsible for enactment and further shapes the mechanisms through which initiative KPIs and implementation plans will be monitored and evaluated (Handbook, 2017).

This phase of the programme will cover three of the economic diversification sectors that are included in the Ninth Five-Year Development Plan: tourism, manufacturing and logistics. In addition, this phase includes two enabling sectors: labour market and employment as well as finance and creative financing. Solutions and interferences were defined through intensive labs (workshops) with the participation of the government and the private sector as well as representatives from academia, civil society, and youth.

The Sultanate also has to focus on non-oil activities and there was a growth of 0.6% at OMR 19,282.3 million in 2016 against OMR 19,170.7 million in the previous year, which shows that the non-oil GDP is showing a gradual increase in growth when the government's major focus became tourism, logistics and mining sectors. The government must try to increase the contribution of non-petroleum activities to GDP within its plan to diversify sources of the national income.

DATA ANALYSIS AND RESULTS

To study the programme and its outreach in the targeted sectors, namely manufacturing, tourism and logistics, the linear model and compound model are used in the analysis. The following Table 1 depicts the share of GDP in current market prices for the year 2016, which is extracted from annual reports of the Central Bank of Oman (CBO) for petroleum and non-petroleum activities.

1

Share of GDP (in current market prices) for the Year 2016

TABLE

	2012	2013	2014	2016**	2015*
Petroleum Activities	52.4	49.0	46.4	27.4	34.1
i. Crude Oil	48.7	45.6	43.2	22.8	29.8
ii. Natural Gas	3.8	3.5	3.2	4.7	4.3
Non-Petroleum Activities	54.4	57.6	59.9	75.6	71.4
iii. Agriculture and Fishing	1.2	1.3	1.3	2.0	1.6
iv. Industry	18.0	18.5	17.6	20.1	19.8
v. Services activities	35.2	37.8	41.0	53.5	49.9

Source: Annual Report Central Bank of Oman 2016 (*Provisional **Preliminary)

From the table just cited, it is clear that the share of crude oil is declining and natural gas shows an uprising figure, whereas the non-petroleum activities are increasing. This shows that there is a scope for non-petroleum activities for expansion. The following Table 2 shows the descriptive statistics of the targeted sector of the *Tanfeedh*.

2

Descriptive Statistics of GDP (2008–2017)

TABLE

<i>The contribution of GDP in different sectors</i>	<i>Mean</i>	<i>Std. Deviation</i>
Agriculture	377.12	91.58
Manufacturing	2738.82	371.41
Mining	108.01	24.18
Services	10841.180	2591.44
Tourism	615.75	211.83

From the table just cited, it is clear that the services sector, manufacturing, and tourism have high mean scores. The fitness linear model and compound model are used to study the sectors mentioned earlier, and the estimated growth rate is predicted for the years 2018–2020.

3

Fitting of GDP of the Targeted Sectors by Linear Model

TABLE

Years	Predicted value of the GDP (in million OMR) ¹				
	Agriculture	Manufacturing	Mining	Services	Tourism
2006	183.22	2479.79	56.83	5360.39	170.76
2007	213.05	2519.64	64.70	6203.59	239.22
2008	242.88	2559.49	72.57	7046.79	307.68
2009	272.71	2599.34	80.45	7889.98	376.14
2010	302.54	2639.19	88.32	8733.18	444.60
2011	332.37	2679.04	96.20	9576.38	513.06
2012	362.20	2718.89	104.07	10419.58	581.52
2013	292.04	2758.75	111.95	11262.78	649.98
2014	421.87	2798.60	119.82	12105.98	718.44
2015	451.70	2838.45	127.70	12949.18	786.90
2016	481.53	2878.30	135.57	13792.38	855.36
2017	511.36	2918.15	143.45	14635.57	923.82
2018**	541.19	2958.00	151.32	15478.77	992.28
2019**	571.02	2997.85	159.19	16321.97	1060.74
2020**	600.86	3037.70	167.07	17165.17	1129.20
R Square value	0.973	0.106	0.971	0.970	0.957
F value	283.32	0.94	272.67	263.01	179.74
P value	0.000*	0.360*	0.000*	0.000*	0.000*
Intercept (a)	153.384	2410.46	48.9509	4517.19	102.300
Annual Increment (b)	29.8315	1.0160	7.8745	843.199	68.4600
Mean Square Error (MSE)	3.13357	7.88613	1.63178	16.4019	3.99566

¹Omani Rials (OMR) is the official currency; 1 OMR=US\$2.6 as on 14 January 2019.

Note: *Denotes significant at 5% level

**Denotes predicted value

The R square value of the linear model is 0.973 for agriculture, 0.106 for manufacturing, 0.971 for mining, 0.970 for services and 0.957 for tourism. The variation indicates nearly 97% for agriculture, 10.6% for manufacturing and 97% for mining as well as services; for tourism, it is 96% at the 5% significance level.

4

Fitting of GDP of the Targeted Sectors by Compound Model

TABLE

Years	Predicted value of the GDP				
	Agriculture	Manufacturing	Mining	Services	Tourism
2006	219.60	2449.09	65.04	6283.04	276.84
2007	237.69	2488.35	70.07	6805.04	310.41
2008	257.27	2528.23	75.49	7370.41	348.05
2009	278.47	2568.76	81.33	7982.75	390.26
2010	301.41	2609.93	87.61	8645.96	437.59
2011	326.24	2651.76	94.39	9364.27	490.66
2012	353.11	2694.27	101.68	10142.26	550.17
2013	382.20	2737.45	109.54	10984.89	616.89
2014	413.69	2781.33	118.01	11897.53	691.70
2015	447.77	2825.91	127.13	12885.98	775.58
2016	484.66	2871.21	136.96	13956.56	869.64
2017	524.59	2917.23	147.55	15116.08	975.11
2018**	567.80	2963.99	158.96	16371.94	1093.36
2019**	614.58	3011.49	171.25	17732.14	1225.96
2020**	665.21	3059.76	184.48	19205.34	1374.64
R Square value	0.991	0.122	0.970	0.965	0.955
F value	903.39	1.11	261.38	217.47	170.16
P value	0.000*	0.322*	0.000*	0.000*	0.000*
Intercept (a)	202.885	2410.46	60.3768	5.801.08	246.894
Annual Increment (b)	1.0824	1.0160	1.0773	1.0831	1.1213
Mean Square Error (MSE)	3.20185	7.9372	1.69995	17.9574	4.3681

Note: * Denotes significant at 5% level

** Denotes predicted value

The R square value of the compound model is 0.991, 0.122, 0.970, 0.965 and 0.955 for agriculture, manufacturing, mining, services and tourism, respectively. The R square value of the compound model indicates a nearly 99% variation for agriculture, 12% for manufacturing, 97% for mining, 96% for services and 95% for tourism. The annual increment for

the agriculture sector is 1.0824, indicating nearly a 10% increase over the year and such an increment is significant at the 5% level. The annual increment for the manufacturing sector is 1.0160, indicating nearly a 10% increase over the year and such an increment is significant at the 5% level. As both linear and compound models are significant at the 5% level, the Mean Square Error (MSE) is used to compare the accuracy of the prediction. The MSE for the linear model for the predicted GDP of agriculture is 3.13357, manufacturing is 7.88613, mining is 1.63178, services are 16.4019 and tourism is 3.99566. However, the MSE for the compound model for the GDP of different sectors is as follows: 3.2018 for agriculture, 7.9372 for manufacturing, 1.69995 for mining, 17.9574 for services and 4.3681 for tourism. The MSE for the linear model is less than that of the compound model. Thus, it is concluded that the linear model is relatively better compared with the compound model in terms of reduced error in prediction. The predicted values of the GDP of different sectors by using a linear model for the years 2018, 2019 and 2020 are clearly stated in Table 3 and by using a compound model in Table 4. The growth rate in percentage shows an increasing trend for all the sectors. The growth rate in percentage is 12.13% for tourism and 8.31% for services. Overall, there is an increase in 38% of the growth in targeted sectors.

Due to the strategic location of the Oman economy, the logistics sector plays a vital role in the diversification sector. With the development of new seaports and airports, the logistics sector provides great potential in the Sultanate's diversification strategies. Currently, in Oman, the logistics sector showed, on average, growth rate around 8% in the period 2010–2015 in sea and land transportation. It focuses nearly 3.5% on international trade. Due to the rapid development in Duqm as a new economic zone, the volume of goods shipped increased from 93 million tonnes to 103 million tonnes. Oman offers low competitive costs when compared with the other GCC nations, and it is considered a

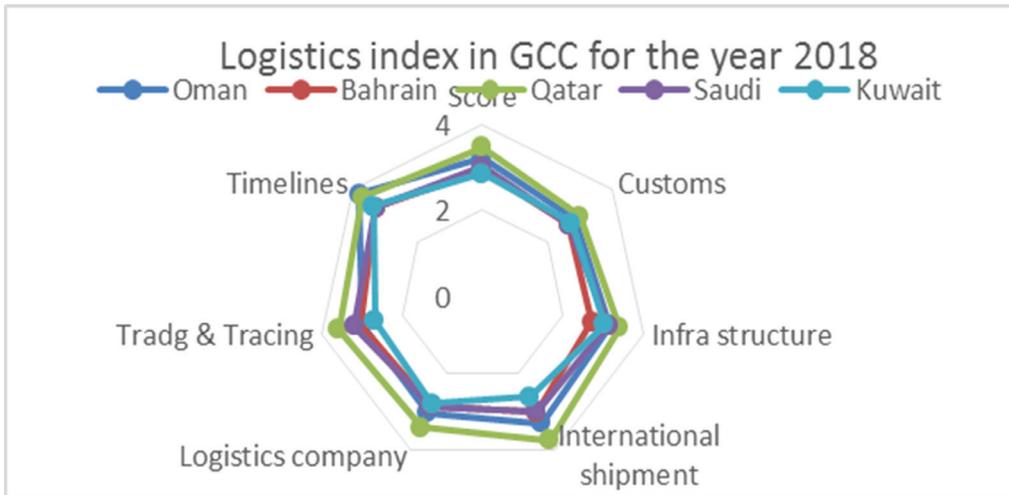
5

Logistics Performance in GCC Nations for the Year 2018

TABLE

	<i>Oman</i>	<i>Bahrain</i>	<i>Qatar</i>	<i>Saudi Arabia</i>	<i>Kuwait</i>	<i>U.A.E</i>
Score	3.21	2.93	3.47	3.01	2.86	3.96
Customs	2.87	2.67	3	2.66	2.73	3.63
Infrastructure	3.16	2.72	3.38	3.11	3.02	4.02
International shipment	3.3	3.02	3.75	2.99	2.63	3.85
Logistics company	3.05	2.86	3.42	2.86	2.8	3.92
Trading & Tracing	2.97	3.01	3.56	3.17	2.66	3.96
Timelines	3.8	3.29	3.7	3.3	3.37	4.38
LPI Rank	43	59	30	55	63	11

Source: IPI.worldbank.org



FIGURE

2

Logistics Performance in GCC Nations for 2018*Source: Tanfeedh Handbook, 2017*

6

Contribution of Logistics Sector in GDP from 2008–2017

TABLE

Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
GDP contribution (in million OMR)	1191.7	1155.0	1201.9	1226.2	1378.9	1516.2	1485.0	1593.3	1482.1	1623.8

Source: World bank.org

predominant logistics hub at the global level. Table 5 and Figure 2 provide information on the logistics in GCC nations.

Oman ranked 43rd in terms of the logistics performance index and Qatar was in the 30th position. From Table 6, it is clear that the GDP contribution from the logistics sector is eventually increasing over the years. In 2008, it was 1191.7 million OMR and it increased to 1623.8 million OMR in 2017. The programme initiates to increase the contribution of the logistics sector to the Sultanate to 2 billion OMR by 2020 and to increase the investment to a minimum of 1 billion OMR. It also aims at reducing the time for the sea cargo import clearance from 7 days to 1.5 days. Overall, the port capacity needs to be increased from 3.1 million to 7 million by 2020. Thus, the scope of the logistics sector shows highly appreciable need in terms of trade and employment as a part of Oman's diversification policy.

7

Ranking of the Sultanate in Several Global Indices Related to the Commercial and Economic Environment from 2011 to 2016

TABLE

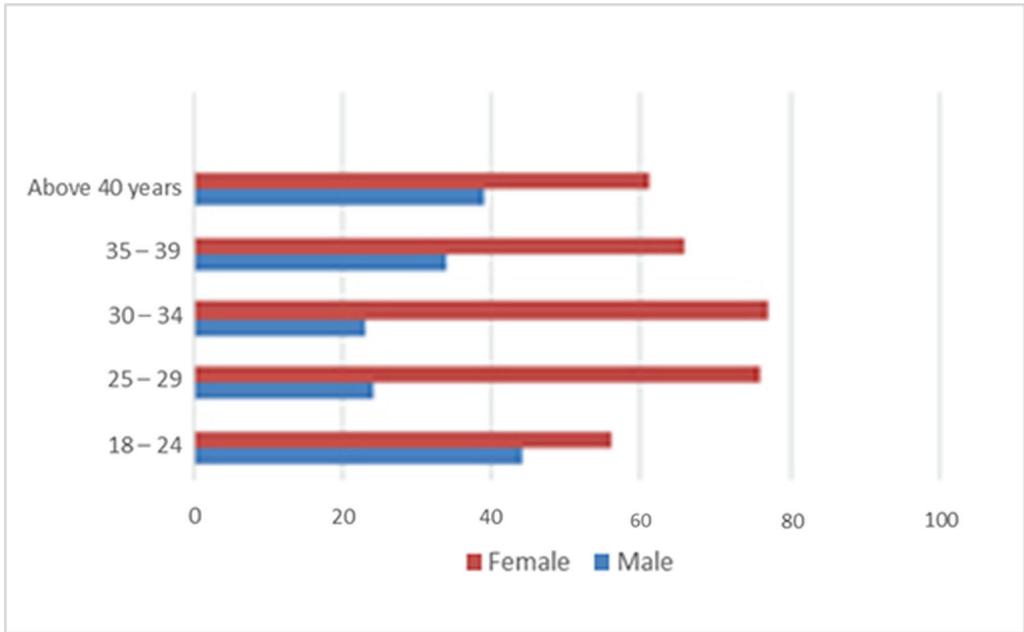
<i>Index</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>Status</i>
Ease of Doing Business (The World Bank)	65.88	67.61	68.74	68.92	63.67	65.40	Stable
The Global Competitiveness Report (The World Economic Forum)	34	32	32	33	46	62	Decline of 18 ranks
Human Development Index (UN)	0793	0793	0792	0793	0796	-	Stable
Economic Freedom of the Arab World (Fraser Institute)	7	7	6	7	5	7	Stable
Index of Economic Freedom (Heritage Institute)	34	47	45	48	56	52	Decline of 18 ranks

Source: Tanfeedh handbook 2017

The programme has also identified two enabling sectors such as the labour market and employment as well as finance and creative financing sectors.

The primary objectives of the government in the *Tanfeedh* programme in terms of the financial sector are to raise the Ease of Doing Business rankings in GCC countries from the third to the first place; to retain the current status of the first place for starting a business in the Ease of Doing Business ranking until the year 2020; to get credit for the Ease of Doing Business among the GCC countries from the fifth position to the first position by 2020; and to increase global competitiveness in getting funds from private and foreign investment to improve the rank of doing business (Handbook, 2017).

As far as the labour market is concerned, the economy faces lots of challenges. There always exists an imbalance in the labour market that the majority of jobs available in the private sector are occupied by non-Omani workers, on the one hand; on the other hand, the percentage of youth unemployment for the nationals is increasing. The public sector has already been overburdened, and, thus, the government is promoting and encouraging small and medium enterprises to create new employment opportunities. There are a few government-funded programmes to support the Small and Medium Enterprise (SME)s in the economy. Nearly 45% of the Omani labour force are high-skilled workers who can add value in the



FIGURE

3

Details of Jobseekers as per PAMR

8

Number of Job Seekers Registered with Ministry of Manpower in Oman in the Year 2017

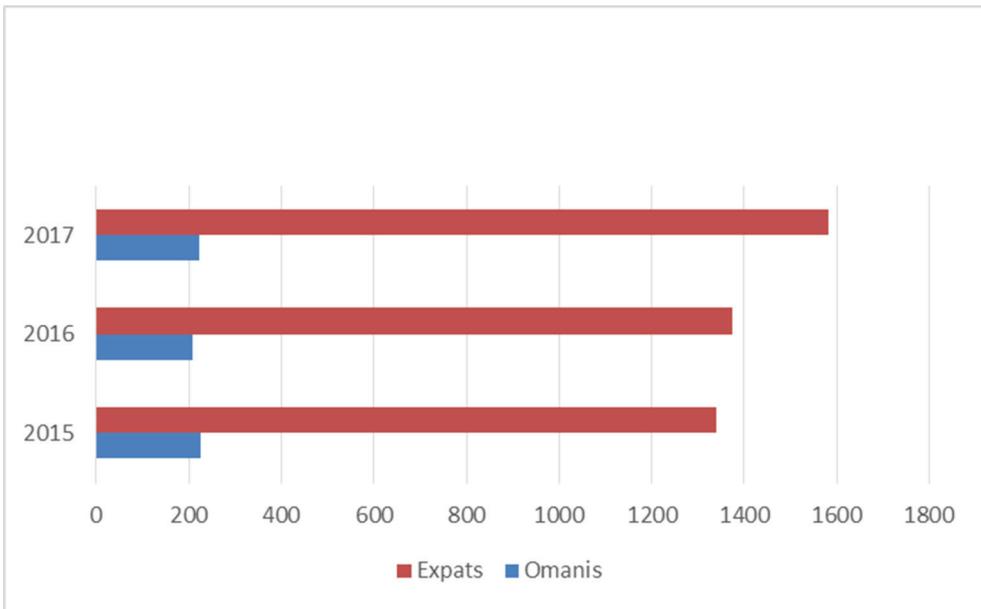
TABLE

Age group	Male (in %)	Female (in %)	Total
18-24	44	56	10774
25-29	24	76	20781
30-34	23	77	7546
35-39	34	66	2811
Above 40 years	39	61	341

Source: Monthly Bulletin of the Public Authority for Manpower Register, August 2017

job market. The government's nationalisation policy, namely Omanisation, will achieve the targeted increase in the labour market.

There is a need for structural transformation in the private sector to provide employment opportunities to the available labour force in the market. The following Figure 4 shows the



FIGURE

4

Job Opportunities Provided in the Private Sector in a Year (000')

number of job opportunities provided by the private sector for Omanis and Expats in Oman for the period from 2015 to 2017.

With the initiatives of the *Tanfeedh* programme, the government is increasing employment opportunities to the Omanis in the three targeted sectors of manufacturing, logistics and tourism. The government is adopting policies in such a way that it meets the current market demand; thus, it aims at fulfilling the skills and knowledge of the Omanis as well as takes necessary action to increase the competitiveness of the Omanis on par with the global needs.

CONCLUSION

This research article concludes with the statement that *Tanfeedh* as a diversification programme has a positive impact on the Sultanate of Oman. Data analysis shows that using linear and compound models, the predictions for manufacturing, logistics and tourism are positive for the years 2018–2020. The Sultanate has abundant potential resources: natural, human and capital. However, the real success of the programme can be identified only with

the support of the community. The community as a whole, the stakeholders, supervisors, investors and business owners involved should be channelised in an appropriate manner so that the real diversification will be the end result. Thus, sustainable economic growth and development can be achieved in the long run.

REFERENCES

- Asra Mubeen, D., Ravi Kumar, D. and Nazneen, M.A.R. (2017) Economic Diversification in Sultanate of Oman amidst Oil crises. *IOSR Journal of Business and Management Ver. IV*, Vol. 19, No. 6, pp. 2319–7668.
- Baroudi, E. (2001) Economic Diversification in the Oil-Producing Countries: The Case of the Gulf Cooperation Council Economies, in ESCWA and API, Economic diversification in the Arab Region: Proceedings of the Expert Group Meeting, Beirut, United Nations, pp. 25–27.
- Tanfeedh Handbook (2017) *The National Program for Enhancing Economic Diversification Tanfeedh*.
- Hartmann, D. and Pyka, A. (2013) Innovation, Economic Diversification and Human Development, FZID Discussion Paper 65-2013, Universität Hohenheim, <https://fzid.uni-hohenheim.de/71978.html>
- Hill, H. (2010) Malaysian Economic Development: Looking Backwards and Forward. *Australian National University-Working Paper*.
- Hill, H. (2013) Malaysian economic development: Looking backward and forward. In *Malaysia's Development Challenges* (pp. 27–68). Routledge.
- Marzovilla, O. (2014) Economic Diversification in GCC countries and the optimality of a monetary union. *European Scientific Journal*, Special edition Vol. 1, pp. 658–675.
- NCSI (2017) *Statistical year book Issue 42*, Oman: National.
- Noh, A. (2013) Natural Resources and Economic Diversification. A case of Malaysia. *Working Paper No. 2*, Tun Abdul Razak School of Government.
- Omer Ali Ibrahim, S.D. (2017) The Role of FDI in Enhancing Oman's Diversification. Working Paper No. 202/2016-17, College of Banking and Financial Studies, <http://www.cbfs.edu.om/UploadsAll/202-2016-17.pdf>
- Parveen, T. (2017) *Economic Diversification in the Arab Gulf States: Issues and Challenges*. www.Academia.com
- Pasinetti, L. (1983) *Structural change and economic growth: a theoretical essay on the dynamics of the wealth of nations*, Cambridge: Cambridge University Press.
- Schumpeter, J. (1912) *Theorie der wirtschaftlichen Entwicklung*, Berlin: Duncker & Humblodt.
- Shayah, M.H. (2015) Economic Diversification by boosting non-oil exports (Case of UAE), *Journal of Economics, Business and Management*, Vol. 3, No. 7, pp. 735–738.
- Thillainathan, R. and Cheong, K.C. (2016) Malaysia's New Economic Policy, Growth and Distribution Revisiting the Debate. *Malaysian Journal of Economic Studies*, Vol. 53, No. 1, pp. 51–68, 2016 ISSN 1511–4554.
-

BIOGRAPHY

Dr. Hemavathy Nithyanandhan has been living in the Sultanate of Oman for the past 22 years. She is currently working as an assistant professor at the College of Applied Sciences, Nizwa, Oman, and also has wide experience in teaching at private and public universities in Oman. She holds Bachelor's and Master's degrees in Economics from the University of Madras, an MPhil from MK University, India, and a PhD from the University of Malaysia. Her research interests are in development economics, poverty and development studies, micro-finance and micro-credit, and health economics. She has published many scholarly articles in both national and international journals. She is very active in community development programmes in Oman and India.