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Factors contributing the growth and performance of the ayurveda industries and constraints faced in marketing of herbal products in Solan district of Himachal Pradesh

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Abstract

Ayurveda system of medicine is one of the rapid emerging fields of medicine. Due to increase in the demand of Ayurveda products, Ayurveda is coming up in India as a business proposition. As the Coronavirus Disease (COVID-19) crisis take over the world, Ayurvedic products helps in boosting the immunity against this deadly disease. The present study was throw light on the factors affecting growth and performance of Ayurveda industries in Solan district of Himachal Pradesh. The main aim of the study is to study the factors which are affecting the growth of these units. For this purpose, multistage random sampling technique was used for the selection of study area. 45 units out of total 60 units were purposively selected from Nalagarh block of Solan district. Out of these 45 units, 25 licensed Ayurveda pharmaceuticals industry units and 20 licensed Ayurveda cosmeceuticals industry units was selected for the study. From each unit, 5 respondents were randomly selected in this stage. Thus, the total sample size was 225. The collected data were analysed using multiple regression and Garrett's ranking technique for better interpretation of the results. It was concluded that the major independent factors which were affecting the net profit of these industries were Annual sales, annual production, size of the company, age of the company, competition status, advertisement, types of products manufactured. High transportation cost was the major constraints faced by the respondents in processing of herbal products.

Keywords: ayurveda industries, net profit, constraints, transportation cost

Introduction

Ayurveda come up with knowledge of avoidance of disease and how to get its principal cause removed if the disease appears. The knowledge of Ayurveda first carried out verbally from the descendants of the sages of India. The oldest texts on Ayurveda are Charak Samhita, Sushruta Samhita and Ashtanga Hridaya. These books tell about the five elements found in space which affects our personal system that is earth, water, air, fire and sky. These books help to understand the key importance of keeping these five elements stabilized for a lively and cheerful life.

The engrossment and demand for ayurvedic products is now increasing in the world. This is because of revived significance of ayurvedic products is connected to the ever increasing indication of the injurious side effects of modern synthetic products. In developing countries, demographic trends, growing economy, affordability, lifestyles changes and awareness about self-medication are urging the Over-the-Counter market. Therefore, the people are more involved in the Ayurvedic over-the-counter products as compared to the medicine or product suggested by Physicians. The plant based products like phyto-pharmaceuticals, botanicals, perfumes, herbal cosmetics, confectionaries and condiments which are obtained from natural products are now taking up a vital portion in the world trade and market. This enormous demand is operated due to various factors like the disturbing working culture, intensive lifestyle, the constant search of peace, growing sickness with unhealthy environment.

Scenario of Ayurveda industries in Himachal Pradesh

Himachal Pradesh is one of the North Indian state in India which is situated in the lap of Himalayas. Most of the state is covered with forest that is about 68.16 per cent of the total geographical area. Himachal Pradesh has well developed Ayurveda system of medicines. This system of medicines is governed by department of AYUSH, Government of Himachal Pradesh, India.

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The state consists of many Ayurveda industries which are licensed under department of AYUSH, Government of India. These industries are manufacturing different type's ayurvedic medicines in a large quantity. There are 3 government pharmacies and 159 non-government pharmacies under Ayurveda in Himachal Pradesh, whereas overall there are 36 government and 7682 non-government pharmacies under Ayurveda in India. (Table 1).

Table 1: Distribution of government and Non- Government Pharmacies under Ayurveda in Himachal Pradesh

	Himachal Pradesh	India
Government	3	36
Non-government	156	7682
Total	159	7718

Source: Ministry of health and family welfare, Government of India

Role of Ayurveda during Covid-19 pandemic in India

Coronavirus disease 2019 which is also known as COVID- 19 is an infectious disease which was first observed in Wuhan, China in December 2019. According to World Health Organization (WHO), the disease is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). This virus spreads very rapidly all over the world. In, India the first case of COVID-19 was observed in January, 2019 (Rastogi *et al.*, 2020) [6]. For developing countries like India it is very difficult to manage this kind of pandemic because India has the second highest population in the world. The ministry of AYUSH, Government of India, based on Ayurvedic literature and scientific publications starts guidelines to boost immunity with special reference to respiratory health by taking into consideration the COVID-19 pandemic.

According to AYUSH, Government of India, the exports of Ayurvedic products rise by about 45% in September 2020 as compared to 2019, after the Centre officially adopted the AYUSH systems of medicine for the management and prevention of COVID-19. Due to increase in the consumer demands towards ayurvedic products during COVID-19, the Ayurveda companies start manufacturing new innovative products. The AYUSH system across the country has also comes forward for being called anytime to serve the nation (Golechha, 2020) [3].

Need of the study

The study aim to analyse the factors affecting the growth and performance of Ayurveda industries in the study area. The factors which were found to be instrumental in growth of the study area were presented in this study. The study is necessary to know the various independent factors which are affecting the net revenue of the Ayurveda units. The study will also throw light on the constraints faced by the industries in marketing of Ayurveda products.

Objectives of the study

To examine the factors contributing to the growth and performance of the study area.

To analyze the problems of the study area with special reference to marketing of herbal products.

Materials and Methods

The study was conducted in Solan district of Himachal Pradesh. The interview schedule was prepared for the collection of the primary data. The schedule was intended to collect the data from the respondents in the sample Ayurveda

industry units with regard to factors affecting its growth and performance and information regarding problem encountered in marketing of herbal products etc. Multistage random sampling technique was used for the selection of study area. In first stage, Himachal Pradesh was purposively selected to fulfil the objective of the study. In second stage, Solan district was purposively selected for the study because of the presence of highest number of licensed Ayurveda industries in this district. In third state Nalagarh block was purposively selected from Solan district as there is highest number of licenced Ayurveda industries. In fourth state 45 units out of 60 units were purposively selected from Nalagarh block. Out of these 45 units, 25 licensed Ayurveda pharmaceuticals industry units and 20 licensed Ayurveda cosmeceuticals industry units was selected for the study. The sample units were 45. From each unit, 5 respondents were randomly selected in this stage. Thus, the total sample size was 225. Multiple regression analysis and Garrett ranking were employed for the better interpretation of the results.

Results and Discussion

The findings of the present study as well as relevant discussion have been summarized under the following heads:

Factors contributing to the growth and performance of the study area

To test the relationship among independent variables on the growth or performance in the study area, the multiple regression analysis was employed. The data was analysed and computed using statistical package for social sciences (SPSS). Table 2 represented the model summary which included correlation coefficient, coefficient of determination, adjusted R square and standard error of the estimate. The relationship between dependent variable (profit) with respect to independent variables (Annual sales, annual production, size of the company, age of the company, competition status, advertisement and types of products manufactured) was found to be 0.99 with R square of 0.98.

The results implied that all the independent variables had contributed 98.3 per cent on the dependent variables. It means that the given seven independent factors i.e. Annual sales, annual production, size of the company, age of the company, competition status, advertisement and types of products manufactured that was studied explain only 98.3 per cent of the growth of Ayurveda industries units. Only 1.7 per cent was contributed by the others factors that must be investigated in further studies. The other factors might be includes external factors like consumer demand in the market, their preference etc. The result is in the accordance with Kipene *et al.*, (2015) [5].

Table 2: Model summary

Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	0.991	0.983	0.973	3.080

Predictors: (Constant), Annual sales, annual production, size of the company, age of the company, competition status, advertisement, types of products manufactured.

Table 3 depicted the significance value was 0.00 which was less than 0.05. it implied that the model was statistically significant in predicting that how Annual sales, annual production, size of the company, age of the company, competition status, advertisement, types of products

manufactured affected the growth of study area. The F calculated value was 97.263 at 5 per cent level of significance. The F calculated was greater than F tabulated value which proved that the overall model was significant. The result is in the accordance with Kinyua (2014) [4].

Table 3: Shows regression ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	6459.906	7	922.844	97.263	.000 ^a
Residual	113.858	12	9.488		
Total	6573.764	19			

Predictors: (Constant), Annual sales, annual production, size of the company, age of the company, competition status, advertisement, types of products manufactured.

Dependent variable: profit

Table 4 shows the result of multiple regression analysis using SPSS software. It determined the relationship between growths of the study area with seven different variables. By analysing the data the equation becomes
 $Y = 58.318 + .641X_1 - .569X_2 - 9.797X_3 + .551X_4 - 14.852X_5 - 3.583X_6 + .021X_7$

Where,

Y = Dependent variable (Profit).

X₁ = Annual sales (₹).

X₂ = Annual production (tons).

X₃ = Size of the company.

X₄ = Age of the company.

X₅ = Competition status.

X₆ = Advertisement.

X₇ = Types of products manufactured (in numbers).

According to the above regression equation, taking all factors into account i.e. Annual sales, annual production, size of the company, age of the company, competition status, advertisement and types of products manufactured at zero, the growth in the Ayurveda units was 58.318. The results further revealed that, a unit increase in the annual sales of the units was led to a .641 increase in the annual profit of the

industries. So, in order to achieve the high profit the industries should increase its sales of the products manufactured. Similarly a unit increase in an Annual production of the Ayurveda products was decrease the annual profit by 0.569. This is because of the reason if the units were producing the products in a large quantity at some point of time the more per unit cost was incurred in the production process which leads to the diseconomies of scale. If the size of the company increased to a unit the annual profit was decreased by 9.797. This may be due to the reason that big company often bears a large cost like to pay the managers or to reward investors, for accounting services for research and development, for training new employees etc. Similarly a unit increase in the age of the company the profit was increasing to .551. If the industries were old, the brand recognition is easier as compared to the industries that are newly set up. This will leads to increase in the growth of the industries. The results also showed that a unit increase in the competition status was decrease the profit by 14.852. It implies that if the competition status among the industries will be high the low will be the profit of the Ayurveda industries units. A unit increase in the advertisement decreased the profit of the company by 3.58 because it was leading to a very high cost and most of the industries were small scale industries. To manage the costing for advertising was very difficult to small scale industries. Again a unit increase in the types of products manufactured was led to increase the profit by 0.021. As the units was manufacturing new innovative products according to the consumer needs the more was the net profit was achieved. The result is in the accordance with Chellaswamy and Revathi (2013) [2].

Table 4 also depicted the level of significance at 5 per cent level and 95 per cent level confidence. Therefore it can be observed that competition status had a 0.000 level of significance, Annual sales has 0.005 level of significance, annual production has .032 level of significance, advertisement had 0.049 level of significance, size of the company had 0.146 level of significance, Types of products manufactured had 0.188 level of significance and Age of the company had 0.192 level of significance. The similar result was reported by Aggarwal (2015) [1].

Table 4: Showing Regression Coefficients

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. Error	Beta	t	Sig.
I (Constant)	58.318	20.667		2.822	0.015
Annual sales (₹)	0.641	.187	.0990	3.426	0.005
Annual production (tons)	-0.569	.234	-0.578	-2.430	0.032
Size of the company	-9.797	6.296	-0.162	-1.556	0.146
Age of the company	0.551	.399	0.100	1.383	0.192
Competition status	-14.852	3.079	-0.525	-4.823	0.000
Advertisement	-3.583	1.633	-0.094	-2.194	0.049
Types of products manufactured (in numbers)	0.021	.015	0.192	1.397	0.188

Constraints faced in selected Ayurveda industries units with special reference to marketing of herbal products

Table 5 presents the constraints faced in selected Ayurveda industries units with special reference to marketing of herbal products. Mainly fifteen factors were identified and among them high transportation cost was the most important problem experienced by the selected respondents with Garret's score (76.5). This might be the reason that road is the only means of transportation in the area. Due to this reason the freight charges are often high. The reasons of high charges of

transportation may be due to fuel charges which are very high, toll taxes etc. Therefore the high transportation cost is the more severe constraint and got rank first. The second most important problem faced in the industries units was poor road network for transportation with Garret's score (73.42). The roads in the area are not wide as much which results in the traffic jams which ultimately increase the transportation conditions of the industries. Competition from other industries was the third main problem and had Garret's score (69.57). Due to increase in the demand of herbal products in the

market more players are entering in the markets or old players are making new and innovative products to keep the competition status high. The fluctuation in price was the fourth most important problem with Garret's score (61.60). Because some new brands are selling products with high prices and some are selling with lower prices. This is leading confusion in setting up a price of the herbal products. The distance market was the fifth important constraints and had score (54). This is due to the reason because the market of ayurvedic products is very far from the study area. The main market of these products is all over India. Though the units are located in the north most part of India, it became very difficult to reach the market very easily. Similarly the sixth most important problem was delay in sale and payment with score (53.39). The reason may be unavailability of raw materials, technical issues etc. which results in the delay in sale of the final products. Sometimes the dealers or wholesaler delay the payments because of many reason which results in the delay in production of products in the industries. The constraint which got the seventh rank was government regulations and had score (52.28), followed by low demand of herbal products (48.67), Lack of awareness of new technology (47.07), Lack of market infrastructure (39.96), non-availability of storage facility (39.46), lack of availability of market information (34.42), quality deterioration during storage (33.35), lack of marketing strategies (32.32) and trade malpractices (31.92). The similar result was reported by Selvaraj and Santhanamari (2019) [7].

Table 6: Constraints faced in selected Ayurveda industries units with special reference to marketing of herbal products

Sl. No.	Constraints	Scores	Garrett's Rank
1.	High transportation cost	76.5	I
2.	Poor road network for transportation	73.42	II
3.	Competition from other industries	69.57	III
4.	Price fluctuation	61.60	IV
5.	Distance market	54	V
6.	Delay in sale and payment	53.39	VI
7.	Government regulations	52.28	VII
8.	Lack of brand image	48.67	VIII
9.	Lack of awareness about online marketing	47.07	IX
10.	Lack of market infrastructure	39.96	X
11.	Non-availability of storage facility	39.46	XI
12.	Lack of availability of market information	34.42	XII
13.	Quality deterioration during storage	33.35	XIII
14.	Lack of marketing strategies	32.32	XIV
15.	Trade malpractices	31.92	XV

Conclusion

It can be concluded from the results there were only seven independent factors which were affecting maximum to the net profit of the Ayurveda industries. So, in order to increase the efficiency and profitability of the industries these factors should be taken into considerations for the further improvement in the Ayurveda industries. Out of these seven independent factors competition status was the major factors which were affecting the net profit of the Ayurveda industries in the study area. Therefore in order to increase the net profit of the industries, the industries unit should starts manufacturing of new and innovative ayurvedic products which are purely based on the consumer needs and wants. The size of the company was another independent factor which was affecting the industry's net profit. High transportation cost was the major constraints faced by the respondents in

marketing of herbal products because road is the only means of transportation in the area. Due to this reason the freight charges are often high. The reasons of high charges of transportation may be due to fuel charges which are very high, toll taxes etc. Poor road network for transportation was also another problem due to non-availability of good roads in the study area.

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