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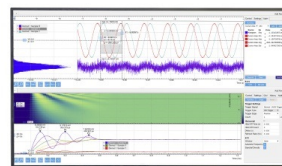
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Factor Influencing Youth in Aquaculture Industry in Kelantan

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Abstract. For as one can remember, aquaculture has been considered as an important activity and sector nowadays even though it is not one of the demanding and an attractive alternative to other work sectors like public sector employment. In the beginning of 1920's, the aquaculture activity in Malaysia has developed rapidly and become as one of an important activity. Aquaculture is becoming important as a way of increasing local production for food security and increasing export revenues. The main purpose of this research is to identify the factors that influence youth interest to become an aquaculture entrepreneur. In this context, 40 youth in University Malaysia Kelantan (UMK) has been selected as respondents. This study used two methods which are qualitative and quantitative as the best way to address the issue of aquaculture entrepreneurship. The simple random sampling technique was applied to collect the data. The respondents selected are those who have interest in the aquaculture business.

INTRODUCTION

Malaysia positioned 15 of the world's top makers in 2014 with creation assessments of 521,000 tons [1]. The fisheries segment contributed 1.1% of world creation in 2013 with 0.4% of aquaculture. Aquaculture contributes 8.9% to the nation's total national output (GDP), making an expected 1,753,900 million employments for Malaysians. It shows that the division offers national nourishment security as well as goes about as a potential supporter of decreasing craving and destitution around the world [2]. With the possibility to give adequate nourishment get to, the area has accomplished dynamic accomplishments in hereditary reproducing programs, culture framework innovation, best aquaculture the board (M. Dickson and so forth.), and aquaculture the executives while aquaculture issues and difficulties stay a worldwide point while Malaysia stays a significant research zone.

Issues and difficulties will be canvassed in different viewpoints as research recommends that the likely explanation behind the more slow development is brought about by fish stock exhaustion has set off the ascending of feed costs^{10,11}, national ecological issues (for example flood event and El-Nino marvels), sicknesses that influenced refined species [3], media effects on spreading bogus data and exploitative encouraging rehearsed in halal point of view.

Youth unemployment and underemployment are serious problems in most countries. It is often more severe in rural than in urban areas. Small-scale agriculture is the developing world's single biggest source of employment. Moreover, with the necessary support it can offer a sustainable and productive alternative to the expansion of large-scale, capital-intensive, labour-displacing corporate farming. This, however, assumes a generation of young rural men and women who want to be small farmers, while mounting evidence suggests that young people are uninterested in farming or in rural futures.

This shows that there is substantial social benefit in promoting an innovative and sustainable aquaculture industry that contributes positively to food security and human health. Continued Professional Development involving eLearning and other innovative approaches can make an important contribution throughout the sector.

In order to encourage the youths to involve in aquaculture industry, our country should provide some trainings to expose the youths to the industry. The training of 4 to 5 days has been developed to address a curriculum that combines

the basic technical and economic principles of developing good aquaculture practices. The trainings are tailored for specific ecosystems and level of aquaculture development [4] in the countries. These practices also exposed the youth to field visits and exchanges, with the aim of enhancing a business acumen in aquaculture.

The technical principles addressed during the trainings include the factors affecting productivity, carrying capacity, and growth rate and water management. It also includes the classification and introduction to farming systems. In addition, seed production, nutrition and feeds, harvest and post-harvest practices. The economic principles introduce the participants to the definition of commercial aquaculture, sustainability principles, and key terminologies in farm management. basic accounting and record keeping in commercial aquaculture, financial statements, business plan, assessment of the economic and financial viability of aquaculture farms, cost-structure analysis, sensitivity analysis, break-even analysis, financial analysis, cash flow analysis.

In the practical sessions, participants are introduced to the use of the User-Friendly Tool for Investment Decision Making in Aquaculture (UTIDA) through group exercises, presentations and plenary discussions using the technical principles and good management practices learnt during the first part of the training. Commercial aquaculture, which refers to fish farming operations whose goal is to maximize profits, is promoted for its potential contribution to food security and nutrition, and poverty alleviation directly by producing food fish and other products, and indirectly through employment creation and generation of income for the purchase of food. Commercial aquaculture equally contributes to the country economic growth.

According to United Nations' Food and Agriculture Organisation [5], the aquaculture industry has grown at an average annual rate of 6.6% between 1970 and 2008 [5]. Based on some article research that we collect, there is one fact about the understanding about the various perceptions of aquaculture is an important part of aquaculture management and planning. So, the Youth awareness and commitment in the aquaculture sector which left by them many decades ago need to be revived [6]. The possible role of perception in policy is problematic when perceptions are based on generalized and vague information such as that found in media characterizations of aquaculture.

MATERIALS AND METHODOLOGY

This study conducted to identify the level of attitude of youth in aquaculture industry in Kelantan and to determine the factor mostly influencing the participation of youth in aquaculture industry in Kelantan. A random sampling technique was used in order to collect the data from respondents. About 40 students of Universiti Malaysia Kelantan (UMK) were selected to answer the administered questionnaire given to them. The data that successfully collected were analysed by using (SPSS 21) to achieve the objectives of this study.

RESULTS AND DISCUSSION

Demographic Information

Table 1 below showed the demographic information of respondents. For gender, the highest percentage respondents choose are female (67.5%) while male got (32.5%). Next, the highest percentage on age is (80%) on 18 – 22 years old, followed by (20%) on 23 – 27 years old. Besides, race highest percentage is 92.5% on Malay, followed by Indian is (5.7%) and lastly Chinese is (1.8%). The status highest percentage is single (90%) while married is (7.5%) and widowed is (2.5%). Next, for the part of the level of education highest percentage is (67.5%) on Degree/Master/PhD level, followed by STPM level (17.5%), then (15%) on Diploma.

TABLE 1. Demographic information of the respondents.

Variable	Frequencies	Percentage (%)
Gender:		
Male	13	32.5
Female	27	67.5
Age:		
18-22 years old	32	80.0
23-27 years old	8	20.0
28-30 years old	0	0.0

(Source: Survey 2019)

TABLE 1. Demographic information of the respondents. (cont...)

Variable	Frequencies	Percentage (%)
Race:		
Malay	37	92.5
Indian	1	2.5
Chinese	2	5.0
Marital Status:		
Single	36	90.0
Married	3	7.5
Divorced	1	2.5
Education Level:		
SPM	0	0.0
STPM/STAM	7	17.5
Diploma	4	10.0
Degree/Master/PhD	29	72.5

(Source: Survey 2019)

Level of attitude of youth in aquaculture industry in kelantan

Descriptive analysis was used in order to find the mean score for each factor. As the mean score for this study was categorized into three categories which are low (1.00 – 2.33), moderate (2.34 – 3.66) and high (3.67 – 5.00). The attitude was recorded as the highest mean score (Mean = 3.995). Since the mean value was categorized as high mean value, it can be stated that the youth entrepreneurs have attitudes in aquaculture industry. The lowest mean score is for subjective norm (Mean = 3.5357). It also can be categorized at a moderate level, but it stated subjective norm which influence youth in aquaculture industry. The third mean score was recorded by perceived behavioural control (Mean = 3.9950). It can be categorized in high range level of the mean score, and it showed ability of youth entrepreneurs in aquaculture industry.

TABLE 2. Result of mean score.

Factors	Mean Score	Level
Attitude	3.9950	High
Subjective Norm	3.5357	Moderate
Practice	3.9950	High

Factor mostly influencing the participation of youth in aquaculture industry in kelantan

For this part, factor analysis was applied in order to determine the factor that mostly influencing the participation of youth in aquaculture industry. Firstly, the Kaiser-Meyer-Olkin (KMO) Bartlett's Test of Sphericity was run. The KMO Measure of Sampling Adequacy is a statistic that indicates the proportion of variance in the variables that might be caused by underlying factors. High values (close to 1.0) generally indicate that a factor analysis may be useful with our data. If the value is less than 0.50, the results of the factor analysis probably will not be very useful [7]. Bartlett's test of sphericity tests the hypothesis that your correlation matrix is an identity matrix, which would indicate that your variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful with the data. The value for KMO sampling of adequacy for Attitude is 0.727, Subjective Norm is 0.872 and Perceived behavioural control is 0.800, Participation is 0.798 and Perception is 0.657. All of the values are more than 0.6, thus the factor analysis can be run as a proper analysis. The significant of Bartlett's test of Sphericity with the value at 0.0 levels is significant. This result means that there are inter-correlations among the variables.

TABLE 3. KMO and Bartlett's Test of Sphericity.

	Attitude	Subjective norm	Perceived behavioral control
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy	0.727	0.872	0.800
Bartlett's Test of Sphericity	0.000	0.000	0.000

The percentage of variance explained is used to measure how much total variance accounted is explained by the factors. Therefore, the result shows that the factors are significant with the factor influencing the participation of youth in aquaculture industry. Based on the Table 4 below shows the most and highest factor influences the youth in aquaculture industry is the perceived behavioural control with the variance explained 57.083%.

TABLE 4. Total variance explained

Factors	Variance Explained (Percentage)
Attitude	48.570
Subjective Norm	55.764
Perceived Behavioural Control	57.083

CONCLUSION

As for the conclusion, the mean score for attitude and perceived behavioural control is 3.99 which are higher among the others. This shows that attitude and perceived behavioural control has the highest influences towards perception of youth in aquaculture. The finding also found that the mostly influencing factor was perceived behavioural control with the highest variance explained 57.083%. The government should encourage the youth to attract in the aquaculture industry by the help in provision of credit scheme. Moreover, the development of aquaculture participatory program can also go a long way in encouraging the youth through trainings, provision of infrastructure, inputs and effective extension work.

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