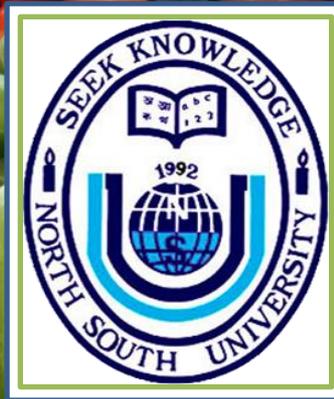


Consumer Behavior towards Organic Food in Select Areas of Dhaka North: A Willingness to Pay Approach



Presented by

Jannat Tarannum Barsha

Co authors:

Raisa Bashar

Dr. Nazmul Ahsan Khan

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Introduction

Bangladesh has achieved the status of self sustainability in terms of food production

It is the high time that Bangladesh should go for food quality rather than quantity and move towards organic food production and consumption

Background

Current Scenario of organic Farming in Bangladesh – Poor

Method Chosen for the study - Willingness to pay method

Justification of the Study

- Bangladesh has achieved the middle income status: right time to move towards organic food over inorganic food products
- The use of chemical fertilizers and pesticides increases the risk of developing cancer in adults and children and adversely affects fetal brain development
- Use of artificial fertilizers depletes the organic matter of soil, reduces water holding capacity and make them more subject to erosion
- Only a few researches have been published on consumer behavior and their willingness to pay towards organic food

Research Questions

1. What is the present level of awareness among the people on organic food products in the selected areas of Dhaka North?
2. How much price premium are they willing to pay for organic food consumption?

General Objectives

To assess the present level of awareness among the people on organic food products in the selected areas

To determine how much price premium they are willing to pay

Specific objectives

- To explore the relationship between demographic information and consumer willingness to pay towards organic food
- To assess consumer knowledge, perception and awareness towards organic food
- To identify how much price premium the consumers are willing to pay for organic food products
- To determine the present status of availability of organic food

Literature Review

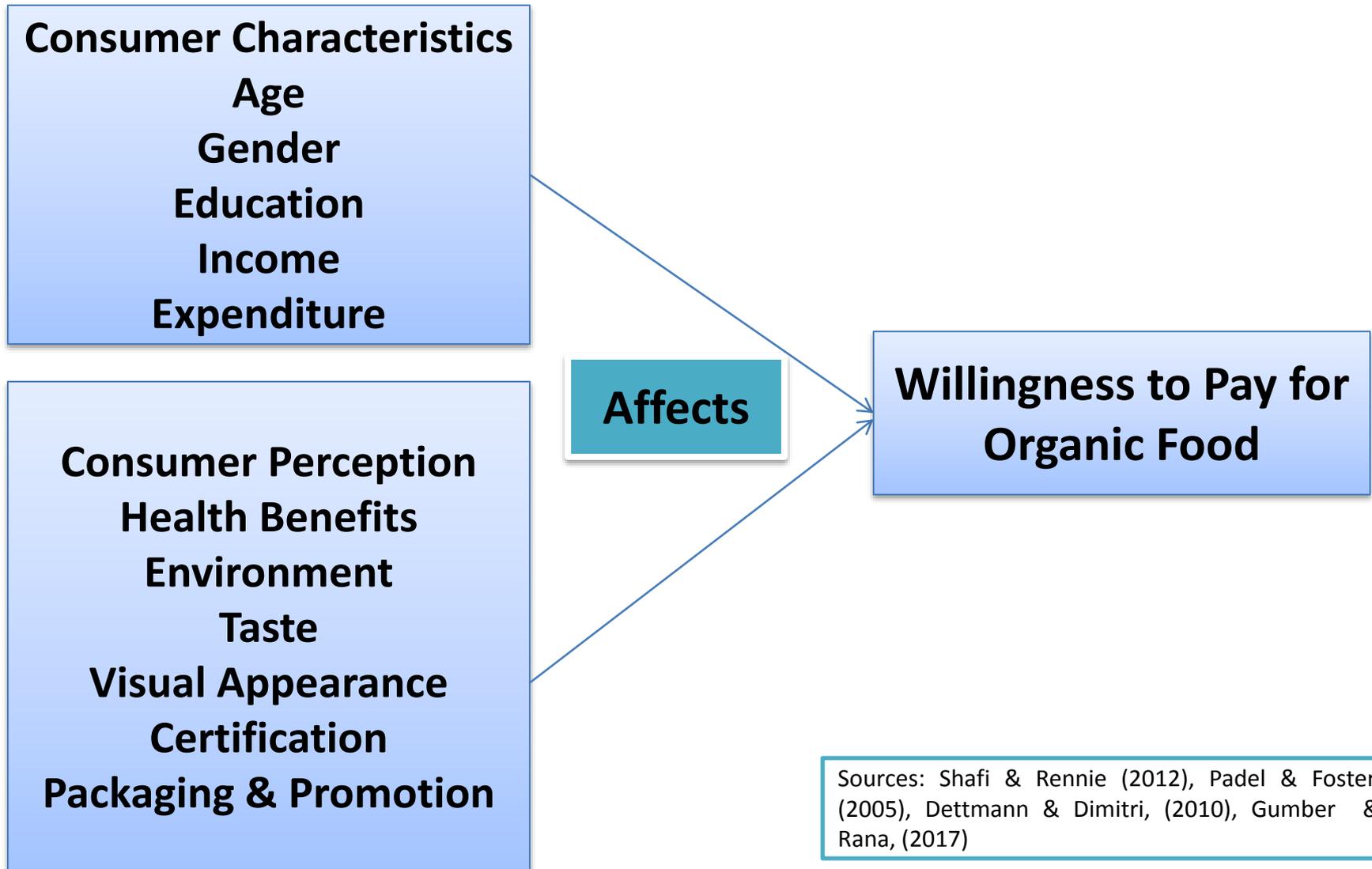
According to Andersen (2007), organic food products are those that are environmentally sound, free from pesticides and chemical fertilizers, do not contain genetically modified organisms and are not processed using irradiation, industrial solvents or chemical food additives

The trend of organic food was initiated in developed countries such as Europe and North America and now expanding to developing countries like India, Nepal, Thailand, Malaysia, and Vietnam (Gumber & Rana, 2017)

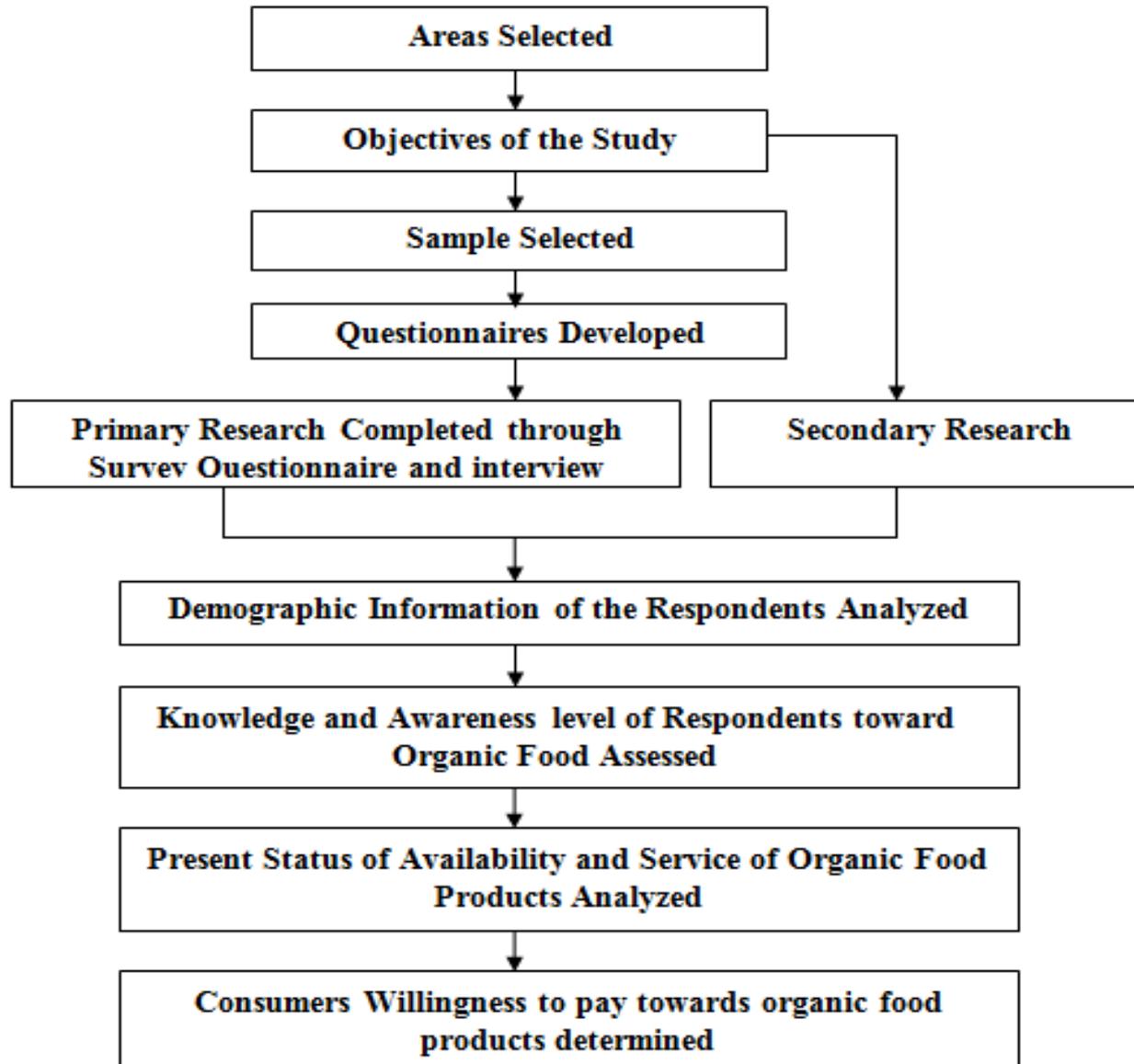
Thatte et al. (2016), found that level of education and knowledge about organic food is directly related and also consumers with higher income are willing to pay the price premium for organic food products

Consumer behavior and organic food consumption in Dhaka city- Low Lack of knowledge, unreliable certification, Price premium and insufficient supply of organic food are the main barriers

Consumer Characteristics, Perception and Willingness to Pay



Research Methodology



The formula for calculating the sample size is as follows:

$$n = \frac{Z_{\alpha}^2 P(1-P)}{d^2}$$
$$n = \frac{(1.96)^2 (0.5) (0.5)}{(0.05)^2}$$
$$= 384.16 \approx 384$$

Where

n = sample size

Z = Z statistic for a level of confidence

P = expected prevalence

d = precision

For the level of confidence of 95%, Z value is 1.96. Since there are no previous studies done in these areas, the prevalence value is taken to be 50%. Therefore, P is 0.5 and $d=0.05$ in proportion of one. The sample size results to 384. However, due to time constraint, a total of 120 respondents were recorded

Data Analysis and Discussion

Table 1: Demographic Information of the Respondents

Gender	Number of Respondents (Total=120)	Number of respondents (%)
Male	51	42.5
Female	69	57.5
Age Group (In years)	Number of Respondents	Number of respondents (%)
18 - 30	47	39.2
31 - 45	46	38.3
46 - 60	21	17.5
Above 60	6	5

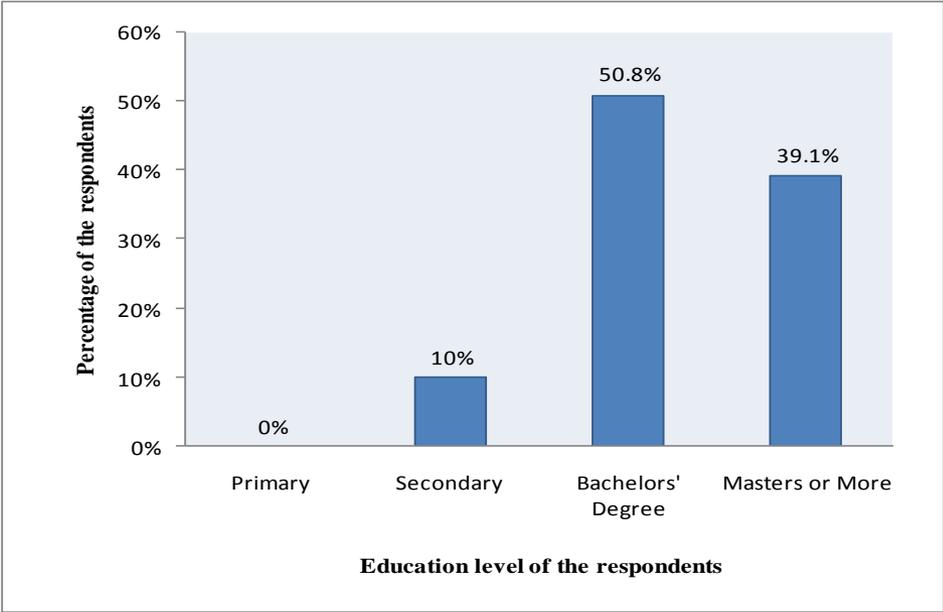


Figure 1: Educational background of the respondents

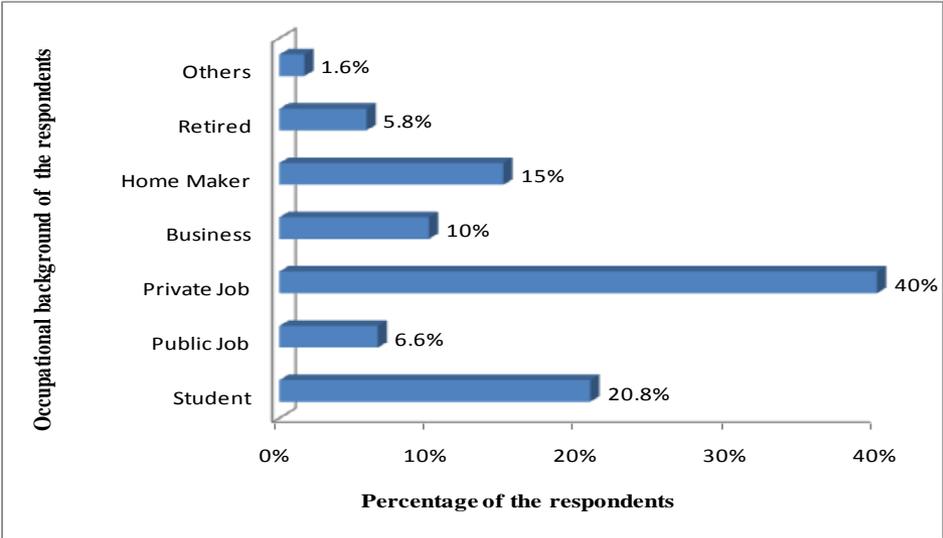


Figure 2: Occupational background of the respondents

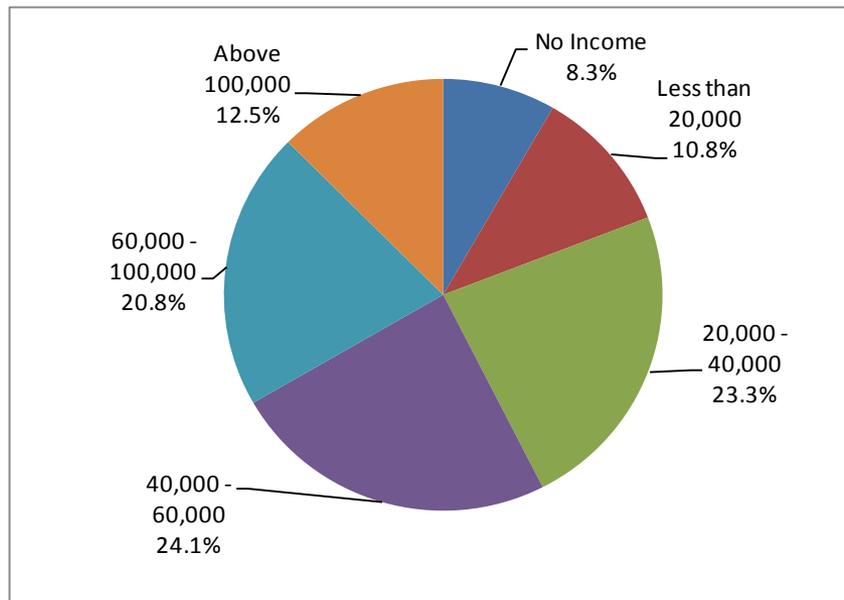


Figure 3: Monthly Income of the Respondents in BDT

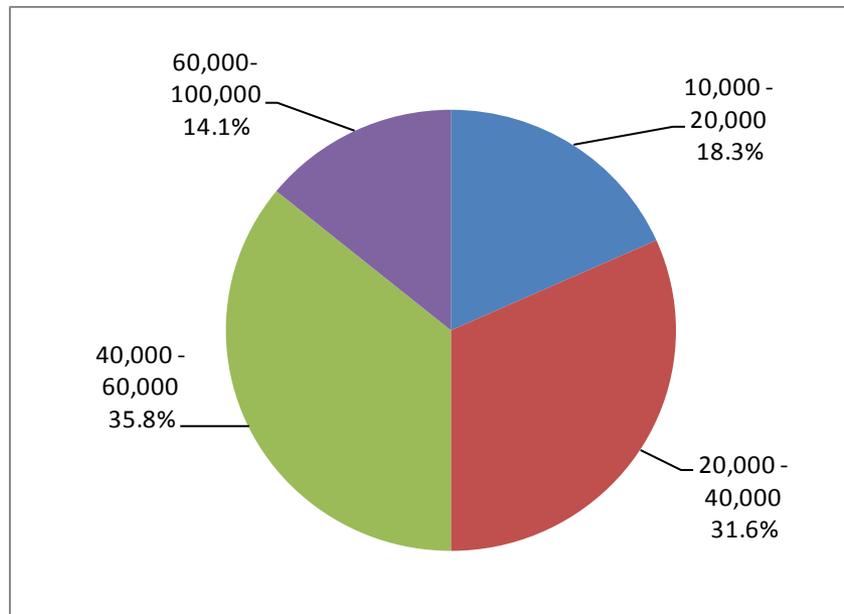


Figure 4: Monthly expenditure of the respondents in BDT

60% (N=72) have the knowledge that organic food refers to those food products which are produced without synthetic fertilizers and pesticides and 70% of the respondents heard the term from internet, books, newspapers, magazines etc. Other 40% do not have the exact idea about the term organic.

Consumers motives behind buying organic food

-73.3% (N=88) said organic food contains more food value

-61.6% (N=74) thinks organic products are more healthy

- 58.3%, N=70 consumers said they are more tasty

- 81.6%, N=98) believes organic farming method is less harmful for the environment

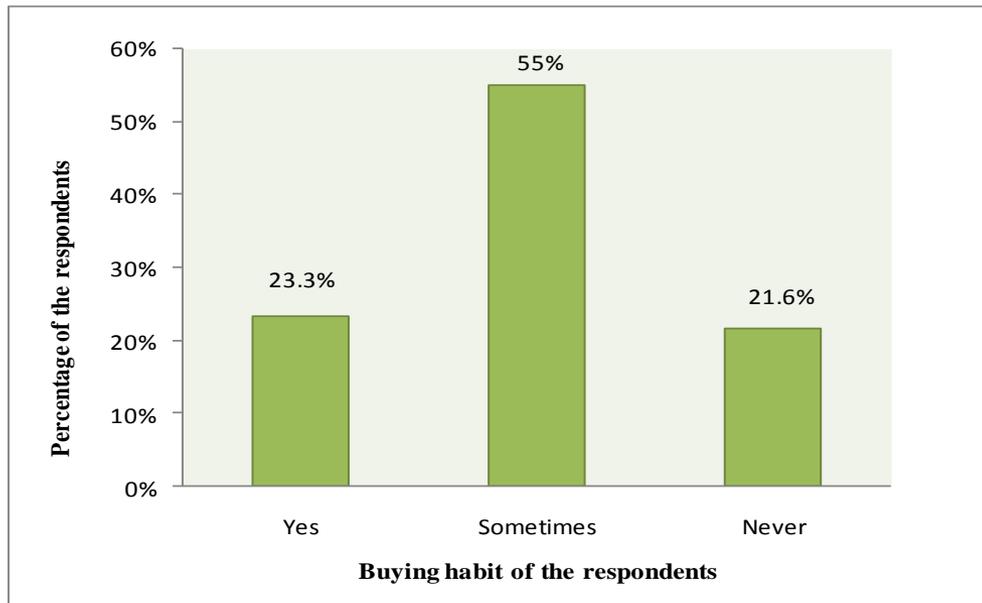


Figure 5: Buying Habit of the Respondents

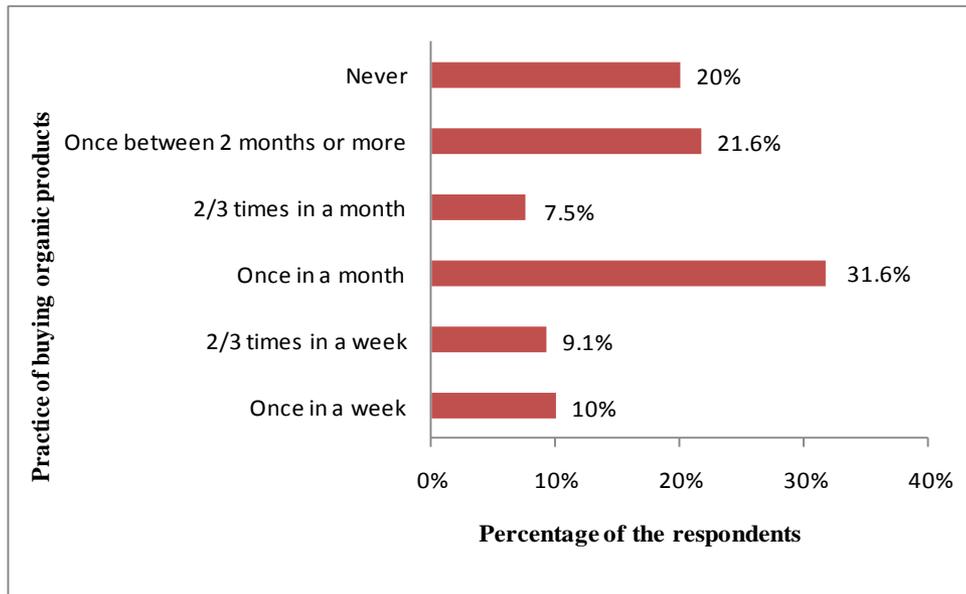


Figure 6: Practice of Buying Organic Food Products among the Respondents

Table 2: Percentage of frequently purchased organic food products

Product Name	Number of organic product buyers	Number of organic product buyers (%)
Rice	15	12.5
Vegetables	66	55
Fruits	64	53.3
Fish	25	20.8
Meat	10	8.3
Tea	27	22.5
Others (Juice, honey, mustard oil, Pulse)	7	5.8
I don't buy	23	19.1



Figure 7: Importance of certification of organic food products

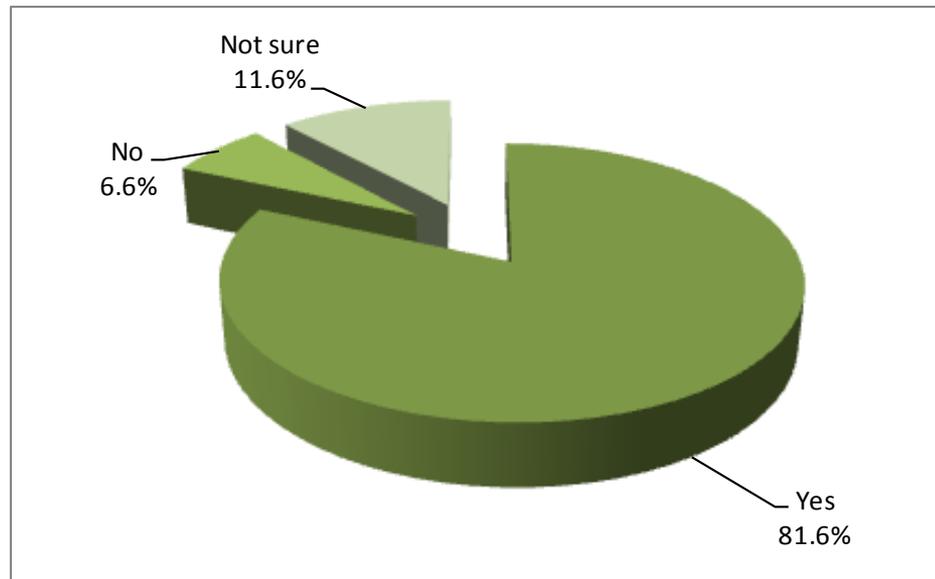


Figure 8: Importance of certification logo on organic food products

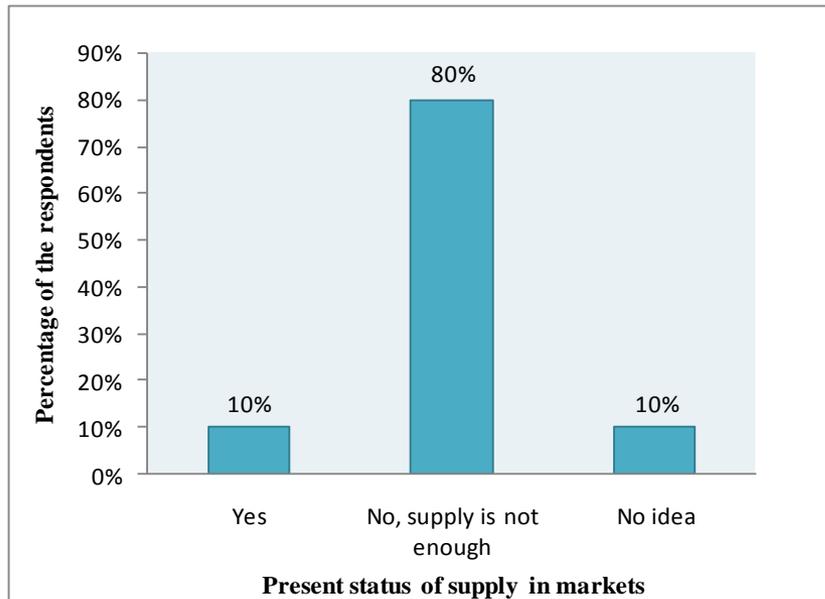


Figure 9: Identification of supply of organic food products in market

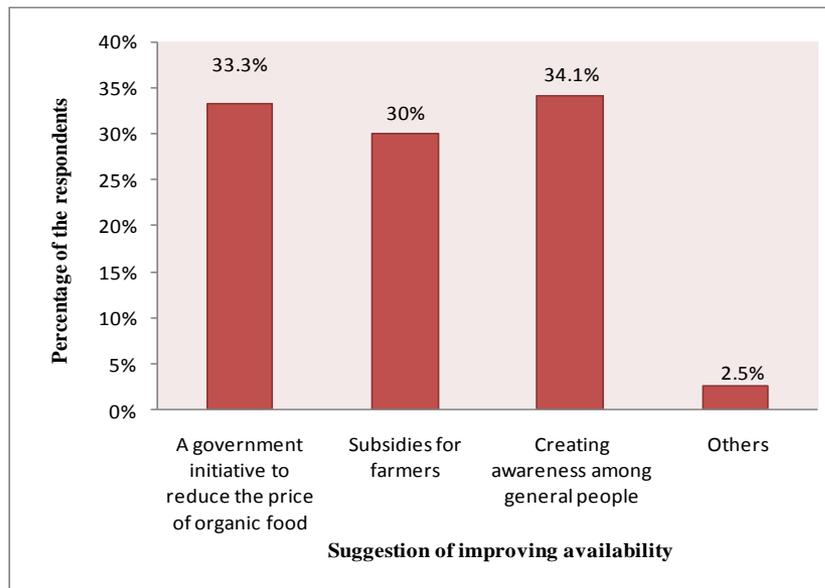


Figure 10: Suggestion for improving the availability of organic food

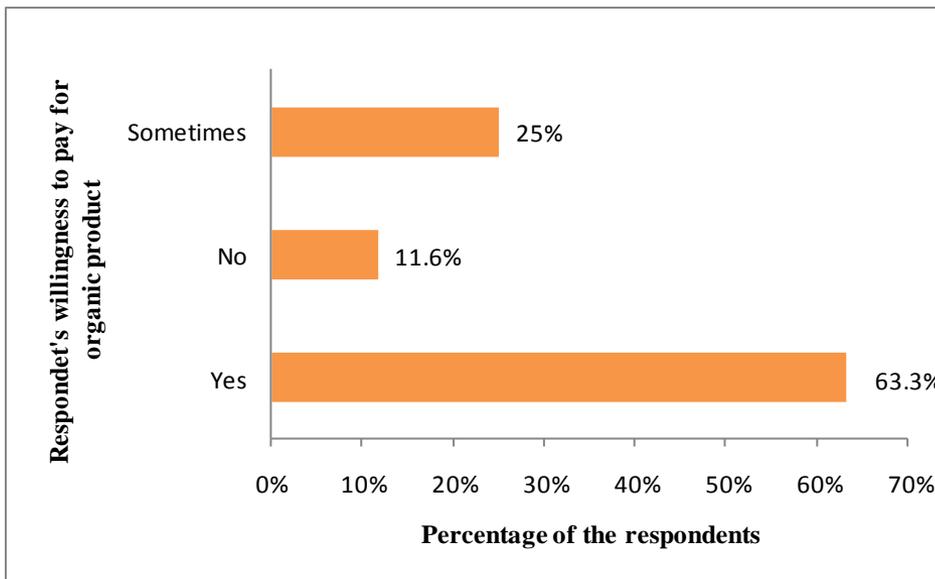


Figure 11: Consumers willingness to pay for organic food products

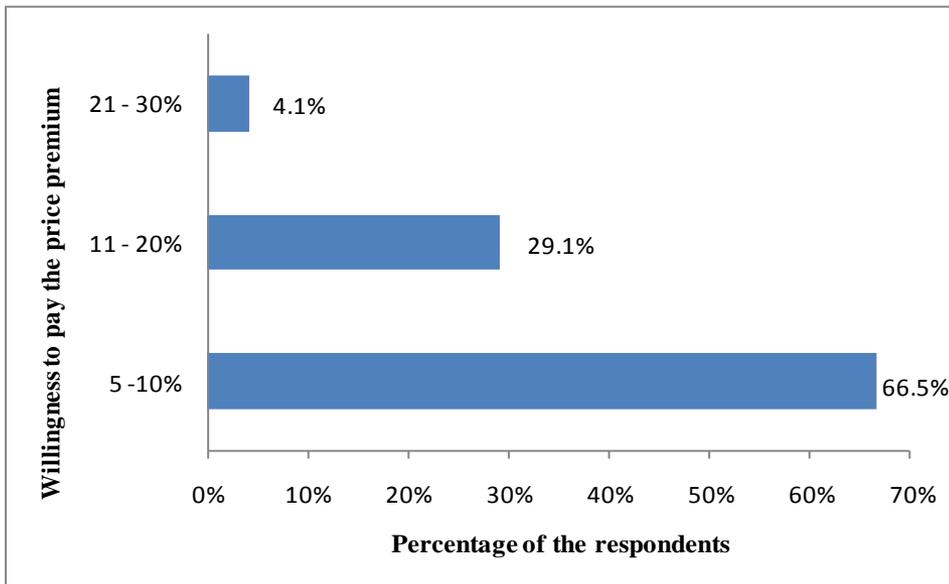


Figure 12: Percentage of price premium consumers willing to pay

Summary of Research Findings and Recommendations

	Level of Education (%) (Bachelors' and Masters)	Level of Income (%) (20,000-above100,000)	Level of Expenditure (%) (20,00-100,000)
Primary Relationship with organic consumption	84.8	73.3	80
Secondary Relationship with organic consumption	89.1	75.6	81

Sources: Iqbal, (2015); Gumber & Rana, (2017); Meyer, (2017)

Most of the people only understand and buy organic vegetables and fruits but have less knowledge about organic fish, meat, rice, pulse and other products

Lack of government certification is one of the major reasons for the lower consumption of organic food products

Certification of Organic Food Products

Government Sector

Develop a reliable authoritative body

Generate an authentic certificate for organic food products

Establish organic and inorganic product market independently

Ensure optimum price for organic products

Create more awareness among general people

Private Sector

Invest more in organic farming

Establish more organic superstores

Encourage all superstores to sell organic products and label them

Arrange organic food festival monthly

Consumer

Make people aware about the harmful impacts on health and environment from inorganic food products

Spread more knowledge about the benefits of organic products

People who have better knowledge are willing to pay price premium

Price premium is another factor which affects the willingness to pay of consumers towards organic food products. The majority of the consumers would like to pay only 5-10% price premium and none of them are willing to pay more than 30% price premium

Consumers claimed the lack of availability while the superstore authority claimed the lack of demand, both are further responsible for lower consumption in the selected areas

Form literature, it has been seen that there are gap exist about consumer behavior and their willingness to pay towards organic food in Bangladesh

Conclusion

Consumers' demand and willingness to pay can be fostered through:

- Organizing health and environmental awareness programs
- Generating authentic certification by the government body
- Ensuring appropriate price policy

Bangladesh has considerable advantages in terms of organic farming and we should grab this opportunity and move towards organic food consumption

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Thank You!

