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## VALUE CHAIN AND SPATIAL CO-INTEGRATION ANALYSIS OF SHRIMP IN SOME SELECTED AREAS OF BANGLADESH

**Md. Imran Omar\*; Md. Shafaet Hossen\*\*;  
Tanvir Mahmud Bin Hossain\*\*\*; Umme Aymon Janifa\*\*\*\***

\*Scientific Officer,  
Agricultural Economics Division,  
Bangladesh Agricultural Research Institute,  
Joydevpur, Gazipur, Bangladesh.

\*\*Assistant Professor,  
Department of Fisheries Biology and Genetics,  
Bangladesh Agricultural University,  
Mymensingh, Bangladesh.

\*\*\*Senior Scientific Officer,  
Agricultural Economics Division,  
Bangladesh Agricultural Research Institute,  
Joydevpur, Gazipur, Bangladesh.

\*\*\*\*Student,  
Faculty of Fisheries,  
Department of Aquaculture,  
Bangladesh Agricultural University,  
Mymensingh, Bangladesh.

### ABSTRACT

*A study was undertaken to examine the marketing system value chain analysis of shrimp in selected areas of Khulna district of Bangladesh during the month of May-June 2012. The objectives of the study were to estimate costs and margins, and to test market integration of shrimp. Primary and secondary data were used for this study. The higher marketing cost was incurred by aratdars and the lowest by retailer. On the other hand, retailers earned the highest net marketing margins. Analysis of market integration shows that Shrimp market in Bangladesh was well integrated. The findings of the study revealed that the marketing of Shrimp was a profitable business and some recommendations were provided for the improvement of Shrimp marketing in the country.*

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**KEYWORDS:** *Engle Granger Co-Integration, Value Chain, Market Integration, Marketing Cost and Margin.*

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## INTRODUCTION

The economy of Bangladesh has benefited enormously from the rapid development of the aquaculture production, in particular from shrimp cultivation. The economic benefits are paralleled with substantial environmental, natural resource and health effects that can be attributed to shrimp farming. The ultimate aim of our research program is to identify those types of shrimp enterprises that have large economic returns but modest environmental, natural resource and health impacts, so that they can serve as a model for sustainable development. The economy of Bangladesh can benefit enormously from increased shrimp cultivation. Therefore, the tradeoff between the micro and macroeconomic benefits and the environmental impacts of shrimp farming needs to be examined. The role of fisheries in Bangladesh in supplying animal protein, in providing employment, in earning foreign exchange and in supporting multifarious ancillary industries at the rural levels is well-known. The total annual fish production is estimated at 2.90 million tonnes in 2009-10 (Bangladesh fiscal year: 1 July-30 June), of which 1.35 million tonnes (46.62%) are obtained from inland aquaculture, 1.02 million tonnes (35.53%) from inland capture fisheries, and 0.52 million tonnes (17.85%) from marine fisheries (DoF, 2010). The main production systems for freshwater aquaculture in Bangladesh are extensive and semi-intensive pond poly-culture of Indian major carps and exotic carps, which account for 80% of the total freshwater aquaculture production. The remaining 20% are mainly from catfish, tilapia, small indigenous fish and rice-fish farming (ADB, 2005). The fishery-based economy will, no doubt, gain even greater importance in the future. Because of the limitations of capture fisheries and the vast potential for the development of culture fisheries, most of the additional fish production, necessary for domestic consumption or for export will have to come from aquaculture. It is also felt that a large part of the surplus labour could be productively absorbed through the development of aquaculture.

The increasing demand and steadily rising price of shrimp in the international market caused a Silent revolution in brackish water aqua farming development. Once a casual activity of little economic significance, brackish water aqua farming soon emerged as a multi-million taka farming industry in a few years. All these developments took place in the private sector with very little inputs from Government. It is only since 1980, the starting year of the Second Five-Year Plan, that the contribution of brackish water aqua farming has been officially recognized. With favorable environmental conditions for brackish water aquaculture and the existence of large areas with good potential for aquaculture, the Government has given high priority to brackish water aqua farming because of the urgent needs of export and rural employment. . Thus, the present study is conducted to examine the fish marketing system, supply chain and value addition to determine the pulling factors for enhancing production, processing and marketing of different species of fishes in Bangladesh. The specific objectives of the study were to examine the existing marketing system of Shrimp, to examine cost and margins at different stages of marketing channels, to examine the price behavior in terms of seasonal price variation, to analyse the market integration of shrimp to identify the major problems of Shrimp marketing and suggest



some remedial measures. Thus the study was conducted for understanding the present situation of marketing system of Shrimp in different regions of Bangladesh with following objectives.

### OBJECTIVES

- To identify different marketing channels and intermediaries involved of shrimp
- To determine the extent of value addition in terms of costs in successive stages of shrimp movement
- To examine the marketing cost and marketing margin of shrimp and
- To analyse the market integration of shrimp

### MATERIALS AND METHODS

The present study was conducted based on field survey method wherein primary data were collected from the respondents. Secondary data was collected from journals, thesis and raw data from monthly bulletin of Directorate of Agricultural Marketing (DAM) and District Fisheries Office. In Khulna district there were a number of successful shrimp producers, trader's i.e. Aratdar, Bepari, LC (Letter of Credite) paiker, Paiker and retailer etc. The study area is confined to one Upazilas namely Khulna Sadar in Khulna district, where the cultivation of shrimp fish was concentrated. Purposive sampling techniques were used for selecting the sample. Total sample size of the study was 100. Selected samples consisted of 20 fish farmers and 80 traders. The intermediaries dealing with shrimp marketing were categorized into three groups, namely, Aratdar, Paiker Depot owner, Processing plant and retailer. From different stages of fish marketing, 10 Aratdars 8 LC (Letter of Credite) paiker, 5 Depot owners, 7 Processing plant 10 Paikers and 40 retailers were selected as respondents for the study. The weekly average wholesale prices of Shrimp of various markets like Dhaka, Chittagong, Sylhet, Khulna, Rajshahi and Mymensingh during 1995 to 2012 were collected from Department of Agricultural Marketing (DAM). Latter it was converted into monthly figures.

### ANALYTICAL TECHNIQUES

The following techniques were used for the analysis.

Percentages of total value addition cost/net profit calculated =

$$\frac{\text{Marketing cost/ Net marketing margin}}{\text{Total marketing cost/ net marketing margin}} \times 100$$

Determination of market integration through Engle and Granger co-integration method

### FARMER'S NET PRICES WERE CALCULATED BY USING FOLLOWING FORMULAS

Farmer's net price = Farmer's sale price - Farmer's marketing cost

**MARKET INTEGRATION:** The main objective of price policy is to safeguard the interests of producers and consumers. The producer's interest can best be safeguarded if he is paid appropriate price for his product. He gets fair prices if markets are well integrated. The basic idea

behind the measurement of market integration is to understand the interaction among prices in spatially separated markets (Goletti and Babu, 1994, pp. 311-325). Thus integrated markets are defined as markets in which prices of differentiated products do not behave independently (Monke and Petzel, 1984, pp. 401-487).

If price movement of a commodity in one market is completely irrelevant to forecast price movements of the same commodity in other markets, the markets are characterized as segmented (Kumar and Sharma 2003, p. 203). In well integrated markets, middlemen's share should be reasonable and consumers get produce at fair price. So it is very important to understand whether commodity markets function efficiently. Markets function efficiently when these are integrated in price relationships and it is also imperative to see whether infrastructural and technological development in communication system has improved the functioning of commodity markets.

**MEASUREMENT OF MARKET INTERGRATION BY CO-INTEGRATION:** The bulk of econometric theories have been based on the assumption that the underlying data process is stationary a) stochastic process is said to be stationary if its mean and variance are constant over time and the value of covariance between two time periods depends only on the distance or gap or lag between the two time periods and not the actual time at which the covariance is computed (Gujarati, 2003, p.797). In practice, most economic time series are non-stationary. Applying regression models to non-stationary data may arise the problem of "spurious or nonsense" correlation (Gujarati, 2003, p. 792). If the time series data like prices, which are non-stationary, are used, it usually would yield a high  $R^2$  and 't' ratios which are biased towards rejecting the null hypothesis of no relationship between the variables concerned. To overcome such problems, the concept of co-integration was used because it offers a means of identifying and hence avoiding the spurious.

In a high inflationary situation like Bangladesh, use of nominal price to use in estimation to correlation coefficient (pair wise) would be misleading as the force of inflation over the years for which, estimated coefficients may tend to show high degree of association between pair of prices of two markets. So, other advanced method of assessing market integration like co-integration method was also needed and that was used in this study. The underlying principle of co-integration analysis is that, although trend of many economic series show upward or downwards over time in a non-stationary fashion, group of variables may drift together.

**UNIT ROOT AND CO-INTEGRATION TEST:** The individual price series were tested for the order of integration to determine whether they are stationary which is known as the unit root test (Gujarati, 2003, p.799). A number of tests for stationarity are available in the literature; these include the Dickey-Fuller (DF) test (Dickey and Fuller,1979),the Augmented Dickey-Fuller(ADF) test (Dickey and Fuller,1981)and the Philips-Perron(PP) test (Perron,1988). For theoretical and practical reasons, the Dickey-Fuller test is applied to regressions run in the following forms:

$Y_t$  is a random walk or without constant:

$$\Delta Y_t = \delta Y_{t-1} + e_t \quad \dots\dots\dots (1)$$

$Y_t$  is a random walk with drift or constant:

$$\Delta Y_t = \beta_1 + \delta Y_{t-1} + e_t \dots\dots\dots (2)$$

$Y_t$  is a random walk with drift around a stochastic trend (constant plus trend):

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + e_t \dots\dots\dots (3)$$

Where  $t$  is the time or trend variable.

In each case the null hypothesis is  $\delta = 0$  ( $\rho = 1$ ); that is, there is a unit root, that means the time series is non-stationary. The alternative hypothesis is that  $\delta$  is less than zero; that is, the time series is stationary. Under the null hypothesis, the conventionally computed  $t$  statistics is known as the  $\tau$  (tau) statistic, whose critical values have been tabulated by Dickey and Fuller. If the null hypothesis is rejected, it means that  $Y_t$  is a stationary time series with zero mean in the case of (1), that  $Y_t$  is stationary with a non-zero mean  $[ = \beta_1 / (1 - \rho) ]$  in the case of (2), and that  $Y_t$  is a stationary around a deterministic trend in equation (3).

It is extremely important to note that the critical values of the tau test to test the hypothesis that  $\delta = 0$ , are different for each of the preceding three specifications of the DF test. If the computed absolute value of the tau statistics ( $\tau$ ) exceeds the DF or MacKinnon critical tau values, we reject the hypothesis that  $\delta = 0$ , in which case the time series is stationary. On the other hand, if the computed ( $\tau$ ) does not exceed the critical tau value, we do not reject the null hypothesis, were the time series is non-stationary.

In conducting the DF test as in (1), (2), or (3), it was assumed that the error term  $e_t$  was uncorrelated. But in case the  $e_t$  are correlated, Dickey and Fuller have developed a test known as the augmented Dickey-Fuller (ADF) test.

This test is conducted by “augmenting” the preceding equation by adding the lagged values of the dependent variable  $\Delta Y_t$ . The ADF test here consists of estimating if the error term  $e_t$  is auto correlated, one modifies (4) as follows:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \alpha_i \sum_{i=1}^m \Delta Y_{t-i} + \varepsilon_t \dots\dots\dots (4)$$

where  $\varepsilon_t$  is a pure white noise error term and where,  $\Delta Y_{t-1} = (Y_{t-1} - Y_{t-2})$ ,  $\Delta Y_{t-2} = (Y_{t-2} - Y_{t-3})$ , etc., that is, one uses lagged difference terms. The number of lagged difference terms to include is often determined empirically, the idea being to include enough terms so that the error term in (4) is serially uncorrelated. The null hypothesis is still that  $\delta = 0$  or  $\rho = 1$ , that is, a unit root exists in  $Y$  (i.e.,  $Y$  is non-stationary).

**SPATIAL PRICE RELATIONSHIP:** To test the market integration, the following co-integration regression was run for each pair of price series:

$$Y_{it} = \alpha_0 + \alpha_1 Y_{jt} + \varepsilon_t \dots\dots\dots (5)$$

Where,  $Y_i$  and  $Y_j$  are price series of a specific commodity in two markets  $i$  and  $j$ , and  $\varepsilon_t$  is the residual term assumed to be distributed identically and independently. The test of market integration is straightforward if  $Y_i$  and  $Y_j$  are stationary variables but if the price series proved as non-stationary then we have to done another test (Engle-Granger test)

Testing whether the variables are co-integrated is merely another unit root test on the residual in equation (5). However, since the  $Y_i$  and  $Y_j$  are individually non-stationary, there is the possibility that the regression is spurious. The DF and ADF tests in the present context are known as Engle-Granger (EG) test whose critical values was provided by Engle-Granger (Ramakumar, 1998). The test involved regression the first-difference of the residual lagged level and lagged dependent variables (Engle-Granger test) is as follows:

$$\text{For Engle-Granger (EG) test, } \Delta \varepsilon_t = \beta \varepsilon_{t-1} \dots\dots\dots (6)$$

If the computed value of 't' of regression coefficient  $\beta$  is higher (in absolute term) than tabulated value, our conclusion is that the residuals from the regression are I (0), that is they are stationary and the regression is not spurious even though individually two variables are non-stationary.

## RESULTS AND DISCUSSION

### MARKETING PRACTICES

#### BUYING AND SELLING

In the study areas, the whole marketing of shrimp has been broken down into various functions such as buying and selling, transportation, grading, storing, weighing, financing, market information and pricing. The activities involved in the transfer of goods are completed through buying and selling functions. Aratdars do the functions of negotiation between buyers and sellers of shrimp and help them at their own business premises on receipt of commission. They do not take the ownership of the products. Shrimp farmers sell 5% of their shrimps to farias; 50% to beparis, 15% to paikers and 5% to retailers via aratdar and 25% to depot owners. Farias sell 60% to depot owners and 40% to retailers via aratdar. Depot owner and bepari each sell 100% of their shrimp to account holders. Paikers sell 100% of their shrimps to retailers via aratdar. Account holders each sell 100% shrimp to processing plant owners and world market (export) respectively. Retailers sell the entire shrimp to ultimate consumers. Shrimp farias purchase 100% shrimp from farmers. Depot owners purchase 40% shrimp from farmers directly, 20% from farias and 40% from farmers via aratdar. Paiker and bepari purchase 100% shrimp from farmers through aratdar. Account holders purchase 30% shrimp from farmers, 50% from beparis and 20% from depot owners. Retailers purchase 80% from beparis and 20% from farmers via aratdar. Consumers purchase 100% of shrimp from the retailers in the study area (Table 1).

**TABLE 1. PERCENT OF SHRIMP/PRAWN TRANSACTED BY VALUE CHAIN ACTORS**

Value chain actor	Purchase from (%)					
	Farmer	Faria	FarmerBepari via Aratdar	Depot owner	AC Holder	Retailer
Faria	100	-	-	-	-	-



Depot owner	40	20	40	-	-	-	-
Paiker	-	-	100	-	-	-	-
Bepari	-	-	100	-	-	-	-
A/C Holder	30	-	-	50	20	-	-
Processing plant	-	-	-	-	-	-	-
Retailer	-	-	20	80	-	-	-
Consuer	-	-	-	-	-	-	100
<b>Sold to (%)</b>							
<b>Value chain actor</b>	<b>Faria</b>	<b>Retailer via Aratdar</b>	<b>Bepari via Aratdar</b>	<b>Paiker via Aratdar</b>	<b>Depot owner</b>	<b>AC holder</b>	<b>Processing plant Consumer</b>
Farmer	5	5	50	15	25	-	-
Faria	-	40	-	-	60	-	-
Depot owner	-	-	-	-	-	100	-
Paiker	-	100	-	-	-	-	-
Bepari	-	-	-	-	-	100	-
A/C Holder	-	-	-	-	-	-	100
Processing plant	-	World market	-	-	-	-	-
Retailer	-	-	-	-	-	-	100

Source: Field survey, 2012.

**GRADING**

Grading is the basic function of sales transactions and is defined as the classification of products according to some standards or measures (Kohls and Uhl, 2005; p. 314). Grading is the sorting of produce into different market quality which facilitates exchange by simplifying buying and selling as it makes the sale by showing sample and description possible. It also simplifies the concentration process and makes easier and less costly the movement of goods through the marketing channel. Grading facilitates sale since different sizes of Shrimp have different prices. In Bangladesh, all intermediaries' grade shrimp on the basis of weight. However, Grading system of shrimp is different from other species. Here grading is based on number of pieces to make one kg. In case of golda, it starts from U-5 (under 5) meaning  $\leq 5$  pieces of golda to make one kg, and bagda starts from 8/12 meaning that 8 to 12 pieces comprise one kg.

**STORAGE**

The storage facilities help buyers and sellers to reduce the wide fluctuation of prices between peak and lean seasons. The storage function is primarily concerned with making goods available at the desired time and enables traders to receive better prices for their products. Because of high perishability, shrimp requires extremely specialized storage facilities matching the seasonal demand. Only the processing plants in the shrimp industry use proper storage systems for export to the world market. Other intermediaries use only ice to transport shrimps from one place to another. Though all intermediaries use ice during marketing, their use of ice in shrimp is not scientific for which quality of shrimp gets affected. While retail selling, some use ice and some do not.

**TRANSPORTATION**

In the study areas, the shrimp farmers and intermediaries use various modes of transports such as van, rickshaw, truck, passenger bus, pickup, Nasimon (locally made pick-up type van for transporting passengers and goods), head load etc, to transfer product from the producing areas to the consumption centre. Figures 1 show different modes of transport used by the intermediaries to transport shrimp from one place to another.

**FIGURE 1. MODE OF TRANSPORT USED BY FARMERS AND INTERMEDIARIES FOR MOVEMENT OF SHRIMP**

Shrimp farmer	Head load: Container carry on head Rickshaw/Van: Three wheel non-mechanized man-driven carrier
Depot owner	Rickshaw/Van: Three wheel non-mechanized man-driven carrier Truck: Cargo carrier (Non-refrigerated)
<i>Paiker</i>	Truck: Cargo carrier (Non-refrigerated) Pickup: Small lorry
<i>Bepari</i>	Truck: Cargo carrier (Non-refrigerated) Pickup: Small lorry
Account holder	Truck: Cargo carrier (Non-refrigerated) Pickup: Small lorry
Processing plant	Refrigerated van
Retailer	Bus: Passenger bus (Bottom cargo holder/roof top) Truck: Cargo carrier (Non-refrigerated) Nasimon: Locally made mechanized small lorry/van Pickup: Small lorry

## FINANCING

The financing function is the advancing of money by someone to carry on the business. For effective operation, financing is of crucial importance in the whole marketing system of shrimp. The source of finance for the value chain actors in the study areas are shown in Table 2 shows that in the case of shrimp, most of the farmers, aratdar, bepari and retailers are self-financed. Depot owners use a combination of own funds, bank loans, NGO and aratdars for shrimp marketing. Only 20% of depot owners procure loans from banks while 5% and 3% received from

NGOs and dadon giving aratdars respectively. However, a majority of depot owners use their own fund for the business. 34% of the paikers take dadon

**TABLE 2. SOURCES OF FINANCE OF SHRIMP FARMERS AND INTERMEDIARIES**

Sources of finance	Market participants (%)							
	Farmer	Depot	Aratdar	Paiker	Bepari	A/C holder	Processing plant	retailer
Own fund	78	72	100	64	91	70	43	100
Bank	0	20		0	0	30	57	
NGO	7	5		2	0			
Friend and relatives	1	0		0	0			
Dadon from Aratdar	14	3		34	9			

Source: Field survey, 2012.

### MARKET INFORMATION

Market information is a facilitative function required for efficiently operating marketing system. In the study area, visiting the markets and use of telephone/mobile phones are the most common sources of collecting market information for all value chain actors. Table 11 shows that fellow traders are also a common source of market information for all types of value chain actors except processing plants. These and LC paikers mainly depend on email/internet to gather market information from aratdar besides their own funds to run their businesses. Account holders partly and processing plant owners mostly depend on bank loans to accelerate the business operations.

**TABLE 3 SOURCES OF MARKET INFORMATION FOR FARMERS AND INTERMEDIARIES**

Sources of market information	Market participants (%)								
	Farmer	Depot owner	Aratdar	Paiker	Retailer	LC paiker	Bepari	A/C holder	Processing plant
From market	80		58	73	92	40	71	80	50
Fellow traders	51		45	43	25	20	29	20	0
Email/Internet	0		0	0	0	80	0	0	100
Telephone/mobile	60	100	90	87	55	100	100	100	100

Source: Field survey, 2012.

## PACKAGING

Packaging may be defined as the general group of activities in product planning which involves designing and producing the container or wrapper for a product (Stanton, 1991). Packaging is essential for proper transportation of shrimp. 'Box' made of cork sheet is widely used by A/C holders and processing plant owners in shrimp. Different sizes of packaging materials along with their capacities are shown in table 4.

**TABLE 4 PACKAGING PRACTICES OF SHRIMP MARKETING IN BANGLADESH**

Packaging practices	Using materials	Capacity	Used by
Basket	Bamboo, Rope and Polythene	40 kg	Farmer, Paiker and Retailer
		20 kg	Retailer
Drum	Plastic	40 kg	Farmer, Paiker



		20 kg	Retailer
Crate	Plastic, Polythene	40 kg	Depot owner (shrimp), Paiker, Bepari, Account holder (Shrimp), Retailer
Steel box	Steel sheet	250 kg	Paiker, Bepari (hilsha)
Wooden box	Wood, Polythene	160 kg	Bepari, Paiker,
Box	Cork sheet	40 and 20 kg	Account holder, Processing plant (shrimp)

Source: Field survey, 2012.

### PRICING

In the study areas, all intermediaries are involved in buying and selling of shrimp. Depot owners, bepari and AC holders of shrimp marketing chain follow prefixed prices set by the processing plant. Farmer, aratdar, paiker, LC paiker, and processing plants practice open bargaining, auction and going market prices method for fixing price of their products in varying degree. Cent percent of the retailers follow open bargain for selling their shrimp to consumers (Table 5).

**TABLE 5 PRICING METHODS FOLLOWED IN SELLING SHRIMPES IN BANGLADESH**

Pricing methods	Market participants (%)								Processing plant
	Farmer	Depot owner	Arat-dar	Paiker	Retailer	LC paiker	Bepari	A/C holder	
Open bargaining	29	0	10	53	100	20	30	0	99
Auction	60	0	99	37	0	40	0	0	0
Based on going market prices	29	0	0	30	0	80	70	0	15
Prefixed	0	100	0	0	0	0	100	100	0

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 prices

Cost-plus method	0	0	0	0	0	0	0	0	0
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Source: Field survey, 2012.

**SHRIMP MARKETING CHANNELS**

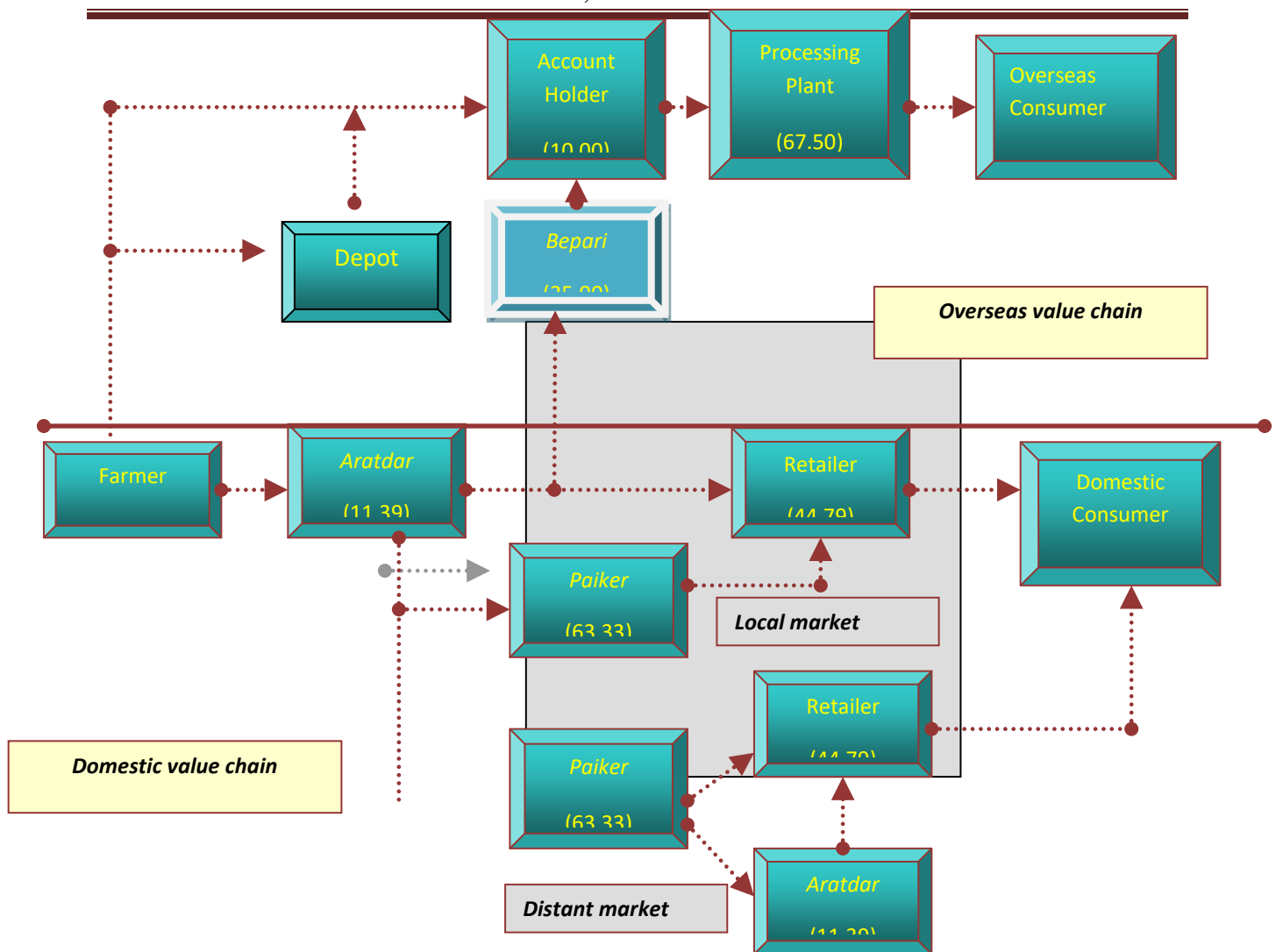
Shrimp is sold in both domestic and overseas market. Major supply chains of shrimp in the study areas are shown below:

**OVERSEAS VALUE CHAIN**

Value chain – I	Shrimp Farmer – Aratdar – Bepari – Account Holder – Processing plant – Consumer
Value chain - II	Shrimp Farmer – Depot owner – Account Holder – Processing plant – Consumer
Value chain - III	Shrimp Farmer – Account Holder – Processing plant – Consumer

**DOMESTIC VALUE CHAIN**

Value chain - IV	Shrimpermen – Aratdar – Retailer – Consumer (Local market)
Value chain - V	Shrimp Farmer – Aratdar – Paiker – Retailer – Consumer (Distant market)



**FIGURE 2 VALUE CHAIN OF SHRIMP IN BANGLADESH**

### VALUE ADDITION COSTS BY DIFFERENT ACTORS

The cost incurred to transport the product from producers to consumers is ordinarily known as marketing cost. In other words, the cost of marketing represents the cost of performing various marketing functions (Kohls and Uhl, 2005; p.96). Marketing costs are incurred when commodities are shipped from the farm to the final market. Intermediary-wise marketing costs are discussed below:

In case of shrimp marketing system, the highest value added cost is incurred by farmers (Taka 1193.35) per maund. The second and third highest costs are incurred by paikers (Taka 1116.47) and the processing plants (Taka 1050.26) respectively. The paiker in shrimp marketing system operates at the local producing markets as well as in the inter district consuming markets. Here, beparis have no aratdari commission because beparis sell all of their shrimp to account holders.

Shrimp marketing system is clustered around the commission agent 'account holder'. The major cost item is aratdar's commission for farmers' and paikers. Transportation cost is the highest cost item for depot owners, beparis and retailers. Wages and salaries are the major cost item for aratdars and processing plants respectively. Icing is the major cost for A/C holder for shrimp marketing system in the study area. Aratdar's commission (35.25%) constituted the highest cost in shrimp/prawn marketing. (Table 6).

**TABLE 6. TOTAL MARKETING COST OF DIFFERENT INTERMEDIARIES INVOLVED IN SHRIMP MARKETING (PER MAUND)**

Cost items	Farmer	Aratdar	Depot owner	Paiker
Aratdar's commission	1017.24	-	-	758.96
Transportation	36.40	-	190.40	138.93
Baskets	73.03	-	40.00	40.00
Icing	-	-	52.10	76.34
Wage	-	90.95	164.64	70.51
Salaries	-	34.67	145.61	-
House rent	-	17.50	18.81	-
Electricity	-	5.87	6.36	-
Telephone bill	15.03	46.38	19.63	11.81
Personal expenses	51.65	40.52	58.33	19.90
Packaging for export	-	-	-	-
Storage	-	-	-	-
Tips and donation	-	11.89	5.20	-
Wastage	-	-	-	-
Others	-	6.70	-	-
Total	1193.35	254.48	701.08	1116.47

Source: Field survey, 2012

**TABLE 6 TOTAL MARKETING COST OF DIFFERENT INTERMEDIARIES  
INVOLVED IN SHRIMP (PER MAUND).....CONTD.**

<b>Cost items</b>	<b>Bepari</b>	<b>A/C holder</b>	<b>Processing plant</b>	<b>Retailer</b>	<b>Total</b>
Aratdar's commission	-	-	-	-	1776.20 (35.27)
Transportation	162.67	53.28	237.50	102.35	921.53 (18.30)
Baskets	50.00	11.34	7.32	10.00	231.69 (4.60)
Icing	44.00	73.70	20.80	62.45	329.39 (6.54)
Wage	14.00	10.31	172.62	-	523.03 (10.39)
Salaries	-	15.17	545.63	-	741.08 (14.72)
House rent	-	1.35	-	2.21	37.66 (0.75)
Electricity	-	0.89	281.75	3.26	298.13 (5.92)
Telephone bill	4.67	2.42	8.63	21.15	129.72 (2.58)
Personal expenses	4.33	4.35	2.46	10.91	192.45 (3.82)
Packaging for export	-	-	4.92	-	4.92 (0.10)
Storage	-	-	3.81	-	3.81 (0.08)
Tips	-	0.33	-	-	17.42 (0.35)
Wastage	-	-	2.32	34.23	36.55 (0.73)
Others	-	-	-	7.60	14.30 (0.28)
<b>Total</b>	<b>279.67</b>	<b>173.16</b>	<b>1050.26</b>	<b>267.72</b>	<b>5036.19</b>



\*Figures in the parentheses indicate percentages of total cost. 1 maund = 40kg

Source: Field survey, 2012.

### MARKETING MARGIN

Average net marketing margins of all intermediaries for Shrimp are given in Table 7. Farmer average marketing cost is Taka 1193.35 per maund. Among all intermediaries, profit of the processing plant is the highest of Taka 1649.74 per maund followed by retailers (Taka 1523.95), paiker (Taka 1416.86), depot owner (Taka 1005.72) and bepari (Taka 720.33). aratdars and A/C holders earn apparently less profit than other intermediaries in shrimp marketing system because they only charge the fixed amount of commission against their volume of business. However, aratdars and A/C holders perform a large volume of business everyday so their total profit is not less than that of other intermediaries except for processing plant owners. Processing plant owners create very high value addition for export buyers so definitely they gain more profit than other intermediaries in shrimp marketing system in Bangladesh.

**TABLE 7 AVERAGE NET MARKETING MARGIN OF DIFFERENT INTERMEDIARIES FOR SHRIMP MARKETING (TK/MAUND)**

Intermedia ries	Purchase price	Sale price	Gross marketing margin	Marketing cost in	Net marketing margin
Farmer	-	21560. 00	21560.00	1193.35	20366.65
Aratdar	-	-	455.65	254.48	201.17
Depot owner	21760.00	23466. 80	1706.80	701.08	1005.72
Paiker	17866.67	20400. 00	2533.33	1116.47	1416.86
Bepari	23800.00	24800. 00	1000.00	279.67	720.33
Account Holder	-	-	400.00	173.16	226.84
Processing plant	24766.67	27466. 67	2700.00	1050.26	1649.74
Retailer	24844.44	26636. 11	1791.67	267.72	1523.95

Source: Field survey, 2012.

Note: Aratdar Gross margin = Average received Aratdar's commission. Gross margin = Sale price – purchase price. Net margin = gross margin – marketing costs

### **DISTRIBUTION OF VALUE ADDITION COST AND NET PROFIT**

Table 8 shows the percentages of total value addition cost and total net profit by different intermediaries for different shrimp marketing system in Bangladesh. Farmers, in shrimp marketing, bear the major marketing cost (23.70% of total cost) because they have to pay aratdar's commission which ultimately increases their marketing cost.

**TABLE 8 PERCENTAGE DISTRIBUTIONS OF VALUE ADDITION COST AND PROFIT BY INTERMEDIARIES AND MARKETING SYSTEM**

Intermediaries	Shrimp	
	% of total cost	% of total profit
Farmer	23.70	-
Aratdar	5.05	2.98
Depot owner	13.92	14.91
Inter district bepari	-	-
Bepari	5.55	10.68
Inter district paiker	-	-
LC paiker	-	-
Paikar	22.17	21.01
Account Holder	3.44	3.36
Processing plant	20.85	24.46
Retailer	5.32	22.60

Source: Field survey, 2012.

Note: Percentages of total value addition cost/net profit calculated =

$$\frac{\text{Marketing cost/ Net marketing margin}}{\text{Total marketing cost/ net marketing margin}} \times 100$$

## INTERMEDIARIES SHARE TO CONSUMERS' TAKA

Farmers'/shrimpermen's share of different species of shrimps is reasonable in the study areas except for shrimp shrimp. The major share (46%) of consumer Taka goes to mahajon in shrimp marketing system of Bangladesh. For other species farmers' share is 67%, 72% and 76% for major carp-pangas-tilapia, shrimp (overseas value chain) and shrimp (domestic value chain) respectively. The price spread is the highest in shrimp (overseas value chain) for its world market demand and the lowest in major carp-pangas and tilapia for the shortest supply chain and lower unit price than shrimp.

**TABLE 9 SHARE (%) OF INTERMEDIARIES TO CONSUMER'S TAKA BY DISTRIBUTION CHANNEL**

Intermediaries	Shrimp	
	Overseas value chain	Domestic value chain
Farmer	72	76
Mahajon	-	-
Aratdar	4	4
Paiker	-	10
Bepari	4	-
Account Holder	10	-
Processing plant	10	-
Retailer	-	7
Price spread (Tk/kg)*	177.50	156.74

Source: Field survey, 2012. \*Equals Farmer's net price/margin received minus retailer's sale price in per kg terms

## SPATIAL PRICE RELATIONSHIP

### MARKET INTEGRATION

The degree of interrelationships between price movements in two markets is called market integration. In other words, in an integrated market, price of a homogeneous commodity at

different spatially separated locations should tend to move together indicating efficient spread of price information and inter-linkages of markets. In interlinked commodity market price movement in one location should be highly correlated with price movement in other locations.

### **INTEGRATION BY CO-INTEGRATION METHOD**

To avoid the problem of spurious correlation between time series variables especially price variable, co-integration method was used which was developed by Engle and Granger (1987) for making firm decisions on market integration. The valuable contribution of the concepts of unit root, co-integration, is to force to find out if the regression residual are stationary (Gujarati, 2004, p. 822). As Granger (1987), notes, “A test for co-integration can be thought of as a pre-test to avoid spurious regression situations.” An intuitive explanation of the main concepts of co-integration analysis is that prices move from time to time, and their margins are subject to various shocks that drive them apart or not. If in the long run they exhibit a linear constant relation, it can be said that they are co-integrated. Granger representation theorem (Engle and Granger, 1987) tests that if a set of variables are co-integrated or integrated of order 1, denoted by  $I(1)$ , there exists a valid error correction representation of the data. For instance, price changes in one period may depend upon surplus demand of the previous period. Hence it is possible to recognize the short-run and long-run behavior through an error correction mechanism. The detail method is as follows:

### **CO-INTEGRATION TEST FOR SHRIMP**

To test the stationary of the prices of Shrimp, the DF and ADF tests for wholesale price of Shrimp were conducted. ADF test was applied in case where serial correlation exists and that could be found from the Durbin Watson statistic (d-value). The estimated tau ( $\tau$ ) statistic of the regression coefficient of one period lagged price, DW statistic and decision that was undertaken are presented in Table 10.

The tau ( $\tau$ ) statistic compared with absolute values (e.g., estimated t values 1.256, -1.971 and -1.828 for Dhaka district prices which are less than the critical  $\tau$  values without a constant, with a constant and with a constant and trend (-2.60, -3.51 and -4.04 at 1% level). That means the null hypothesis is accepted and concluded that the Shrimp prices of Dhaka district contained unit root that is the price series is non-stationary. Similarly, it is found that prices of Shrimp of all the selected districts are non-stationary.

The next step is to examine whether bivariate co-integration exists among different districts Shrimp prices. The researcher's aim was to find that which market's price influences others. It is normally assume that Dhaka is the reference market and it influences other markets prices. As data on prices of Shrimp for Dhaka, Chittagong, Rajshahi, Khulna, Sylhet, Khulna and Gazipur was available from DAM's weekly price report from the year of 2000 to 2012, so the available data were used for the analysis. In Table 11. the results of estimated co-integration regression and the final result were presented. The Engle-Granger (EG) tests of residual or error term confirmed the stationary of the residual series for all groups of two markets.

Thus the results indicated that the residual series (which are linear combination of Shrimp price series) are stationary at level I (0). That means yet the original price series being non-stationary but their linear combination being I (0), the series are cointegrated.

**TABLE 10: UNIT ROOT TEST (TEST OF STATIONARITY/NON-STATIONARITY)  
FOR THE PRICES OF SHRIMP**

Market	Method	Condition	Intercept	Coefficient of	Coefficient of	Coefficient of	Coefficient of trend	d-value	Decision
Dhaka	used	used		Pt-1	$\Delta$ Pt-1	$\Delta$ Pt-2	(t)		stationary Non-
	DF	Without constant		0.007				2.12	
		With constant	27.24	-0.127 (-1.971)				2.2	
		With constant & trend	55.4	-0.248 (-1.828)			3.295	1.96	
Chittagong	DF	Without constant		0.003 (-1.251)				1.39	stationary Non-
		With constant	17.65	-0.125 (-1.628)				1.34	
		With constant & trend	39.4	-0.321 (-2.397)			2.298	2.06	
Khulna	DF	Without constant		0.004 (-0.868)				2.1	stationary Non-
		With constant	13.78	-0.176 (-1.958)				1.95	



	ADF	With constant & trend	28.008	-0.374 (-2.214)			4.981	1.81	stationary	Non-
		1 lagged difference with trend	67.05	-0.58 (-2.417)	0.239		6.597	1.98		
Sylhet	DF	Without constant		0.006 (-1.267)				2.02	stationary	Non-
		With constant	38.24	-0.137 (-1.89)				2.1		
		With constant & trend	74.36	-0.248 (-1.825)			3.239	1.98		
Gazipur	DF	Without constant		0.004 (-0.75)				2.09	stationary	Non-
		With constant	25.61	-0.117 (-1.524)				1.79		
		With constant & trend	93.5	-0.28 (-1.789)			4.205	1.98		
Khulna	DF	Without constant		0.004					stationary	Non-
		With constant		-1.345				1.59		
		With constant & trend	35.01	-0.128 (-1.537)				1.98		

Note: Figure within ( ) shows t-values of the regression coefficient.

Dickey-Fuller Critical values for 1% and 5% are: Without a constant: -2.60 and -1.95 respectively, with a constant: -3.51 and

-2.89 respectively, with a constant and trend: -4.04 and -3.45, respectively, for sample size 100 (Gujarati 2004, p.975).

Source: Department of Agricultural Marketing (DAM 1995-2012)

**TABLE 11. SPATIAL PRICE RELATIONSHIPS BETWEEN DIFFERENT MARKETS FOR SHRIMP FROM MAY 1995 TO DECEMBER 2012**

Markets	Co-integrating Regression	Co-integration Test	Decision
		Engel-Granger	
Dhaka-Chittagong	$P_D = 17.316 + 0.869P_C$	$\Delta U_t = -0.743 U_{t-1}^{***}$	Co-integrated
	$R^2 = 0.891 \quad (32.57)$	$(-8.893)$	
Dhaka-Rajshahi	$P_D = 3.53 + 0.985P_R$	$\Delta U_t = -0.628 U_{t-1}^{***}$	Co-integrated
	$R^2 = 0.892 \quad (32.664)$	$(-7.632)$	
Dhaka-Khulna	$P_D = 16.202 + 0.96P_K$	$\Delta U_t = -0.716 U_{t-1}^{***}$	Co-integrated
	$R^2 = 0.895 \quad (33.248)$	$(-8.581)$	
Dhaka-Sylhet	$P_D = 18.93 + 0.87P_S$	$\Delta U_t = -0.567 U_{t-1}^{***}$	Co-integrated
	$R^2 = 0.886 \quad (21.75)$	$(-7.30)$	
Dhaka-Mymensingh	$P_D = 2.234 + 0.979P_M$	$\Delta U_t = -0.832 U_{t-1}^{***}$	Co-integrated
	$R^2 = 0.884 \quad (31.413)$	$(-9.701)$	
Dhaka-Gazipur	$P_D = 12.702 + 0.978P_G$	$\Delta U_t = -0.582 U_{t-1}^{***}$	Co-integrated
	$R^2 = 0.801 \quad (22.90)$	$(-7.27)$	

Note: Figure within ( ) shows t-values of the regression coefficient.

Tau ( $\tau$ ) values (without constant) at 1% and 5% level of significance are -2.55 and -1.95 respectively in the equation.

\*\*\* indicates 1% level of significance.

\*\* indicates 5% level of significance.

Source: Department of Agricultural Marketing (DAM 1995-2012)

As mentioned earlier, Khulna is surplus area in Shrimp production and the rest districts considered in the study are deficit area, so when price changes in this surplus area then automatically prices will changes for the other districts.

Finally, the result implies that if any divergence from long-run equilibrium occurs in period  $t-1$ , it will be adjusted towards equilibrium level in period  $t$ . Thus, the selected Shrimp markets in Bangladesh are shown to be integrated. This is mainly attributed to close proxy, good communication facilities especially development of cell phone technology and good infrastructure availabilities among the market centers in Bangladesh.

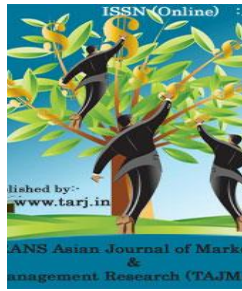
## CONCLUSION

The findings of this study indicated that the marketing of Shrimp is a profitable business. Thus, the selected Shrimp markets in Bangladesh are shown to be integrated. This is mainly attributed to close proxy, good communication facilities especially development of cell phone technology and good infrastructure availabilities among the market centers in Bangladesh. It also suggests that there is wide scope for the development of Shrimp farming and trading in this country. In this study the profit of retailer was higher than that of other intermediaries. To make the business more profitable, efficient marketing system should be developed by reducing marketing cost and increasing marketing service. The government in Bangladesh needs to ensure that the proper infrastructure and necessary social capital are available for effective participation of all the market intermediaries of the seafood value chain. For better shrimp marketing, side by side with the private sector, government should also play active role in providing physical facilities like refrigerated storage, refrigerated vans, good market places with related facilities like water, ice, electricity, drainage facilities and sitting arrangements etc. Development of road networks is greatly needed, which is a responsibility of the government. Market regulations needs to be strictly followed. Monitoring to ensure shrimp quality needs to be strengthened. Similarly, it is also the responsibility of the government to see that consignment can reach the destination without requiring paying unnecessary tolls and subscriptions. The development of good road and transport networks can reduce superfluous involvement of intermediaries, which could be beneficial for both the shrimpers/farmers and consumers. Assembling centers with refrigerated storage facilities may be developed so that the perishability of shrimp is checked, which would enable the assembling centers to make bulk sell/transfer to the next destination. This could reduce post harvest loss and provide better price for the shrimpers/farmers.

## REFERENCES

1. ADB 2005. An evaluation of small-scale freshwater rural aquaculture development for poverty reduction. Operations Evaluation Department, Asian Development Bank, Manila, Philippines.
2. Ahmed, M., Rab, M.A. and Bimbao, M.A.P. 1993. Household socio-economic resource use and marketing in two thanas of Bangladesh. ICLARM Technical Report 04, p. 34.
3. Bangladesh Bank, 2011. Annual Report of Central Bank of Bangladesh 2009-2010, <http://www.bangladesh-bank.org/>, Accessed date: 22.03.2011.

4. Crawford, I.M. 1997. Agricultural and food marketing management. Food and Agricultural Organization of the United Nations, Rome, pp.261-262.
5. Dey, M. M., M.F. Alam, and M. L.Bose. 2010. Demand for aquaculture development: perspectives from Bangladesh for improved planning. *Reviews in Aquaculture* 2: 1-17.
6. DOF 2011. Shrimperies statistical yearbook of Bangladesh 2008-2009. Shrimperies Resources Survey System, Department of Shrimperies, Dhaka, Bangladesh.
7. Engle, R. F. and Granger, C. W. J. (1987), "Co-integration and Error Correction: Representation, Estimation and Testing". *Econometrica*, Vol. 55 (2): 251-276
8. Faruque G. 2007. An Exploration of Impacts of Aquaculture Production and Marketing of Rural Livelihoods in Three Regions in Bangladesh (PhD thesis). University of Stirling, UK.
9. Ferris R.S.B., Collinson C., Wanda K., Jagwe J. and Wright P. 2001. Evaluating the marketing opportunities for shea nut and shea nut processed products in Uganda. A report prepared for USAID. P.77.
10. Hasan, M.R. 2001. Demand-led research and management of wild freshwater shrimp in Bangladesh. Support of University Shrimperies Education and Research (SUFER), Dhaka, p.76.
11. Investopedia. 2011. <http://www.investopedia.com/terms/v/valuechain.asp>, Access date: May 16, 2011.
12. Jacinto E.R. 2004. A research framework on value chain analysis in small scale shrimperies. Paper presented to the 10<sup>th</sup> Biennial Conference of the International Association for Study of Common Property, Oaxaca, México, 9–13 August 2004, p.27.
13. Kaplinsky, R., and Morris, M. 2000. A Handbook for Value Chain Research, International Development research Center (IDRC), Canada.
14. Kohls, R.L and Uhl, J.N 2005. Marketing of agricultural products. 9<sup>th</sup> edition. Macmillan publishing co., Inc., New York.
15. Porter, M.E. (1980). Value Chain Analysis. Oxford Press Ltd. London.
16. Sapkota-Bastola, P, M.M. Dey, M.F. Alam, K. Singh. 2012. Price transmission relationships along the seafood value chains in Bangladesh: An analysis of both aquaculture and capture shrimperies species.. A report submitted to Food and Agriculture Organization for the project entitled A Value-chain Analysis of International Shrimp Trade and Food Security with an Impact Assessment of the Small-scale Sector.
17. United States Department of Agriculture. Agriculture Fact Book 1998. Chapter 1. Online. Retrieved June 7, 1999. <http://www.usda.gov/news/pubs/fbook98/chart1.htm>

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## FUTURE PROSPECTS OF ONLINE MARKETING

**Ankush Kumar Jindal\*; Krishan Kant\*\*; Rohit Sharma\*\*\***

\*Assistant Professor,  
Vivekananda Institute of Professional Studies,  
GGSIU, India.

\*\*Department of Commerce,  
Delhi School of Economics,  
University of Delhi,  
New Delhi, India.

\*\*\*Assistant Professor,  
Bhagwan Parshuram Institute of Technology,  
GGSIU, India.

### ABSTRACT

*Internet marketing is an interesting topic especially for researchers in the marketing field. It is a new way of marketing a product/service globally to the targeted market around the world. This paper introduces a new approach concerning Internet marketing in electronic commerce; showing how advertisers need this innovation to be successful. This also relieves marketing managers for more value added tasks such as marketing plans for better development of the company. However, researchers who plan to develop research using the internet need to be aware of severe problem related to this new tool. In particular we show that the nature of internet creates different sampling problems.*

**KEYWORDS:** *Internet marketing, innovation, E-commerce, Advertisers.*

### INTRODUCTION

Internet marketing (IM) is also known as digital marketing, web marketing, online marketing, or e-marketing. As the name states, it is the advertising of products or services over the Internet. However, it also implies marketing through the wireless media and through e-mail. Electronic customer relationship management (ECRM) systems are also categorized under Internet



marketing. IM can be creative, as well as, technical through its design, development, advertising, and sales over the Internet. This paper is a secondary research regarding how E-commerce gradually forms part of our daily lives. It concerns different aspect of advertising in terms of electronic commerce.

In the past ten years, the Internet population varied a lot ; an estimation of about 50 percent increase of the World Wide Web (WWW) per month and the numbers of websites double every 53 days . A 60percent of large companies and 30 percent of midsize companies were estimated to make use of the Internet for marketing purposes by the year 2000. In 2003, the first generation of internet users was fresh graduates - fast to get the concepts of online commerce and shopping. Major investments in China were also made by international E-commerce companies at that time; escrow systems were made for better trust in buyers and sellers. The hotel industry now face market challenges and business travellers demand more for the Web in terms of information and booking of hotels. The WWW is an electronic technology which is an effective means for marketing hotels and it also develops customer relationship in the long-run. The Internet allows firms to open a Web site in an electronic mall, have their products available to millions of potential customers and only in a short time period. GE, IBM, Ford, Kraft, and Proctor & Gamble were the first to register “domain names”.

Internet marketing is using the Internet to do one or more of the following.

- ☐ Communicate a company's message about itself, its products, or its services.
- ☐ Conduct research as to the nature (demographics, preferences, and needs) of existing and potential customers.
- ☐ Sell goods, services, or advertising space over the Internet.

An Internet marketing strategy is necessary to effectively compete in today's business environment.

It can help one to promote the business by:

- ☐ Allowing one to easily manage individual or mass communication
- ☐ Assisting one in managing one's brand
- ☐ Creating and presenting one's business identity
- ☐ Generating customer trust and loyalty

## **TYPES OF INTERNET MARKETING**

Internet marketing is broadly divided in to the following types:

- **DISPLAY ADVERTISING:** the use of web banners or banner ads placed on a third-party website to drive traffic to a company's own website and increase product awareness.
- **SEARCH ENGINE MARKETING (SEM):** a form of marketing that seeks to promote websites by increasing their visibility in search engine result pages (SERPs) through the use of either paid placement.
- **SOCIAL MEDIA MARKETING:** the process of gaining traffic or attention through social media sites.
- **EMAIL MARKETING:** involves directly marketing a commercial message to a group of people using electronic mail.
- **REFERRAL MARKETING:** a method of promoting products or services to new customers through referrals, usually word of mouth.
- **AFFILIATE MARKETING:** a marketing practice in which a business rewards one or more affiliates for each visitor or customer brought about by the affiliate's own marketing efforts.
- **CONTENT MARKETING:** involves creating and freely sharing informative content as a means of converting prospects into customers and customers into repeat buyers.

## LITERATURE REVIEW

According to a report jointly published by the Internet and Mobile Association of India and IMRB International, the online advertising market is expected to reach Rs 2478 crore by March 2014 in the country. The online advertising market, comprising search, display, mobile, social media, email and video advertising, has grown by 29 per cent year-on-year to Rs 2,260 crore by March, 2013. The online advertising market on an average has expected to grow by 40 per cent annually in four years to 2013-14. Search and display advertising forms a large portion of the overall pie in 2011-2012. Their percentage share has, however, lowered somewhat in 2012-2013, owing to the rise in the mobile, social media and video advertising. Spends on mobile advertising have doubled from Rs 235 crore in 2011-12 to Rs 230 crore in 2012-13, primary reasons being the proliferation of mobile phones in India. Advertisements on mobile phones and tablets grew from a 7 per cent share in FY 2011-2012 to 10 per cent of the Indian online ad market in FY 2012-13, totalling to spend of around Rs 230 crore. Social media, email and video advertising constitute 13 per cent (Rs 300 crore), 3 per cent (Rs 68 crore) and 7 per cent (Rs 150 crore) of the online advertising market, respectively.

## RESEARCH METHODOLOGY

The findings of the research paper have been arrived at by conducting primary and secondary research. The paper carries information for the Indian financial year 2012-13. Primary Research has been done with Internet Users, Industry and various local business owners and retailers.

Structured Face to Face interviews were conducted with them. In Depth interviews were conducted with industry experts of the Internet Advertising Industry in India. Respondents for the depth Interviews also include local business owners, retailers and Advertisers. Secondary Research was done to understand the structure and dynamics of Indian Internet Advertising industry. Information from various published resources has been used.

## HISTORY OF INTERNET MARKETING

Considering the current volume of internet marketing business, it's hard to believe how young the internet marketplace is. While the timeline of internet marketing has been short, the cumulative events leading up to where we are now have impacted the entire globe faster than any marketing revolution in history.

Internet marketing is the practice of using the Internet as a medium for a marketing campaign. An Internet marketing campaign can involve several different types of advertisements, including the banner bars that formed of core of online advertising efforts in the late 1990s, a newsletter distributed via e-mail, an interactive pop-up window, links to one World Wide Web site from another, and a Web site itself. Internet marketing efforts can be designed to push direct sales, build or solidify a brand, encourage repeat business, and garner customer information. Quite often, the Internet is just one of several mediums—including television, radio, and print—that companies use in their marketing campaigns.

**TABLE-1 INTERNET MARKETING- INNOVATIVE TRENDS**

<b>Innovative Trends</b>	<b>Purpose</b>
Internet marketing using mobiles	Phones are soon overtaking computers as the primary method of accessing information on the internet
Web 2.0 and Social networking	Interaction, personal relationship, and multimedia have become the new marketing challenges, youtube, facebook are some of the most important new channels that marketers use to broadcast on.
Blogs, Niche Marketing , Affiliate Marketing, Pay Per Click Advertising	Blogs increased in number and created a web of links and using Niche marketing. Thousands of products were being put up for sale utilizing the concept of affiliate marketing.
Google.com	Dominant search engine and search engine optimization was born.
Newsletters and Online Articles	To generate interest and persuade the online websites visitors.

Websites and Emails	Made people aware about the existent of company and its products through mails, newsletter etc.
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### **FUTURE SCOPE OF INTERNET MARKETING**

- Most people worldwide can use the Web since it is affordable and easy to access. Internet is a fast and flexible means for marketing. Shopping on the Internet is convenient as there is no time restriction, it is comfortable since it is in a user friendly environment and there is also an instant satisfaction of ordering, paying and delivering.
- A one-to-one basis, as well as, a two way communication with customers through the Internet is possible. Enhancing brand image, creating awareness and providing customer service are more important than just selling the products or entertaining customers.
- Nowadays, people live a busy life and shopping online is time consuming for them. The company also saves time since whenever a customer uses his/her credit card to purchase a product, through the Web Trak software from Aurum Software, the company can access customers' details. E-marketing is seen as a promotional.
- E-communities or moderated group chat -where customers with similar interests can interact-are strategies to build relations through Internet. This new era of commerce is beneficial for marketing logistics, a global presence, to establish and maintain a competitive edge, shorten components of supply chains, for cost savings and research advantage.
- Exporters using internet marketing also have the advantage of measuring statistics easily and inexpensively; almost all aspects of an Internet marketing campaign can be traced, measured, and tested, in many cases through the use of an ad server. The advertisers can use a variety of methods, such as pay per impression, pay per click, pay per play, and pay per action. Therefore, exporters can determine which messages or offerings are more appealing to the audience. The results of the campaigns can be measured and tracked immediately because online marketing initiatives usually require users to click on an advertisement, to visit a website, and to perform a targeted action.

### **SHORTCOMINGS OF INTERNET MARKETING**

There is no actual face-to-face contact involved in the Internet communication. For the types of products that rely heavily on building personal relationship between buyers and sellers such as the selling of life insurance, and the type of products that requires physical examination, Internet marketing maybe less appropriate. While internet marketing cannot allow prospective buyers to touch, or smell or taste or 'try on' the products, However a survey of consumers of cosmetics products shows that email marketing can be used to interest a consumer to visit a store to try a product or to speak with sales representatives [Martin at el (2003)]. Some of the disadvantages of e-Marketing are dependability on technology, Security, privacy issues, Maintenance costs due to

a constantly evolving environment, Higher transparency of pricing and increased price competition, and worldwide competition through globalization.

The notion of marketing one's products or one's services to its customers by interrupting them repeatedly through advertising isn't enough anymore at least not in the current business climate. Creating awareness about one's company or one's brand through mass media like newspaper advertising, magazine callouts, or any sort of broadcasting medium doesn't go far enough. The same holds true for PR campaigns that beg reporters to pay attention to one's products or to tell one's company's story. In the end, those strategies sell your brand short.

The advent of the Internet and, more specifically, the rise of Web-based tools and technologies, have given the customers a new voice. Suddenly, thanks to blogs, Facebook, Twitter, and other social and online networking technologies the customers are empowered to demand more of the companies they do business with. They are using their newfound voices to talk to businesses as well as to converse with each other. They will howl when you give something bad or wrong, they will praise you when you do well, and they will create their own version of the story of your business and what it sells.

Such a changed scenario of doing businesses today also creates enormous opportunity for businesses. Rather than being afraid of the newly empowered consumer, or blocking your ears to their voices, consider the ways your business can harness this change.

Businesses large and small are being confronted with a new communications paradigm known most familiarly as Web 2.0. A sea change has taken place with the advent of various channels and no longer can companies turn a deaf ear to the conversation that is taking place through these manifold channels.

Businesses must develop engagement strategies to counter negative perceptions about their brands, people, products, and services; reward those who speak well of them and use the same media as consumers to generate brand awareness, create positive brand impressions, and incite customer evangelism and word of mouth.

Further, the way businesses market themselves has changed. No longer do companies merely target audiences and broadcast messages through unidirectional mass media. In this new paradigm, "markets are conversations" and "participation is marketing." As such, businesses must learn how to operate through these new channels to engage their customers and prospects and penetrate newly developed niche markets. The tools of social media are the means by which this is done.

The paper lists only some of the tools of internet marketing as new tools keep on developing while the old tools keep on disappearing as technology evolves from time to time. Every Business can use those tools which easily allow them to reach to their consumers or clients or end user etc without any much hardship.

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## INTERNET MARKETING IN INDIA – CHALLENGES

**1. GOVERNANCE, LAWS AND REGULATIONS:** When it comes to online businesses, there are stricter money transaction rules. Law enforcement and protection against cybercrime requires review. Widespread corruption is another big issue. Many people don't want to set up online shops to escape taxes and do things unaccounted.

**2. CULTURAL ISSUES:** Most people believe that shopping online can prevent them from getting the best deals. This gives them excellent F2F opportunity to do maximum negotiation and receive other freebies.

**3. ONLINE SHOPPING WORRIES:** A lot of computer literate people are still hesitant to consume online shopping facilities that are available out there in India for the following reasons.

**A. FEAR FACTOR:** A lot of people still do not believe things that are not tangible.

**B. UNRELIABLE DELIVERY MECHANISMS:** Postal service or the most expensive courier companies may not be able to guarantee prompt delivery.

**4. LACK OF TECHNICAL INFRASTRUCTURE:** The backbone of any reliable online service or sales is a strong supply chain. In volume business, this has to be at its best and this is exactly what many online services in India lack.

**5. MARKETING PHILOSOPHIES & CHANNELS:** Television, hoardings and cinema ads are still way ahead of the Internet when it comes to preferred marketing channels. This also results in poor quality affiliate networks and online ad services. Moreover, there are a lot of inconsistencies and dishonesty prevailing with the networks as well. This has further decelerated the affiliate marketing penetration in India.

## CONCLUSION

The Internet network is a marketing channel use by advertisers, marketers, and society to find the right combination of marketing mix to best suit customer's needs. It is important for a company of this era to have access to the Internet to be more successful. Internet marketing does not only target consumers, but also Internet advertisements client marketers from companies. This is so because companies prefer to hire specialist in creating a Web site. People always find themselves under stress of working long hours and they do not have enough time for social activities or even shopping. They thus develop this new millennium where IM through E-commerce becomes an everyday thing and routine for them. E-mail is as famous as direct marketing in supporting E-commerce activities. Most clients feel that this new media is a success in relation to traditional marketing advertising. But Internet should be used with other media for a more effective marketing tool. Internet marketing will become even more important in the future. As more companies will have access to the Internet, they will start doing business over the Internet [3] [5].



China's economy will be in another dimension with E-commerce where customer focus, responsible business practices and innovation are the determinants of success and not customer relationship [8]. With a decrease in communication prices, more customers will shift to the Internet as well. Security will not be an issue anymore because software companies, banks and credit card institutions are working hand in hand to improve Internet security. Companies need to protect themselves in three areas: data integrity, confidentiality of data and authenticity by installing firewalls or routers. Customers will look for a business on the Web since there are unique opportunities for marketing a company's service, selling products and gathering information on the Net [3]. The marketing mix plays an important role in IM in E-commerce; deciding what type of advertising best suits customers through the Web. This is the new era of innovation; where everyone interacts on the Web.

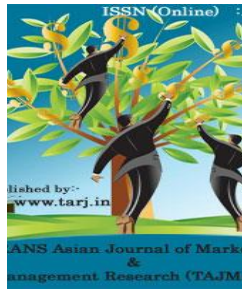
## REFERENCES

1. David C. Gilbert, Jan Powell-Perry and Sianandar Widijoso (1999), "Approaches by hotels to the use of the Internet as a relationship marketing tool", *Journal of Marketing Practice: Applied Marketing Science*, Vol. 5 No. 1, pp. 21-38.
2. Eric Sandelands (1997), "Utilizing the Internet for marketing success", *Pricing Strategy & Practice*, Volume 5, No 1, pp. 7-12.
3. Karen A. Forcht and Rolf-Ascan Wex (1996), "Doing business on the Internet: marketing and security aspects", *Information Management & Computer Security*, 4/4, pp. 3-9.
4. Paul Herbig and Brian Hale (1997), "Internet: the marketing challenge of the twentieth century", *Internet Research: Electronic Networking Applications and Policy*, Volume 7, Number 2, pp. 95-100.
5. Alicia Aldridge, Karen Forcht and Joan Pierson (1997), "Get linked or get lost: marketing strategy for the Internet", *Internet Research: Electronic Networking Applications and Policy*, Volume 7, Number 3, pp. 161-169.
6. Rossan Phillip J. (2003 Sept.) *The Internet and SME Exporting: Canadian Success Stories*
7. Chaffey David, Ellis-Chadwick Fiona, Mayer Richard, Johnston Kevin - *Internet Marketing – Strategy, Implementation and Practice* by 3rd ed. Pearson Education, p 8.
8. Ibid, p 8.
9. [http://en.wikipedia.org/wiki/Internet\\_marketing](http://en.wikipedia.org/wiki/Internet_marketing)
10. Duermeyer Randy Internet Marketing-, former About.com Guide [http://homebusiness.about.com/od/homebusinessglossar1/g/internet\\_market.htm](http://homebusiness.about.com/od/homebusinessglossar1/g/internet_market.htm)
11. [http://en.wikipedia.org/wiki/Internet\\_marketing](http://en.wikipedia.org/wiki/Internet_marketing)



12. Internet Marketing - History of Internet Marketing, Internet Marketing In The Twenty-first Century <http://ecommerce.hostip.info/pages/710/Marketing-Internet.html>
13. <http://marketingtenerife.com/market-sectors/marketing-to-tourists/a-brief-history-of-onlineInternational> Conference on Technology and Business Management March 18-20
14. Linton Ian, Six Benefits of Internet Marketing - Demand Media <http://smallbusiness.chron.com/sixbenefits- internet-marketing-31382.html>
15. Chaffey David, Ellis-Chadwick Fiona, Mayer Richard, Johnston Kevin - Internet Marketing –Strategy, Implementation and Practice by 3rd ed. Pearson Education, p 26.
16. <http://www.infodriveindia.com/Exim/GUIDES/Default.aspx>
17. Reader Casey, eHow Contributor - [http://www.ehow.com/list\\_6830573\\_advantages-informationtechnology- export-marketing.html](http://www.ehow.com/list_6830573_advantages-informationtechnology- export-marketing.html)
18. <http://en.wikipedia.org/wiki/Blog>
19. Chaney Paul (2009) The Digital Handshake – John Wiley & Sons, Inc, p 57
20. A. Kulkarni, Product Manager: <http://yourstory.in/2013/01/indian-e-commerce-what-does-the-future-look-like/>.
21. Avery, S. Online tool removes costs from process. Purchasing, vol. 123, no. 6, (1997), pp. 79-81.
22. S. B. Boughton, Search engine Marketing, Bart Boughton was a student in the MBA program in the School of Management and Business at St. Edward's University, (2005).
23. H. Bell and N. K. H. Tang, "The effectiveness of commercial Internet websites: a user's perspective", Internet Research: Electronic Networking Applications and Policy, vol. 8, no. 3, (1998), pp. 219-228.
24. J. Bernard and S. Simone, "Bidding on the buying funnel for sponsored search and keyword advertising", Journal of Electronic Commerce Research, vol. 12, no. 1, (2011), pp. 1-18.
25. A. Day, "A model of monitoring Web site effectiveness", Internet Research: Electronic Networking Applications and Policy, vol. 7, no. 2, (1997), pp. 109-115.
26. D. Agrawal, R. P. Agrawal, J. B. Singh and S. P. Tripathi, "E-commerce: True Indian Picture", Journal of Advances in IT, vol. 3, no. 4, (2012), pp. 250-257.
27. N. Edwards, S. Handcock and J. Mullen, "Electronic commerce: reality bytes", Supply Management, vol. 3, no. 8, (1997), pp. 32-34.

28. D. C. Fain and J. O. Pedersen, "Sponsored Search: A Brief History", Bulletin of the American Society for Information Science and Technology, vol. 32, no. 2, (2006), pp. 12-13.
29. F. J. M. Gonzalez and T. M. B. Palacios, "Quantitative evaluation of commercial websites: an empirical study of Spanish firms", International Journal of Information Management, geocart.com : <http://www/geocart.com/online-business-success.asp>, vol. 24, no. 4, (2004), pp. 313-328.
30. H.-T. Chang and S. Wu, "A Switching Proxy for Web Search Engines. Advanced in Information Sciences and Service Sciences", Advanced Institute of Convergence Information Technology, vol. 3, no. 5, (2011), pp. 52.
31. Prospect, Information on <http://www.iprospect.com/search-engine-marketing-university/>, (2008).

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## VIGOR THE TOUGH DECISIONS IN UNDER PRESSURE – A STUDY OF DELHI PROFESSIONALS

Prof. Sultan Singh\*; Ms. Sahila Chaudhary\*; Ms. Madhu Arora\*\*\*

\*Department of Business Administration,  
Chaudhary Devi Lal University,  
Sirsa, Haryana, India.

\*\*Assistant Professor,  
Institute of Business Management,  
JCD Vidyapeeth,  
Sirsa, Haryana, India.

\*\*\*Research Scholar,  
Department of Commerce,  
Chaudhary Devi Lal University,  
Sirsa, Haryana, India.

### ABSTRACT

*Aptitude to take the tough decisions appropriately makes the intellectual the business leader in the corporate arena. Tough times develop the intellectual skills in the public. Present study aims at finding whether Indian intellectuals' vigor the tough decisions in tough times or not. Study gives the mixed results where majority of intellectuals were found to put off or postpone the tough calls whereas some of intellectuals take the changes as a challenge and take initiatives in this regard. Exceptional ones are often found in few facts that means results of the study are valid and can be generalized.*

**KEYWORDS:** *Tough, Decisions, Vigor, Management.*

### INTRODUCTION

Today's era is competitive one. Business world is undergoing to be more complex and tougher than ever before in such changing atmosphere. The philosophy "Do additional with less" is emerging with new reality. Various tough times take place in business where an intellectual has

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to deliver more without a total arousing drain. These tough times demand tough management. Tough management is a way to approach work. It is a practical, reasonable and organized way to get the decisions more easily, make the statistics on a consistent basis, have those around you understand where you stand, and increase the business [John Halter, 2005]. As per NFI surveys more than 80% of executives were found under stressed because of enhance in workload but not increasing recompense significantly. They are planning to hang about with the organizations in years rather than decades. Their efficiency is getting affected negatively due to all this. In such conditions need of hard-hitting management arises and initiate the researchers to know how they manage in such tough times sustaining their optimal efficiency coping with their arousing balance.

### **OBJECTIVES OF THE STUDY**

- To know how the intellectuals manage in tough times.
- To explore whether intellectuals vigor the tough decisions in tough times.

### **RESEARCH METHODOLOGY**

Being the study descriptive in nature, it went through primary as well as secondary data collection, primary with transmission of structured questionnaire and secondary from books, journal, magazines and websites. Data has been analyzed with mean scores & overall index. Computations were made as below:

#### **• ASCERTAINING THE LEVEL OF EFFECTIVENESS FOR INDIVIDUAL PARAMETERS**

The scores for the parameter are derived by multiplying the number of respondents with the respective score and its subsequent summing. Effectiveness index was calculated by applying the formula:

Real scores obtained for the proclamation  $\times 100$

Highest obtainable score for the proclamation

#### **• THE OVERALL EFFECTIVENESS INDEX IS CALCULATED BY USING THE FORMULA**

Top scores obtained for the four parameters  $\times 100$

Sum of highest scores obtainable for four parameters

Overall index has been taken as benchmark. Questionnaire was circulated and got it filled up from 50 Indian Intellectuals to know their decisiveness in tough times. Four points scale was

used categorizing their responses in Immediately, Take opinions, Delegate and Defer. Furthermore proper weight age has been given to each category.

**TABLE 1: MEASURES OR PARAMETERS OF THE STUDY**

<b>MEASURES OR PARAMETERS OF THE STUDY</b>	
Environment of tough decisions would depend upon following five variables	
• Putting off the tough calls	
• Easier Decisions	
• Toughest Decisions	
• Segmentation by level	
• Forcing office politics out	

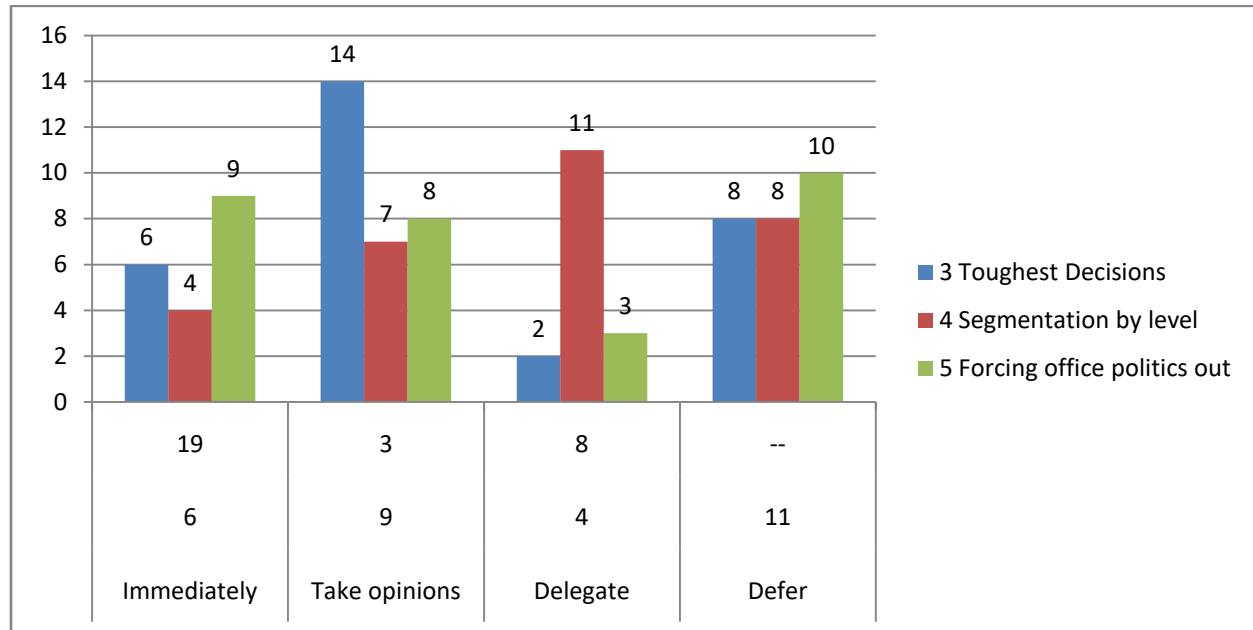
## RESULTS & DISCUSSIONS

Eminence of direction is appraised in terms of tough decisions taken by executives in tough times. Public chase the leader who vigor the tough decisions to make the tough calls and keep it going forward to bring the results more within reach.

**TABLE 2: MEASUREMENT OF “VIGOR THE TOUGH DECISIONS”**

S.No	Constituents of Vigor the Tough Decisions	Immediately	Take opinions	Delegate	Defer	Mean Values
1	Putting off the tough calls	6	9	4	11	6.6
2	Easier Decisions	19	3	8	--	9.2
3	Toughest Decisions	6	14	2	8	7.0
4	Segmentation by level	4	7	11	8	6.7

5	Forcing office politics out	9	8	3	10	6.8
	Overall Index					36.3



**FIGURE 1: MEASUREMENT OF "VIGOR THE TOUGH DECISIONS"**

Results shown in table 1 & Figure 1 states that majority of the intellectuals, was found comfortable with easier decisions either taking them immediately or delegating to the subordinates whereas toughest decisions are taken by the intellectuals either with the consultation of others or postponed. There is lack of executives who believe in taking the new challenges. Some intellectuals put off the tough calls whereas some of them segregate the decisions' into various levels and show their ability which results the office politics out. So overall it can be said that tough times vigor the intellectuals to take the tough decisions. Overall index is 36.3 that indicate that around 36% of the intellectuals' vigor the tough decisions in tough times they believe in taking the challenges and enjoy such critical times by proving their value to the organizations.

## CONCLUSION

Intellectual **must be Tough in tough times** to follow a wimp into battle. A leader who cannot deal with misfortune and obscurity while keeping their calm and delivering solutions will quickly be disregarded by the team. And even worse, an Intellectual who does not know where he stands will find himself footing alone. There is no place for wimps in the Leadership World. Only tough man can cope with the tough times. Present study tries to explore the guts that enable

a man to bring the big business goals achieved in situation of crisis. Study finds that some of the intellectuals may have been dynamic and some of them might have been quite souls in tough times. Some intellectuals get off track right away. They procure into the “**false choice**” of “mean or nice” in pressure. It has been proved by the results of present research that tough decisions make a leader strong, successful and tough in tough times. In Indian context, there is a lack of such tough leaders who vigor the tough decisions in time of crisis. Tough times call for intellectuals to express real optimism not to ‘cheerful Talk’.

### LIMITATIONS OF THE STUDY

- The task done is restricted to Indian Intellectuals in Delhi and NCR only.
- As the study was pertaining to intellectuals’ attitude in tough times, biased information may restrict validity of inference possible.
- The study was constrained by limitations of time.
- The raw data was collected with the help of structured questionnaire technique. Therefore study is bounded by the limitation of this technique

### REFERENCES

- Tough Leadership – Mean or Nice and other Myths Posted by John Halter at <http://streetmartleader.com/2010/08/28/tough-leadership-mean-or-nice-and-other-myths/>
- Chuck Martin; “Tough Management”, Tata McGraw-Hill Publishing company Limited, edition 2005, ISBN o-07-060139-9
- Tough Times, Tough Decisions viewed at [calacanis.com/2008/10/22/tough-times-tough-decisions/](http://calacanis.com/2008/10/22/tough-times-tough-decisions/)
- Nonprofit Survey: Managing in Tough Times viewed at <http://www.giftworksconnect.com/2009/12/nonprofit-survey-managing-in-tough-times/>



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