INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

CONTENTS

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   ii
A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
www.ijrcm.org.in

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   iii

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

www.ijrcm.org.in

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT iv

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

www.ijrcm.org.in

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Management Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email address: **infoijrcm@gmail.com**.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION**:

                                                        DATED: _____

   THE EDITOR
   IJRCM

   Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF**.

   (e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

   DEAR SIR/MADAM

   Please find my submission of manuscript entitled '_____' for possible publication in your journals.

   I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

   I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

   Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

   NAME OF CORRESPONDING AUTHOR:
   Designation:
   Affiliation with full address, contact numbers & Pin Code:
   Residential address with Pin Code:
   Mobile Number (s):
   Landline Number (s):
   E-mail Address:
   Alternate E-mail Address:

   NOTES:
   a) The whole manuscript is required to be in *ONE MS WORD FILE* only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
   b) The sender is required to mentionthe following in the **SUBJECT COLUMN** of the mail:
       New Manuscript for Review in the area of (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/ Engineering/Mathematics/other, please specify)
   c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
   d) The total size of the file containing the manuscript is required to be below **500 KB**.
   e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
   f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE**: The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS**: The author (s) **full name**, **designation**, **affiliation** (s), **address**, **mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT**: Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   v
A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
www.ijrcm.org.in

5.   **KEYWORDS**: Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.

6.   **MANUSCRIPT**: Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.

7.   **HEADINGS**: All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

8.   **SUB-HEADINGS**: All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.

9.   **MAIN TEXT**: The main text should follow the following sequence:

      INTRODUCTION

      REVIEW OF LITERATURE

      NEED/IMPORTANCE OF THE STUDY

      STATEMENT OF THE PROBLEM

      OBJECTIVES

      HYPOTHESES

      RESEARCH METHODOLOGY

      RESULTS & DISCUSSION

      FINDINGS

      RECOMMENDATIONS/SUGGESTIONS

      CONCLUSIONS

      SCOPE FOR FURTHER RESEARCH

      ACKNOWLEDGMENTS

      REFERENCES

      APPENDIX/ANNEXURE

      It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed **5000 WORDS**.

10.   **FIGURES & TABLES**: These should be simple, crystal clear, centered, separately numbered & self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.

11.   **EQUATIONS**:These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.

12.   **REFERENCES**: The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s**) for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

<p align="center">**PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES**:</p>

BOOKS
- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS
- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES
- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS
- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES
- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES
- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES
- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

<p align="center">**INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT**

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

www.ijrcm.org.in</p>

vi

CONTRIBUTION OF NON-MARKET WORKS IN BANGLADESH: CONSIDERING LOCATION, EDUCATION, FAMILY RELATION & MARITAL STATUS

DR. MD. AOULAD HOSEN

ASST. PROFESSOR

DEPARTMENT OF ECONOMICS

NATIONAL UNIVERSITY

GAZIPUR, BANGLADESH

ABSTRACT

Two conditions need to be necessarily fulfilled for the goods and services produced by the transformation of input to output- use value and exchange value. Nevertheless, a significant amount of goods and services are produced across the world without exchange value. But, these substantial amounts of value can not be justified by regular market framework. This study deals with the estimates of the "non-market production or works (NMWs)" of five factors: location, education, family education, family relation and marital status, consisting of men and women from different age groups and children. Besides secondary data this research took into account primary data and case studies. Two methods: works method and opportunity cost method, were incorporated to evaluate the NMWs in Bangladesh. Among the sub sectors of each factor the research showed that respondents taken from rural areas contribute significantly high (tk.3,375), a good volume of the average value of the NMWs was derived from less than primary to eight pass, respondents from the families of primary pass and class 9 to SSC as recognized the highest level of education provided more NMWs, a significant contribution was provided by wives (tk. 4,192) through average estimate and the unmarried people generated less value than the average value of NMWs.

KEYWORDS

Exchange Value, Market Framework, Non-market Works, Opportunity Cost Method, Works Method.

INTRODUCTION

The principles of economics are mainly based on the theoretical concept of circular flow. Again, the simple and fundamental concept of circular flow assumes a continuous interaction between producers and consumers. Producers represented by firms and consumers come out from households. The two parties' interaction goes on through the two market frameworks, such as goods market and factor market. Here, the two markets mainly justify the economic values of goods and services generated by producers and consumers. Firms provide consumers with goods and services in exchange for consumer expenditure and "factors of production" from households (Mankiw, 2001). Some work which produces significant values such as collecting water; cleaning and taking care of house; washing clothes; washing dishes; cooking and serving meals; taking care of children; taking care of the sick and the elderly, crop gleaning; collecting and making cow dung cakes and sticks etc can not be evaluated by the conventional market structure. So, such work can be mentioned as 'non-market work' (NMW). Among the various market structures, the value of product is evaluated by the characteristics of market structure, such as the number of buyers and sellers, quality of product, consumer's and producer's knowledge about product, mobility of factors of production, the degree of government intervention etc. But there is little scope to measure the value of NMWs.

This paper focuses on non-market activities of women, children and unemployed people. This paper approaches non-market activities mostly for unpaid labor. In this area, researches sponsored by Bangladesh Bureau of Statistics (BBS), have mainly focused on household activities. In revised estimates, 1989-90 to 1998-99 of National Accounts Statistics of Bangladesh, the data collected from different sector and sub-sector is based on the methodology of System of National Accounts (SNA) - 93 frameworks. According to the international definition adopted in 1993, the non-market sector or the informal sector, a sub-sector of the household institutional sector in the SNA and Non Profit Institutions Serving Households (NPISH) cannot include economic units of the informal sector. But all the production of the household sector cannot be imputed to the informal sector. The two types of non-market production ignore by SNA. The first type is non-SNA work providing unpaid services for own final use. Work providing unpaid domestic services for own final use within household such as cleaning, decoration, maintenance of dwelling occupied by the household; preparation and serving of meals; transportation of members of the household & their goods and work providing unpaid care-giving services to household members (care, training and instruction of children; care of the sick, infirm or old). The second non-market work is non-SNA work providing unpaid domestic services, care giving services and volunteer services to other households, community, NPISH. Here, researchers deliberately exclude non market work outside SNA. The 1993 definition of informal sector is based on the characteristics of the economic unit in which the person is working.

OBJECTIVES

The main objective here therefore was to develop methods subsequently estimate these NMWs. The main objectives were –
1. To estimate the NMWs how NMWs affects by location, education, family relation and marital status.
2. To find out the comparative contribution of the NMWs made by people from each factor.

THEORETICAL FRAMEWORK

There are three basic concepts in economics regarding works. These are formal sector (henceforth FS), informal sector (henceforth IS) and non-market works (NMWs). The regular market framework is capable of evaluating the value of formal economy. Informal sector is a growing sector in the South-Asian region and the economy of Bangladesh is a special example of this scenario. The IS in the developing countries has been significantly notable over the last couple of decades. Often the earnings and employment situation of IS workers are worse than those of the FS workers. The importance of the IS sector as an engine of economic growth and job formation, seeks to gather key conclusions from the theoretical and empirical literature related to the concept of the informal sector with the aim of discussing their policy implication (Blunch, Canagarajah, & Raju, 2001).

ABOUT INFORMAL ECONOMY

The term is much more of recent coinage. The optimism of the modernization had led most people in the 1950s and 1960s to believe that traditional forms of work and production would disappear as a result of economic progress in the developing countries. As this confidence proved to be unfounded, researchers turned to study more closely on IS and finally they discovered that the traditional sector did not only continue to exist, but also came up to include new developments. In accepting that these forms of productions were there to stay, scholars started using the term informal sector, in Ghana (1973 by anthropologist Keith Hart) and Kenya (1972 by ILO). Since then, the informal sector has become an increasingly popular area of investigation, not just in economics, but also in sociology and anthropology. Arguably, the most influential book on 'informal economy' is '*The Other Path*' by Soto's, (1989), which was published in English in 1989 with a preface by the Peruvian writer Mario Vargas Llosa. In the second half of the 1990s many scholars have started to consciously use the term "informal economy" instead of "informal sector" to refer to a broader concept that includes enterprises as well as employment in developing, transitional, and advanced industrialized economies. The IS has become a powerful analytical tool for analyzing the new complexities in the urban economy and the environment in general, and urban labor and housing markets in particular (Amin, 1996).

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT　17

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

www.ijrcm.org.in

DIFFERENT VIEWS ON NON-MARKET ACTIVITIES

There are different views regarding NMWs available in economic literature. : According to Chadeau (1992), non-market production covers the goods and services of the household members and the productions for their own consumption, and combines their unpaid labor and, in some cases, the goods and services they acquire on the market . Hamdad (2003) defines household work as the goods and services resulting from such activities. He terms it a source of utility to the members of the household and other households and a contribution to their well-being. According to Abdel & Sirageldin (1969), household work means the value of housework, of home production (do-it-yourself) and the value of time spent by head of families and their wives on doing or receiving volunteer work or taking further education. The activities of NMW are very difficult to recognize and the patterns of work appear different from one locality to another; even the name of each NMW can not be unified. In Indian economic context, Charmes (2006) intend to explain how the informal sector is defined. The NMWs were identified by the researcher within the concept of SNA. NMWs outside SNA were excluded. The 1993 definition of SNA of the informal sector is based on the characteristics of the economic unit in which a person is working. Budlender (2004) stated a clear explanation of 1993 SNA and from the statement helps to recognize the market work, subsistence production and non market domestic work.

NMWS IN BANGLADESH

The estimate of GDP for non-market activities is yet to find a complete shape. Some researches have been done on women household work (Hamid, 1989 &1994) where 53% of non-market productions of women were identified. After defining market work, non market activities and house works that study used few tools (such as opportunity cost, informal wage) for the estimate. From the study of 'non-market work and national income in Bangladesh' Hamid (1994) argues that housework should be redefined as the economic services produced by household members. She defined 'work' as any activity that might be delegated to a paid worker and these activities may be executed in the market or the non-market. She includes all the agricultural and non-agricultural activities in the market work, and the subsistence work and house work in the NMW. A comprehensive study done by Bayes and Hossain (2007) introduced the time budget method to determine the use of labor. They collected data of four days of labor in the household, including the nature of work, working hours, earnings etc. A good number of variations in labor activities were observed in rural area, and the main activities indicated to sex-based labor involvement. However, all work exchanging for economic benefit. Moreover, the social structure of Bangladesh itself is working a barrier to incorporate the value of the NMWs (Hosen, 2012a). Hosen (2012b) estimated the monetary value of a graduate and female NMWs. He revealed that, on an average, a graduate generated tk. 3,594.41per month, from exercised the Model 1: TVNMWOC = a + b EQD6 + e1 (where, TVNMWOC = 2042. 95 + 1551.46 EQD6, TVNMWOC = 2042. 95 + 1551.46 X1= 2042. 95 + 1551.46 = Tk. 3594.41 per person/month, according to dummy variable, EQD6 = 1, recognized graduate level of education), while a female contributed tk. 2588.72 per month (based on the Model 2: TVNMWOC = c + d SEX + e2).

RESEARCH METHODOLOGY

DATA COLLECTION

This study was based on primary data and case studies. The primary data were gathered from some rural and urban areas in Bangladesh. Here collected data were reexamined by the current sources of data of the conventional national income estimate adopted by Bangladesh Bureau of Statistics (BBS, 2008). The activities under NMWs appear to be different in rural and urban areas. To accommodate various NMWs, three types of sample locations were considered: i) urban, ii) rural and iii) semi urban or semi rural (mixed sample areas). The respondents were asked to fulfill a questionnaire having three administrative parts: one for household NMWs, one for NMWs outside the household and one for NMWs before begin employment. Workers were to identify their part and mention the names of the NMWs, duration of the NMWs etc. If a producers of NMWs got any return (in terms of money or other form return say: clothing, lodging, food, etc.), she of he declare on the respective questionnaire against the NMWs. Random sample technique was used. Data was collected from Dhaka, that represented the outline of NMWs of urban people and to cover rural and semi-rural pattern of sample this study was considered two areas from Gazipur: Sador and Tongi. There were four village of Sador and five locations of Tongi was covered and in Dhaka 18 locations were considered. In case study areas this research used participatory methods for data gathering and qualitative methods for data analysis. Semi-structured interviewing was a form of guided interviewing in which only some of the questions were predetermined and new questions were usually generated during the interview.

ESTIMATION PROCEDURES

Initially, the study was examined of the information collected from the respondents through questionnaire. Respondents usually report the time long on their NMWs in terms of weeks or months, even years or seasons. That was converted into work in hours. The research has considered 8 standard hours for each day with two holidays and transforms each NMW of every individual by hour.

Two methods are considered to estimate the NMWs:
1. works method
2. opportunity cost method

WORKS METHOD

The BBS (2008) survey 2007 evaluated some NMWs. This study was accredited the market value of NMWs of that survey and was taken into account as the yardstick of this method. From the 'Wage Survey-2007', it was observed that the highest total earnings of Tk. 3906 per month in the 40-49 working hours group has the highest standard deviation with a minimum of Tk. 450 and a maximum of Tk. 19800. As the earnings are mostly paid on a daily basis in the informal sector, daily wages have been given in the informal sector in the four working hour's group. This survey collects data of the daily wages/monthly salaries paid for specific occupations in the industry throughout the country. "Salary means the amount of taka that paid workers receive in cash or kind (including for food, housing and clothing) before any deduction for pensions, taxes or social security and on the other hand daily wage means the amount of taka that one receives in cash and non-cash remuneration for his one day labor. The salary includes any payment for time not worked (due to vacation, sick leave) and any additional payment such as bonuses and allowances, BBS (2008)". Average daily wage of day-laborers and monthly earnings/salary of the employee are estimated by occupation for the non-farm sector. To accommodate the study author has divided all the NMWs into three main categories. Among the three categories, different types of NMWS are included in each division. From sample survey, research found 16 (mention as 1 to 16), 17 (mentioned as 21 to 37) and o6 (mention as 41 to 46) types of NMWs which represents the three categories of **household NMWs** (see appendix-1, for more), **outside NMWs** (see appendix-2, for more) and **NMWs before employment** (see appendix-3, for more) respectively. Hourly wage of each category of NMW was determined to estimate the value of the NMWs under works method.

OPPORTUNITY COST (OC) METHOD

To get a suitable estimate of NMW, opportunity cost method is used. OC method explores the potential of an economy. Author has identified three factors of a respondent: the level of education of a respondent, sample areas where a respondent is living, and the age of a respondent. Each factor provides a window to evaluate an individual. Three variables were considered to estimate OC method: educational qualification (w1), sample area (w2) and age (w3). These three variables appeared differently for each respondent; it also varied from one respondent to another. To judge each variable for each respondent, other two variables remained the same. Finally, OC derived from the average value of w1, w2 & w3, i.e. OC named as the average wage, W = (w1+w2+w3)/3. It was required to take some assumptions to figure out the value of w1, w2 & w3 (Hosen, 2012). The assumptions were

EDUCATIONAL QUALIFICATION (W1)

According to the answers of the respondent, educational qualification was found between illiterate to masters degree. Eight categories of educational qualification were taken to assign the value against each level of education of an individual. The categories were illiterate, primary, eight pass, SSC pass, HSC pass, graduate, masters, and technical. Each level of education of a respondent was assigned an opportunity (cost) to do market works and this opportunity (cost) of a particular work mention by per hour wage.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   18
A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
www.ijrcm.org.in

SAMPLE AREAS (W2)

Individuals who live in the urban areas enjoy more works opportunities than the ones living in the rural areas. Three types of percentage values were introduced to find out the opportunity cost of three broad categories of sample locations. 100%, 85% and 60% of tk. 17.08 per hour and per day were assigned for the sample areas of urban, mixed and rural regions respectively.

AGE (W3)

Physical capability of a people may vary for many reasons. Level of age was the basic identity to evaluate the ability of a person to do works. Four age categories were identified to estimate the opportunity cost of age. Here, the identical wage of tk. 17.08 per hour and per day was also applied against the different age structures of the respondents. Finally, the OC estimate is derived from the average value (W) of w1, w2 and w3.

### CORRECTED BY DEDUCING ADDITIONAL SUPPORT

The respondent who got benefit of the additional support against the NMWs was to answer about the quality of support as minimum, below average, average and standard for food support, shelter support and clothes support. These monetary valuations of the additional support were derived by the average value of each support, and this average value indicated a regular and present cost of each support.

THE STUDY AND ITS FINDINGS

SAMPLE AREAS

Majority of respondents were from the urban area having of the total 59% and the rest of the respondents are covered from rural and mixed areas with certain similarities. It was observed that the value of the non market works (NMWs) of different sample locations, respondents taken from rural areas contribute significantly high in both estimates i.e. works estimate and OC estimate. An extraordinary value of the NMWs was derived by works estimate which secured the highest average value of Tk. 3375 per month. The second value (tk. 2766) was generated by semi urban (mixed) areas. People living in the rural areas contributed the highest average value of the non market activities (Tk. 2616 per month) according to the opportunity cost estimate. But the overall value of the NMWs mainly comes from the urban area. This is because most of the people live in the urban areas.

FIGURE 01: PERCENTAGE VALUE OF NMWS BY SAMPLE AREAS
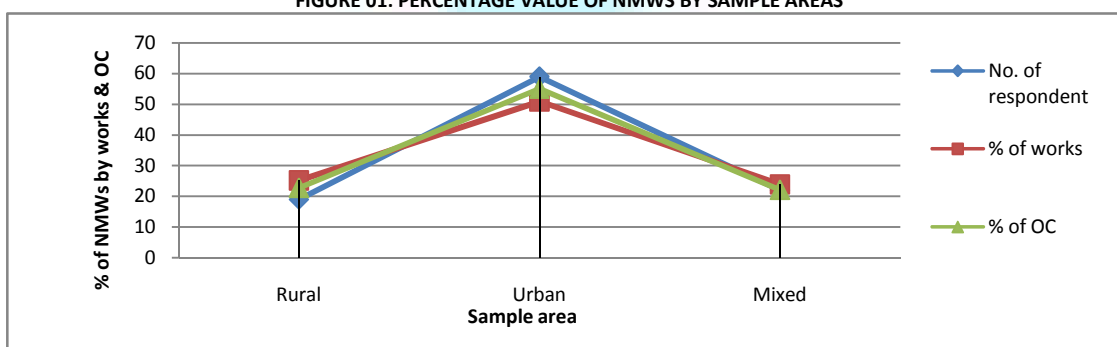
A little difference of the percentage of value of the NMWs is found from the rural and urban areas in works and OC measures. Comparatively a lower value of NMWs was extracted from the urban sample location in relation to the number of people. The situation was reverse in rural areas (see Table 04, for more). Only rural areas secured higher position for producing NMWs which was reflected by the average value of both the works and OC estimates. The overall trend of average measures showed that 'works estimate' derived more value than 'OC estimate'.

EDUCATIONAL QUALIFICATION

The study acquired eight categories of educational levels, among the respondents one-forth reported to be illiterate. Respondents, between 10 to 15 percent, were covered by the most of the educational levels; the educational levels were indicated as primary, eight pass, SSC, HSC and graduate. Among the eight categories of the levels of education, more than 50% respondents were between primary pass and above the interval, 25% people were acknowledged to be illiterate. A competent volume of the average value of the NMWs was derived from less than primary to eight pass, measured by the estimates of works and OC methods. But, the respondents from SSC and HSC levels extract a lower value of the NMWs than the respondents of the other levels of education. According to the works estimate, less than primary, primary pass and eight pass respondents secured more or less the same value which is above the average (Tk. 2,544 per month). In contrast, the graduate and masters respondents did more NMWs, according to the OC measure.

FIGURE 02: PERCENTAGE VALUE OF NMWS BY EDUCATIONAL QUALIFICATION
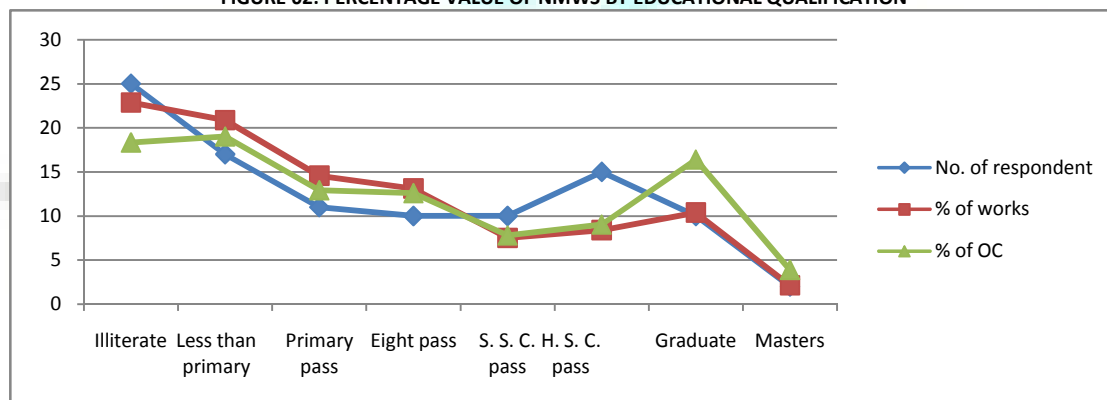
The OC estimate showed that a little higher contribution was done by the graduates and masters people. However, taking all the observations into consideration, it can be said that the works method did well with up to the HSC level; contrarily the OC method was at its best with the graduate and masters levels on average (see Table 05, for more).

FAMILY'S HIGHEST LEVEL OF EDUCATION

A respondent's contribution in the NMWs may differ because of family's highest level of education. Among the eight categories of educational levels, the majority (28%) were Class 9 pass to SSC pass, which was the highest level of educational stage in the respective families. According to the works estimates, respondents from the families of primary pass and class 9 to SSC as the highest level of education provided more NMWs. Again, respondents with graduation and masters did more NMWs in terms of the OC method. The average contribution was relatively higher up to HSC pass as family's highest level of education and monthly tk. 3317 can be derived by the family where primary pass recognized as highest level of education. In contrast, graduate and masters level of education gave more NMWs in respect to the average OC estimate.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   19
A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
www.ijrcm.org.in

FIGUR 03: PERCENTAGE VALUE OF NMWS BY FAMILY'S LEVEL OF EDUCATIONAL
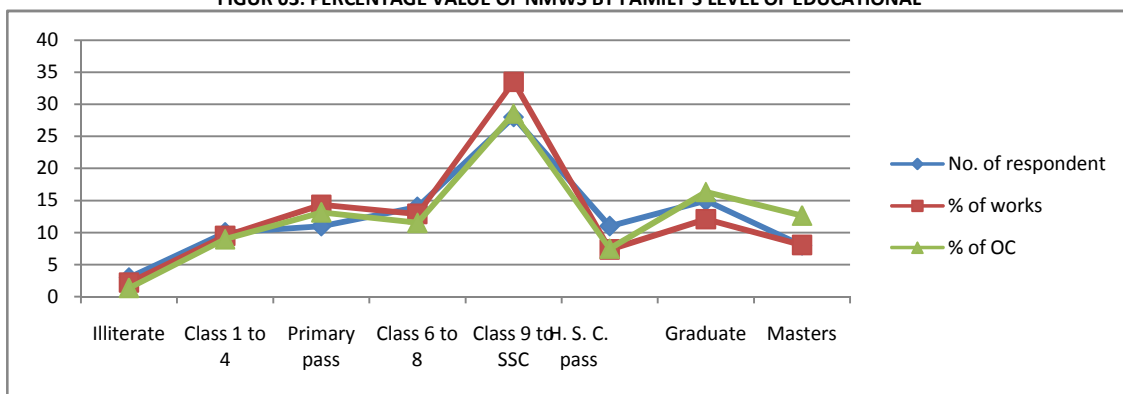
Persons having education between classes 9 and SSC contributed significant NMWs by percentage measure of the works and OC methods. The contribution was very low in the families which were illiterate (see Table 06, for more).

RESPONDENT KINSHIP VARIETY WITH FAMILY HEAD

About 44 respondents answered as son, 23 as wives, 16 as own (self) were significant among the kinship varieties of the respondents. According to the works estimate of average value of the NMWs, near about tk. 4,200 (monthly) was extracted by wives. The same estimate showed that the value generated by daughter-in-laws and nephews were higher than the other respondents. With a little discrepancy of the value of the NMWs, the OC estimate conferred the same result. In contrast, the contribution of brothers was significantly low in both estimates. Percent contributions of the NMWs, derived from wives and daughter-in-laws were significantly high with respect to the number of respondents. Meanwhile, brothers, self and daughters represented the reverse figure.

FIGURE 04: PERCENTAGE CONTRIBUTION OF NMWS THROUGH KINSHIP
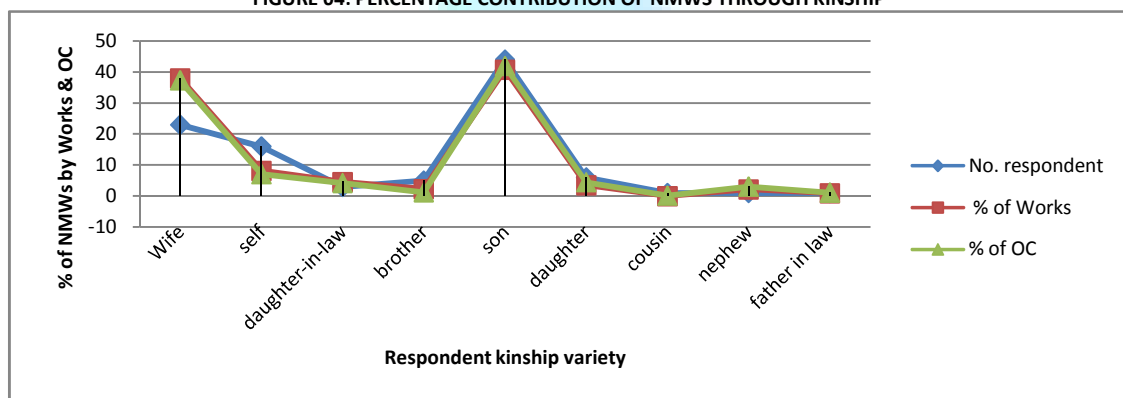
A significant contribution was provided by sons and wives through per cent estimate of both measures. Rest of the kinship did not play any significant role to produce NMWs. A little discrepancy appeared in the contribution of wives and self by percentage measure of the works and OC methods (see Table 07, for more).

MARITAL STATUS

The ratio of the married and unmarried respondents was almost same, which were 46% and 52% respectively. Because of the family responsibilities, the married people generated more NMWs than the unmarried groups and between the two estimates regarding married groups, the value of works estimate was higher than the value of the OC estimate. Works estimate NMWs secured higher value than OC estimate irrespective of all status. The married and divorced people generated Tk. 3,004 and Tk. 3,806 average value per month respectively which was higher than average value of works estimate, the unmarried people generated less value than the average value of both measures.

FIGURE 05: PERCENTAGE VALUE OF NMWS BY MARITAL STATUS
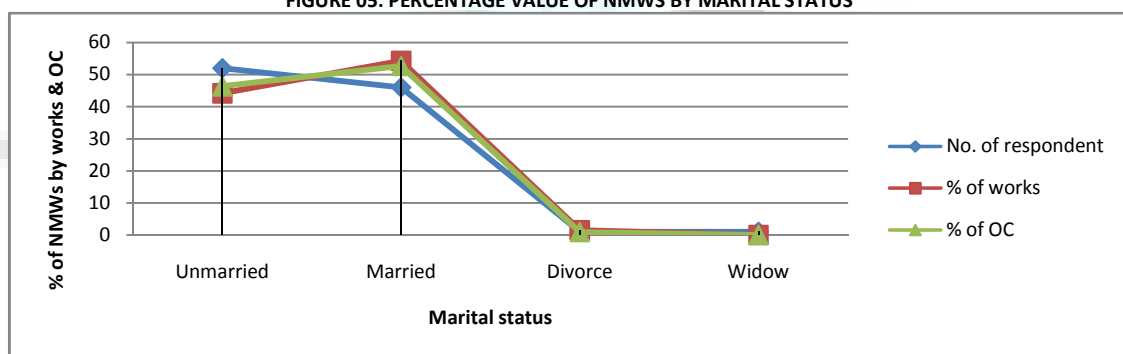
This picture showed the responsibility of the married people regarding the NMWs of household and the outside of household areas. On the other hand, to produce the NMWs, the percentage contribution of the unmarried was slightly lower than their number (see Table 08, for more).

CONCLUSION

There were five aspects have been judged to know how NMWs were produced. The factors were location, education, family's education, kinship and marital status. The research showed that respondents had taken from rural areas contributed significantly well through works estimates than urban and mixed areas. A good volume of the average value of the NMWs was derived from less than primary to eight pass, they monthly produced between tk. 3,126 to tk. 3,341 by the average value of works method and in OC method it limits tk. 2,443 to tk. 2,750. Respondents from the families of primary pass and class 9 to SSC as recognized the highest level of education provided more NMWs. Here, respondents came from primary pass as recognized the highest level of education produced tk. 3,317 per month and tk. 2,609 per month by the average value of works and OC method respectively. Again, this family group did well than the other level of

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 20
A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
www.ijrcm.org.in

education in terms of percentage contribution. The contribution of wives was the top than other kinship, in both estimates of NMWs wife monthly generated tk. 4,192 and tk. 3,534 by average value of works and OC estimates. Finally, this research showed that, the unmarried people generated less value than married, the monthly contribution of NMWs of a married person were tk. 3,004 and tk. 2,501 by the average value works and OC method.

The value of the NMWs needs to be incorporated to the concept of development economics, which, in this way, can determine a really potential for an economy. To understand the real potential and strength of the real labour force of an economy, it is necessary to introduce and add the value of the NMWs to the conventional development concept (growth plus structural change, HDI index, etc.). The people who produce the value of NMWs are always being undermined by the families and society because they cannot get economic return against their NMWs. There are lots of scopes to work in that field. Bangladesh is the labor abundant considering both of formal and informal labor markets. Author found that, a significant number of unemployed people are producing NMWs and on the other hand, a huge number people derived from informal sector are also working to produce NMWs. These surplus labour some how engaged in NMWs to produce goods and services. A huge attention is required to evaluate the NMWs and new method of estimation is necessary to be considered as an alternative tool of market evaluation.

APPENDIX

TABLE 01: HOUSEHOLDS NMWS

Survey code	Survey occupation	BBS code	Industry by occupation (BBS)	Monthly wage (Tk.)	Daily wage (Tk.)	Hourly wage (Tk.)	Variation (24.125=100%)
1	2	3	4		5	6	7
1	Child care	F 149*	Accountant	5826.99	194.23	24.27	100.639
2	Teaching	F 133	Primary school teacher	3030.99	101.03	12.62	52.34
3	Washing up	40	Washer man	3540	118	14.75	61.14
4	Iron	25	Iron man	4020	134	16.75	69.43
5	Meal preparation	7	Household maid/workers	1950	65	8.12	33.67
6	Cooking	6	Cook/Chef	4230	141	17.62	73.05
7	Dish clearing	7	Household maid/workers	1950	65	8.12	33.67
8	Cleaning the house	7	Household maid/workers	1950	65	8.12	33.67
9	Sweeping	4	Sweeper	3720	124	15.50	64.24
10	Elder care	F 149*	Accountant	5826.99	194.23	24.27	100.63
11	Book-keeping	F 149	Accountant	5826.99	194.23	24.27	100.63
12	Sewing and repair clothing	10	Tailor	3660	122	15.25	63.21
13	Repair and maintenance of dwellings	20	Carpenter	4740	158	19.75	81.86
14	Poultry	F(011,016,025,041)*	(Average of different labor)	2493.48	83.11	10.39	43.06
15	Cow look after	F(011,016,025,041)*	(Average of different labor)	2493.48	83.11	10.39	43.06
16	Boat repairing	F 011,016,025,041)*	(Average of different labor)	2493.48	83.11	10.39	43.06

Source: Author's Field Work, April-August, 2009, F = Formal wage code.

TABLE 02: OUTSIDE NMWS

Survey code	Survey occupation	BBS code	Industry by occupation (BBS)	Monthly wage (Tk.)	Daily wage (Tk.)	Hourly wage (Tk.)	Variation (24.125 = 100%)
1	2	3	4		5	6	7
21	Vegetable cultivation	23	Gardener	2640	88	11.00	45.59
22	Cow boy	7	Household maid/workers	1950	65	8.12	33.67
23	Fishing	23*	Gardener	2640	88	11.00	45.59
24	Making fishing net	F 041*	Helper (knitting etc.)	2608.9	86.96	10.87	45.06
25	Harvesting	F 149 *	Accountant	5826.9	194.23	24.27	100.63
26	Gardening	23	Gardener	2640	88	11.00	45.59
27	Khata making & sewing	F 041*	Helper (knitting etc.)	2608.98	86.96	10.87	45.06
28	Mat making	F 041*	Helper (knitting etc.)	2608.98	86.96	10.87	45.06
29	Tailoring	10	Tailor	3660	122	15.25	63.21
30	Boutique design	F 039*	Cutting man (RMG)	3996.99	133.23	16.65	69.03
31	Look after business	16	Salesman in footpath	4140	138	17.250	71.50
32	Accounting business	F 149	Accountant	5826.99	194.23	24.27	100.63
33	Milk marketing	F(011,016,025,041)*	(Average of different labor)	2493.48	83.11	10.39	43.06
34	Farming	F(011,016,025,041)*	(Average of different labor)	2493.48	83.11	10.39	43.06
35	Kitchen shopping	F(011,016,025,041)*	(Average of different labor)	2493.48	83.11	10.39	43.06
36	Waiter	F 103	Waiter	2625	87.5	10.93	45.33
37	Hotel cleaner	F 100*	Room boy	2031.99	67.73	8.46	35.09

Source: Author's Field Work, April-August, 2009.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 21
A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
www.ijrcm.org.in

TABLE 03: NMWS BEFORE EMPLOYMENT

Survey code	Survey occupation	BBS code	Industry by occupation (BBS)	Monthly wage (Tk.)	Daily wage (Tk.)	Hourly wage	Variation (24.125=100%)
1	2	3	4	5	6	7
41	Training with adding up value	F 133*	Primary school teacher	3030.99	101.03	12.62	
42	Voluntary teaching	F 134	Pre- primary school teacher	1963.98	65.46	8.18	33.92
43	Gathering experience	F(011,016,025,041)*	(Average of different labor)	2493.48	83.11	10.39	43.06
44	Voluntary social work	F 143*	Nurse/midwives	3777.99	125.93	15.74	65.25
45	Automobile worker	F 080	Automobile worker	3457.98	115.26	14.40	59.72
46	Undefined work	(Average of all work)		3309.6	110.32	13.79	57.16

Source: Author's Field Work, April-August, 2009, *= Arranged works

Ave Hourly wage 13.790

total No. of work 39

Adjusted Ave Hourly wage 15.077 (Considering inflation 2007/8)

Adjusted Ave Hourly wage 16.081 (Considering inflation 2008/9 June)

TABLE 04: NMWS COVERED FROM THREE SAMPLE AREAS

Sample Area	No. of respondent	Value of NMW by works (monthly)	Average value of works	% of works	Value of NMW by OC (monthly)	Average value of OC	% of OC
Rural	19	64,124	3,375	25.2	49,696	2,616	22.8
Urban	59	129,456	2,194	50.9	120,271	2,038	55.1
Mixed	22	60,848	2,766	23.9	48,291	2,195	22.1
Total	100	254,429	2,544	100.0	218,258	2,183	100.0

Source: Author's Field Work, April-August, 2009.

TABLE 05: NMWS VARY BY EDUCATIONAL LEVEL

Education level	No. of respondent	Value of NMW by works (monthly)	Average value of works	% of works	Value of NMW by OC (monthly)	Average value of OC	% of OC
Illiterate	25	58,195	2,328	22.87	40,043	1,602	18.35
Less than primary	17	53,148	3,126	20.89	41,532	2,443	19.03
Primary pass	11	37,106	3,373	14.58	28,225	2,566	12.93
Eight pass	10	33,414	3,341	13.13	27,500	2,750	12.60
S. S. C. pass	10	19,160	1,916	7.53	16,994	1,699	7.79
H. S. C. pass	15	21,410	1,427	8.42	19,697	1,313	9.02
Graduate	10	26,492	2,649	10.41	35,803	3,580	16.40
Masters	2	5,503	2,752	2.16	8,465	4,232	3.88
Total	100	254,429	2,544	100	218,258	2,183	100

Source: Author's Field Work, April-August, 2009.

TABLE 06: NMWS VARY BY FAMILY'S HIGHEST LEVEL OF EDUCATIONAL

Education level	No. of respondent	Value of NMW by works (monthly)	Average value of works	% of works	Value of NMW by OC (monthly)	Average value of OC	% of OC
Illiterate	3	5,626	1,875	2.21	2,993	998	1.37
Class 1 to 4	10	24,154	2,415	9.49	19,592	1,959	8.98
Primary pass	11	36,486	3,317	14.34	28,701	2,609	13.15
Class 6 to 8	14	32,855	2,347	12.91	25,134	1,795	11.52
Class 9 to SSC	28	85,235	3,044	33.50	62,280	2,224	28.54
H. S. C. pass	11	18,754	1,705	7.37	16,357	1,487	7.49
Graduate	15	30,778	2,052	12.10	35,615	2,374	16.32
Masters	8	20,540	2,567	8.07	27,587	3,448	12.64
Total	100	254,429	2,544	100	218,258	2,183	100

Source: Author's Field Work, April-August, 2009.

TABLE 07: NMWS DIFFER THROUGH KINSHIP OF RESPONDENTS

Respondent	No. respondent	Value of NMW by works, 000' Tk.	Average value of works	% of Works	Value of NMW by OC '000TK	Average value of OC	% of OC
Wife	23	96.416	4,192	37.9	81.279	3,534	37.2
Self	16	20.692	1,293	8.1	15.301	956	7.0
daughter-in-law	3	11.509	3,836	4.5	9.113	3,038	4.2
Brother	5	5.699	1,140	2.2	2.573	515	1.2
Son	44	103.533	2,353	40.7	91.350	2,076	41.9
Daughter	6	8.776	1,463	3.4	9.583	1,597	4.4
Cousin	1	(0.038)	(38)	(0.0)	0.227	227	0.1
Nephew	1	5.502	5,502	2.2	6.522	6,522	3.0
father in law	1	2.339	2,339	0.9	2.308	2,308	1.1
Total	100	254.428	2,544	100.0	218.256	2,183	100

Source: Author's Field Work, April-August, 2009.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   22

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

www.ijrcm.org.in

TABLE 08: NMWS CHANGE IN MARITAL STATUS

Marital status	No. of respondent	Value of NMW by works (monthly)	Average value works	% of works	Value of NMW by OC (monthly)	Average value of OC	% of OC
Unmarried	52	112,439	2,162	44.2	101,222	1,947	46.4
Married	46	138,184	3,004	54.3	115,035	2,501	52.7
Divorce	1	3,806	3,806	1.5	2,001	2,001	0.9
Widow	1	-	-	-	-	-	-
Total	100	254,429	2,544	100.0	218,258	2,183	100.0

Source: Author's Field Work, April-August, 2009.

REFERENCES

1. Abdel, I. and Sirageldin, H. (1969), "Non-market components of national income" Survey Research Centre, ISR- Institute of Social Research, Michigan: The University of Michigan, Ann Arbor.
2. Amin, A. T. M. N. (1996), "The Informal Sector Paradigm: Analytical Contributions and Developmental Role," Regional Development Dialogue, *spring 1996, Vol. 17, No. 1*, pp 6-21.
3. Bangladesh Bureau of Statistics (2008), "Key Findings of Labor Force Survey 2005-06," BBS, Dhaka: Government of the People's Republic of Bangladesh.
4. Bangladesh Economic Review (2006), Dhaka: Government of People's Republic Bangladesh, pp.123-155, 224-227.
5. Bayes, A. and Hossain, M. (2007), "Gramer manush grameen aurthonity: jibon jibikar poribortan porjalochana," Dhaka: Abdul Azad, Chairman, Writers' Foundation.
6. Blunch, N. H., Canagarajah, S. & Raju, D. (2001), "The informal sector revisited: A synthesis across space and time" Social Discuss Paper Series, No. 0119 Washington, D.C: The World Bank.
7. Budlender, D. (2004), "Why should we care about unpaid care work?," Precigraph, Mauritius, Harare: Frontline Electronic Publishing (Pvt.) Ltd: Southern Africa and Indian Ocean States.
8. Chadeau, A. (1992), "What is households' non-market production worth?," OECD Economic Studies, No. 18, pp. 86-102).
9. Charmes, J. (2006), "Expert group on informal sector statistics" 11th & 12th May, Delhi group, Paris: Institute of Research for Development.
10. Hamdad, M. (2003*),* "Valuing households' unpaid work in Canada, 1992 and 1998: trends and sources of change" Ottawa: Statistics, Canada Economic Conference.
11. Hamid, S. (1994), "Non-market work and national income: the case of Bangladesh," The Quarterly Journal of The Bangladesh Development Studies, Dhaka, Vol. XXI, No. 2 & 3.
12. Hosen, A. (2010): "Estimating Non-market Activities: A Study on Unpaid & UnderpaidLabor Force in Bangladesh" PhD research work, National University, supervised by Anu Muhammad, Dhaka.
13. Hosen, A. (2012a), "Individual Worth vs. Aggregate Value: Influential Factors of Non-Market Works (NMWs) in Bangladesh," Global Journal of Management and Business Research, Global Journal Inc. (USA), Vol. 12, Issue 2, Version 1.0.
14. Hosen, A. (2012b): "Female and Graduate Contribution of Nonmarket Works in Bangladesh: An Opportunity Cost Analysis," Accepted (May, 12) to publish by the International Journal of Business and Management (IJBR), Canadian Center of Science and Education (CCSE).
15. Mankiw, G. N. (2001), "Principles of Economics" (2nd ed.), 6277, Orlando, FL 32887-6777, Philadelphia: Harcourt College Publishers, Harcourt Inc., pp. 398-407.
16. Muhammad, Anu (2005), "Bangladesher orthonitir gotimukh," Dhaka: Shrabon Prokashani.
17. National Accounts Statistics of Bangladesh (2000), "Strengthening national accounts of Bangladesh (SNAB)" Dhaka: BBS, Government of Peoples Republic of Bangladesh, Bangladesh.
18. Soto, H. de (1986), "El Otro Sendero" (Spanish Edition), Amazon.com: Sudamericana, Retrieved 2006-12-18.
19. Soto, H. de (1989). *The other path: the economic answer to terrorism*. Peru: Harper Collins.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   23

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

www.ijrcm.org.in

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce, Economics and Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail **info@ijrcm.org.in** for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail **infoijrcm@gmail.com**.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   24
A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
www.ijrcm.org.in

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT   III

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

www.ijrcm.org.in