Economic Analysis on Income and Expenditure of the Handloom Weavers: Case Study in Sagaing Township

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Abstract

The study analyseseconomic conditions by the Handloom Weaver of the Sagaing Township.The primary data werederived from survey. There are31villages and 2 wards handloom weaving industries in Sagaing Township. Among them 3 villages and 1 ward were selected to describe the economic conditions by using simple random cluster sampling technique. This paper derives from the study of economic analysis on income and expenditure of the Handloom Weavers by using primary data collection. This study shows thathandloom weaver's income effect on their household education, health and property. According to the study, ifthe weavers have their own handloom and products, the weavers will increase their monthly income. The weavers'monthly income has positive relationship with their expenditure and their possessions such as television, types of house, and smart phone but it has not related with their education. Therefore, this paper analysis the wealth condition of Handloom Weavers' household is good condition.

1.Introduction

Myanmar'shandloom weaving is the traditional textile industriesandit is found in all over the country such asin Kachin, Kayar, Kayin, Chin, Shan, Mon States Mandalay and Sagaing Region.The most famous handloom weaving is Lum Yar Kyaw acheik and is almost found in Amrapura Township, Mandalay Regionand Sagaing Township,Sagaing Region.Lum Yar Kyaw acheik are made from over and 100 Loom but it is very difficult to weave with Power Loom and highly skillful weavers can only weave it. Handloom weaving is highly labor intensive industry with low capital investment.Most of handloom weavers are women in Myanmar.Thus, handloom weaving is not only a heritage of Myanmar but alsoan artistry of the weavers.

Although we can buy a lot of many modern textiles and clothing with the affordable price, most of Myanmar people like traditional handloom weaving silk wears. They are suitable for wear in Myanmar culture and climate and most of Myanmar women like to wear the silk acheiks in the special events. Therefore,Lum Yar Kyaw acheik is most popular the traditional handloom silk wears in Myanmar but these textile industries haveslightly improvement in the country. The handloom weavers attempt tocreate for highly innovativedesigns in the textile industry. In present situation, the cost of living is very high. Income determines the standard of living and financial status. Most of the weavers' primary source of livelihood is weaving. So, the socio-economic conditions of the handloom weavers depend on their income.Thus, this paper studieseconomic analysis on income and expenditure of the handloom weavers.

1.1 Objectives

-To analyze the factors affecting on the handloom weavers income

- To analyze the relationship between income and expenditure of handloom weaver

1.2 Methods of the Study

The study was conducted using primary information which was analyzed and presented descriptive, simple regression, multi regression model and wealth index. The design of the survey had been based on simple randomcluster sampling. In this survey, 424 handloom weaving households were selected from 1 ward and 3 villages in Sagaing Township and the survey was conducted by using structured questionnaires.

1.3Scope and Limitation of the Study

The study area of the research paper is Sagaing Township, a major handloom weaving area in Sagaing Region. There are 31 villages and 2 wards Handloom industry in Sagaing Township. Among them 3 villages and 1 ward were selected by using simple random cluster sampling. The following table shows handloom weavers in the selected ward and villages.

Table (1.1) Selected Handloom Weaving Households

Villages	Frequency	percent
SeinKone ward	124	29
Kyaut Thar village	121	28
Sakyin village	100	24
Paganthu village	79	19
Total	424	100

Source: Survey data of Sagaing Township, 2019

The income and expenditure data was collected only handloom weaver's income and expenditure, the handloom weavers' family income from the study area. Therefore, the income and expenditure is only handloom weavers' income and expenditure.

2. Historical Background of the Sagaing Township

Sagaing is the largest region of the 7 region in Myanmar and is the second largest constituent until of Myanmar after Shan State. Sagaing covers about 14 percent (9352km3) of Myanmar's area. It is divided into 8 districts and 37 townships. Three Township area (Lahe, Leshi and Nangun) from the Naga Self- Administered Zone.

"Sagaing Township" is located on the West Bank of the Ayeyarwady River. It lies between the north latitude 21˙52′ to 22˙13′ and the east longitude 95˙37′ to 96˙03′.Sagaing is bordered at the north by Wet Let Township, on the cost Mattaya Township at opposite side of Ayeyawaddy River and on the west by Myinmu Township and Ayardaw Township the opposite side of Mue River.

It has an area of 485.16 square miles (310502 acres) and is composed of Sagaing Town Proper and 76 village tracts with 117 villages. In Sagaing township has two city that are Sagaing city and Sadoung city. They comprise 34 wards. At the present, total population of Sagaing Township is 282730 (2018) out of which 48% are males and 52%

are females. Most of people are living in the rural area 69% and 31% are living in urban area. There are eight races and most of Burmese. This township is dominated by numerous Buddish monastic centers. As the covering Minwon Mountain, Ayeyawaddy river flows in the east of Sagaing Township. Because the people in Sagaing Township faith mysticism buddhism, it is a peaceful and harmony township with shadow of Buddha, Dhamma and Sanagha.

Sagaing Township belongs to traditional culture, historical settlements, Buddha image, pagodas and monastic centers. Moreover, it has traditional handloom weaving, power-loom weaving, handicraft of silver, copper, crock and guitar workshop, horticulture industry and others. In Sagaing Township, most of rural people are working traditional handloom weaving which is providing massive self-employment to the rural people. Handloom industry in Sagaing is an ancient cottage industry. It produces Lun Yar Kyaw Kyo Gyi Acheik, Silk Acheik and Yarn Acheik. Lun Yar Kyaw Kyo Gyi Acheik is mainly famous product in handloom industry which began master weaver (DawNyar) in Sagaing. Most of Myanmar women are wearing this product in traditional ceremonies. Mostly the products of the handloom industry are selling in the local market.

3. Analysis of Socio-Economic Status of Handloom Weaver in Sagaing Township

In this section, data collected from the survey by using questionnaire,analyzed and interpreted in according with the above methods and procedure. The socio-economic variables considered for the study are: age, individual weaver income, individual weaver expenditure, handloom weavers' family income, marital status and educational status, members of handloom weaver, owner of handloom household property, type of house and sanitation condition of the handloom weavers.

3.1 Demographic Factors of Respondents

Thehandloom weavers' age can be seen in the following table(3.1).

Table (3.1) Age of Sample Handloom Weavers

Age	Number of Weavers	Percent
18-24	157	37
25-31	140	33
32-38	93	21.9
39-45	30	7.1
46-52	4	0.9
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to this table (3.1), most of the weaver are18-24 years old (37%)and the middle age group (46-52) weaver is 0.9%. It is found that handloom weaving is working whose are young females.

To study the handloom weavers' economic situation, the individualhandloom weavers' income are described in Table (3.2).

Table (3.2) Individual Handloom Weavers' Monthly Income

Income (Kyats)	Number of Household	Percent
25000-149999	191	45.1
150000-274999	207	48.8
275000-524999	24	5.7
525000-649999	1	0.2
650000-774999	1	0.2
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table(3.2), the most weavers' monthly income are between25000 and 149999 (45.1%), and between 150000 and 274999 (48.8%).The large monthly income group is between 525000 and 774999(0.4%).Therefore, the result found that the most weavers' monthly income is under 300000 Kyats.

To study the individual handloom weavers'monthly expenditure, the consumption expenditure is the largest part of income. The observed data are described in Table (3.3)

Table (3.3) Individual Handloom Weavers' Monthly Expenditure

Expenditure (Kyats)	Number of Household	Percent
5000-93999	128	30.2
94000-182999	212	50
183000-271999	53	12.4
272000-366999	23	5.5
361000-449999	8	1.9
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the above table, the most weavers' monthly expenditure is between 94000 and 182999 kyats (50%). The large monthly expenditure group is between 361000 and 449999 kyats (1.9%). The small income group is between 5000 and 93999 kyats (30.2%). Therefore, the result found that the most weavers' monthly expenditure is lower 300000 kyats.

The following table showsthe handloom weavers' family income.

Table (3.4) Family Income of Handloom Weavers

Income(Kyats)	Number of Household	Percent

17000-301999	128	30.2
302000-586999	212	50
587000-871999	53	12.4
872000-1156999	23	5.5
1347000-1441999	8	1.9
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the above table (3.4),small income group is between 17000 to 301999 kyats(30.2 %) andlargest income group isbetween 1347000 to 1441999 kyats (1.9 %). Themostmonthly income groupis between 302000-586999 kyats (50 %).

Table (3.5) Marital Status of Weavers

Marital Status	Number of Weavers	Percent
Single	237	55.9
Married	178	42.0
Widow	6	1.4
Divorce	3	0.7
Total	424	100

Source: Survey data of Sagaing Township, 2019

The table (3.5) shows marital status of weavers. This is one of the important factors which affect the social status of the people. The study found that 55.9% of the weaversis single, 42% is married, 1.4% is widows and 0.7% is divorce.

Table (3.6) Education Level of Handloom Weavers

Education Level	Number of weavers	Percent
Uneducated	4	0.9
Primary level	281	66.3
Secondary level	111	26.2
High School level	19	4.5
Diploma level	3	0.7
Graduate	6	1.4
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table (3.6), as level of employment is the deciding factor of the employee in which as low education has low employment opportunity and high education has high employment and high income occupations. In this study, 0.9% of the respondents areuneducated and 66.3% is primary school level. Most of weavers have only primary level of education. Only about 1.4% respondents are graduated.

Table(3.7) Member of Household Members

Number of Household Members	Frequency	Percent
1	2	0.5

2	53	12.5
3	101	23.8
4	93	21.9
5	82	19.3
6	59	13.9
7	25	5.9
8 and above	9	2
Total	424	100.0

Source: Survey data of Sagaing Township, 2019

According to table (3.7), 101 householdshave 3 family members and about 12.5% of households have two children. And then, 21% of households have four children, 19% of householdshave five children, 13.9% of households have six children, 5.9% of households have seven children, eight and over children have nine(2%).

Table (3.8)Number of Weaverof the Handloom Household

Number of Weaver	HandloomHousehold	Percent
1	289	68.2
2	99	23.3
3	33	7.8
4	3	0.7
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to table (3.8), most household consist of one weaver (68.2%). Being two and three weavers household are 23.3% and 7.8% respectively.Most weaver household has four weavers (0.7%).

Table (3.9)The Condition of the Handloom Ownership

Own of the Handloom	Number of Household	Percent
Yes	302	71.2
No	122	28.8
Total	424	100

Source: Survey data of Sagaing Township, 2019

The property owned looms by the weavers also affects their income. The table(3.9) shows thatowned handloom is 302 (71.2%)and leased handloom is 122 (28.8%).This show that majority of weaver have owned handlooms.

Table (3.10) Handloom Weaver's Income support for their family education

Number of Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total

Support for education from primary to high school.	8 (1.9%)	161 (38%)	93 (21.9%)	149 (35.1%)	13 (3.1%)	424 (100%)
Support forHigher education	15 (3.5%)	206 (48.6%)	110 (25.9%)	84 (19.8%)	9 (2.1%)	424 (100%)
Support forLearning other language	53 (12.5%)	233 (55.0%)	89 (21.0%)	27 (6.4%)	22 (5.2%)	424 (100%)
Support for vacation training	5 (1.2%)	100 (23.6%)	95 (22.4%)	204 (48.1%)	20 (4.7%)	424 (100%)
Support for economic studies	7 (1.7%)	108 (25.5%)	81 (19.1%)	209 (49.3%)	19 (4.5%)	424 (100%)

Source: Survey data of Sagaing Township, 2019

According to the table(3.10), most of the responded found that disagree is more percentage than agree.Moreover,neutral percentage has average about 22%.

Table (3.11) Handloom Weaver's Income support for their family Health

Number of questionnaire	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Support for health care	2 (0.5%)	51 (12%)	102 (24.1%)	266 (62.7%)	3 (0.7%)	424 (100%)
Support for medical check up	17 (4%)	165 (38.9%)	116 (27.4%)	125 (29.5%)	1 (0.2%)	424 (100%)
Support for vaccination	3 (0.7%)	98 (23.1%)	116 (27.4%)	205 (48.3%)	2 (0.5%)	424 (100%)
Support for old person	3 (0.7%)	71 (16.7%)	115 (27.1%)	231 (54.5%)	4 (0.9%)	424 (100%)
Support for child and pregnancy	6 (1.4%)	130 (30.7%)	146 (34.4%)	140 (33%)	2 (0.5%)	424 (100%)
Support for infection	4 (0.9%)	9 (21.9%)	112 (26.4%)	212 (50.0%)	3 (0.7%)	424 (100%)
Support for personal clean	2 (0.5%)	43 (10.1%)	81 (19.1%)	294 (69.3%)	4 (0.9%)	424 (100%)
Support for health food	2 (0.5%)	44 (10.4%)	69 (16.3%)	300 (70.8%)	9 (2.1%)	424 (100%)

Source: Survey data of Sagaing Township, 2019

According to the table(3.11), most of the weaverrespond that agree is more percentage than disagree.Moreover,neutral percentage has average 25%.Strongly disagree percentage have very small.

Table (3.12) Handloom Weaver's Income support for their Household Furniture

Number of question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Support for own home	16 (3.8%)	182 (42.9%)	107 (25.2%)	114 (26.9%)	5 (1.2%)	424 (100%)
Support for using model home appliance	8 (1.9%)	87 (20.5%)	145 (34.2%)	176 (41.5%)	8 (1.9%)	424 (100%)
Support for using home furniture	6 (1.4%)	132 (31.1%)	135 (31.8%)	147 (34.7%)	4 (0.9%)	424 (100%)
Support for mobile and others	10 (2.4%)	117 (27.6%)	133 (31.4%)	160 (37.7%)	4 (0.9%)	424 (100%)

Source: Survey data of Sagaing Township, 2019

According to the table(3.12), most of the responded answer that disagree,neutral and agree are more percentage than strongly disagree and strongly agree.Moreover, almost agree percentage have large andstrongly disagree percentage have very small.The following table show three type of handloom weaving productswhich are LunYarKyawacheik, silk acheik and yarn acheik.

Table (3.13)Types of Weaving Product

Types of Weaving	Number of Weavers	Percent
LunYarKyawAcheik	122	28.8
Silk Acheik	253	59.7
Yarn Acheik	49	11.6
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table(3.13),most weavers weave silk acheik which has 59.7% and more than LunYarKyawacheik weavers whichare 28.8% that is very long time and very expenses.Yarnacheik weavers have 11.6% that is very small comparing to others.

There are many reasonsof weavers because of weaving to survive for their live.These are six reasons in the following table(3.14).

Table (3.14)Handloom Weaver's Reason for Weaving

Types of Reason	Number of Weavers	Percent
Low income	88	20.8

Unemployment	13	3.1
Unskilled in other works	50	11.8
Uneducated	11	2.6
Hobby	181	42.7
Traditional	81	19.1
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table(3.14),most of weavers are weaving due to hobby (42.7%),low income(20.8%) and traditional(19.1%).The reason for being unemployment and uneducated are 3.1% and 2.6%. Others vocational unskilledweaver is 11.8%.

Table (3.15)Getting Advance Wages of Weavers

Getting Advance Wages	Number of Weavers	Percent
Yes	105	24.8
No	319	75.2
Total	424	100

Source: Survey data of Sagaing Township, 2019

Table (3.15) shows that handloom weavers get advance their wages. Handloom weavers in village do not getting advance their wages, but handloom weavers in urban get advance their wages because their cost of living is very high. Handloom weavers getting advance wage is 24.8% and do notgetting advance their wages is 75.2%.

Table (3.16) Types of Credit Organization forHandloom Weavers

Credit Organization	Handloom Weavers	Percent
Non Borrower	351	82.8
Agriculture Bank	32	7.5
Co-operative Society	8	1.9
Alliance	14	3.3
Global Treasury Bank	1	0.2
Others	18	4.2
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table (3.16) show many credit associationsthat are lending to people who needed money.Most of them are Agricultural bank (7.5%), Alliance credit association(3.3%) and others credit organization(4.2%).Non borrowing handloom weaver is 82.8%.The least one is global treasury bank, 0.2%.

Table (3.17)The condition of household property of Handloom Weavers

Household Property	Yes		No	
	Frequency	Percent	Frequency	Percent
Car	12	2.8	412	97.2

Motorbike	346	81.6	78	18.4
Television	350	82.5	74	17.5
VCD /EVD	227	53.5	197	46.5
Radio	209	49.3	215	50.7
Sewing Machine	31	7.3	393	92.7
Generator	35	8.3	389	91.7
Rice cooker	355	83.7	69	16.3
Iron	244	57.5	180	42.5
Smart phone	397	93.6	27	6.4
Electric Pot	322	75.9	102	24.1
Fan	258	60.8	166	39.2
Refrigerator	90	21.2	334	78.8
Water Pump	96	22.6	328	77.4
Electronic Kettle	289	68.2	135	31.8
Others	116	27.4	308	72.6

Source: Survey data of Sagaing Township, 2019

According to the table(3.17), the most percentage of household properties arecommunication,entertainment and kitchen property. Motorbike and smart phone in the communication channel are 81.6% and 93.6%.Television,VCD/DVD and Radio in the entertainment property are82.5%,53.5% and43.3% respectively. Moreover, rice cooker, electric pot and electronic kettle in kitchen property are 83.7%,75.9% and 68.2% respectively.For health, iron is 57.5% and others property is about 20%.

Table (3.18)Type of House of Handloom Weavers

Type of House	Number of Weavers	Percent
RC	16	3.8
Brick	102	24.1
Wood	162	38.2
Bamboo	144	34.0
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table (3.18), there are four types of house of the handloom weavers. The most wood houses are38.2% and the least RC type of house is 3.8%. The Brick and bamboo types of house are 24.1% and 34.0% respectively. By looking at the above table, the condition type of house of the weaversis fair condition.

Table(3.19) Type of Sanitation of Handloom Weavers

Type of Sanitation	Number of Weavers	Percent
Fly proof toilet	289	68.2

Covered pit toilet	114	26.9
Latrine	17	4.0
Others	4	0.9
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table (3.19), there are four types of sanitation of the weaver. The Fly proof toilet is 68.2% and the least others are 0.9%. The covered pit toilet and latrine are 26.9% and 4.0% respectively. By looking at the above table,the condition of sanitation of the handloom weavers are very good condition.

Table (3.20) Drinking Water of Handloom Weavers

Type of Drinking Water	Number of Weavers	Percent
Underground water	52	12.3
River water	310	73.1
Stream water	4	0.9
Purified water	18	4.2
Others	40	9.4
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table (3.20), two-third of handloom weavers are drinking the river water that is 73.1%.The underground, stream and others water are 12.3%,0.9% and 9.4% respectively. The purified water is4.2% in the handloom weavers.The condition of drinking water from the view of sanitary has not yet good.

Table(3.21)Solid Waste Situation of Handloom Weavers

Type of Waste	Number of Weavers	Percent
Burn	142	33.5
Burial	1	0.2
Municipal	111	26.2
River/ Stream	8	1.9
Others	162	38.2
Total	424	100

Source: Survey data of Sagaing Township, 2019

According to the table(3.21),the waste condition of handloom weavers are burn, burial, municipal,river/stream and others .Burning, municipal and others are 33.5%,26.2% and 38.2% respectively.At last burial of waste and throwing in the river/stream are 0.2% and 1.9%. Therefore, the condition of burning and throwing anywherecan cause air pollution and the environmental problems.

3.2Analysis of the Study

Firstly, this paper studies the handloom weavers' income support for their family education**,** their family health and their household property by using simple linear regression model.Secondly, this paper studies the individual handloom weaver income, handloom weaver family income and the individual handloom weavers' income and expenditure by using multi regression model. Finally, this paper studies the wealth index by using the household properties, type of house and sanitation data.

3.2.1 Simple linear regression model of handloom weaver's income in Sagaing Township

To develop the simple linear regression model, dependent and independent variables will be stated firstly. The dependent variable is education of handloomweavers' household. The independent variable is individual handloom weavers' monthly income.The simple linear regression model is follows;$Y=b_0+b_1X$

Where; Y=Mean of Education

X=Handloom weavers' monthly income

b_0= constant

b_1 =intercept

The estimated results of simple liner regression models are described in the following table.

Table (3.22) The relationship between Mean education and weavers'monthly income

Variable	Mean education	S.E	t	Sig
Constant	2.664	0.079	33.580	0.000
Weavers'monthly income	2.938***	0.000	6.742	0.000
R^2	0.097			
F	45.455***			0.000

Source: SPSS output

*****, **, *:Indicate statistical significance at the 1% level, 5% level and 10% level.**

According to the table, education of the handloom household and handloom weavers' monthly income are significant at 1 % level. Therefore, it can be concluded that handloom weavers' monthly income effect on theirfamily education.An individual handloom weaver's income support mean of health, dependent and independent variables will be stated firstly. The dependent variable is their family health condition.The independent variable is individual handloom weaver's monthly income.

The simple linear regression model is follows;$Y=b_0+b_1X$

Where; Y=Mean of health

X=Handloom weavers' monthly income

b_0= constant

b_1 =intercept

The estimated results of simple liner regression models are described in the following table.

Table (3.23) The relationship between MeanHealth and weavers'monthly income

Variable	Mean Health	S.E	t	Sig
Constant	3.293	0.070	47.250	0.000
Weavers'monthly income	1.717***	0.000	4.486	0.000
R^2	0.046			
F	20.125***			0.000

Source: SPSS output

*****, **, *: Indicate statistical significance at the 1% level, 5% level and 10% level.**

According to the table, weavers' family health condition and handloom weavers' monthly income are significant at 1% level. Therefore, it can be concluded that handloom weavers' monthly income effect on their family health. The following table shows that individual handloom weaver's income supportstheir mean of education. The dependent variable is education of handloom household. The independent variable is their individual handloom weavers' monthly income.

The simple linear regression model is follows;$Y=b_0+b_1X$

Where; Y=Mean of Property

X=Handloom weavers' monthly income

b_0= constant

b_1 =intercept

The estimated results of simple liner regression models are described in the following table.

Table (3.24)The relationship between MeanProperty and weaver's monthly income

Variable	Property	S.E	t	Sig
Constant	2.451	0.82	29.815	0.000
Weaver's monthly income	2.928***	0.000	6.482	0.000
R^2	.091			
F	42.020***			0.000

Source: SPSS output

*****, **, *: Indicate statistical significance at the 1% level, 5% level and 10% level.**

According to the table, household property and individual handloom weavers' monthly income are significant at 0.1 % level. Therefore, it can be concluded that handloom weavers' monthly income effect on the property of handloom household.

3.2.2Individual Handloom Weaver's Monthly income in Sagaing Township

To develop multi regression model of individual handloom weaver's income, dependent and independent variables will be stated firstly.The dependent variable is individual handloom weaver's monthly income. The independent variables are age of weaver, education, types of weaving product, own of handloom and marital status.

The estimated multi regression model is as follows;

$\widehat{Y_1} = b_0 + b_1X_{1i} + b_2X_{2i} + b_3X_{3i} + b_4X_{4i} + b_5X_{5i}$

In constructing the model, the variables are notes as:

$\widehat{Y_1}$ = Individual handloom weaver's monthly income

X_{1i} = Age of weaver

X_{2i} = Weaver's education

X_{3i} = Types of weaving product

X_{4i} = Own handloom

X_{5i} = Weaver's marital status

The estimated results of multi regression model are described in the following table.

Table (3.25)Results of Multi Regression Model for Individual Handloom Weaver's Monthly income.

Dependent variable(Handloom Weaver's income)	Coefficient	Std. error	t-test	sig
Age of weavers	117.075	481.419	0.234	0.808
Weavers' education	-13295.535	23015.876	-0.578	0.564
Types of weaving product	72269.991***	10871.335	6.648	0.000
Own handloom	91632.036***	7481.717	12.247	0.000
Marital status	-9805.006	7023.077	-1.396	0.163
Adjusted R square	0.29			
F-value	35.033***			0.000

Source: SPSS output

*****, **,*:Indicate statistical significance at the 1% level, 5% level and 10% level.**

According to the table, individualhandloom weavers' monthly income are influence by types of weaving product, own handloom which are significant at 1% level.They have positive effect on the individual handloom weaver's monthly income.According to the result that the most significant factor is own handloom (91632.036) and the second significant factor is the type of weaving product (72269.991). Age of weavers, weavers' education and marital status are no related individual handloom weavers' monthly income. Therefore, mainly individual handloom weaver's monthly income depend on own handloom and types of weaving product.

3.2.3Handloom Households' Monthly income in Sagaing Township

To calculate handloom households' income, the dependent variable is handloom households' monthly income. The independent variables are number of family, number of handloom weaver, type of weaving product and own of handloom.

The estimated multi regression model is as follows;

$\widehat{Y_2} = b_0 + b_1X_{1i} + b_2X_{2i} + b_3X_{3i} + b_4X_{4i}$

In constructing the model, the variables are notes as:

$\widehat{Y_2}$ = Handloom household's monthly income

X_{1i} = number of household member

X_{2i} = number of handloom weaver

X_{3i} = Types of weaving product
X_{4i} = Own handloom
The estimated results of multi regression model are described in the following table.

Table (3.26) Results of Multi Regression Model for Handloom Household's Monthly Income.

Dependent variable (Handloom Household's income)	Coefficient	Std.Error	t-test	sig
Number of household member	6153.285***	6940.377	8.862	0.000
Number of handloom weaver	50572.043**	16377.240	3.088	0.002
Own handloom	84537.394***	21800.722	3.878	0.000
Types of weaving product	186119.570***	30602.416	6.082	0.000
Adjusted R square	0.339			
F-vale	55.236***			0.000

Source: SPSS output

*****, **,*: Indicate statistical significance at the 1% level, 5% level and 10% level.**

According to the table, the influence factor of handloom household's monthly income are number of family, number of handloom weaver, own handloom and types of weaving product. These three factors are at 1% level ofsignificant positive relationship between them .First factor is types of weaving product(186119.570), the second factor is own handloom (84537.394), and the third factor is number of family (61503.285). The four factorsis number of handloom weaver (50572.043)at 5% level of significant.

According to the result, mainly handloom households' monthly income depends on number of household member, types of product and own handloom, and second depends on number handloom weaver.

3.2.4**Individual Handloom Weaver's Monthly Income and Expenditure**

To analyze the relationship between an individual handloom weaver's monthly income and expenditure, the dependent variable is individual handloom weaver's monthly income. The independent variables are weavers' monthly expenditure, educational level, marital status, age of weavers, smart phone, television, Motor-bike, types of house and sanitation system.

The estimated multi regression model is as follows;

$\widehat{Y_1} = b_0 + b_1X_{1i} + b_2X_{2i} + b_3X_{3i} + b_4X_{4i} + b_5X_{5i} + b_6X_{6i} + b_7X_{7i} + b_8X_{8i} + b_9X_{9i}$

In constructing the model, the variables are notes as:

Y_1 = Individual handloom weaver's monthly income
X_{1i} = Individual handloom weaver's monthly expenditure
X_{2i} = Weaver's education
X_{3i} = Marital status
X_{4i} = Age of weavers
X_{5i} = Smart phone
X_{6i} = Television
X_{7i}= Motor-Cycle

X_{8i} =Type of house
X_{9i} = Type of sanitation
The estimated results of multi regression model are described in the following table.

Table (3.27) Results of Multi Regression Model of Individual Handloom Weaver's Monthly income and Expenditure

Dependent variable(Handloom Weaver's income)	Coefficient	Std. error	t-test	Sig
Individual weaver's monthly expenditure	0.44**	0.139	3.236	0.001
Weaver's education	-51544.943**	26141.461	-1.972	0.049
Marital status	-10213.013	8021.960	-1.273	0.204
Age of weavers	-262.896	524.075	-0.485	0.628
Smart phone	43318.397**	15556.725	2.785	0.006
Television	31878.435**	10096.007	3.158	0.002
Motor-Cycle	2731.606	9864.177	0.277	0.782
Type of house	27125.151**	8586.904	3.159	0.002
Type of sanitation	6081.022	8111.767	0.750	0.454
Adjusted R square	0.094			
F-value	5.877**			0.000

Source: SPSS output

*****, **,*: Indicate statistical significance at the 1% level, 5% level and 10% level.**

According to the result table, the relationship between individual handloom weavers' monthly income andexpenditure are significant at 0.5 % level. The most significant factors are individual weavers' monthly expenditure, television, type of house, smart phone and weaver's education.It has positive relationship withindividual weavers' monthly expenditure, television, types of house, and smart phone. But it has no related with weavers' education. This means that even uneducated wavers can earn more income than educated wavers. They need to skill in weaving which cannot apply their education. They are weaving ordering design.

Adjusted R square value is 0.094. This mean the predictors (independent variables) represents 9.4% changes in individual weaver's income and remaining 90.6% can be contributed by other factors which are not studied as these beyond the scope of this study.

3.2.5Wealth Condition of the Handloom Household Weavers

To calculate wealth index of the handloom weavers'household, the household weavers' properties are motor-cycle, television, fan, smartphone, electrical pot, iron, electric kettle, rice cooker, type of house, type of sanitation and type of water.

Table (3.28) Wealth condition of the Handloom Household Weavers

Types of Wealth	Frequency	Percent
Poorest	84	19.8

Poor	90	21.2
Middle	74	17.5
Rich	80	18.9
Richest	96	22.6
Total	424	100

Source: SPSS output

The above table shows the wealth condition of the Handloom Household Weavers. The poor household is 41 percent, the middle household is 17.5 percent and the rich household is 41.5 percent. The result shows that the wealth condition of the handloom household weavers are good condition because of rich household percentage is greater than poor household percentage.

4. Finding

According to the study, weavers in handloom industry are young and middle age level but they are not educated. The data suggests that the weavers of Sagaing Township in handloom industry need to be educated and to promote their working standard and, life style.The results indicate that most weavers wave Lum Yar KyawSilk Acheik according to hobby and most weavers owned Handloom. The properties of their types of house, looms and household properties depend on their economic status.

In addition, according to the result of simple linear regression model, the analysis confirms that handloom weavers' income is effecting on their household education, health and property. In the multi regression model, the dominated factors of weaver's income are weaver's expenditure, television, type of house, and smart phone. It has a positive significant relationship between them. But it has no relationship with weaves' education. Income increasing factors of individual handloom weaver are own handloom and types of products. Anindividual handloom weavers' income and the household's incomeare playing an important role in their family. According to theresult, wealth condition of the handloom weavers' household is good condition.

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