

Exploring the Contribution of Social Innovation by Business to Toddy Palm Farmers' Livelihood

(Case Study: Jaggery Powder Production in Kyat Sue Kyin Village Tract, Yesagy Township)

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Abstract— Social innovation is crucial for value creation, growth and employment and innovation processes which take place at the enterprise, regional and national level. This research aims to examine the contribution of social innovation by business to toddy palm farmers' livelihood. The qualitative research approach and the quantitative approach were used in the current study. The palm trees are cultivated widely in Upper Myanmar, and their fruits, branches, stems and roots are useful economically. The toddy palm trees are lifeblood of rural areas. However, the hard work and less lucrative business have resulted in declining number of toddy farmers. Production and selling of jaggery of toddy palm farmers was going to vanish. These facts increased labour migration. The way to address they faced challenges is to make value added and to find new market. By using innovative ways of production, jaggery powder which derives from a block of jaggery can substitute chemical sweeteners powder (Monosodium Glutamate) and then, it can be distributed to local and foreign markets. It was found out that social innovation not only creates value for society but will be a key driver for business. Moreover, social innovation can create and sustain social value for toddy palm farmer's livelihood.

Keywords— *social innovation, labour migration, value creation, growth, employment*

I. INTRODUCTION

The growth of modern economic systems has generated more numerous, complex and urgent social challenges. Moreover, there is a growing consensus that the disconnection between economic growth and social welfare is increasing (Harayama, Nitta, 2011). Nowadays, social innovation particularly in the rural areas focuses on successful solution different social economic, political and environmental issues. Social innovations may be a vehicle creating social change related to better quality of life and creating mechanisms how to cope with different sets of problems. Social innovation as a vehicle for social change in rural communities in order to mitigate negative consequences of restructuring process, this article focuses on bottom-up social innovations that emerge and are developed by rural communities and have social impact to the development of the community better satisfaction of human needs, social inclusion and empowerment.

1.1 Rational of the Study

Toddy palm trees are a symbol of rural life in Myanmar, especially in Upper Myanmar. Spatially, toddy palms are grown in Myingyan, Pakkoku, Kyaunkpadaung, Yesagy, Mahlaing, Taungthar, Mandalay and Magwe Townships. The trees are cultivated widely in Upper Myanmar, and their fruits, branches, stems and roots are useful economically. The toddy palm trees are lifeblood of rural areas. Myanmar has cut down their trees indiscriminately; this has resulted not only in a significant

drop in the number of trees and toddy climbers, but also in the price for toddy in the market. Today, Toddy palm climbers have become fewer, because they cannot earn enough from the traditional business. Therefore, the trees are cut and sold as an easy means to make money by the rural people. Meanwhile, the new generation is leaving the toddy farming business and looking for steady-income jobs in foreign countries. Increasing numbers of youths going overseas have also led to the shortage of workers in these areas. According to a recent UN report, Myanmar loses an average of some 546,000 hectares of forest land each year, the third-worst deforestation rate in the world after Brazil and Indonesia. Toddy palm farmers in rural area were faced social problem and economic problems due to these facts. The way to address they faced problems is to make value added and to find new market for jaggery. Social innovation not only creates value for society but will be a key driver for business. In this paper, it attempts to study the contribution of business for toddy palm farmers' through social innovation in Yesagy Township.

1.2 Objectives of the Study

This study focused on the following objectives:

- (1) To explore the innovative ways of Royal Jaggery Powder Production who create and sustain social value for toddy palm farmers' livelihood.
- (2) To explore the contribution of businesses for Toddy Palm Farmers' Livelihood through social innovation.

1.3 Research Question

How does social innovation contribute to the improvement of toddy-palm farmers' livelihood?

1.4 Methodology

Descriptive analysis method and paired t test were applied in this study to explore the contribution of social innovation to toddy palm farmer's livelihood of Kyat Sue Kyin Village tract, Yesagy Township. The qualitative research approach and the quantitative approach were used to tackle research questions. The sample size for this study was made of 60 participants, obtained by using the sample size formula. Interview was conducted 555 Shwe Hnintha Co., Ltd to make sure that Royal Jaggery Powder Production as performing social innovation. Primary data were collected by conducting the personal interviews with 60 toddy palm farmers who producing the toddy palm sap as an essential raw material of jaggery powder. Secondary data refers to information collected from department of planning in Yesagy Township.

1.5 Scope of the Study

This study emphasizes on the role of innovative ways of Royal Jaggery Powder Production who create and sustain social value for toddy palm farmers' livelihood. This study focused on the contribution of Royal Jaggery Powder Production in the toddy palm farmers' livelihood. There is population about 70 toddy palm farmers who producing and selling the toddy palm sap to 555 Shwe Hnintha Co., Ltd. for produce Royal Jaggery Powder in Kyat Sue Kyin Village tract, Yesagy Township. The number of 60 respondents was surveyed according to sample random sampling method.

II. LITERATURE REVIEW

2.1 The Concept of Social Innovation

The concept of social innovation is not new, as the writings of both Durkheim and Weber stressed the importance of social innovation in the creation of social order, especially in the context of social and technological change. Innovation for inclusive growth is also defined as "the development and implementation of new ideas which aspire to create opportunities that enhance social and economic well-being for disenfranchised members of society" (George, MacGahan & Prabhu, 2012, p.663).

In other words, social innovation is a socially acknowledged answer which aims at triggering social change by meeting human needs which have not been met by the market in its classic way, at promoting social inclusion and at providing professional education actors who are subject to social exclusion (André and Abrue, 2006). Therefore, social businesses, the theme of the next section, may result from social innovations. According to Cajaiba-Santana (2014), social innovation deals with new collective practices: "Social innovations are new social practices created from collective, intentional and gold-oriented actions aiming at promoting social change through the reconfiguration of how social goals are accomplished".

Three main pillars are related to social innovation: territory, life conditions and work/job. The territory is related to the social actors and their innovative practices in the places where they happen whereas life conditions relate to the life quality of people who get the benefits of the innovation. Work/job refers to the organizational scope and other issues related to regulations, jobs and work organization (CRISES, 2014).

One of the ways to exert social innovation and generate solutions which can create social value is a social business, the theme that is discussed below. It stood out as Muhammad Yunus got the Nobel Prize, due to the foundation of the Grameen Bank, a microcredit institution which aims at mitigating extreme poverty in emergent countries.

2.2 The Concept of Livelihood and Rural Livelihood

Livelihood perspectives performed a vital role in the development of rural communities in the past decades and it has gained importance in development theory and practice. The operating definition of livelihood is 'making a living', and 'supporting a family' (IRP 2005). The term is well understood as human being naturally develops strategies and implements them in order to ensure their

survival. From large range of learning and practice, various definitions have already emerged that tried to represent the complex nature of livelihood. According to Chamber and Conway (1991:6) "livelihood is comprised of capabilities, assets and activities wanted for a means of living' or 'mixture of resources used and activities carried out in order to live'. As per the definition, the resources or assets can be categorized into tangible and intangible. For instance, tangible resources includes meals stores, cash savings, trees, land, livestock, tools and other resources while claims one can make for food, work, assistance, get admission to market and education, and health services, and employment opportunities can be counted as intangible resources.

2.3 Value Added Creation

When a business operates in a competitive market, but from the same suppliers as its competitors and works the same way, it creates the same value as everyone else. Small businesses have an especially hard time attracting sales in such an environment. To be successful, a business has to create added value for a potential customer. Ideally, a business looks at its situation and its potential customers and innovates to add corresponding extra value to what it offers.

2.3.1 New Goods

One way of offering added value is to create a new product that addresses the needs of some potential customers better than existing products. To do this, a business has to survey potential customers to find out what they value. It has to identify those high-value features it which can be produced at a reasonable cost. Small businesses can often accomplish this quickly because of their flexibility due to their small size.

2.3.2 New Markets

Another way to create extra value is to identify a new market and create an innovative product for it. Businesses have to discuss general needs and requirements with their customers to find out where they can offer improvements. Sony created the original mobile music market with the Walkman, and Apple created the smart-phone market with the iPhone. Both companies were extremely successful in creating new value.

2.3.3 New Production Methods

Another way of creating added value is to focus on reducing costs. Businesses can create added value by manufacturing the same or a better product using more efficient methods. They only create added value if there is an overall improvement. Cutting costs by manufacturing an inferior product does not create added value.

2.3.4 New Supply Sources

Another way to reduce costs is to find new suppliers that can meet or exceed your requirements at a lower cost. These are typically suppliers who are already creating added value because they innovated in their operations. They can pass some on to your customers. Added value makes the whole supply chain more efficient.

2.3.5 Industry Reorganization

Sometimes an innovative strategy is so revolutionary that it leads to the reorganization of an entire industry. Small businesses can cause where they grow large very quickly. Usually, small businesses are swept up in such reorganization, and they have to use their inherent flexibility to adapt and survive. Such industry reorganization can only take place when the innovation leads to such a high level of added value that the old way of operating can no longer compete. The new industry creates more value than the old one.

III. The Role of Royal Jaggery Powder Production in Rural Area

3.1 Middle Myanmar's Vanishing Jaggery Production

Toddy palm (*Borussus Flabellifer*) are in the sharp decline, a trend that's affecting the production of the confectionery known as jaggery as well as the illegal tippie popular in rural areas. The toddy palm is found throughout Southeast Asia and the subcontinent, where it is used for wine and many references to the palms, toddy wine and a sugar produce known as jaggery. There are many references to the palms, toddy wine and jaggery in Myanmar art and culture.

However, the trees are under threat in central Myanmar as increasing number are being chopped down, mainly because they are no longer generating income.

Jaggery is made by heating toddy sap until it thickens. It is then cooled and poured into moulds of differing sizes. Deforestation has affected population because of a shortage of firewood is higher than the market price of the jaggery.

Myanmar has cut down their trees indiscriminately; this has resulted not only in a significant drop in the number of trees and toddy climbers, but also in the price for toddy in the market. Today, Toddy palm climbers have become fewer, because they cannot earn enough from the traditional business. Therefore, the trees are cut and sold as an easy means to make money by the rural people. Meanwhile, the new generation is leaving the toddy farming business and looking for steady-income jobs in foreign countries. Increasing numbers of youths going overseas have also led to the shortage of workers in these areas. According to a recent UN report, Myanmar loses an average of some 546,000 hectares of forest land each year, the third-worst deforestation rate in the world after Brazil and Indonesia. Toddy palm farmers in rural area were faced social problem and economic problems due to these facts. As well as helping to raise the income of toddy palm farmers, such a plan was also needed to preserve a tree and to promote their business that has long played an important role in the country's agricultural sector.

3.2 Profile of Kyat Sue Kyin Village Tract, Yesagyo Township

Kyat Sue Kyin is one of the village tracts of Yesagyo Township. There are two villages in this village tract. They are Kyat Sue Kyin village and Kyout Phu village. According to township planning office's data, the total population is 852 in Kyat Sue Kyin village and 233 in Kyout Phu village. The total population is 1085 in Kyat

Sue Kyin Village tract. The number of household is 235 in Kyat Sue Kyin Village tract. The main occupations are farmer, loom, livestock, retailer and casual laborer. Among other occupations, there are 70 households whose occupations are mainly palming farmers.

3.3 Background of Royal Jaggery Powder Production

555 Shwe Hnintha Co., Ltd. was established 80 years ago and has maintained its founding traditional practices to this date. Ever since the time of the ancestors, the company bought jaggery from palm juice production areas to sell to Yesagyo, along with a number of other cities. Around the year 1960, 555 Shwe Hnintha Co., Ltd. Trading House was established at Yesagyo and started distributing jaggery nationwide. In 1975, the company was expanded into Yangon, Myanmar.

After that, the company bought vehicles and boats to assist in distributing jaggery products to the cities situated along the Ayeyarwaddy River. At the time the second generation owner of the company made strides in exporting jaggery to Bangladesh and China across land borders.

Starting from 2015, the jaggery market price started plummeting. The company tried to combat this by producing higher quality products, in comparison to the local competition.

In 2010, the 555 Shwe Hnintha Co., Ltd started cooperation with a foreign company and launched a campaign to produce the finest quality of jaggery products in Myanmar. With such established goal, 555 Shwe Hnintha Co., Ltd educated more than 1,100 palm tree growers from 30 villages about the proper methods of collecting palm juice. They also provided the necessary equipment required to collect hygienic palm juice and produce good quality jaggery.

Moreover, during the off-season of palm juice, the companies subsidized palm farmers with the seeds of alternative crops, such as rice and beans. The company also loaned out sums of money, free of interest, to the farmers during the off-season.

Being a business handed over from generation to generation, 555 Shwe Hnintha Co., Ltd has learned the step by step procedures as well as difficulties accompanying palm juice collection and jaggery production. This company has been continuously working to ensure better living conditions for palm farmers, and, at the same time, working to improve the quality of its jaggery products.

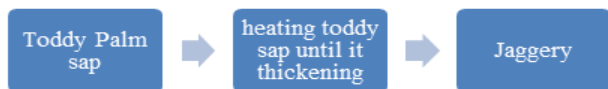
In 2016, 555 Shwe Hnintha Co., Ltd started to produce jaggery powder at a purification quality (99%) never before done by any other jaggery company. The new business for 555 Shwe Hnintha has resulted in higher incomes for farmers who grow the toddy palm trees.

In 2018, "555 Shwe Hnintha Co., Ltd" was established to export jaggery powder to the Japanese market, while simultaneously expanding distribution in the local sector. Japan imports 30 tonnes of jaggery powder, and 20 tonnes are consumed domestically a month. The company plans to export to South Korea, China and the Netherlands.

3.4 Production Process of Jaggery

Figure 3.1 provides the production process flow chart of jaggery.

Figure (3.1) Production Process Flow Chart



Source: 555 Shwe Hnin Thar Company

3.5 Production Process of Jaggery Powder

Figure 3.2 provides the production process flow chart of jaggery powder.

Figure (3.2) Production Process Flow Chart



Source: 555Shwe Hnin Thar Company

3.6 Purposes of Innovation of Royal Jaggery Powder Production

The question was asked to 555 Shwe Hnintha Co., Ltd to illustrate their purpose in the Kyat Sue Kyin Village Tract. Of the respondent the research result shows that the common point regarding the purpose were to be able to substitute jaggery powder at the place of widely using sugar and saccharin. Other purposes were to raise income of palm farmers, to protect from going to vanish tradition jaggery business, to provide new market for jaggery and to create more employment opportunities for young people living in area have these productions. The research results are similar to the approach of the Stanford Social Innovation Review is that social innovation is a process of creating new solutions for social problems in an efficient and sustainable way so that value can be aggregated to the society. The aim is to increase social value through producing value added production as a key driver for business.

3.7 Royal Jaggery Powder Production can improve development in Toddy-Palm Farmers' Livelihood

To improve development in toddy palm farmer's livelihood, the research showed that RJPP can improve development in toddy palm farmer's livelihood by increasing the income of toddy palm farmer to spent more money in education, health and infrastructure. Moreover, RJPP can improve development in toddy palm farmer's livelihood by protection from going to vanish traditional jaggery business to sustain their economic value.

3.8 Impacts of Royal Jaggery Powder Production on beneficiary Community

By creating job opportunities, they can reduce young people in this area moving to other countries. Because of new technology used by RJPP, the use of firewood can be reduced, and as a consequence, RJPP actually protects deforestation.

3.9 Differences brought through Social Innovation

As the process of social innovation, the traditional business change innovative technology, this is value added creation. By innovating, can face changes from existing condition of rural area to differences. The difference made through their innovation was reducing poverty by raising income around rural area also to protect vanish business. The results also show that another difference was to reduce unemployment by creating job opportunities and was to protect deforestation by using new technology.

IV. EFFECTS OF ROYAL JAGGERY POWDER PRODUCTION ON TODDY – PALM FARMERS' LIVELIHOOD

This section of the research describes analysis of data collected through a questionnaire and interviews. It also provides findings from the research results. The findings from the research questionnaires and interviews are discussed according to sections. Part I focuses on condition of toddy palm farmers before working together with Royal Jeggary Powder Production, Part II focuses on condition of toddy palm farmers after working together with Royal Jeggary Powder Production and Part III focuses on comparison of education, health and income and infrastructure rating of before and after.

4.1 Descriptive Statistics for sample Toddy Palm farmers in Kyat Sue Kyin village tract

Table 4.1 described the demographic characteristics of respondents. There are more male (91.7%) than female (8.3%) in the sampled respondents. Mainly, male works climbing toddy palm and women works carrying toddy sap, preparing earthen pots to be used in collecting toddy palm sap, cooking some of toddy juice in a large pan to make jaggery.

According to Table 4.1 there are four categories of age range concerned with toddy palm farmers as in the following table. Majority of respondents are age between 41 to 60 years (53.3%), second highest age-groups (26.7%) is between 19 to 40 years. (18.3%) of respondents are age 61 and above and (1.7%) are within 18 years respectively. As toddy palm claiming is a dangerous occupation, young and old are rarely found while life between 19 and 60 years is the most common.

As shown in Table 4.1, the educational level of toddy palm farmers falls in different categories. According to results, 23.3% of respondents have monastery education. 41.7% of toddy palm farmers have primary level and 20% of toddy palm farmers have middle level and 11.7% of toddy palm farmers have high school level. Interestingly, there are also toddy palm

farmers who have high level of education in which 3.3% have graduated level.

Further result showed that the majority of households are within 5-8 (53.3%) people in size; this is followed by house with 1 to 4 people (33.3%). There were also households with 8 and above (13.3%) people in size. They could be interpreted to mean that a typical household size of respondents in this study is larger than five people.

It also pointed out that the production and selling of jaggery works alongside other occupations during the time of off season, but the main source of income of respondents is the toddy palm farming.

	Distribution	Frequency	Percent
Sex	Male	55	91.7
	Female	5	8.3
age	within18	1	1.7
	19-40	16	26.7
	41-60	32	53.3
	61 and above	11	18.3
	education	Monastery education	14
	primary	25	41.7
	Middle	12	20
	High school	7	11.7
	graduated	2	3.3
Households Size	1 to 4	20	33.3
	5 to 8	32	53.3
	8 and above	8	13.3
Main source of income	toddy palm farm	60	100
	trading	0	0
	crop	0	0
	livestock	0	0
	other	0	0

Source: Survey Data (March, 2020)

4.2 Status of working condition before Jaggery Powder Production

According to data 4.2, the result showed that 33.3% of the respondents own 1 to 50 palm trees and 43.3 % own 51 to 100 palm trees and 6.7% own 101 to 150 palm trees and 5% own 151 to 200 palm trees and 11.7% own 200 palm trees to above.

According to data table 4.2, when satisfaction of respondents on regular price of lead on jaggery was asked 20 % of respondents accept the normal price and 80% of respondents not agree the normal price. And then respondents were asked that “does selling jaggery and lead produce your family livelihood?” 80% of respondents have no enough their earn to solve their

livelihood and 1-.7% of respondents enough their earn. Respondents were asked that “Have you ever thought of giving up traditional jaggery production and turning to other lucrative jobs?” 53.3% of respondents have ever through of giving up traditional jobs and to turn other lucrative jobs and 46.7% have not thought this idea. 83.3% of respondents have not decided to stop working jaggery production and sold palm tree but 16.7% of respondents have decided. The result showed that 80% of respondents cannot enough earn from toddy palm jobs. However, they cannot take risk to stop working jaggery product and to turn other lucrative job.

	Distribution	Frequency	Percent
number of palm tree	1 to 50	20	33.3
	51 to 100	26	43.3
	101 to 150	4	6.7
	151 to 200	3	5
	200 to above	7	11.7
Are you satisfied with regular pricing and are satisfied with the price of lead?	Yes	12	20
	No	48	80
Does selling jaggery and lead produce your family's livelihood?	Yes	10	16.7
	No	50	83.3
Have you ever thought of giving up traditional jaggery production and turning to other lucrative jobs?	Yes	32	53.3
	No	28	46.7
Have you ever decided to stop working jaggery production and sold palm tree?	Yes	10	16.7
	No	50	83.3

Source: Survey (March, 2020)

4.3 Awareness of Toddy Palm Farmers on Royal Jaggery Powder Production

The question was asked to identify the awareness of toddy palm farmers on RJPP. Firstly, the questions that "Did you know that RJPP is production value-added products for Jaggery?" were asked to respondents, the result showed that 100% of respondents do actually know RJPP is production value-added products for Jaggery. The result showed that n=27 (45%) of respondents were operating with RJPP until 4 years, n=22(36.7%) were operating with RJPP about 5 years. 5 % and 13.3% of respondents were operating with RJPP 1 year and 2 years respectively. All of respondents are interested in RJPP activities. They answers that 100% of respondents agreed RJPP's action affects their life. The result was reported on Table (4.3).

	Distribution	Frequency	Percent
Did you know that RJPP is production value-added products for jaggery?	Yes	60	100
	No	0	0
How long has it been working with RJPP?	1 year	3	5
	2 years	8	13.3
	3 years	0	0
	4 years	27	45
	5 years	22	36.7
Insterested in RJPP activities?	Yes	60	100
	No	0	0
Does RJPP's action affect your life?	Yes	60	100
	No	0	0

Source: Survey Data (March, 2020)

4.4 Reliability Statistics of the Study

Cronbach's Alpha was used to analysis the reliability of the research. The Cronbach's Alpha for contribution of RJPP on toddy palm farmer's livelihood was 0.926 which means that the level of relative internal consistency and reliability result was excellence situation. The result was reported in Table (4.4).

Table(4.4) the Cronbach's Alpha for All Variables

Variables	Cronbach's Alpha	Results of Reliability	No. of Items	No. of respondents
statements	0.926	Excellent	10	60

SOURCE: SURVEY DATA (MARCH,2020)

4.5 Contribution of Royal Jaggery Powder Production on Toddy Palm Farmers' Livelihood

According to Table (4.5), the overall weighted average mean of the contribution of RJPP on Toddy Palm Farmers' livelihood are high above 4.59. According to survey, the farmers have positive perception on the contribution of RJPP that increasing their income and improving living standard and their life quality improvement through create job opportunities. RJPP also create a new market for jaggery through the added value. As a result, going to vanish the custom of producing jaggery can be resumed. It is not the traditional way, but it is innovative and new technology and it is important that the toddy palm farmers are more concerned about hygienic palm product and systematic production.

Sr no.	Particular	Mean
1	Increasing income	4.78
2	Improving living standard	4.75
3	Social security	3.48
4	Creating job opportunities	4.73
5	Improving life quality	4.73
6	Providing new market for Jaggery	4.75
7	Protect environment	4.67
8	Protecting from going to vanish	4.72
9	Producing hygienic palm product	4.67
10	Systemistic production	4.63
Weighted average mean		4.59

SOURCE: SURVEY DATA (MARCH,2020)

4.6 Paired Test for Welfare Condition of Toddy Palm Farmers before and after Royal Jaggery Powder Production

According to Table (4.6) and Table (4.7), there are three rating concerned with toddy farmer's education, health, and income and infrastructure condition before joining with RJPP and after joining with RJPP. t (degree of freedom)= t -value, p =significance level. In this age thus would be: $t(59) = -11.07$, $P < 0.0005$. Due to the mean of education level of toddy palm farmer before and after join with RJPP and the direction of the t -value can conclude that there was a statistically significant improvement in education level rate from 1.97 (low level) to 2.87 (high level): an improvement of 0.9 rates. There was a statistically significant improvement in health level

from 1.92 to 2.82; an improvement of 0.9 rates ($t(59) = -12.157, P < 0.0005$). There was a statistically significant improvement in income level from 1.82 to 2.8 on improvement of 1.15 rates ($t(59) = -24.73, P < 0.0005$). There was a statistically significant improvement on infrastructure after join with RJPP from 1.73 low to 2.73 high levels, an improvement of 1 rate ($t(59) = -14.874, P < 0.0005$). The result shows that after working with jaggery powder production, Toddy Palm farmers' education, health, income and infrastructure condition level has improved from low level to high level.

		Mean	N	Std. Deviation	Std. Error Mean
Education	Before	1.97	60	0.61	0.079
	After	2.87	60	0.343	0.044
Health	Before	1.92	60	0.497	0.064
	After	2.82	60	0.39	0.05
income	Before	1.82	60	0.39	0.05
	After	2.8	60	0.403	0.052
infrastructure	Before	1.73	60	0.446	0.058
	After	2.73	60	0.446	0.058

Source: Survey Data (March, 2020)

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
education	before -after	-0.9	0.63	0.081	-1.063	-0.737	-11.07	59	0
health	before -after	-0.9	0.573	0.074	-1.048	-0.752	-12.157	59	0
income	before -after	-1.15	0.36	0.046	-1.243	-1.057	-24.738	59	0
infrastructure	before -after	-1	0.521	0.067	-1.135	-0.865	-14.874	59	0

Source: Survey Data (March, 2020)

V. CONCLUSION

5.1 Findings

The first part of the research has been designed to explore the innovation way of powder production in rural area. The second part has been designed to explore the generate information with regards to personal profile condition of toddy palm farmers' livelihood. Finally, the contribution of Royal Jaggery Powder Production on toddy palm farmer's livelihood has been identified. The research is focused on the selected toddy palm farmers in Kyat Sue Kyin Village tract, Yesagyo Township. The finding of the study is described as below.

The research found that RJPP is the private business. The owner is between 19 to 40 years age. His business name is 555 Shwe Hin Thar Co.,Ltd. 555 Jaggery

was established 80 years ago. 555 Company was produced jaggery from 1970 to 2015. In 2016, 555 Shwe Hin thar Company Limited added value of traditional jaggery to jaggery powder production through the innovation way. In 2016, 555 Jaggery started to produce jaggery powder at purification quality (99%) never before done by any other jaggery company. The purpose of the company is that to be able to substitute jaggery powder at the place of widely using suger and saccharin. Other purposes were to raise income of palm farmers and to create more employment opportunities for young people in rural area and to create sustain social value for toddy palm farmer's livelihood. It was made the innovation way that can improve development in toddy palm farmer's livelihood, they operated in by increasing the income of toddy palm farmer's to spent more

money in education of their children, health care for their families, and infrastructure like that housing. And also can improve living standard of toddy palm farmers. It created job opportunities which can reduce migration of young people in the rural area to other countries. Because of using new technical, it can reduce usage of firewood. Therefore, RJPP protect the deforestation in this area. The differences brought through social innovation that was reduce poverty by rising income of toddy vanishing business of jaggery. The result showed that social innovation of RJPP which create and sustain social value for toddy farmers' livelihood. The second part of the study explored the general information with regards to personal profiles and condition of toddy palm farmers' livelihood. It can be conducted that the question survey found that mainly, male workers climbing toddy palm and female workers carry toddy, sap, prepare earthen pots to be used in collecting toddy palm sap, cooking some of the toddy juice in a large pan and to make jaggery. As toddy palm climbing is a dangerous occupation, young and old are rarely found while life between 19 and 60 years is the most common. Moreover, in education level of toddy palm farmers, mostly farmers are monastery and primary education. This showed that why educated young people have no longer been working in such a tiring field as toddy palm climber. Thus it could be interpreted that a typical household size of toddy palm farmers in this study is larger than five people. Further finding that the production and selling of jaggery work alongside other occupations during the time of off season, but the main source of income is the toddy palm farmers. Although toddy palm farmer is the low profit work, toddy palm farmer cannot give up the job because of change the lucrative jobs. They need the solute to improve their existing jobs. In 2016, the further findings that all of the toddy palm farmer do actually know RJPP is production value-added product for jaggery.

The third part, the result showed that the toddy palm farmers have positive perception on the effective of RJPP that to be increased their income and to be improved their living standard and their life quality improvement through create job opportunities. RJPP also created a new market for jaggery through vanish the custom of production jaggery can be resumed. It is not in traditional way but it is innovation new technology and it is important that the toddy palm farmers are more concerned about hygiene palm produced at systematic product.

Finally, the analysis of the improved of health, income and infrastructure of toddy palm farmers before and after working with jaggery powder production in Kyat Sue Kyin village tract found that education, health, income and infrastructure condition level improve from low level to high level. Therefore, social innovation not only creates value for society but will be a key driver for business. Moreover, social innovation can create and sustain social value for Toddy palm farmers' livelihood.

5.2 Recommendation

Social innovation is the best way to trickle social and economic problems in rural area, especially poor people in rural. Therefore, many social innovator and social entrepreneurs were required growth in Myanmar. In order to develop the region, local product was required to form value added. Only by added value can produce new market and

increase financial gain. The authorities also must guide to support SMEs sectors. The development of SMEs will provide more opportunities for small businesses in the region. Small business in the region should also prioritize innovation. Only innovation can achieve sustainable development. The following are therefore suggestion to develop social innovation.

- Need government draw short-term and long-term policy action toward social innovation
- Need improve social purpose organization's access to federal innovation, business development and skills training programs.
- Establish a cross-sector Social innovation Ecosystem Program to address gaps in early-stage support, capacity building and impact measurement.
- Ensure government funding practices support and enable social innovation.
- Address the social and economic issues through from engaging in social innovation, social finance, and social enterprise.
- Businesses through innovative way must maintain the social impact in the long run.
- Addressing local issues requires innovative way of doing business

To conclude, there are still less empirical researches about social innovation in Myanmar. Therefore, we need to explore further researches based on the social innovation concepts. This research will basic for further studies. Entrepreneurs and business owners will get awareness which social innovation can improve rural livelihood and social and economic development of the country through this study. Moreover, policy maker need to support private businesses as a social innovation.

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