<調査研究シリーズ 86>

Investigating Village Socio-economic Condition and Possibility of Poverty Reduction through Sample Survey (The Case of Rattan Handicraft Village of Siem Reap, Cambodia)

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ABSTRACT

This study attempts to investigate the (1) socio-economic conditions of Bra Youth village in Siem Reap Province of Cambodia for examining extent of poverty, and (2) possibility of generating better employment and income opportunities for reducing poverty. The author also would like to share the village survey experience and knowledge on recent situation of Cambodian village economy through this paper. The first section introduces the general features of the survey area, Bra Youth village, in which traditional family based rattan handicraft businesses play an important role in daily life since around 1950. Limitations of survey work and sampling method are discussed in section two. Analysis of compiled survey data with particular focus on social and economic condition of village people related to poverty are given in section three. Possibilities of poverty reduction by generating better employment and income opportunities through village micro rattan business are examined in section four. Finally, suggestions and concluding remarks are also provided. This study could verify that Bra Youth village is suffering from a severe poverty problem. However, there is a high possibility to reduce poverty by generating better employment and income opportunities through village traditional family based rattan business.

Introduction:

It is very important for governments, policy makers, and international organizations to know more about the real socio-economic situations of the people from remote areas of developing countries in order to provide appropriate policy measures for eradication of poverty towards achieving the Millennium Development Goal. But, unfortunately, basic socio-economic information and statistics especially for rural areas of developing countries are extremely lacking due to the absence of peace, tranquility, expertise and financial assistance. In addition, it is also very difficult and sometimes impossible for researchers of developed countries and international organizations to get permission from the government and local authorities for conducting socio-economic surveys in the countries of Asia such as North Korea, Myanmar, Afghanistan, Pakistan and Timore Laste. Fortunately, rural areas of Cambodia are relatively easy to get permission for social and economic survey, if we try through local universities, research centers and authorities. For this study, we were able to have a chance to conduct a village survey in Siem Reap Province with the help of local authorities through the connection of Angkor University Research Center for Economic Development (AURCED). Although, the problems of insurgency and landmines have still remained in some area of Cambodia, the areas under our study is quite safe. Moreover, as in other developing countries, the problems of language barrier, peoples' willingness to accept the interview from survey team, and understanding the importance of village survey work for improving village socio-economic life are unavoidable. As a result, socio-economic literature and statistical data on rural Cambodia are still very limited.

Accordingly, the main objective of this paper is to share the village survey experience and the findings on recent situation of Cambodian village economy. In order to achieve research objective, this study attempts to investigate the (1) socio-economic conditions of Bra Youth Village in Siem Reap Province of Cambodia for measuring the extent of poverty, and (2) the possibility of generating employment and income opportunities for reducing poverty.

The first section introduces the general features of Bra Youth Village (BYV) in which daily socio-economic life heavily relies on traditional rattan handicrafts which have been producing since approximately 1950. Limitations of survey work and sampling method are discussed in section two. Analysis of compiled survey data and findings with particular focus on social and economic condition of village people

related to poverty are given in section three. The difficulties in preparing survey questionnaires, conducting interview and analyzing survey results especially for income, expenditure, skill, experience, daily working hours and division of labor are also discussed in this section. Possibilities of generating better employment and income opportunities for poverty reduction are examined in section four. Finally, we also attempt to provide suggestions and concluding remarks.

Section Ⅰ. General Features of Bra Youth Village (BYV)

In this section, geographical and climatic conditions, population structure, education and healthcare facilities, prevailing traditional socio-cultural values, and daily socio-economic lives of people in general are explored as background knowledge in order to reexamine in the analysis of compiled data for drawing conclusion.

Before collecting data and information for this study, the author visited the villages of Siem Reap Province, since 2008 and selected Bara Youth Village during the end of April 2010 and then conducted a preliminary survey in June under the supervision of Angkor University Research Center for Economic Development and with the help of students form Angkor University. Of course, drafting the survey questionnaire is based on basic village information provided in advance by AURCED, and then we tried to modify and finalized in line with the study objectives. The contents of our survey questionnaire (Lwin, Linne and Mori, 2010) tried to focus not only the socio-economic situation of village but also the prices of products, cost of raw materials, required labor, rattan bush reserve, potential of demand and supply, skill level, willingness to produce new rattan products, and willingness to take training for improving skill and income.

Bra Youth village is located on the southwest of Siem Reap city which is known as one of the tourist cities of Asia for its famous world heritage Angkor Wat. This village belongs to Siem Reap Province which comprises 907 villages. Moreover, Bra Youth village is one of the villages of Toek Will Commune which covers 10 villages with an estimated total population of over 5200. The population of Bra Youth village is about 589 and the numbers of males and females are 268 and 321 respectively. The village has 116 households with an average family size of about five, in which 88 households make their living on producing rattan handicraft (RH) and remaining 28 households are growing rice. Therefore, it can be said that 75.9% of village households are earning the living from producing and selling rattan handicrafts in their

houses. Some of the rice growing households are also producing rattan handicrafts. Moreover, rattan weaving and selling business of the village operated by the village women is one of the outstanding features. Traditional technique of production has remained unchanged and simple traditional knives are still using in processing and weaving rattan products. According to the 63 year-old village head who was born and grew up in this village, family-based rattan production and sales business began around 1950 probably as a result of the rich rattan bush, appropriate local demand, and scarcity of land for cultivation.

About a kilometer long main earth road of Bra Youth village keeps the houses on it's both sides. This unpaved earth road is one of the hindrances for the tourists to visit traditional handcraft shop houses, especially during the rainy season. The village also does not have primary school for its children or healthcare center for its people. These education and healthcare facilities are available only in the market town which is located a kilometer away from the village. On the other hand, the village does not have water and electricity supply problems. Water is easily available from hand pumped tube wells located inside their house compound or nearby. Electricity from private company is also available but it costs about $250 for connection fees and monthly electricity charge is expensive for village people. Therefore, Bra Youth Village still has many households which are using battery for TV and lighting. Of course, batteries are easily rechargeable and cheap.

The village economy and daily life of the villagers are quite isolated although it is located about 8 kilometers away from Siem Reap city center and about 10 minutes drive from the international airport. The influence of market and modern way of living on the village is still very weak and deep rooted traditional values remain unchanged. Village people know each other very well and, take caring and helping each other as relatives rather than neighbors.

Generally, most of the village households are raising live-stock such as hen, duck and pig for food and also sell these for cash. Those households which own cows and buffaloes for growing rice are richer than the rattan handicraft producing households. Every house compound has fruit trees such as papaya, coconut, banana, mango and guava. Naturally grown vegetables such as morning glory are available nearby. Some households are selling naturally grown morning glory in the market or restaurants of Sien Reap for side income. Village women who are busy for weaving rattan and daily chaos rarely visit to Siem Reap or market town nearby. They usually buy the things for cooking from three small village shops which sell basic food items

and daily household goods such as cooking oil, onion, chili, salt, meat, rice, potato, eggs, fish, sweet, candle, soap, and few indigenous medicines. One of the house wife interviewees said that "sometime we need to go all shops to buy only oil, eggs, and onion for cooking as these shops sell very limited items." Almost all the village girls and women keep their hair longer as tradition. Of course, there is no beauty saloon for village girls and women, but it has a barber shop and a karaoke shop. Most of the households usually buy cooking ingredients every day immediately before cooking lunch and dinner, as probably they cannot afford to buy in advance. Some of the village families do not have enough money even for children education and medical care. However, they likely do not have severe poverty related problems, such as malnutrition and underweight children. Despite the fact that the average household monthly income is about 50 to 80 dollars, they are not as poor as some village people from India, Bangladesh and Africa which have unfavorable geographical and climatic conditions.

Table 1-1   General Features of Bra Youth Village

Particulars	Unit of measures
1 . Total population	589
2 . Male	268
3 . Female	321
4 . Sex Ratio (M：F)	1.0：1.2
5 . Total number of households	116
6 . Average household size	5.2
7 . Rattan handicraft producing households	88 (75.9%)
8 . Rice producing households	28 (24.1%)
(Some households also produce rattan products)	
9 . Estimated working labor force (143 Male, 188 Female)	341
10. Share of working labor force	56.93%
11. Dependency ratio (Rough estimation, 248/341)	0.73 persons
12a. Distance from Siem Reap City center	8.0 km
12b. Distance from nearest market town	1.0 km
12c. Distance from international airport	2.5 km
12d. Distance from primary school	1.0 km
12e. Distance from village health center	1.0 km
13. Geographical and climatic conditions	Low. flat & swampy land, wet & dry seasons
14. Soil condition	Moderate
15. People of BYV make living at about 1$ a day*	

Note;   Estimation based on survey data
Source: Compiled from survey data

As in other villages of Asia, there is no limit for working age and pension system in Bra Youth Village. All the healthy old people are working at their own pace let's say until 70. Although we do not have the data for the population of 15 years old to 60 as well as 0 14 years old and over 60, we make a rough estimation for dependency ratio basing on our survey result. Estimated working labor force in the village is about 341 (56.9%) and this makes dependency ratio as 0.73, which is given in table (1-1). Finally, it would be appropriate to summarize the some outstanding features of Bra Youth Village as follows:

(1) Almost all the households earn their living on traditional rattan handicraft family business,

(2) Almost all the young and old village females are engaging in traditional rattan handicrafts business,

(3) Using family labor and traditional knives only as tool of production,

(4) Techniques of processing raw material and weaving rattan handicraft are handed down from generation to generation,

(5) Producing and selling of rattan handicraft in the village houses is merely a traditional type family based micro-business,

(6) Having characteristics of semi-commercialized village economy, and

(7) Having deep-rooted socio-cultural values and traditions.

Section Ⅱ. Limitations of survey works and sampling method

This section aims to highlight the problems of preparing the questionnaire, limited village basic data and information, language difficulty, recruiting survey team members, and difficulty in choosing appropriate sampling method etc. Fortunately, cooperation and guidance of AURCED made it possible this study to overcome some of these problems. However, it is worth to point out that the shortcomings mentioned below before and during survey work would create some weak elements in concluding remarks.

Generally, all the village survey works need basic geographical, political, social and economic information about designated survey area in advance to prepare the survey questionnaires in line with the fundamental and supporting objectives of the research. Appropriate questionnaires generally produce the good survey results for analysis and drawing concrete conclusion. As in other low income developing

countries of Asia our target survey area, Bra Youth Village, is also lacking basic social and economic data. For example, it does not have basic information such as (1) village map related to land use, households and establishments (2) population data related to distribution of age, sex, education, marital status, occupational etc., and (3) size and ownership pattern of agriculture land and crop patterns.

The author visited the Bra Youth Village and met with village head as pilot study during the end of April 2010 and collected the basic data with the help of AURCED to prepare the survey questionnaire. Then AURCED organized the survey team with the students of Angkor University who have survey experiences and ability to speak English. Some of them can also speak Japanese. The questionnaire is prepared in English and orientation was conducted in both languages, Khmer and English, in order to minimize the misunderstanding especially in the contents of questionnaire. Then, amendments and modifications of questionnaire were made through discussion. Finally, village survey was conducted during the end of June, 2010. Of course, survey team used Khmer language to interview village people with the English questionnaire. We also found some shortcomings especially in the contents of questionnaire due to our insufficient knowledge on nature of traditional family based rattan handicraft micro-business. Then, we made some amendments again to the content of questionnaire. However, it is expected that insufficient basic village data and information as well as knowledge on traditional rattan business would not reduce much the relevancy of questionnaire and accuracy of survey results.

Regarding the sampling method and sample size, we also faced some difficulties. Bra Youth Village which has 116 household, is still do not have the systematic numbering of houses or address and households' location map. It makes difficulties for the application of systematic random sampling. The absence of data for age and sex distribution, husbands and wives' occupations and educational conditions also made impossible for us to use two-stage or stratify random sampling methods properly. Limited time and heavy rain in Cambodia are also the main causes of hindrance for drawing household (establishment) map of our own for conducting relevant sample survey. The information we collected from village head and some RHP families during the first visit of April 2010 was also very limited. According to village head, Bra Youth Village has 88 rattan handicraft producing households and 28 rice producing households. As our main objective of the study is to verify the possibility of generating better employment and income opportunities for the poor rattan handicraft producing households (RHPH), it is appropriate to conduct survey

only for RHPH. Accordingly, we calculated the sample size based on RHPH only. But, unfortunately, we could not obtain the accurate information for the location of these RHPH and non RHPH. Moreover, as we have expected, we came to know during the first day morning of survey work that the village also has households which are producing both rattan handicraft and rice as well as some village households have husbands' income from other non-farm jobs. Therefore, we calculated our new simple size again based on total number of village households (116) by using the statistical formula. The revised sample size is 80 RHPH and survey team interviewed the households which produce rattan handicrafts regardless of main or side income. As discussed above, although we have unavoidable weak points especially in sampling methods and degree of randomness, the small difference between our sample size and total number of rattan handicraft producing village household make it possible our survey to maintain its unbiased and accurate result.

Section Ⅲ. Analysis of Compiled Data

The main purpose of this section is to analyze the compiled survey data for the investigation of extent of poverty and possibility of generating better employment and income opportunities in Bra Youth Village. The problems of investigating working hours, work sharing, job experiences and skill level of rattan handicraft producers together with the problems of data analysis are also discussed in this section.

3-1 Age, sex and marital status

As given in table (1-1) the sex ratio of Bra Youth Village is about (1.0: 1.2) or it has 6 females for every 5 males. This is the same situation as in other villages of Cambodia due to the result of tragic Poll Pot regime which lasted from 1975 to 1979 and took many lives, especially male. Here, it is important to note that the women dominated the situation in rattan business is not because of prevailing sex ratio of BYV, it is just only the nature of rattan handicraft business. According to table 3-1, there are only 6 male RHP and other remaining 74 or about 92.5％ of producers belong to female. Among the women producers, the numbers of married women and widow are 56 (75.7％) and 11 (14.9) respectively. Regarding age structure, average age is about 38.9 and the youngest and oldest ages range from 19 to 78 years old.

The original survey data gives the further information that there is only 5 RHP whose age belong to 60 years and over, and those who belong to single and marriage

females are generally young. Therefore, it can be said that rattan handicraft business in Bara Youth village is operated and managed by young and mature women, and the village has high potential of supply to respond to the market demand. Moreover, this young and mature women labor force has also potential for possibility of generating better employment and income than the present.

Table 3-1   Age, sex and marital status of rattan handicraft producers (RHP)

No	Particulars	Unit of Measures
1.	Age and sex distribution	
	Average age of Rattan handicraft producers	38.9 years
	Minimum age	19 years
	Maximum age	78 years
2.	Sex distribution	
	Male	6
	Female	74
3.	Marital status	
	Single	10 (12.5%)
	Married	56 (70.0%)
	Widow	11 (13.8%)
	Divorced	3 (3.7%)

Source: Compiled from survey data

3-2   Educational condition

As given in table 3-2, nearly half of rattan handicraft producers' educational conditions belong to reading and writing only and primary school level (47.6%). Unfortunately, about 37.4% of RHP is illiterate. Almost all the school-age children go to school although most of them rarely reach high school. Producing and selling style of rattan handicraft in Bra Youth village is still at the stage of tiny traditional family based micro-business and little capital and education is required. Probably, the low educational level of village RHP keeps the rattan business in an infant stage longer. Currently, although the parents of BYV have strong desire to educate their children, their income is just enough only for daily meager food.

In addition, the daughters of RHP usually help their mother's rattan business and would be gradually grown up as new generation of RHP. It is expected that the growth of employment and income opportunities in BYV would lead not only to the progress in general living standards of the people but also the improvement of children education. Moreover, it is sure that educational level of next generation of

RHP in BYV will be higher than the present generation. This would be one of the positive factors for upgrading BYV rattan business with their own hands in the near future.

Table 3-2   Education of RHP and their children

No	Level of education	Unit of Measures
1.	Education level of RHP	
	Illiterate	30 (37.4%)
	Read & write	21 (26.3%)
	Primary school	17 (21.3%)
2.	Middle school	10 (12.5%)
	High school	2 (2.5%)
	University	None
3.	Language ability of RHP	
	Speak mother tongue (Khmer) only	77
	Speak other languages	3
	Children education	
	All the school-age children go to primary school and mostly continue to middle school, but rarely continue to high school.	

Source: Complied from survey data

3-3   Experience and skill

It is really difficult to measure the peoples' skill level and knowledge of tiny traditional type family business in practice. Generally, job experiences of RHP can be measured based on the number of years spent for producing rattan handicraft (RH). But, there is no appropriate yardstick or data for measuring year of working experience for BYV. Most of the interviewees arbitrarily answer that they begin to help carrying rattan, processing raw rattan and weaving rattan from the age of around 7. Some interviewees answer such as "we are weaving the rattan for our whole life". Therefore, "the age at which we should begin to count for measuring the year of experience" is very uncertain. Accordingly, it is some what relevant to assume that number of year of experience is directly correlated with the age, as almost all the RH producers were born in, and grown up in, BYV. Therefore, for this study, the estimation of years of experience is based on age alone unless the interviewee answers the years of experience.

According to table 3-3, average years of experience of producing rattan handicraft is about 23.5 years and maximum years of experiences is about 70 years although the

minimum is only two months. This minimum year of experience should be considered as an exceptional case. Number of households which produce rattan products alones is 44 (55.0%) and those who produce with 2 to 3 family member is 29 (36.3%). The remaining 7 households respond that it is difficult to count the exact number of family members who are fully involved in production as school children also are helping much. It is likely to be true, because rattan producing is family based traditional business.

Table 3-3   Experience and skill

No.	Particulars	Unit of measures
1.	Year of experience	
	(1) Average years of experience in producing RH	23.5
	(2) Minimum year of experience	2 months
	(3) Maximum years of experience	70 years
2.	Number of households using various family labor in producing RH	
	(1) Number of households producing RH alone	44 (55.0%)
	(2) Number of households producing RH by two persons	20
	(3) Number of households producing RH by three persons	9
	(4) Number of households partly help by children	7
3.	Level of skill	
	(a) Producing number of type of RH products	
	(i) Number of households producing only one type	2 (2.5%)
	(ii) Number of households producing 2-6 types	78 (97.5%)
	(b) Value of RH products	
	(i) Number of households producing less than 1$ to 5$ worth	44 (55.0%)
	(ii) Number of households producing over 5$ worth	36 (45.0%)
	(c) Minimum and maximum value of products	
	(i) Minimum value of RH product	0.25 $
	(ii) Maximum value of RH product	20 $
	(d) Ability of producing new type of RH	
	Number of households who can produce new type of RH	67 (83.8%)
	Number of households who can not produce new type of RH	13

Source: Complied from survey data

Regarding level of skill was also another difficult issue for us during the stage of questionnaire preparation. However, we attempted to measure skill level by introducing questions such as, "how many types of products can you produce" and "highest value of your products". Here, we implicitly assume that those who can produce many types of products and/or expensive products have a higher level of skill

than others. Table 3-3 provides the information that 2 households produce only one type and the other remaining 78 households can produce 2 to 6 types of products. The values of their products range from 0.25 $ to 20.0 $. Moreover, the number of household which can produce less than 1$ to 5$ worth product is 44 (55.0%) and over 5.0 $ to 20.0 $ is about 36 (45.0%). Regarding possibility of producing new rattan products, 67 (83.8%) households respond that they can produce new products if they can get the sample design in advance. Therefore, it is relevant to consider that there would not be many technical problems in producing new products if they have market demand for new design.

Currently, nearly half the rattan handicraft producers are produced with the help of family members. In practice, it is difficult to confirm who is fully employed or underemployed due to the traditional family based nature of rattan business. Division of labor among family members for such as carrying raw rattan, processing raw rattan, and weaving rattan etc. cannot be differentiated clearly as in modern production. Technique of producing rattan handicrafts has naturally been handed down from generation to generation. They could learn rattan weaving techniques from their grandmothers, mothers, and the elderly. Therefore, it would be relevant to consider that level of skill and the age of women also has a strong positive correlation.

3-4   Income and expenditure (food, clothing, healthcare)

The most difficult task of conducting survey in village economy of developing countries is inquiring about income and expenditure of the people. The Bra Youth Village of Cambodia is no exception. As given in table 3-4, the average monthly income of RHP is about $33.7, and the minimum and maximum incomes range from $10 to $80. Of course, the lowest income earner of RHP seems rely on husband's income.

In order to make a conjecture about the social and economic conditions of the RHP and their families, we tried to cover items such as expenditures on foods, clothing and health care in the questionnaire. Average daily food expenditure per household is about $2.3 and minimum and maximum vale range from $1 to $5. Nearly half 37 or 46.3% of total households take meal 2 times a day. Average annual household expenditures on clothing and healthcare are $66.7 & and $86.8 respectively.

Our rough estimation for average daily expenditure per RHP households basing on expenditure survey covering food, clothing and healthcare states that rattan

handicraft producing household are making their living on about $2.73 a day. If we include the expenditures on electricity, fuel wood, child education, average daily expense would be around $3.0 a day per household. If we considered the average household size of 5 persons, the people of BYV are making their living on less than 1$ a day. Therefore, it is relevant to judge that extent of poverty in BYV is high from the aspect of daily living expenses. However, according to author's experience, it is worth noting that socio-economic condition of BYV seems better than the poorer slum people of Thailand, Philippine, Myanmar, Bangladesh and India.

Table 3-4 Income and Expenditure

No.	Particulars	Unit of measures
1.	Income	
	(1) Average monthly income of RHP	33.7 $
	(2) Minimum monthly income of RHP	10 $
	(3) Maximum monthly income of RHP	80 $
2.	Expenditure	
	(a) Food	
	(i) Average daily food expenditure per household	2.30 $
	(ii) Minimum daily food expenditure per household	1.0 $
	(iii) Maximum daily food expenditure per household	5.0 $
	(a1) Number of meal a day	
	(i) Average number of meal a day per household	2.5 times
	(ii) Number of household which take 2 meals a day	37 (46.3%)
	(iii) Number of household which take 3 meals a day	43 (53.7%)
	(b) Clothing	
	(i) Average annual expense for clothing per household	66.7 $
	(ii) Average monthly expense	5.6 $
	(c) Healthcare	
	(i) Average annual expense for healthcare per household	86.8 $
	(ii) Average monthly expense	7.2 $
	(iii) Average daily expense	0.24 $

Source: Compiled from survey data

3-5   Husbands' job and income

As in other low income developing countries, some of the husbands from BYV are earning their living in the urban informal sector of Siem Reap City. It is also difficult to estimate their income. Here, we do not attempt to investigate the income from rice and vegetable growing, as our study mainly concern with RHP. Total number of husbands of rattan handicraft producers is 56, in which 43 husbands have

job and the remaining 13 husbands do not have specific job. The occupations of husband vary greatly, but mostly belong to taxi drivers and construction workers. According to compiled survey data from table 3-5, only 18 husbands have non-farm job and income from outside the village, of which 6 husbands are working as car drivers (mostly taxi), and 7 husbands belong to construction workers. Regarding their estimated average monthly income, taxi drivers and construction workers can earn about $128.3 and $130.0 respectively, while civil servants earn average about $50. The number of rice farmers is 18 and other 7 husbands belong to vegetable and fruit producers.

Average monthly income per husband, excluding the incomes of rice and vegetable growers, is about $116.1. Based on the average monthly income from

Table 3-5   Husbands' noon-farm jobs and income

No.	Particulars	Unit of measures
1.	Husbands' non-farm job and income	
	Husband's average monthly non-farm income	116.1 $
	Number of husband working non-farm job	18 (32.2%)
	(a) Taxi driver	
	(i) Total number of taxi driver	6
	(ii) Average monthly income	128.3 $
	(b) Construction worker	
	(i) Total number of construction worker	7
	(ii) Average monthly income	130.0 $
	(c) Civil servant	
	(i) Total number of civil servant	1
	(ii) Monthly income	50 $
	(e) Others	
	Police 2, Soldier 1, pump well workers 1	4
	Average income	65.0 $
2.	Husbands' farm job and income	
	Number of husband working farm job	25 (44.6%)
	(a) Rice farmer	
	(i) Total number of rice farmers	18
	(ii) Average annual income	Not available
	(b) Vegetable and fruit farmers	
3.	(i) Total number of vegetable and fruit farmers	7
	(ii) Average annual income	Not available
	Number of unemployed or underemployed husbands	13 (23.2%)
	(Do not have specified jobs (56-43 13))	

Source; Compiled from survey data

producing rattan handicrafts ($33.7), average monthly husband income ($116.1) and average family size (5.2), we can roughly estimate that all the household members under survey make their living on about $1 a day.

Table 3-5 provides the other important information that RHP households have surplus labor. Because of this, most of the husbands are working in the informal sector and about 13 (23.2%) husbands still do not have job. If we can employ the village surplus labor, this will lead to growth of household income. How and what type of job should be provided to them is the most difficult common problem for the researchers and policy makers.

Section Ⅳ. Analysis of Compiled Data: Possibility of generating better employment and income towards poverty reduction

4-1 Working hour and day

Table 4-1   Working day and hour

No.	Particulars	Unit of measures
1.	Working hours	
	(1) Average working hours a days	7.5
	(2) Minimum working hours a day	3.0
	(3) Maximum working hours a day	13.0
2.	Working days per week	
	(1) Average working days per week	6.7
	(2) Minimum working days per week	4.0
3.	(3) Maximum working days per week	7.0
	Working days per month	
	(1) Average working days per month	29.1
	(2) Minimum working days per month	20.0
	(3) Maximum working days per month	30.0
4.	Number of RHP who works less than 35 hours a week	56 (70.0%)

Source: Compiled from survey data

This section analyzes the findings from survey results to verify the possibility of generating better employment and income opportunities towards poverty reduction in Bra Youth village.

As early as since the pilot survey period, during April 2010, we came to notice the difficulties of estimating daily working hours and number of working days of the

RHP of Bra Youth Village. As discussed in previous section, it is difficult to know how to share the work among family members, let's say in making a small rattan tray. Generally, housewives of BYV are producing rattan products as an integral part of daily cooking, child caring, raising domestic animals etc. It is also difficult to estimate the working hours even the unmarried women, as they are doing daily chores nearly the same as married women, maybe except child caring. Although our village women interviewees seriously responded about their working hours and days, accuracy of the results is somewhat questionable.

As stated in table 4-1, although the average daily working hours of RHP (7.5) approaches to normal working hour of eight hours a day, minimum and maximum working hours range from 3.0 to 13.0 hours. Average working days a week (6.7) is longer than normal, but minimum working days a week is only 3. Number of RHP who works less than 35 hours a week is about 56 (70%). This result also gives the important information that rattan handcraft producers of BYV are underemployed or BYV has surplus labor.

4-2　Production decision

Normal businesses usually decide their amount of production based on demand and supply as well as cost of production and product prices. The prices of product, cost of raw material, wage, expected demand etc. are the determinants of decision in general. But, these text book level micro-economic theories are rarely applicable to rural areas of low income developing countries which are mostly at the stage of semi-commercial economy. Market mechanism still does not work fully in traditional type family based micro rattan business of Bra Youth Village.

Table 4-2　Production decision

No	Particulars	Unit of Measures
1.	Number of household producing at own pace	26 (32.5%)
2.	Number of household which decision based on order quantity	34 (42.5%)
3.	Number household which decision based on both (1) & (2)	20 (25.0%)
4.	Number of household which decision based on price	None

Source: Complied from survey data

As stated in table 4-2, none of RHP responds that their production decision is basing on prices of product. It is different from that of decision making process of normal business. Villagers have very weak bargaining power in the rattan product

market and are also lacking market knowledge. Village rattan products are usually
forced to sell at a price determined by middle men or shop owners from the city for
many reasons. Particularly, village handicraft producers are always in need of money
and usually sell their rattan products at the prices paid by middle man. About 32.5%
(26) of producer under survey are producing at their owned pace, based on order
quantity, about 42.5% (34), and the other remaining 25% (20) make their decision
based on both factors. It would be appropriate to consider that market forces do not
work properly and are playing unfavorably for the Bra Youth village. It has high
possibility increase in income, if fair market forces prevail.

4–3 Seasonal variation in production

Production of primary products in developing countries still relies much on
climatic and geographical conditions. Rattan handicraft micro-business of BYV is still
highly influenced by rainy and dry seasons of Cambodia. In table 4–3, more than half
of the RHP (68.8%) responds that dry season is the best for production and
marketing while 17 household (21.3%) answer that order quantity is more important
than the seasons. Moreover, it is generally true that Siem Reap has less tourists or
customers for all business during rainy season and it also impacts on rattan business
of Bra Youth Village.

Table 4-3   Seasonal variation in production

No	Particulars	Unit of Measures
1.	Number of household that respond summer is the best	55 (68.8%)
2.	Number of household that respond not depend on season but on order quantity	17 (21.2%)
3.	Number of household that respond other than season and order quantity	8 (10.0%)

Source: Complied from survey data

4–4 Natural Rattan and its related factors

Raw rattans were available even in and around Bra Youth Village till the end of
around 1990s. However, currently, rattan handicraft producers are already facing the
problem of rattan shortage as a result of rapid growth of rattan handicraft demand from
tourist of Angkor Wat and Thailand as well as due to the lack of preservation of rattan
bush. For example, as stated in table 4–4, required average distance for buying or

cutting rattan is about 67.5 km and maximum is 150 km. Currently, rattan product producers are spending much time, money and labor for fetching rattan than in the past.

More than 35 rattan producers or about nearly half (43.8) buy or cut rattan from over 80 km away and other 28 (35.0%) RHP fetch from over 20 km to 80 km. In other words, about 78.8% of RHP under survey needs to go more than 20 km for fetching raw rattan.

Table 4-4   Labor requirement and distance to raw rattan source

No	Particulars	Unit of measures
1.	Require hour for buying or cutting raw rattan	
	(1) Average required hours	12.1
	(2) Minimum required hours	1.0
	(3) Maximum required hours	24.0
2.	Required number of labor for buying or cutting raw rattan	
	(1) Average required labor	1.4 persons
	(2) Minimum required labor	0.0
	(3) Maximum required labor	4.0
3.	Distance to raw rattan place	
	(a) Distance	
	(i) Average distance	67.5 km
	(ii) Minimum distance	0.0
	(iii) Maximum distance	150 km
	(b) Number of RHP	
	(i) Number of RHP who buy or cut raw rattan from 20 km and less	17 (21.2%)
	(ii) Number of RHP who buy or cut raw rattan from over 20 km to 80 km away	28 (35.0%)
	(iii) Number of RHP who buy or cut raw rattan from over 80 km away	35 (43.8%)

Source: Complied from survey data

This rattan shortage problem can be considered as one of the main bottlenecks to be solved urgently for generating better employment and income opportunities for Bra Youth Village in the very near future.

Moreover, as given in table 4-5, only 6.2% or 5 producers respond that rattan is still plenty, but, 73.8% (59) of RHP respond "we are already facing rattan shortage". About 42.5% (34) of producers are buying raw rattan instead of cutting from naturally grown rattan bush. Unfortunately, we do not have relevant information on rattan caring cost and changes in price of rattan which requires detail cost survey.

Table 4-5　Potential of raw rattan reserve

No.	Particulars	Unit of measures
1.	Raw rattan reserve	
	Number of RHP which respond plenty	5 (6.2)
	Number of RHP that respond just enough	16 (20.0)
	Number of RHP that respond facing shortage	59 (73.8)
2.	Number of RHP which buy raw rattan	34 (42.5)
3.	Number of RHP which cut from rattan bush	46 (57.5)
4.	Average price of raw rattan (about 40 pieces of rattan stick)	0.64 $

Source: Compiled from survey data

4-5　Change in rattan handicraft price

Table 4-6　Change in rattan handicraft price

No	Particulars	Unit of Measures
1.	Change in product price (Compare to last five years)	
	Number of RHP that respond;	
	(1) prices are increasing	21 (26.2%)
	(2) Prices are decreasing	43 (53.8%)
	(3) Prices are changing not too much	16 (20.0%)
2.	Price differential (Retail, Middleman, wholesale)	
	We do not have reliable response because households usually sell	
	their products piece by piece.	

Source: Compiled from survey data

Compiled data for change in rattan products price compare to last five years given in table 4-6 provides the impression of decreasing trend of prices. For example, about a little more than half (53.8%) of RHP under survey respond the declining prices of their products compared to last five years while other 26.3% answer that prices are generally increasing. Although we can not trace the main causes of this situation, the most possible reason would be the "rattan product market is becoming more competitive compared to last few years". It is worthy to note that Bra Youth Village is one of the villages producing rattan handicrafts for market demand in Siem Reap Province. It is needless to point out that we need further research on causes of change in rattan price structure in and around BYV.

4-6   Potential of demand and supply

As we do not have capacity to conduct systematic demand survey, we made an assumption that the monthly sale value of rattan handicraft producer is approximately equal to value of demand for rattan products. It is still true for most of the village economy which is led by demand rather than supply. Our estimated average monthly demand for rattan products in Bra Youth Village based on the data of table 4-7 is about $2965.6 and, minimum and maximum values of demand range from 880.0 $ to 7040.0 $. As demand for rattan products depend on many factors such as price, population, income, number of tourist, quality of product, consumer taste, prices of complementary and substitutable goods etc. Of course, without conducting systematic demand survey we can not estimate the potential demand for rattan products accurately. In order to investigate effectively the possibility of generating better employment and income, having more information about demand potential is very important. Accordingly, modification and updating of this study should be given priority on estimation of rattan products demand and its nature.

Table 4-7   Potential demand

No.	Particulars	Unit of Measures
1.	Estimated monthly demand (sale value)	
	Average demand per month per household	33.7 $
	Minimum demand per month per household	10.0 $
	Maximum demand per month per household	80.0 $
	Estimated monthly total demand for Bra Youth Village	
2.	Average	2965.6 $
	Minimum	880.0 $
	Maximum	7040.0 $
3.	Seasonal demand	
	Number of household which respond that dry season has the highest demand	55 (68.8%)

Source: Compile from survey data

We also attempt to examine the supply potential of Bra Youth Village from the aspects of capacity of production and availability of inputs particularly raw rattan, labor and working hour. Of course we implicitly assumed that prevailing price of products, price of inputs and technique of production remained unchanged. As given in table 4 -8, about 58 or 72.5% of rattan producers respond that they have capacity to produce more if they have demand. Although rattan product producers are beginning to face shortage of rattan, it is likely that they can manage the raw material problem if there

is demand. Moreover, 31 (38.8%) households respond that they have enough labor and other 42 (52.5%) household answer that they have enough time to respond the increase in demand. In order to investigate the possibility of generating better employment and income opportunities detail research work on supply side is also necessary.

On the whole, analysis of complied data could provide valuable information related to generating better employment and income opportunities. As discussed above, rattan business has been playing an important role in social and economic life of BYV. Although this paper is lacking detail survey on demand and supply of rattan products, some of the findings from analysis give the impression that the growth of employment and income of rattan producers rely more on expansion in demand rather than supply. It is also important to be aware that the rattan product market in Seam Reap is also becoming more competitive and having a blend of traditional and modern features. Moreover, market has been changing from quantity to quality market, gradually. Unfortunately, the producers of Bra Youth Village do not notice much

Table 4-8　Supply potential (capacity of production and input)

No.	Particulars	Unit of Measures
1.	Capacity of production:	
	Number of RHP which respond	
	(1) Have enough capacity to produce if demand increase	44 (55.0%)
	(2) Have moderate capacity to produce if demand increase	14 (17.5%)
2.	(3) Have no capacity to produce even demand increase	8
	(4) Others	14
	Capacity of input:	
	Number of RHP which respond:	
	(a) Rattan	
	(i) Have enough rattan	44
	(ii) Do not have enough rattan	14
	(iii) Other (Do not have relevant answer)	22
	(b) Labor	
	(i) Have enough labor	31 (38.8%)
	(ii) Do not have enough rattan	7
	(iii) Others	42
	(c) Time	
	(i) Have enough time	42 (52.5%)
	(ii) Do not have enough time	7
	(iii) Others (Do not have relevant answer)	31

Source: Compiled from survey data

about these changing market situations. In order to attract and generate the product demand, Bra Youth Village should make effort to improve their quality of products through skill training especially for improvement in processing raw rattan, neatly weaving, standardization of products and new product design. Quality control is also another important task not only for finished rattan products but also the raw rattan and its processing stages to have the strength of "supply creates its own demand". It is needless to point out that BYV certainly needs assistance and cooperation from international organizations and individuals for the improvement of their rattan handicraft business.

According to our rough estimation, in order to maintain the present standard of living of rattan producer, the value of total monthly demand for whole village has to be kept at $2978.0. All the respondents mentioned that income is very unstable due to weather and irregular order from middle men. Rattan handicraft producers are selling their products at a very cheap price which are about a half to one thirds of market price in Siem Reap city. If there is a rattan handicraft village social business firm with training center, it can provide not only skill training but also reliable price, new job and market opportunities.

Concluding Remarks

It would be appropriate to provide a sequence of concluding remarks which directly address the objectives of our study.

(1) Generating employment and income opportunities through rattan handicraft business for poverty reduction in Bra Youth Village is possible,

(2) However, the possibility of poverty reduction heavily depends on stable growth of rattan product demand,

(3) Stable growth of demand depends on quality of products and regular supply, attracting tourists, and broadening market channel,

(4) Producing high quality products depends on provision of skill training, marketing knowledge and educating business ethic,

(5) Provision and implementation of above mentioned requirements would be done by a business organization such as social business firm which has reliable profit making objectives as well as capability of providing social contribution to village people,

(6) Achievement of above mentioned scenario also depends on cooperation and

support of local authorities as well as participation of village people, especially the women who are managing traditional rattan family business from generation to generation.

Finally, it is worthy to suggest that further research on "potential demand and supply" and "production and marketing situations of other rattan products producing villages" of Siem Reap Province is required.

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