WOMEN'S ROLE IN THE MEDICINAL PLANTS MARKET IN THE *TAMU* OF WEST COAST, SABAH

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ABSTRACT This paper aims to describe women's roles in medicinal plants market in the *tamu* (local market). This paper is based on the results of a case study which was conducted in some selected *tamu* in west coast, Sabah. Data has been collected via survey with 84 women vendors. Finding has listed five main roles including selling medicinal plant, supply sources, cultivating medicinal plants, provide knowledge and enhancing knowledge. While, the average mean score is 3.73, which is indicate that the role of women in the medicinal plants market is positive.

Keywords: Role, women, medicinal plants, tamu.

INTRODUCTION

In Sabah, local market or open market is known locally as *tamu*. Medicinal plant is one of the main resources being sold in the *tamu*. Previous studies show that majority of the medicinal plants vendor in the *tamu* of the west coast Sabah are women (Julius Kodoh et al., 2009; 2017; Julius Kodoh, 2006; Jurry et al., 2014: 2016). Women's involvement in the medicinal plants market in other places like Pakistan and South Africa has been recorded in previous local market (Muhammad Hamayun et al., 2005; Omobuwajo et al., 2008 & Marshall, 2012). In Malaysia, focus research on women's role in the medicinal plants' market is unexplored. Hence, this paper has been done to determine the matter.

In line with the government's policy to empowered the role of women through business, this study can provide information to further elaborate and refine the role of women to continue leading the market of medicinal plants. Literature reviews showed that nowday women is contributing in development and economic (Colonius & Dg. Norizah, 2014; Fatimah et al., 2002). In Nigeria, selling medicinal plants is important for women as a profession. They engage in the sales of herbal products for the treatment of numerous ailments (Adebo & Alfred, 2011; Omobuwajo et al., 2008). While Marshall (2012) also found that around 90 per cent of women are fulltime street market trader in southern Africa. This is shows that women are strongly related to the herb-based medicine market. But what are their contributions to the market? These questions can be answered by studying their roles. Recognition women's roles in *tamu* contributes to a better understanding of women's responsibilities in providing knowledge, manager of natural resources and sustaining the medicinal plants. When the women's knowledge and contributions are clearly acknowledged and valued, will it be possible to promote effective participation of women in decision-making processes on the conservation and distribution of medicinal plants (Siles, 2002).

METHOD

This exploratory study was carried out in 14 selected local markets in the west coast division, Sabah, namely Inanam, Gaya Street, Kiulu, Kota Belud, Koperasi Pembangunan Desa (KPD), Manggatal, Papar, Pekan Nabalu, Penampang, Ranau, Tamparuli, Putatan, Tenghilan and Tuaran. The west coast of Sabah is the most developed area in Sabah, where there are various development projects, particularly in relation to industry and business. There are also many local markets selling medicinal plants, especially traditional herbs.

For hundred years of existence, tamu is an important ground to the community in Sabah. It is the centre for gathering, battering goods and a ground for several local activities with regards to cultural and society, including seeing friends and relatives (Jurry et al., 2014; Chong & Low, 2008; Abdul Samad, 1989). Data was collected via survey. Questionnaires were distributed to a total of 84 respondents among women that involved in the selling of medicinal plants. Collected data were analysed with descriptive statistical analysis using IBM SPSS 21 software to get the mean score for each item as well as the frequency for despondences' feedback. Mean score describes the roles that women are most likely to perform in the *tamu*.

RESULT AND DISCUSSION

Demographic Background of Respondent

Majority of respondents are fully engaged in the plants base market in the *tamu*, except for a respondent who is also a rubber tapper that selling medicinal plants in *tamu* to earn side income. They earned between RM100.00 to RM2000.00 per month from their sells. Age distribution indicates that respondents are aged between 20 and 80 years old, of which 52 per cent of them have reached the age of 51 years and above. This is a good sign to have young generation involved in this market, because young generation is the potential group to ensure the continuous use of medicinal plants.

In terms of demographics analysis, most of the medicinal plant sellers in the study area are Kadazandusun (77 per cent), followed by Sino- Native (8 per cent), Bajau (7 per cent) and others, namely the Rungus (2 per cent), Brunei (2 per cent), Lundayeh (1 per cent) and the Murut (1 per cent). This is due to the location of study area where the population of Kadazandusun is high, especially in Penampang. Whereas, most of the Sino Native are family related to the Kadazandusun and live in the same neighbourhood. The Bajau population distributed along the coast including Tuaran and Kota Belud and partly in downtown of Kota Kinabalu City. While the Brunei lives in Papar. Sellers from the outside of the study area are the Rungus from the northern part of Sabah, while the Murut and Lundayeh from the interior of the state. They were recorded in Penampang, Inanam and Manggatal. While others doing their business locally. Some of them came to the west coast of Sabah's *tamu* for a wider market opportunity.

Medicinal plants sold by the women in the *tamu* are made up of 70 species from 42 families. Species the most frequently mention by the respondents is wooden plants (30 per cent), then followed by herbs species (20 per cent). Other than that are shrubs, gingers, lianas, mosses, ferns and climbers. This large number of species indicates that communities in the study area still highly depend on plant-based medicines.

Women's Role in Medicinal Plants Market in West Coast Sabah

There are five main roles of women in the medicinal plant market in the study area are listed in Table 1. The fives roles are selling medicinal plant, supply sources, cultivating medicinal plants, provide knowledge and enhancing knowledge. The mean score shows the ranking of each role according to the collective tendency. While the average mean score is 3.73, which is indicate that the role of women in the medicinal plants market is positive.

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Item	Mean	SD
Selling medicinal plants	4.48	.630
Supply sources	4.07	.773
Cultivating medicinal plants	3.67	1.15
Provides knowledge	3.44	1.391
Enhancing knowledge	2.99	1.452
Note: Mean= 3.73 Standard Deviation= 1.080 N= 84		

Table 1 Women's role in medicinal plants market in west coast Sabah

Selling medicinal plants

Human's decision is often done for economic purposes (Chan et al., 1993). Communities in Sabah have long been collecting forest products as medicine and source of income (Julius Kodoh, 2006). The sellers make the selling of medicines as a livelihood. For example, Dayang (2013) and Martha (2013) mentioned that selling medicinal plants is a major source of family income. He and his family run a medicinal plant-based business done throughout the Sabah state. As mentioned earlier that women have begun to play its role in development and economy, the role of women in *tamu* is to offer medicinal plant resources to the community. According to the findings, they are currently involved actively in the selling of medicinal plants, especially for income (99 per cent), while the rest may have another reason. The selling price of medicinal plants is between RM0.05 and RM35.00, depending on market

conditions and supply. Prices will increase as supply of a species is low. Their income from medicinal plants can reach up to RM2,000.00 per month, hence it is a good opportunity for women to generate income.

Supply Sources

Women are traditionally being the main producers of medicinal plants products including (Siles, 2002). In order to meet the demand for medicinal plants in the *tamu*, women are very frequently, responsible to supply the resource both direct and indirectly to the community. According to the World Health Organization (WHO), there are 80 per cent of people in the developing countries rely on traditional medicine for health. The main reason for using traditional medicines is tradition and accessibility of the sources. Women are collecting medicinal plants to be kept in home and used for their own needs, while rest of medicinal plants collected are sold in the local market. In this case, 89 per cent of respondent agree that they are only to selling high accessible plants to be sold.

Cultivating Medicinal Plants

Planting medicinal plants around the house is a habit for the Malays (Fatan, 2003). Human response will determine the condition of plant resources (Jurry et al., 2016). Cultivating is one of the efforts to ensure that demand is met. It is also a step towards conservation to reduce the threat of wild plant species from the natural environment. Hence vendor begins to cultivate some rare and high demand species. As for the study area, more than 70 per cent of the vendors have begun to plant as many as 69 per cent of different type's species of the total medicinal plants sold in the *tamu*. Although most species of trees are sold in the study area, herbs and shrubs are most often planted as the species does not require large areas and can be planted around their house.

Provides Knowledge

People in Borneo are indeed have long been fully utilizing plant parts as medicines (Fasihuddin & Ghazally, 2001). So far, people still use medicinal plants (Felix, 2007). In fact it has become like part of their livelihood. The

knowledge about medicinal plants was learned from one party to another (Jurry et al., 2016). The uses of herbal medicines in Malaysia are based on practical experiences, observations and rituals which are derived from socio-religious beliefs was and passed from one generation to another (Law & Soon, 2013). In Sabah, the community rely on knowledgeable individuals for healing (Felix, 2002). Women are always being the main party who inheritance and spreading the information of medicinal plants. They provide the valuable source of knowledge of medicinal plants, as happened in the study area. In overall, 70 per cent of the respondents are willing to provide information and sharing the knowledge about the medicinal plants. This is a volunteering effort to ensure that knowledge will continue to evolve.

Enhancing Knowledge

The value of medicinal plants is also learned through experiences (Jurry et al., 2016). The use of medicinal plants for various human health and disorders is a common in the society. More than 50 per cent of respondent states that they are constantly improving and enhancing knowledge of medicinal plants for the purpose of equipping knowledge to be channelled to users and future generations. They also believe that each plant has medicinal plants is necessary to enrich the plant-based medicinal products. In order to increase their knowledge, they also read and get information online. In addition, they also learn from friends and keep up with market trend. As a result, several species were introduced in the market such as the *Phaleria papuana (Mahkota Dewa)* and *Clinacanthus nutans (Belalai Gajah* also known as *Sabah Snake Grass)*. There are also species introduced by other sellers such as *Agathis borneensis (Raja Kayu)* and *Boesenbergia stenophylla (Jerangau Merah)*.

CONCLUSION

Women manage the medicinal plants that are sold in the *tamu* of west coast Sabah. This means that they are playing a very important role to ensure the existence of the resources. They are also hold the majority of all local plant knowledge, inheritance and spreading the information. Women are those who are responsible for the conservation and management of those useful

domesticated and wild plants. This matter has been explained throughout women's daily work has required more of this knowledge. Since women are the operators who dominate most of the medicinal plant market in Sabah west coast *tamu*, their role in pursuing the market is highly important. To ensure the continuity of the medicinal plant market, as well as to enhance women's role as the manager of the resources, locals should be educate about the importance of medicinal plants, not only for health purposes, but also to their socioeconomic development. Proper method in collecting the useful plants should be taught and implement to avoid the threat of species. Cultivation of threatened medicinal plants should be continued in order to secure the supply of resources and as a means of preventing stress on species. To meet better resources management, a coordination and cooperation among various agencies including government departments and vendors need to be established to strengthen the role of women and to maintain the medicinal plant market.

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INTERVIEW

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