

## การพึ่งตนเองของกลุ่มแม่บ้านเกษตรกรทาบลาน จังหวัดปราจีนบุรี

ปริญญารัตน์ ภูศิริ<sup>1</sup>, สาวิตรี รังสิภัทร์<sup>2</sup> และนาถ พันธุมหาวิน<sup>3</sup>

<sup>1</sup>นักศึกษาปริญญาเอก (เกษตรเขตร้อน),

E-mail: p\_poosiri@yahoo.com

<sup>2</sup>Ph.D. (Agricultural and Extension Education), รองศาสตราจารย์,

ภาควิชาส่งเสริมและนิเทศศาสตร์เกษตร คณะเกษตร,

<sup>3</sup>Ph.D. (Community Development), รองศาสตราจารย์,

สำนักส่งเสริมและฝึกอบรม,

มหาวิทยาลัยเกษตรศาสตร์

### บทคัดย่อ

การวิจัยเชิงสำรวจนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยที่มีอิทธิพลต่อการพึ่งตนเองของกลุ่มแม่บ้านเกษตรกรทาบลาน จังหวัดปราจีนบุรี และเพื่อเสนอแนะแนวทางการพึ่งตนเองของกลุ่มแม่บ้านเกษตรกรทาบลาน เก็บข้อมูลโดยใช้แบบ สัมภาษณ์ ทำการสัมภาษณ์สมาชิกทุกคนในกลุ่มจำนวน 56 คน โดยใช้สถิติเชิงพรรณนา คือ ความถี่ เปอร์เซ็นต์ และ ค่าเฉลี่ย และทดสอบสมมติฐานโดยใช้การวิเคราะห์ความถดถอยเชิงพหุ ผลการศึกษาพบว่าปัจจัยที่มีอิทธิพลต่อการพึ่ง ตนเองของกลุ่มแม่บ้านเกษตรกรทาบลานมี 3 ปัจจัย คือ การบริหารจัดการกลุ่ม มีอิทธิพลมากที่สุด รองลงมา คือ การจัดการ ความรู้ และพื้นที่ถือครองตามลำดับ ตัวแปรอิสระทั้ง 3 ตัวมีอิทธิพลต่อการพึ่งตนเองของกลุ่มถึง ร้อยละ 68 โดยตัวแปรการ

จัดการกลุ่มมีอิทธิพลต่อการพึ่งตนเองของกลุ่ม 58.2 ที่ระดับนัยสำคัญทางสถิติ .001 ตัวแปรการจัดการความรู้มีอิทธิพลต่อการพึ่งตนเองของกลุ่ม ร้อยละ 6.7 ที่ระดับนัยสำคัญทางสถิติ .001 และตัวแปรพื้นที่ถักครองมีอิทธิพลต่อการพึ่งตนเองของกลุ่ม ร้อยละ 3 ที่ระดับนัยสำคัญทางสถิติ .05 ข้อเสนอแนะเพื่อการพึ่งตนเองของกลุ่มมี 3 ประการ ดังนี้ 1) การบริหารจัดการกลุ่ม กลุ่มควรมีการวางแผนการทำงานกลุ่มให้ชัดเจน มีการแบ่งงานसानให้สมาชิกกลุ่มอย่างยุติธรรม และจัดหาอุปกรณ์ที่จำเป็นต่อการจักสานแก่สมาชิก เช่น จัดเตรียมใบลานที่พร้อมสำหรับการจักสาน 2) สมาชิกกลุ่มควรได้รับการพัฒนาทักษะในการจักสานลวดลายและรูปแบบใหม่ ๆ อยู่เสมอ โดยจัดให้มีการศึกษาดูงานหรือเชิญผู้เชี่ยวชาญจากภายนอก มาฝึกอบรมแก่สมาชิกกลุ่ม 3) ผู้นำกลุ่มควรมีความเสียสละ กระตือรือร้น และมีความสามารถแก้ไขปัญหาที่เกิดขึ้นในกลุ่มได้ดี

**คำสำคัญ:** การพึ่งตนเอง, กลุ่มแม่บ้านเกษตรกรบ้านทับลาน, พฤติกรรมของสมาชิกกลุ่ม, วิสาหกิจชุมชน, ภูมิปัญญาชาวบ้าน,

## Self-Reliance of Thap Lan Woman's Weaving Group in Prachin Buri Province

Parinyarat Poosiri<sup>1</sup>, Savitree Pangsipaht<sup>2</sup> and Nath Bhanthumnavin<sup>3</sup>

<sup>1</sup>Ph.D. candidate (Tropical Agriculture),

E-mail: p\_poosiri@yahoo.com

<sup>2</sup>Ph.D. (Agricultural and Extension Education), Associate Professor,

Department of Agricultural Extension and Communication,

<sup>3</sup>Ph.D. (Community Development), Associate Professor,

Extension and Training Office,

Kasetsart University

### Abstract

The objectives of this survey research study were to study factors influencing self-reliance of Thap Lan woman's weaving group in Prachin Buri province and to seek for suggestions on group self-reliance. The interview schedule was an instrument for collecting data from the entire 56 group members. Data were analyzed by using descriptive statistics. The hypothesis was tested by using stepwise multiple regression analysis. The results were found that there were three independent factors influencing the group self-reliance. The result showed that of all ten independent factors, there were only three factors: knowledge management, group management, and marketing that influenced on total group self-reliance. Three independent factors had influence on total group self-reliance at 68.0% ( $R^2 = .680$ ). Group management and knowledge management had influence on total group self-reliance at 58.2% and 6.7% at .001 significant levels, followed by agricultural land tenure had an influence on total group self-reliance 3.0% at .05 significant level. There are three recommendations for group self-reliance as follows: 1) group management should be plan clearly the group task, share fairly the weaving product to group members and support weaving materials for group members such as preparing Lan leaf for weaving. 2) Group members should always gain to develop their weaving skills in terms of setting study tour or training by invitation outside expert. 3) Leader should be devoted, enthusiastic, as well as high ability to solve problem of group.

**Keywords:** community enterprise, group members' behavior, local wisdom, self-reliance, Thap Lan village woman group

**Introduction**

Rural economics in the community is the base of development for national economics. Rural economics focuses on holistic approach in human, economy, society, policy, and environment as well as emphasizing rural people’s learning opportunity for development. The extension of economic activity in local areas should be related with local wisdom, raw materials, and labor in the locality; for example, community industrial or Thai weaving development. The objective of the rural economics is self-reliance in terms of the economy and society among family, community, and network.

Community Enterprise (CE) is a way of rural economic development. The goal of this enterprise is income-generation for rural people for self-reliance in order to improve their potential to manage their capitals such as local wisdom, natural resources, and knowledge in rural area by themselves. This enterprise focuses on a learning process not only to improve the production process but also to develop marketing for increasing income. (Phongphit, 2006).

The Department of Agricultural Extension (DOAE) is a core team for integration stakeholders to extend the CE to local areas. The purpose of the extension is to strengthen the CE and rural people’s self-reliance. There are 34,087 CE’s registered with DOAE and there are 559,748 members (DOAE, 2007). Thap Lan woman’s weaving group is an example of CE. This group uses raw materials, Lan palm leaves for weaving many kinds of products such as hats, handbags, and boxes. They can use local wisdom and new technology to improve these products. The local wisdom of Lan palm leaf weaving is passed on from former to new generations. The weaving

occupation is the way of life for rural people in Thap Lan village.

This research aims to study how the group can manage themselves through knowledge, human resources, natural resources, and marketing to improve the group self-reliance in the current situation. The results from this study will be useful for strategy formulation or strategic guidelines in order to extend and develop CE effectively.

**Objectives**

1. To analyze demographic information, knowledge management, group management and marketing factors influencing the group self-reliance.
2. To seek suggestions for group self-reliance.

**Hypothesis**

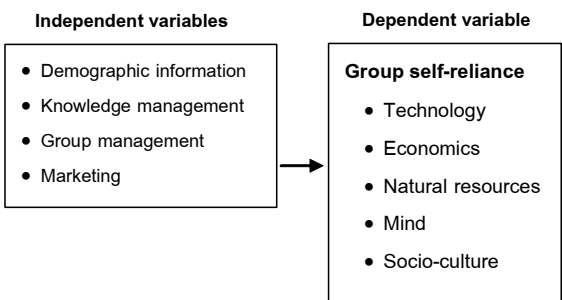
Demographic information, knowledge management, group management, and marketing factors influence the group self-reliance.

**Operational Definition**

**Demographic information** referred to general characteristics, economics, and occupation of respondents.

**Age** referred to age of members who worked in this group while answering the interview questions.

**Conceptual Framework**



**Education** referred to number of years to gain the highest qualification.

**Agricultural land tenure** referred to number of planting area in members' possession to make a living such as cassava, rice, and fruit tree.

**Total income** referred to all earnings from household in 2006.

**Total expense** referred to all expense from household in 2006.

**Duration of membership** referred to number of years to be applied for membership of this group.

**Number of labor** referred to number of member in respondents' family who helped with weaving occupation except the respondent.

**Knowledge management** referred to the opinions of group members towards the knowledge management of the group committee. It included five items as follows: analyzing, searching, collecting, sharing, and utilizing. It was measured by the Likert scales with five levels.

**Group management** referred to the opinions of group members towards the controlling and management of the group. It included four items as follows: organizing, leaders, members' behaviour, and participation of group members. It was measured by the Likert scales with five levels.

**Marketing** referred to the opinions of group members towards the activities for marketing group products. It included four items as follows: product, price, place, and promotion. It was measured by the Likert scales with five levels.

**Elements of Thap Lan woman's weaving group self-reliance** referred to the opinions of group members towards the five following components: technology, economics, natural resources, mind, and

socio-culture. It was measured by the Likert scales with five levels.

**Technology** referred to capability of group to take new knowledge for invention or improvement the weaving apparatus for increasing the quality of weaving product. Group members could invent apparatus from raw material in local area. All group members could use this apparatus and it did not destroy the environment. Moreover, capability of group increased network for exchange technology.

**Economics** referred to income generation from weaving occupation of group members, capability to find the source of finance both inside and outside group, as well as capability in saving, investment, and social welfare.

**Natural resources** referred to capability of group members to use and to conserve their natural resources. They participated in plant and conservation Lan tree. They cooperated with networks to plan, to set rule, to follow the rule, and to solve the Lan tree problem. They passed on ideas for conservation Lan tree to young generation. In addition, there were networks for exchange Lan tree knowledge.

**Mind** referred to intention, endurance for problem, and high level of confidence both in them and in group. They had creative ideas for improving group task. Moreover, they had sense of belonging and were proud of their group.

**Socio-culture** referred to level of helping each other in group, unity, smoothly in group and always forgiving each other. They were glad to sacrifice their time for group work. They were pleased with success of other members. In addition, they believed in group work after withdrawal of supporter.

## Methodology

### Population

A total of 56 people in Thap Lan woman's weaving group, Bu-Pram sub-district, Na Di district, Prachin Buri province was the population in this study.

### Data collection

An interview schedule was employed to collect data from group members. It was divided into five parts: 1) demographic information, 2) knowledge management, 3) group management, 4) marketing, and 5) group self-reliance.

### Testing validity and reliability of the interview schedule

The instrument was validated by a team of experts in this field. The Cronbach alpha was utilized to test the reliability of the instrument. The reliability of this interview schedule was .9654.

### Data analysis

Descriptive statistics included frequency, percentage, and arithmetic mean. Stepwise Multiple Regression Analysis was employed to test a hypothesis. The statistical level of significance at .05 was determined.

### Interpretation of the opinion of group members

The interpretation of mean scores derived by the Likert scale representation of group members' opinions of knowledge management, group management, marketing, and group self-reliance were as follows:

Mean scores	Interpretation
4.21 - 5.00	very strongly agree
3.41- 4.20	strongly agree
2.61- 3.40	moderately agree
1.81- 2.60	strongly disagree
1.00- 1.80	very strongly disagree

## Results and Discussion

Interviews with all members of the Thap Lan woman's weaving group included three important results that were four independent factors, elements of this group self-reliance, and hypothesis testing.

In terms of independent factors included demographic information, knowledge management, group management, and marketing.

'**Demographic information**' it was found that most members (96.4%) were females; average age was 44 years old. According to economic factors, 41.1% of group members were landless. Average household income and expense were 117,253.2 and 86,519.9 Baht/year. In terms of average weaving income and expense were 52,156.8 and 15,969.7 Baht/year. Moreover, 39.3% of the group members had weaving as their main occupation and 53.6% as their supplementary occupation. 46.4% of respondents became group members between 21 to 25 years. 85.7% of respondents participated in this group in order to increase their income. From this result was shown that respondents were old age so that they could not work an employment. In addition, some respondents were landless or less agricultural area so that they earned low income from agriculture. They tried to find other occupation for make a living. The weaving Lan palm leaf was a supplementary occupation in this village because there were raw materials in the local area, low investment, and freedom to work at home.

According to '**Knowledge management**' (KM), it was found that the average opinion on the method of KM was at the moderately agree ( $\bar{x} = 2.94$ ). It included five items: analyzing, searching, collecting, sharing, and utilizing. The top items were following:

to consult with members to seek for information on group improvement ( $\bar{X}= 3.16$ ); to correct mistake ( $\bar{X}= 3.41$ ); to keep necessary information for group work ( $\bar{X}= 2.96$ ); to discuss in group after training ( $\bar{X}= 3.16$ ); and to implement new knowledge from training to improve group task ( $\bar{X}= 3.05$ ). (Figure 1) From the result was shown that chairman and committee discussed with group's members to find information for improving group task. They were always correcting mistake in group work by asking from the elderly or GOs. In addition, they kept necessary data for working such as the picture of Lan palm leaf preparing, the picture of weaving technique and writing down the mixed ratio of dyeing color. According to the sharing in this group was found that they discussed the information from training with group's members by informal meeting. Last but not least, they took new knowledge from training to improve group task such as using an electrical weighing machine for repeating the dyeing color. This

result was showed that this group committee had a variety of way to manage knowledge that influenced group to be self-reliance.

**Group management:** it was found that the average opinion on the level of group management was strongly agree ( $\bar{X}= 3.52$ ). The top of each item was as follows: organizing was to share the weaving product properly under the capacity of each member ( $\bar{X}= 3.82$ ). In the leaders' trait was to be friendly and to keep on working until reach the goal ( $\bar{X}= 4.11$ ). According to members' behavior in the group, it included well responsible for their task ( $\bar{X}= 4.52$ ), and participation was to gain benefits from Lan leaf weaving on the same standard ( $\bar{X}= 3.82$ ). (Figure 2) From the above reason was found that the organizing in the group was strongly agree. The committee divided order depending on member's skills such as rapid, design, and beauty. The group members who had higher skills received more pieces than group members who had lower skills. In addition, committee

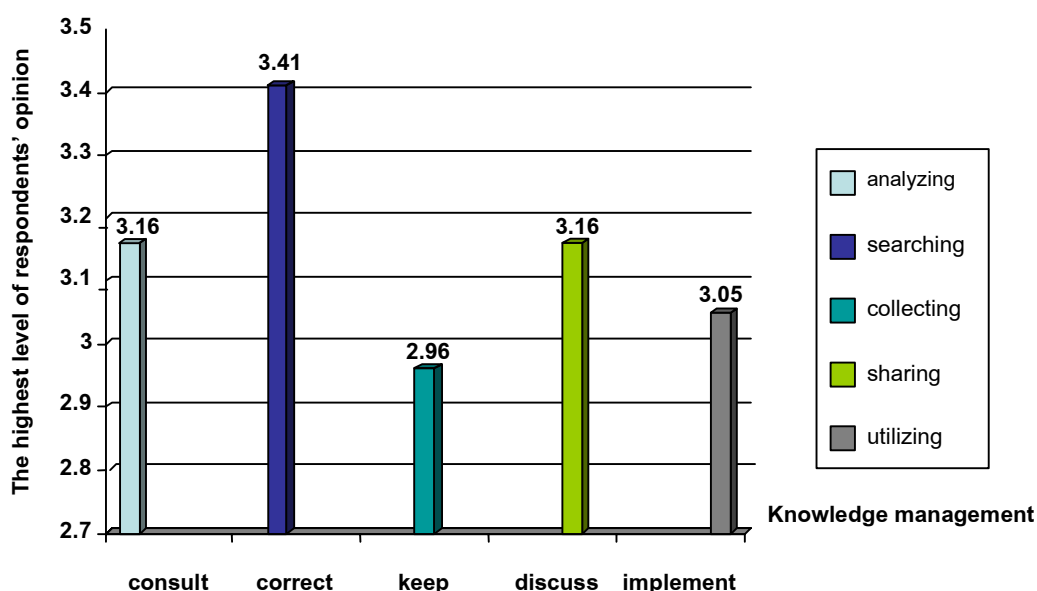


Figure 1: The highest level of respondents' opinion on the knowledge management

could provide task to member continually and they could coordinate with network both inside and outside community; for example, they could co-produce with the Wang Khon Daeng group in the Bu Pram sub-district when group had over-production. Nevertheless, the group had the lowest level of clearly group planning especially the group production. Group could not plan to produce all year because the production depended on the market. In terms of leaders was found that they were friendly with all people and could find new method to work. Nevertheless, they could not increase the productivity and selling. According to group members were satisfied to work at home and gained freedom of weaving on their free time as well as were good responsibility on their task and interested in improving their skills. Lastly, group members received the same standard of raw materials to weave because it was convenient to manage for a large amount of order.

**Marketing:** it was found that opinion on this topic was at the moderately agree level ( $\bar{X}=3.23$ ). It consisted of product, price, place, and promotion. The following top of each items were: there was an after-sales service ( $\bar{X}=3.43$ ); the price of Lan product was suitable for its quality ( $\bar{X}=3.36$ ); local stores in village was a suitable place for selling Lan product ( $\bar{X}=3.75$ ); and sellers who are group members were well promotion of Lan product ( $\bar{X}=3.73$ ). (Figure 3) From the result was shown that this group was good customer service such as changing the handbag handle. The product price was suitable for its quality because of two reasons. Firstly, its identity composed of handmade, fine, durable, and bright color. Secondly, it took many steps for preparing Lan leaf for weaving. In terms of a local store in the locality was improved for the tourists attraction and there was a salesperson in local store to demonstrate the process of production and persuade the customers

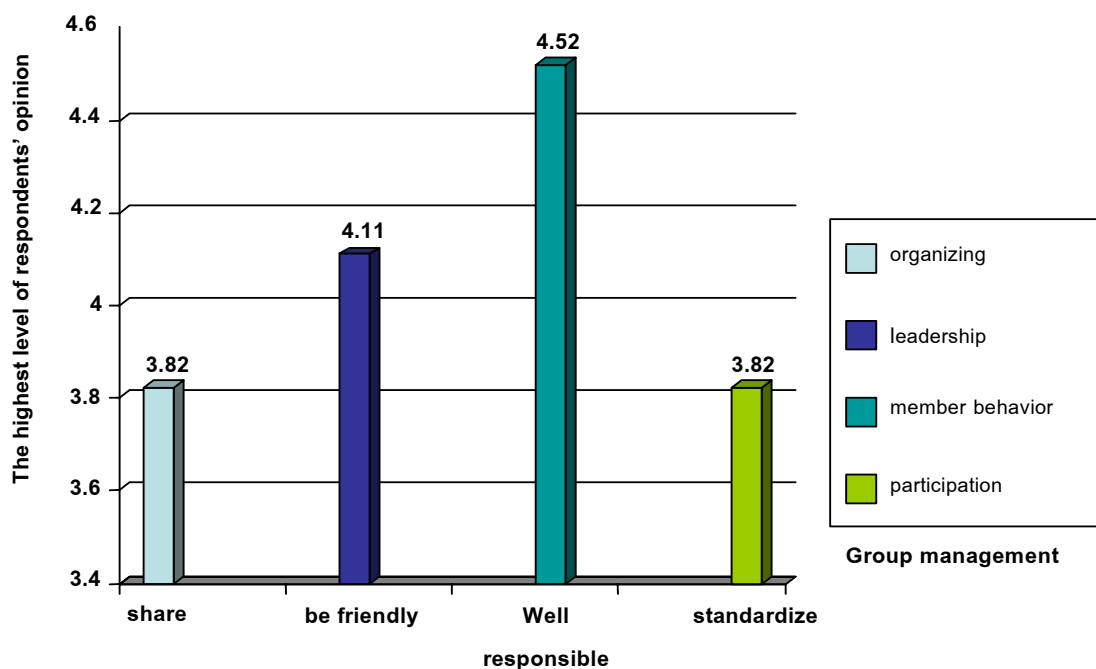


Figure 2: The highest level of respondents' opinion on the group management



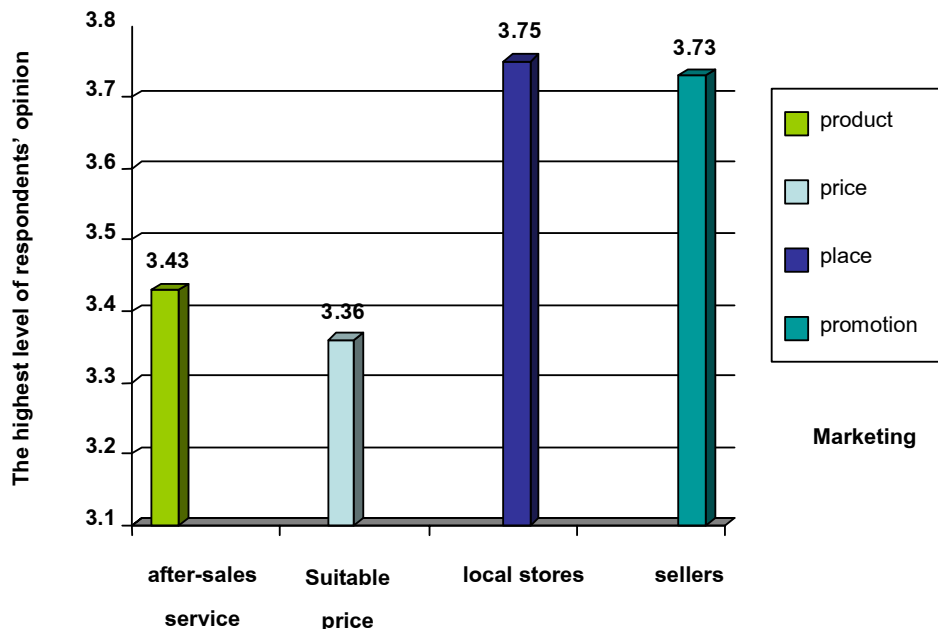


Figure 3: The highest level of respondents' opinion on the marketing

to buy the domestic products. Nevertheless, this group lacked of information about customers' need and new market.

**'Elements of Thap Lan woman's weaving group self-reliance'**: it was found that there was a moderately agree level ( $\bar{X}=3.34$ ). The highest respondent opinion was strongly agree in terms of socio-economic ( $\bar{X}=3.85$ ) followed by mind at the average score of 3.50. On the other hand, the items of technology, natural resources, and economy were at the moderate level ( $\bar{X}=3.37, 3.13,$  and  $2.90$  respectively). The top of each item was as follows: 1) members were pleased to work long hours when having large orders; 2) members were proud of their group; 3) the appropriate technology was to use the dyeing pot from the training; 4) they managed to be able to use the Lan leaf for weaving all year round;

and 5) the weaving occupation was an activity for generating income.

#### Hypothesis Testing

This part deals with discussion about independent variables influenced self-reliance of Thap Lan woman's weaving group. This study set the symbol for analyzing and interpretation of independent variables and dependent variables with group self-reliance. The meaning of the independent variables were as follows:  $X_1$  = age,  $X_2$  = education,  $X_3$  = **agricultural land tenure**,  $X_4$  = total income,  $X_5$  = total expense,  $X_6$  = duration of membership,  $X_7$  = number of labor,  $X_8$  = **knowledge management**,  $X_9$  = **group management**, and  $X_{10}$  = marketing.

**The result of testing hypothesis** was found that three independent factors: group management ( $X_9$ ), knowledge management ( $X_8$ ) and agricultural

land tenure ( $X_3$ ) influenced the group self-reliance at the statistical significance level of 0.001. These factors illustrated the strong relation with self-reliance and explained 68.0% of the variation in self-reliance ( $R^2 = .680$ ) (Table 1).

The equation of multiple regression analysis was  $Y = 1.493 + .360(X_9) + .187(X_8) + .005(X_3)$

And standard equation was as follows:  $ZY = .528(X_9) + .376(X_8) + .175(X_3)$

From the result indicated that group management ( $X_9$ ) was first placed in the equation and was found to predict total self-reliance 58.2% at .001 significant levels. Knowledge management ( $X_8$ ) was second placed in the equation and was found to predict total self-reliance 6.7% at .001 significant levels. Agricultural land tenure ( $X_3$ ) was third placed in the equation and was found to predict total self-reliance 3.0% at .05 significant levels. (Table 1)

### Discussion

The research findings have shown that there were three factors influencing group self-reliance: group management, knowledge management, and agricultural land tenure. In terms of, **group management** had an influence on group self-reliance.

This variable composed of four elements. First, organizing, it was found that there was smooth running of group task because member acted following rules of group. Second, leadership, it was found that leader devoted to the group task, to keep on working until reaching the goal, to have friendly relation with all people, to be able to seek new methods to improve weaving product as well as to allocate the weaving product properly to the capacity of each member. Next, members had shown the good responsibility on their tasks and were interested in improving their skills. They satisfied to work at home and gained freedom of action their own task. This result was harmonious with Keowan (2005) concluded that strength of this group was to earn from weaving while they lived with their families. As a result of the group members could weave when they stayed with family and had freedom of weaving on their free time. Lastly, participation, it was found that group members to take part in analyzing the group problem, to take part in making decision on how to receive new order, to devote their tools, time, and labor for group task. They satisfied from gaining benefit from group members by receiving the same standard of Lan leaf for weaving. This also was in

**Table 1 Stepwise Multiple regression for analyzing factors influencing self-reliance of Thap Lan woman's weaving group**

Predicted variable	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	R <sup>2</sup> change	Correlation coefficient (b)	Standard error (Se)	Standardized Coefficients (Beta)	t	P (sig.)
$X_9$	.763	.582	.575	.582	.360	.017	.528	5.044	.000
$X_8$	.806	.650	.637	.067	.187	.053	.376	3.563	.001
$X_3$	.825	.680	.662	.030	.005	.002	.175	2.209	.032
Constant = 1.493			F overall = 36.831			sig = .000			

line with Tawonathiwat and Traimongkolkul (2006) concluded that success factors of Community Enterprise composing: clearly structure of group, high potential of leader, and high knowledge management. Second variable was **knowledge management**; there was a possible reason for this result that was the willingness to exchange and share knowledge among group committee and group members. Another possible reason was using of informal meeting to discuss how to improve weaving products. They could learn together to improve a new patterns or a designs by sharing ideas with each other. They corrected mistakes by learning from past experience such as improving technique for dyeing the same standard of Lan product. Finally, **agricultural land tenure** had influence on group self-reliance because the group members who had agricultural land tenure weaved as a supplementary occupation. They live there without migration and to be group members for a long time.

There were seven items that had no influence on group self-reliance. They were following as: age, education, total income, total expense, duration of membership, number of labor, and marketing. The explanations of this finding were that group members were adult and first generation as well as they weaved as a supplementary occupation. About half of respondents (53.6%) had only one person in family helped with weaving. Lastly, marketing in the opinion of respondents was limited marketing channels.

### Conclusion

In this study, there were four independent factors for group self-reliance including demographic information, knowledge management, group

management, and marketing. The result from this study was shown that **demographic information** 96.4% of respondents were females with average age of 44 years old, all with primary education. 41.1% were landless and 33.9% had agricultural land tenure between 1-10 rai/household. Average total income and expense were 117,253.2 and 86,519.9 Baht/year. Average of membership duration was 17.9 years. Average of labor in household who helped with weaving was 1 person. Next, **knowledge management**, the average respondents' opinion on the KM was at the moderately agree level. **Group management**, the average respondents' opinion on the group management was at strongly agree level. **Marketing**, the average respondents' opinion on this topic was at the moderately agree level.

In terms of dependent factor, **element of group self-reliance**, it was found that the average respondents' opinion on total group self-reliance was at moderately agree level, the highest opinion was strongly agree in the socio-culture, followed by mind. Average opinion on technology, natural resources, economic was at moderately level.

**The result of hypothesis testing:** the demographic characteristics, knowledge management, group management and marketing factors influencing the group self-reliance. The result showed that of all ten independent factors, there were only three factors: knowledge management, group management, and marketing that influenced on total group self-reliance. Three independent factors had influenced on total group self-reliance at 68.0% ( $R^2 = .680$ ). Knowledge management and group management had influenced on total group self-reliance at 58.2% and 6.7% at .001 significant levels, followed by agricultural land tenure

had influenced on total group self-reliance 3.0% at .05 significant level.

### Suggestions

#### Knowledge management

1) To always discuss in group after training or study tour by informal meeting for improving group task.

2) To increase weaving skills of members continuing by invitation outside experts to teach at the group.

3) To collect necessary information for group working such as pattern of Lan products.

#### Group management

1) To plan clearly the group task.

2) To share the weaving product properly according to the capacity of each member.

3) Leader should be devoted, enthusiastic, friendly, as well as high ability to solve problem and manage group task.

4) Members should well responsible to weave when receiving order from group.

5) Group should support weaving materials for group members such as dyeing Lan leaf.

### References

Department of Agricultural Extension. (2007). **Small and Micro Community Enterprise** (online). Available: <http://www.CE.doae.go.th>.

Keowan, B. (2006). **Complete Research report of Embedded Innovation in Community Agricultural Project (Central Region)**. Nonthaburi: Sukhothai Thammathirat Open University.

Phongphit, S. (2006). **Items ought to Know about Community Enterprise**. 2nd ed. Bangkok: Department of Agricultural Extension.

Tawonathiwas, S. and P. Traimongkolkul. (2006). Success Factors of Community Enterprises and Enhancing Strategies: Experiences from 4 Case Studies in the Central Region. **Kasetsart J. (Soc. Sci)**, 27, 307-320.