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THE PROPER DEVELOPMENT OF PRODUCTION MANAGEMENT TECHNOLOGY OF OTOP GROUP BASED ON LOCAL WISDOM

Abstract:

The objective of this study was to investigate the technology and working environment of OTOP group based on local wisdom in Nontaburi province. A sample was chosen by purposive sampling which included 134 people who volunteered to work with the project. The research tools included questionnaire, interview form, small group discussion, and focus group. For the qualitative technique, the 0.96 level of confidence was applied by using a software program. Statistic description included geometric mean and standard deviation. In addition, context analysis and summary analysis were utilized for quantitative technique.

The findings from the questionnaire revealed that the technology used by OTOP group had a problem with raw material order with a mean of 2.95 and it was rated as a medium level. Also, in the production process, there was a failure to use technology to increase the value added with a mean of 2.47 and it was rated at a low level. The worse problem was a failure to improve the production process and there was no exchange of knowledge between others. The findings from the small group discussion revealed that there was a before and after work of checking equipment and machine at the medium level, but there was a low level of time table for maintenance. The urgent improvement for OTOP group included handbook for equipment, machines, and its maintenance to prevent machine breakdown and its inability to deliver goods on time.

Keywords:

Production Management Technology; TOP Group; Local Wisdom

Introduction

The 11th National Economic and Social Plan were formulated during the economic and social turbulence. From the 8th to 10th National Economic and Social Plan had been integrated the Philosophy of Sufficiency Economy to apply in many areas. The Philosophy was also the way to perpetuate local wisdom and local knowledge and take advantage of local wisdom and local knowledge to make strong communities with self-immunity all over Thailand. The Philosophy can also be applied into one tumbon, one product (OTOP) which is a community product that tries to compete with commercial products in domestic and international markets. OTOP products generally lack an understanding of modern technology and basic knowledge of health, marketing, and management. Regardless of the many problems that OTOP groups may face, it is important for the researcher to find ways to enhance their potentials of OTOP products based on the local wisdom in order to be able to compete with commercial products. In this way, it would be possible to increase quality of the products, sales, income, and the quality of life of the OTOP producers. The lack of modern knowledge resulted in the poor quality of products, unattractive packages, short life of products, and no marketing plan. Therefore, this study is aimed to use the findings to directly solve the problem of OTOP products and provide them with better understanding of modern technology and basic knowledge of health, marketing, and management in order to be able to compete with producers of the similar products in both domestic and international market.

Methodology

The purposes of this study were to examine the potentials of OTOP group on the sustainable operation based on local wisdom of Nontaburi province which was registered with Department of Community Development as well as to develop OTOP products according to the Philosophy of Sufficiency Economy. The population of this study included OTOP producers in six districts of Nontaburi Province. A sample was chosen by purposive sampling which included 125 people who volunteered to work with the project. The research tools included questionnaire, interview form, small group meeting, and focus group. For qualitative technique, the 0.95 level of confidence was applied by using a software program. Statistic description included geometric mean and standard deviation. In addition, context analysis and summary analysis were utilized for quantitative technique. The information from the survey was divided into four parts. The first part included a check list information which was analyzed by using frequency and percentage. The second part included rating scale information which was analyzed by using mean and standard deviation. The third part included open end questions which were analyzed by using summary and content snapshot. The last part included focus groups which were analyzed by using summary and content analysis.

Findings

Table 1. Mean and Standard Deviation of Technology Management of OTOP producers

Technology Management of OTOP producers	Mean	S.D.	Level	Rank
Have a plan	3.80	0.88	high	3
Assign role and responsibility	4.21	0.68	High	1
Assign proper place for work	4.06	1.17	High	2
Control and work evaluation	2.83	0.74	Medium	6
Raw material inventory	3.04	0.79	Medium	5
Marketing plan	2.42	1.06	Low	7
Customer logs	1.07	0.74	Low	9
External knowledge	2.30	1.04	Low	8
External funds	1.57	0.50	Low	10
Have accounting	3.50	0.96	Low	4
Total	2.94	0.85	Medium	

From table 1, the findings revealed that OTOP producers are in need of improvement in terms of technology management of OTOP products. The overall mean was only 2.94 which indicted a medium level. However, the top highest means were Assign role and responsibility, Assign proper place to work, and Have a plan, while, the three lowest means were external knowledge, customer logs, and external funds.

Table 2. Mean and Standard Deviation of Standard Quality of OTOP products

Standard quality of OTOP producers	Mean	S.D.	Level	Rank
Products were directly matched with the demand	20.4	0.88	Low	7
There is quality control during the process of production	2.94	0.63	Medium	3
There is quality assurance before shipping the products	3.30	0.76	Medium	2

There is standard quality of the products	1.89	0.75	Low	8
There is a product contest	2.36	1.10	Low	5
There is a guarantee after sale	2.27	0.78	Low	6
There is a chemical residue in the products	3.41	1.38	Medium	1
There is a standard quality of raw material	2.47	0.88	Low	4
There is a certify by respectable organization	1.50	0.64	Low	10
There is a training of standard quality	1.60	0.75	Low	9
	2.37	0.85	Low	

From table 2, the findings revealed that OTOP producers are really in need of improvement in terms of standard of quality for OTOP products. The overall mean was only 2.37 with a 0.85 standard deviation and was rated at a low level. The top three highest means included a chemical residue in the products, quality assurance before shipping products, and quality control during the process of production. However, the three lowest means included the standard quality of the products, training of standard quality, and certify by respectable organization.

Table 3. Mean and Standard Deviation of environment and safety of OTOP production

Environment and safety of OTOP production	Mean	S.D.	Level	Rank
There is enough light at the workplace	4.86	0.35	High	1
There is noise at the workplace	1.61	0.63	Low	9
There is a problem of temperature at the workplace	2.14	0.83	Low	4
There is a problem of dust and chemical residue at the workplace	1.89	0.72	Low	5
There is a problem of area assigned at the workplace	3.86	0.78	High	2
There is a plan for fire protection at the workplace	2.51	1.31	Medium	10
There is a water pollution problem at the workplace	2.18	0.99	Low	3
There is a problem of smell at the workplace	1.69	0.74	Low	7

There is a problem of high risks of accidents at the workplace	1.78	0.82	Low	6
There is a level of vibration problem at the workplace	1.66	0.67	Low	8
	2.41	0.78	Low	

From table 3, the findings revealed that OTOP producers had a serious problem of environment and safety of OTOP production and process. The overall mean was only 2.41 and it was rated with low level. The top three highest means included enough light at the workplace, problem of area assigned, and water pollution. However, the three lowest means included level of vibration, noise, and plan for fire protection.

Discussion

In terms of technology, there was a problem of lack of understanding modern technology and unable to implement the useful technology effectively. This finding concurred with the study of Kantanyamai Cherkul and Rosada Vetpaond and Sumali Santiponvut who investigated about problems and guidelines for OTOP to prepare for ASEAN and found that the low fund and lack of investment fund caused OTOP producers to suffer with out of date technology (K. Cherkul, 2014 and R. Vetpaond and S. Santiponvut, 2013) . These OTOP producers needed the financial assistance from the government. Another problem was the chemical residual. This problem was reported by ASTV manager online many times that the lack of understanding about health caused these OTOP producers to careless about their production process and how to handle chemical and food preparation (ASTV, Manager online, 18 December 2014). Moreover, the quality of life at workplace and at home was so important that OTOP producers must understand and can create the atmosphere and safe working conditions (S. Santiponvut, 2009). Still, there is a need of proper understanding and proper information to disseminate into the community.

Sumali Santiponvut, et al. who studied the topic of the Development of State Enterprise and Enhance the Potentials of OTOP Products and stated that it was important for communities all over Thailand to understand quality of life and how to preserve the environment. In addition, Vitaya Mekrum et al, stated that the quality of life for community is consisted of four factors which are basic quality of life, quality of living, quality of working, and quality of working conditions (V. Makrum, et,al.,2014). If these conditions are fully understood, the community will have a chance to have a better quality of life.

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