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GUIDELINES FOR OTOP PRODUCER DEVELOPMENT TO THE STANDARD SYSTEM OF ENVIRONMENT MANAGEMENT ISO 14001

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Abstract - The study found that the personnel management compensation and incentives with an average of 4.27 at the high level, the administration. Found to be an effective means of communication within the organization, with an average of 3.59, at the high level, the machinery, and equipment that should be repaired. Maintenance 4.18, at the high level, the material was found, should be selected to deliver the raw material used to produce an average of 3.99, at the high level, the budget showed. There should be a fund that is used in the preparation of the development, packaging and label products, OTOP, with an average of 3.97 at the high level, the environment is found, which should have developed the industry environment to affect air pollution at a high level with an average of 2.70.

This research study aims to identify factors in the development of manufacturer product OTOP, leading to an environmental management system standard ISO 14001. The sample of 73 people, the instrument was a questionnaire divided into 2 steps, is a statistical frequency, percentage, average, standard deviation.

The study found that the personnel management compensation and incentives with an average of 4.27 at the high level, the administration found to be an effective means of communication within the organization, with an average of 3.59, at the high level, the machinery, and equipment that should be repaired. Maintenance 4.18, at the high level, the material was found, which should be selected to deliver the raw material used to produce an average of 3.99, at the high level, the budget showed. There should be a fund that is used in the preparation of the development, packaging and label products, OTOP, with an average of 3.97 at the high level, the environment is found, which should have developed the industry environment to affect air pollution at a high level with an average of 2.70.

Keywords - Environmental management; ISO 14001; Environmentfactor

I. INTRODUCTION

In the current issue of the environment and quality of life of the population has deteriorated at an alarming rate, due to the advancement in technology, economy, and industry. All of which contributed to the worsened environment quickly and continuously, causing management efforts to control and reduce environmental impact by increasing the intensity of movement of organizations, both public and private sector. This shows the willingness and commitment to improving the environment in the society as well as in common resolve. , Led by trade measures combined with environmental matters. Prepared Green Specifications subsequently the International Organization for Standardization (ISO), the development of economy and society, Thailand, with the transition from an agrarian society into an industrial society, more and has grown rapidly, OTOP products same as the one industry that is vital to the economic development of the country is huge, both in terms of production, marketing, employment, technology development and linkages with other industries continuously. But some also affecting the manufacturers OTOP products consequential from pollution and cause impetus to international organizations, International Standardization, or ISO (International Organization for Standardization), a series of environmental management standards "ISO

14000 Series" and more. The implementation of the initial find, where there are problems in implementation, which is probably due to the lack of employee awareness information on the substance lack of understanding of the requirements and the lack of participation in care, thus affecting other areas such as personal factors, perceived information on substances, knowledge, attitude and participation and the need for organizations to have a better environment and more, as well as about the problems or obstacles to propose recognized environmental management system ISO 14001 provides manufacturers, OTOP success and have developed updated continuously next to saving the environment. Thus, the idea to study factors in the development of products manufacturer. OTOP leads the Environmental Management System ISO 14001 in Nonthaburi province to increase the competitiveness of its enterprises. OTOP based on local knowledge, to develop a standard community to raise standards, to be accepted, leading to sales increase and the economy, the community and income for families in circulation. the economy in the community has a strong self-reliant in the end, will bring benefits to lead a balanced life that will create the potential for the production of OTOP and the people are living a happy and is enhancing competitiveness within the market and to be recognized as an international sustainable.

II. OBJECTIVES

To study the factors in the development of manufacturer product OTOP, leading to an environmental management system standard ISO 14001.

III. SCOPE OF THE RESEARCH

Scope the area will collect data and studies in the area of manufacturing OTOP products in Nonthaburi. The scope of the content consists of seven fields, which are as follows: (1) the administration, (2) general management, (3) management, (4) machinery and equipment, (5) the material, (6) budget and (7) the resources and the environment.

IV. RESEARCH METHODOLOGY

This research is a quantitative research, where the sample has a total of 73 people, where the tools used to collect data were divided by topic into 2 steps as following.

Step 1, questions about the general information of the individual producers. OTOP in Nonthaburi province, the nature of the query, a check-list (Check list) consisting of questions six questions are (1) gender, (2) age, (3) education, (4) the position, (5). working life, (6) work a few hours a day.

Step 2, questions concerning the development of manufacturing OTOP products in Nonthaburi province to lead the Environmental Management System ISO 14001, questionnaires, rating scale (Rating Scale) 5 level consists of questions: (1). the personnel management, (2) general management, (3) management, (4) the equipment and, (5) the material, (6) the budget, (7) the resources and the environment.

V. RESEARCH TOOL CONSTRUCTION

The tools used to collect data in this research was conducted as follows, (1) Study papers, articles and research reports that research on theoretical concepts relevant to the attributes of individual manufacturers, OTOP Nonthaburi, (2) defines the framework and scope to create a tool to meet the objectives, (3) the data from the study to create a questionnaire, (4) data was reviewed to improve, (5) brings the query to the 5 experts checked then analyzed coefficient match. (Validity) by calculating the IOC (Index of Objective Congruence) at 0.50 or above, (6) to query the correct update to the experimental group than the sample (try out) 30, (7) were taken from the group's calculations, checks for validity. (Reliability) by means of a

questionnaire (Cronbach, 1970) at the confidence level of 0.87 and (8) published the completed questionnaires to determine the actual sample.

VI. DATA COLLECTION

Data collection for this research was conducted to collect information by asking for cooperation from the producers of OTOP in Nonthaburi province, on the questionnaires of the 90 series, with recovery starting on 13 March-31 May, 2559B.E., included in the data collection, 78 days to receive a questionnaire, a questionnaire has been set back 73, when data collection is completed by then conduct analysis using a computer program.

VII. DATA ANALYSIS AND APPLIED STATISTICS

The researchers analyzed the data using a computer to analyze the data.

3.5.1 Analysis of general characteristics of a questionnaire checklist (Check list) statistics used was frequency percentage.

3.5.2 Analysis of enterprise development, to lead the Environmental Management System ISO 14001, a questionnaire asked about the section (Rating Scale), average (arithmetic) and standard deviation (SD).

3.5.3 Analysis of Barriers to Development Agency under the Environmental Management System ISO 14001, a questionnaire asked about the section (Rating Scale), average (arithmetic) and standard deviation (SD).

CONCLUSION

From the analysis of the operating staff, production staff, employees daily, the OTOP products manufacturer in Nonthaburi. Most are male, with a total of 42 people, 57.5 percent, was the highest since the age of 26-30 years, with a total of 32 people, representing 43.8 per cent, the level of education. The highest level since Bachelor's degree with a total of 24 people, accounting for 32.9 percent, the job is the most high-level employees, operating a total of 43 people, accounting for 58.9 percent, operating hours, most of the work. 8 hours, with a total of 34 people, 46.6 percent, and a review of the operating staff, production staff, employees daily, the OTOP products manufacturer in Nonthaburi province on the factors in the development of OTOP product producer groups to contribute to environmental management standard ISO 14001.

Table1: Mean and standard deviation of Personnel Management

Personnel Management	\bar{X}	S.D.	Description	Level
1. All employees should work with the goal of enterprise development	4.01	0.70	High	4
2. All employees should work with the goal of enterprise development	4.10	0.74	High	2
3. OTOP products manufacturer in Nonthaburi, it should be highlighted that the organization has the initiative in the development of packaging and logo	4.14	0.75	High	1
4. Manufacturers OTOP products in Nonthaburi, data is collected by the organization	4.03	0.76	High	5
5. OTOP products manufacturer in Nonthaburi have an idea about the product or the development of new packaging, always	4.05	0.77	High	3
Totalscore	4.01	3.72	High	

From Table 1, the administration found the OTOP the producer group should be highlighted that the organization has developed creative packaging and logo (= 4.14) were at the highest level, and product manufacturers. OTOP is a preliminary analysis of the organization (= 3.92) in the least.

Table2: Mean and standard deviation of General Management

General Management	\bar{X}	S.D.	Description	Level
1. OTOP products manufacturer in Nonthaburi. Should have a good relationship with the community and government agencies	4.19	0.56	High	3
2. OTOP products manufacturer in Nonthaburi. There should be a vision, Clearly intended to develop environmental packaging and logo	4.16	0.75	High	4
3. OTOP products manufacturer in Nonthaburi, there should be a plan for environmental management systems that can help reduce costs in the development of packaging and logo	4.22	0.74	High	2
4. Manufacturers OTOP products in Nonthaburi, there should be a solution in the organizations to efficiently	4.12	0.76	High	5
5. OTOP products manufacturer in Nonthaburi should the environment Great work Putting welfare system Compensation and incentives	4.27	0.77	High	1
Totalscore	4.19	3.58	High	

From Table 1.2, the administration found that the producer group OTOP products are in good working environment, the welfare system remuneration and motivation (= 4.27) were at the highest level, and the atmosphere in the workplace constant (= 3.97) in the least.

Table 3: Mean and standard deviation of the Administrative

Management	\bar{X}	S.D.	Description	Level
1. Lack of personnel with the knowledge, resources and environment in the development of packaging and logo	2.75	1.27	Medium	3
2. OTOP products manufacturer in Nonthaburi province of executives in OTOP marketing Distribution	2.66	1.23	Medium	4
3. Communicate effectively within the organization	3.59	0.70	High	1
4. Officers OTOP products manufacturer in Nonthaburi of all employees	3.44	0.68	High	2
TotalScore	3.11	0.97	Medium	

From Table 3, the administration found communicate effectively is within the organization (= 3.59), at the most, and the executive producers of OTOP products in the market. In the distribution and development of packaging and logos (= 2.66) in the least.

Table4: Mean and standard deviation of Machines and Instrument

MachinesandInstruments	\bar{X}	S.D.	Description	Level
1. OTOP products manufacturer in Nonthaburi, screening machines should be used in standard production	4.01	0.67	High	3
2. OTOP products manufacturer in Nonthaburi, waste production should be recycled (recycling)	3.96	0.80	High	4
3. OTOP products manufacturer in Nonthaburi, there should be repaired Maintenance	4.18	0.71	High	1
4. Manufacturers OTOP products in Nonthaburi, should the removal of waste from the maintenance 4.03 0.78 High 2. Total score 4.04 0.74 Medium	4.03	0.78	High	2
Totalscore	4.04	0.74	Medium	

From Table 4, the machinery and equipment of the producer group product OTOP repair maintenance (= 4.18), at the most, and the producers of OTOP should bring waste from the production of recycled (recycling) (= 3.96) exists in the least.

Table5: Mean and standard deviation of the raw material

RawMaterials	\bar{X}	S.D.	Description	Level
1. Selection of suppliers for raw materials used in the production of OTOP	3.99	0.54	High	1
2. The control of raw material suppliers, product OTOP	3.92	0.68	High	4
3. Purchasing - supplying raw materials used in the production of OTOP	3.98	0.67	High	2
4. Maintaining a raw material used in the production of OTOP	3.93	0.78	High	3
Totalscore	3.95	0.66	High	

From Table 5, the material was found to have been selected to deliver the raw materials used in production (3.99) is the highest level and controlling the delivery of raw materials in the lowest (3.92).

Table 6: Mean and standard deviation of the budget

Budget	\bar{X}	S.D.	Description	Level
1. The financing system used in the preparation of the product. OTOP and the development of packaging and logo	3.97	0.66	High	1
2. Approval of the budget management system ISO 14001	3.81	0.70	High	3
3. The cost of a consultant to prepare the system ISO 14001	3.82	0.69	High	2
4. The cost of the training system ISO 14001	3.64	0.82	High	4
Totalscore	3.81	0.71	High	

From Table 6, the budget showed the sources of funds used in the preparation of the development, packaging and label products OTOP (= 3.97), the highest level, and the cost of training the ISO 14001 is the smallest (= 3.64).

Table 7: Mean and standard deviation of Resources and Environment

Resources and Environment	\bar{X}	S.D.	Description	Level
1. OTOP products manufacturer in Nonthaburi, get the stench from the plant side more or less	2.64	1.24	Medium	3
2. Development of industrial environmental impact on air pollution, more or less	2.70	1.36	Medium	1
3. Community experiencing illegal discharge of waste water from the plant	2.68	1.50	Medium	2
4. Manufacturers OTOP products in Nonthaburi, given the seriousness of dusty	2.63	1.00	Medium	4
Totalscore	2.66	1.27	Medium	

From Table 7, the environmental industry development environment affect air pollution in the highest level (= 2.70), and the company has been the intensity of dust in minimal (= 2.63).

DISCUSSION

The administration, OTOP products manufacturers should be highlighted that the producers of OTOP products, a creative development, packaging and logos (= 4.14), consistent with Treetos (Treetos, 2552B.E.), an organization that focuses on the creative process and goals and objectives and to make the organization better achieve the stated goals, Mekhum (Mekhum, W., 2552 B.E.), found that the development model packaging and logo A participatory manner to raise the standard product (OTOP), the philosophy of Sufficiency Economy in Nonthaburi province, the focus of new product development. Focus on marketing of new products, including the creation of innovative technologies or new product development, general management, the environment, good welfare system. Compensation and incentives to employees (= 4.27), pushing employees to engage employees willing to participate. Will result in a more positive attitude, consistent with Viboonpong and Sriboonjit (Viboonpong, A. and Sriboonjit, S., 2548), a study on SME development strategy to find. Assistance should focus on the development of human resources with the knowledge to be self-reliant by providing education (Educating), a non-training (Training), which many groups have been training a lot. I cannot understand it enough to put into action, the group learned by cultivating a certain way to be effective, the expert group could be a Best Practice on each side or external experts create a learning process within the group and between groups and joint planning U-chenko PLC (Thailand (2546B.E.)), A climate and environment that encourage and support self-reliance, by changing the paradigm of governmental or private first, which led to the measure. and projects that reinforce self-reliance of the group in the next.

Management also found that respondents opinion about the management of the respondents the most is communication within the manufacturer's product OTOP, efficiency (= 3.59), consistent with Petchprasert (Petchprasert, K., 2550B. E.) found that pushes employees to engage employees willing to participate will result in a more positive attitude, which Mekhum (Mekhum, W., 2559B.E.) To study the development of process technology using local knowledge on the processes involved along the sufficiency of the community, Klongkhone. Sub-district, Meung District, Nonthaburi province, that there should be information technology, advertising, radio, television, print media, the internet (Nunthapanich, P., 2549B.E.), to exhibit or participate in various projects, promotion the public through government agencies and sales through direct sales, the rate of new product introduction to customers, communicating with customers after the sale including exhibitions on various locations, the product must have label recommendations and also design surveys to collect data on customer needs, the machinery and equipment, respondent opinion about the machinery and equipment of respondents most queries are the OPTOP producers should be repaired maintenance (= 4.18), maintenance repair machines, new features to enable

organizations to minimize resource consumption, which corresponds with Mekhum (Mekhum, W., 2556B.E.) that there should be a record of maintenance, scheduling maintenance, check the equipment before and after practice, the budget maintains the most, and with manual tools and equipment maintenance that is required to bring advanced machinery used in production. There are plans to produce, with the expansion in production. Products that meet the production needs of our customers, there is no way to monitor product quality, product inspection before underwriting standards to define quality, sending its entrant, warranty and after sales. A warranty, and prepare materials are diverse. Because each training course with the use of composite materials, training is different, some cannot be procured in the district of Nonthaburi province. Because time is limited the material was found, the selection of suppliers for raw materials used in the production of quality can reduce the waste caused by the material, which Mekhum (Mekhum, W., 2559B.E.), Should give priority to the statement purchases of raw materials used in the operation must actually works, and the goods, if the manufacturer selected its quality products, we are manufacturing standards and safety for consumers directly with Diewissares (Diewissares, S., 2527, p. 154), environmental, because the respondents to focus on the environment is the most developed industrial environmental impacts consistent with climate poison. Songsoonthorn (Songsoonthorn, C., 2546 BE: p. 280) found that stable economic, social and environmental good, consistent with Mukda (Mukda, W., 2557B.E.), through the use of resources save longevity and causing damage to the environment as little as possible and in accordance with Mekhum (Mekhum, W., 2556B.E.) found that the technology environment and safety in the workplace, well-lit and have no problem in running noise, no dust or chemicals, planning and fire prevention in the workplace, no pollution, operational issues, there is no smell at work, control areas at risk of harm in the workplace.

SUGGESTIONS

The study factors in the development of products manufacturer OTOP in Nonthaburi province, and analyze the barriers to the development organization under the ISO 14001 standard for environmental management systems of manufacturers OTOP.

1. Employees of OTOP products manufacturers need to focus on learning. Management Environmental Management System with the requirements, procedures, documentation and document control. The organization has developed a systematic and ongoing.
2. Employees of OTOP products manufacturers need to cooperate in the environmental management plan of the producer group product OTOP, in order to maintain the standard ISO 14001.

3. Employees of OTOP products manufacturers need to study and apply the knowledge gained from the training used in practical applications in the production of OTOP products continuously.

4. Management of the Authorities should help to educate visitors about the role of division of labor made. Then the production skills trained to the members in the group, with expertise and creativity.

5. The financial management, there should be funding loans with low interest rates to producers, should be trained in the preparation of financial statements in accordance with accounting principles properly.

6. Management Materials Agencies should provide knowledge, advice, training, development process improvement varied, as well as assistance for other raw materials, which can be local to the renewable and raw materials left over from the production, add value to. the best value for money, or by creating a network linking the manufacturers of the same type or other types, so the use of shared resources.

7. Management methods, the relevant authorities should help to provide knowledge about the structure, rules, regulations, prescribed practices within the group and manufacturers should be coordination between the various agencies, and pursuing opportunities to build networks. The common set of standards to produce the correct direction.

8. Management Market Agencies should provide training to further knowledge in the development of a product model. Quality standards, expanding sales channels OTOP products to more formats to maximize the opportunities and channels to reach consumers, the price should be the price of goods to the market, the public relations should have been advertised advocates for consumers to get to know, through the media, such as leaflets, radio, local TV, websites, and so on.

9. Management building Agencies should provide guidance in the planning process, to train selected members to learn the tools, machinery and equipment used to produce the work, monitoring equipment before each use. Maintenance tools, equipment to extend the service life.

10. Guide the prioritization of the aspects to be used as a guide in determining strategies to solve problems for the producer group next OTOP products.

FUTURE WORK SUGGESTIONS

1. Carefully study the impact of the implementation of the ISO 14001 environmental management system into practice in lowland producers OTOP.

2. Carefully study the factors that influence participation in environmental management activities of producers OTOP.

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