



THE DEVELOPMENT OF A MODEL OF ENVIRONMENTAL MANAGEMENT FOR HEALTH ENHANCEMENT WITH FOREST THERAPY, LAM PHAYA VALLEY, MUEANG DISTRICT, YALA PROVINCE IN THE FUTURE

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ABSTRACT

The objective of this research was to develop a future health enhancement model with therapeutic natural forests using the EDFR technique. The group of experts consists of knowledgeable people. understanding of health enhancement with natural forest therapy, 24 people by two groups of experts were defined as 1) academic experts; relating to policies and operations of natural resources and environmental officer's media group of government officials' independent group and a group of local government organizations and 2) public experts People who are involved in health promotion. The tool used to collect data was the interview and the estimation scale type questionnaire data storage conducted the first round of interviews and used the collected data to create an estimation scale questionnaire. Bring it to the experts in the second and third rounds. The data was obtained from the questionnaire in the final round to find the median, popular base, and the difference between popularity vs median and the quartile range to identify the most probable trends and there is a coherence of ideas between experts to summarize and write a model of the future. They reviewed the format using the connoisseurship of 12 stakeholders, which eventually reached a consensus. The results showed that a model of health promotion with therapeutic natural forest, Lam Phaya Valley, Muang District, Yala Province in the future was appropriate. On ecological and environmental issues. It consists of physical, biological, and useful values. and quality of life. These 4 principles are related by principles, procedures, practices, and programs of the therapeutic natural forest that are suitable in terms of distance, time, and form of the therapeutic nature forest path. as well as the interpretation of nature and must contain a guide and a nature trail map. In addition, such forms must contain meaningful labels. under the health management and health promotion plan as well as having a relationship with people's participation as well taking into account the management of community forests as well as land use and land use planning. This requires a fundamental relationship in watershed management. water management and development of water resources and such forms must be developed in local occupations according to the Sufficiency Economy Philosophy. The young guides in trekking have a role to play in linking the details of the model to drive it well.

Keywords; Development, Model of Environmental Management, Health Enhancement, Forest Therapy

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INTRODUCTION

living in a competitive society and lack of health care in the long term, it will affect the health of the body. The occurrence of various diseases, which will gradually progress the disease slowly, gradually accumulated symptoms continuously until the chronic symptoms of the disease. (Bumrungrad Hospital, Patient Knowledge Management Center, 2016; Samornthip Vibhavanich and Narin Sangraksa, 2016). Thailand has given importance to human resource development. to be physically, mentally and mentally ready. Because Thai people are more

prone to non-communicable diseases. which is the leading cause of death due to improper health risk behavior. This lack of continuous physical activity. Working conditions affecting lifestyle environmental pollution, etc. Therefore, the Master Plan for enhancing Thai people's well-being focuses on enhancing health management in all forms. leading to the potential for self-management of good health (National Strategy Committee, 2018). However, the Thai health system still faces challenges from all aspects such as entering an aging society. The transition from rural society to urban society as well as



technological advances as a result, people have higher expectations of the quality of the service system. while the government budget is limited not enough to support the increase in public health expenditures The Ministry of Public Health has therefore formulated a 20-year strategy to be used as a guideline for the development of the health system. for people to have good health and quality of life and affecting the public health expenditure of the country (Ministry of Public Health, Office of Policy and Strategy, 2017). There are also reviews of the literature on the benefits of spending time in nature on the level of human health and quality of life. Many studies report that spending time in nature is associated with improved health outcomes and improved quality of life. There are also reviews about Shinrin-Yoku and the healing nature forest. that supports health benefits that encompass exposure to nature and the green environment The aim of these reviews is to describe empirical research conducted on the physiological and psychological effects of Shinrin-Yoku, or Forest Bathing (Oh, B., *et al.*, 2017; Hansen, M. M., *et al.* ., 2017). Highlights of the area of Lam Phaya Valley, Mueang district, Yala province, which is located at the top of Lam Phaya subdistrict the condition is a humid evergreen forest. It is a national forest reserve that is rich in nature. Ecosystems have many characteristics, including mountain evergreen forests, freshwater marshes, streams, peatlands, and biodiversity. Most of the area is a plateau. There is a plain within the valley with dense vegetation covering Lam Phaya Valley. Such conditions are beneficial both directly and indirectly to the villagers in the community, namely as a source of drinking water for use within the community. It is a food source and habitat for a wide variety of animals. It is a place to visit and relax. and is a learning center for natural forests and wildlife. Activities performed in the area activities that focus on nature walks and group activities together by using the method of walking along the nature trail to explore plants, streams, waterfalls, dams, and caves (Yala, Rajabhat University, 2016).These

activities are still lacking in health promotion. Therefore, the researcher is necessary and aware of the importance of studying the development of an environmental management model for health promotion through therapeutic natural forests. The researchers used the EDFR technique to visualize the future. And it is a technique that can be applied to policy making. Selection of solutions to obtain facts from the past to solve problems. Research objectives, to develop an environmental management model for health promotion with therapeutic natural forests, Lam Phaya Valley, Muang district, and Yala province in the future.

LITERATURE REVIEW

The papers by Oh, B., *et al.* (2017) discuss the health and well-being benefits of spending time in the forest. Spending time in nature has been reported to be associated with improvements in a wide range of health and well-being outcomes, including Song, C., *et al.* (2016). Research in Japan on the physiological effects of homeopathy says that humans evolved into what it is today after 6–7 million years. If we set the beginnings of urbanization as the rise of the Industrial Revolution. Living is a contributing cause of “stress states” in modern people. Whereas Hansen, M. M., *et al.* (2017) discuss forest bathing and natural therapies, which currently support health benefits that span exposure to nature and the green environment. This review aims to describe the empirical research conducted. The Physiological and Psychological Effects of Shinrin-Yoku (or Forest Bathing) in Japan and China and Lee, I., *et al.* (2017) discuss how effective wild therapy can be in reducing adult depression levels. In addition, a study was conducted on the outcomes of natural forest activities using different techniques, namely Yu, Y. M., *et al.* (2016). He found that the participants were examined for salivary cortisol assessing their quality of life and stress levels four times: before camp, and during camp. and after leaving the camp for 2 weeks and 4 weeks. There was a change in salivary cortisol that can be attributed to exercise during a trekking camp. Increased



quality of life While Yu, C. P., et al. (2017) examined the effect of a short-term forest bathing program on autonomic nervous system activity and emotional states in middle-aged and older adults. to test for changes in autonomic nervous system activity. Mood after participating in the short-term forest bathing program (2 hours) It was found that the changes in autonomic nervous system activity and mood after the short-term (2-hour) forest bathing program were pulse rate, systolic blood pressure, and dia. The stoic was significantly reduced after the program. pointed out physiological benefits As for Ikei, H., et al. (2018) studied naturopaths. Humans have spent more than 99.99% of our evolutionary history in our natural environment. It shows that we were primarily adapting to nature. the gap between the natural environment and Human physiological functions has adapted to the highly urbanized conditions. The artificial environment in which we live today is the reason for this. "Stress state" itself. Modern human experience in the past few years There was scientific evidence supporting its physiological effects. The effect of relaxation is caused by natural stimuli. In addition, the physiological effects of homeopathy, which consisted of flower therapy, were also tested. wooden material garden therapy and forest therapy It is used both in field experiments and in the laboratory. when exposed to natural stimuli It stimulates the function of the prefrontal cortex, causing brain activity. sympathetic nervous activity, blood pressure, heart rate, and stress hormones decrease and the function of the autonomic nervous system increases. Ochiai, H., et al. (2015) studied forest therapy programs' physiological and psychological effects on middle-aged women. The natural environment was increasingly recognized as an anti-stress agent in urban environments. In addition, with the reduction in pulse rates the level of cortisol in saliva decreases. Increase positive feelings and reduce negative feelings. Meanwhile, Ochiai, H., et al. (2015) also experimented with spending time walking and relaxing in a forest environment

(forest bathing or forest therapy). To demonstrate anti-stress effects in healthy adults. From the literature review and related research, it can be concluded that Nature and forests are useful. It has been associated with humans since the early days of human evolution. Even in modern times, humans are starting to distance themselves from nature. the change in social conditions and the development of urban society caused humans to face many health problems, but in the end, what man craves is nature.

RESEARCH METHODOLOGY

Step 1: This studied on the development of an environmental management model for health promotion with therapeutic natural forests, Lam Phaya Valley, Muang District, Yala Province in the future. There were 3 stages of study, namely, Step 1: Study of concept documents, theories, and related research, including ecosystems of Lam Phaya Valley, nature therapy, trekking, nature trails, and interpretation of Nature Trail Guide Nature trail maps and media signs. Step 2 Analyzed the policy framework for health management. health improvement plan Strategy of Yala Province health promotion public participation community forest theory Land use and land use planning watershed management water and water resources development. Local career development based on sufficiency economy principles and future research to link to the study of an environmental management model for enhancing health with natural forest therapy. Step 3 Process the ideas obtained from Steps 1-2 to create a research tool. This was a semi-structured interview, bring it to the advisory board for review and improvement until it was approved.

Step 2 Research by interviewing experts using Ethnographic Delphi Futures Research techniques. There were 8 sub-steps of the study. Step 1: Selection of 24 experts, comprising academics involved in environmental policy and operations conservation of natural resources and the environment, health, and tourism. Step 2. Use the interview framework, which is a built-in tool, and collect opinions from individual experts. These were summarized as the results of the study and used to



analyze the content (Content Analysis) on various issues to create tools in the next step for Round 1. Step 3: Use the analysis and synthesis results from the data from the 1st round of interviews to find the frequency and create an appropriate model assessment form for the development of an environmental management model for health promotion with therapeutic natural forests. It was a 5-level rating scale. Step 4: Adopt an appropriate model assessment form in environmental management for health enhancement through natural forest therapy, created and improved according to recommendations sent back to the original group of experts. In order for each person to evaluate the importance of each issue for a second round. Step 5: Apply the answers obtained from the appropriate model assessment of environmental management for health enhancement through natural forest therapy. of experts in the 2nd round to analyze the median, mode, and interquartile range. Step 6 Bring the analysis results from round 2 back to the experts by showing the answers of each expert, along with the median, baseline, and interquartile ranges of each question, based on an analysis of all expert groups. to the same group of experts to determine the score. They verify the original answered or changed the new answer with reasons for the 3rd round. Step 7: Answers from the 3rd round of experts' Optimal Model Character Assessment Questionnaire were analyzed for median, mode, and interquartile ranges. Step 8 Summarize the results of the data analysis after all points have reached consensus, take the data, process it, and draw conclusions from the research to paint a picture of the future.

Step 3: Examination of research results, including the suitability of research findings for utilization by connoisseurship. The researcher brought the research results, which are the conclusions of the study of the development of an environmental management model for health promotion with natural forest therapy, Lam Phaya Valley, Muang district, Yala province in the future. Finally, 14 seminars were held. people to certify the results of

the research as well as the appropriateness of the research results.

Population, selection of experts for the 1st and 2nd rounds of interviews, the selection of experts to interview on the issue according to the tools that have been created, rounds 1 and 2 are purposive sampling. Criteria formulation was an expert who is an academic. relating to environmental policies and operations Conservation of natural resources and the environment, health, tourism group of government officials' independent organization Local government organizations and general people who are involved in the use of the Lam Phaya Valley.including a total of 24 experts.How to select qualified persons in the process of referral connoisseurship selected a positive Sampling number of 14 people by specifying criteria related to environmental policies and operations conservation of natural resources and the environment, health, law, public relations group of government officials, and a group of local government organizations which is different from the expert group.

Research tools, Interview Guidelines by interviewing all sample experts. The interview frame was set for the Lam Phaya Valley ecosystem. Nature therapy, trekking, nature trails, and interpretation Nature Trail Guide nature trail map Meaningful sign health management. The public participation community forest theory Land use and land use planning watershed management water and water resources development Local career development according to the Sufficiency Economy Philosophy.

Data collection,In Data collection in Round 1, the researcher personally contacted the researcher to explain the research objectives and research methodology that requires data collection in 3 steps. The first stage was an interview that takes about 1-2 hours.Steps 2 and 3 send the questionnaire from the interview to fill out, which takes approximately 1-hour to schedule an appointment for an interview and conduct an interview data collection in round 2.The

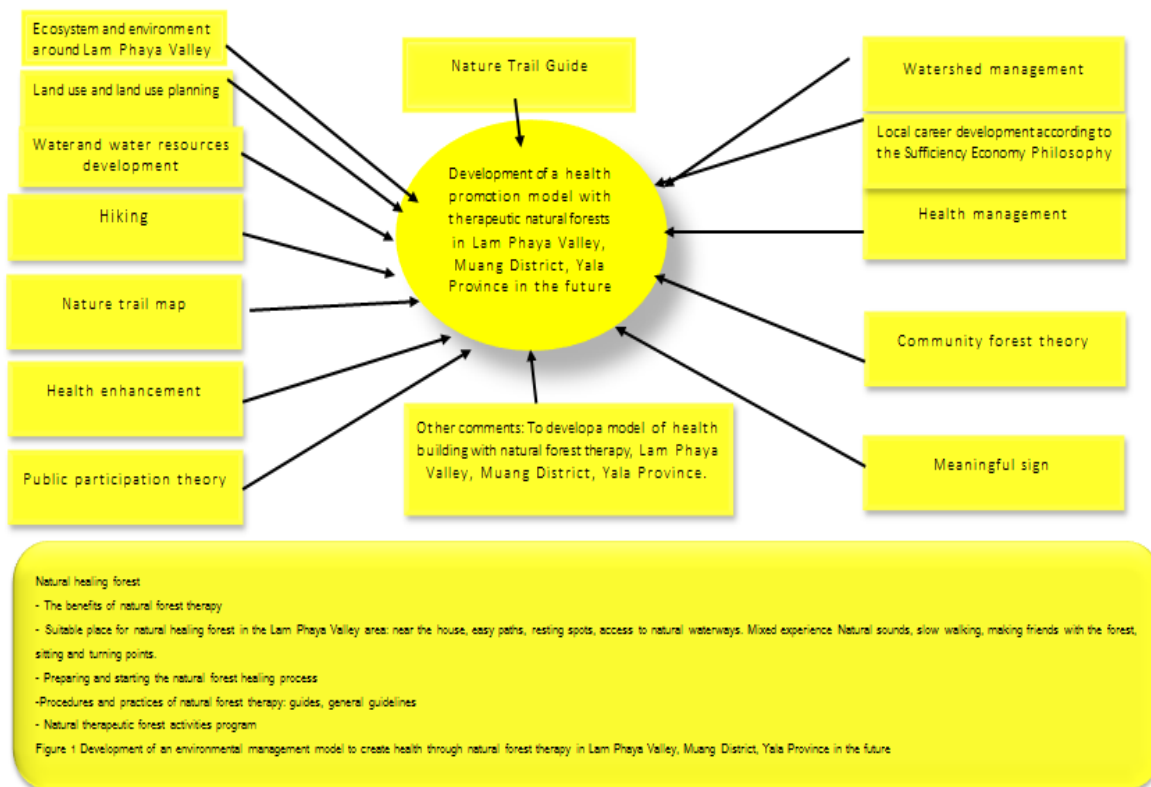
researchers analyzed the data from 24 questionnaires. In data collection in the third round, the researcher sent the interview form to the expert to confirm the research results.

Data Analysis,The median, popular and interquartile ranges were analyzed individually. Then, a trend with a median of 3.50 and above is selected to create a questionnaire to collect data in the third round to analyze the median, popular base, difference between base and median, and interquartile range.for each interpretation, the researcher has determined that A median between 4.50-5.00 shows that experts see the message as the most likely trend to occur. A median between 3.50-4.49 shows that experts consider the message to be highly likely that the trend will occur. A median between 2.50-3.49 shows that experts consider the message a moderate likelihood of the trend to occur. A median between 1.50-2.49 shows that experts see the message as less likely that the trend will occur. A median between 1.00-1.49 shows that experts consider the message the least likely to occur. Interquartile range the researcher calculated the difference between the 1st quartile and the 3rd quartile. Interquartile range the calculated trend of whichever trend is less than or equal to 1.50 indicates that the opinions of experts on the trend were consensus. An interquartile range of any trend greater than 1.50 indicates that the opinions of experts on the trend are inconsistent. The value difference between popular base and median interpretation If the value of the difference between the base and the median values does not exceed 1.0, the opinions of the experts on the statement are deemed consistent.Consistency considerations of any statement whose interquartile range does

not exceed 1.50 and the difference between base and median do not exceed 1.00 is consistent. In case any message has a range between the quartile that does not exceed 1.50, but the difference between the popular and the median exceeds 1.00 or vice versa, the statement is considered inconsistent.

RESEARCH RESULTS

The following showed an analytical model for the development of an environmental management model for health promotion with natural forest therapy in Lam Paya Valley, Muang District, Yala Province in the future. that's right. This can be explained in detail, that is, there is a model developed according to the concept of natural healing forest on ecological and environmental issues It consists of physical, biological, and useful values. and quality of life. These 4 principles are related by principles, procedures, practices, and programs of the therapeutic natural forest that are suitable in terms of distance, time, and form of the therapeutic nature forest path. as well as the interpretation of nature, which must include a guide and a nature trail map. In addition, such forms must contain meaningful labels. under the health management and health promotion plan as well as having a relationship with public participation as well. Taking into account the management of community forests as well as land use and land use planning. This requires a fundamental relationship in watershed management, water management, and water resources development. As well as such models, there must be the development of local occupations in accordance with the Sufficiency Economy Philosophy. In order to have a link to the details of the model to drive it well.



DISCUSSION AND CONCLUSION

Discussion

Data analysis was conducted to study guidelines for the development of environmental management models for health enhancement through natural forest treatments. and to find opinion trends, and consistency, i.e., people have good physical and mental health, resulting in a good mood. and able to pursue a career It was the starting point for political, social, and economic development. Trees, mountains, streams, and land are the factors of life. which was consistent with the description of Vadakkanchary, J. (2003). Naturopathic doctor Owner of a Natural Healing Center in India described Natural therapy as the treatment of body and mind by natural processes. based on the principle that all kinds of diseases This makes it appropriate to develop into a source of health-enhancing tourism in the future. Because Thailand still has a private system, resulting in dependence on the government system. Corresponding to Wichit Ruangpan (2018) Said that the basic system of Thai society, which has been around since ancient times, has been rewarded for doing good deeds. Even today, it was

still used as a habit of claiming that generosity causes more harm than benefit. and should allow the community to participate in thinking Participate in planning decisions from the beginning. which is consistent with the research of Kasem Tiengtham (2015) has conducted a study on the Development of Phu Mungkorn Green Nature Trail with the participation of Thap Lan villagers in Buprahman Subdistrict, Nadi District, Prachinburi Province by emphasizing conveying meaning in the way of life using local wisdom The use of religious therapy in the forest according to the way of life and culture of the locality, such as inviting monks to preach, walking in the forest, praying in the forest that is used as a natural forest source. take care of food Change the way of life in accordance with nature. and use therapeutic music from the forest such as birdsong, insects, wild animals, wind, the sound of waterfalls, and running water to help relax the mind. This was in line with Wanbut's Yuphakeset (2019), which referred to forest bathing as a special invisible drug. It was also consistent with the description of Ching Li (2522) that was to be in the midst of nature. will help restore the mood because of the sound of the forest The smell of the trees, the sun, and the fresh air. will make us feel free and



Reduce stress and anxiety In addition, Oh, B., et al. (2017) discusses research in natural contexts that exposure to “forest” or “forest therapy” was helpful in managing psychological symptoms including anxiety. Anxiety, depression, mood disorders, burnout stress caused by lifestyle. There were clear measures to prevent invasion and destruction. The soil should always be fertile. Plants are planted that create ecosystems together. This corresponds to the concept with Kasem Chankaew (2015) discussed watershed management that must take into account the suitability of land use. should arrange a historical tour in which Lam Phaya There is a soil suitable for building Buddha images, namely giant garlands or traveling according to the way of Lam Phaya people. There should be sweeping leaves to enter the base of the tree. Sompong Nilphan, (2016) has studied soil knowledge and analyzed spatial data for land development covering the issues mentioned above in the Lam Phaya Valley issue. Provide comprehensive natural wastewater channels. The water was pollution-free and can be used to grow plants within the community. It should be a source of water that can flow from the forest to the community. Do not throw rubbish into water bodies. and utilized from water sources in agriculture which corresponds to (Wichit Ruangpan, 2018 ; Kasem Chankaew, 2015 ; Clifford, M. A. 2018) set zone to open industrial factory in the area Organize an area that presents air quality issues of Lam Phaya Valley. Lam Phaya Valley had the best air in the south. When touching and inhaling, it is cool and refreshing. and plant more trees to have good weather (Rueangpan, V. 2020a; Rueangpan, V. 2020b; Kasem Chankaew, 2013) Do not move to destroy Designated as a reserve. Do not trespass, destroy. The community participates in the care, surveillance, presentation of mineral stones found in the area. Preserve natural rocks and minerals, do not add, repair or destroy, and do not excavate rocks, try to be in the natural state as much as possible (Rueangpan, V. 2020; Kasem Chankaew, 2013; Selhub, E. N., & Logan, A. C., 2012). Should think of rules for entering the area. to prevent the

destruction of forests/ecosystems from tourists/people who want to take care of their health. There should be no factory Offices or buildings in the natural forest area to avoid disturbing nature and blocking the scenery of the forest. There should be a variety of natural resources. and avoid building too many roads (Kasem Chankaew, 2013; Aphichit Wongtubtim, 2010 ; Hirano-Takemura, F., 2011) about ecosystems and the environment; in terms of biologics, rules of entry should be considered; to prevent deforestation/ecology (Aphichit Wongtubtim, 2010; Nordbo, I., & Prebensen, N. K., 2015) The community participates in surveillance and surveillance of crimes in the area. Establish a no-hunting/bird shooting area Conservation of endemic birds, consistent with Yu, Y. M., et al., (2016). They discussed the role of forests and their values in the quality of life for human beings, which are important in the field of joint surveillance. and corresponds to the concept of (Erwin, W., 1976). Measures to prevent chemical spraying Pesticides in the natural forest area of Lam Phaya Valley and create moisture for the forest (Ministry of Public Health, 2020 ; Wichit Ruangpan, 2017; Shin, W. S, Shin, C. S., & Yeoun, T. S., 2012) There should be a clear distinction between dangerous animals and humans that will enter. Reptiles can be kept in their original environment if they do not cause harm to humans. and do not shoot reptiles for food (Wichit Ruangpan, 2015 ; (Kanchaya Mao Siew and Charunthorn Bunyanupar, 2014) The community participates in surveillance and surveillance of crimes in the area. Watch out for disturbances and conservation. including propagation and conservation and propagation of rare animals under the supervision of experts (Kasem Chankaew, 2013; 2015; Kongkrit Somchai, 2020) There were relevant officials or organizations to explore the forest. The vegetation was suitable and does not harm the villagers or animals. and raise awareness of forest and plant resources conservation (Kuljira Saowaluckchinda, 2012; Kasem Chankaew, 2015; Vichit Ruangpan, 2018) The water resources were fertile and fertile in both the soil clean water, and



air benefit communities and other living things. The population is suitable for the area, not too dense. Government officials educate the people. There were leaders and administrators planning the geography of the community. Determine the population appropriately and not be too crowded. and ask about the needs of the local people (Rueangpan, V., 2020a; 2020b). The roadside accommodation should be built with local architecture. Create nature along the way. Build a simulated forest along the way. Keep the place tidy and only do what is really necessary (Mett Mettkarunchit, 2010; Yala, Yala Rajabhat University, Biodiversity Research Center, 2016). The state must support to educate the public, have a land mark, take pictures, be safe for people's lives. wildlife and property create local occupations for the community by organizing them in proportions without encroaching on the original nature. Always restore tourist attractions to be perfect. ecotourism and learn nature and study biodiversity the benefits of plants (Cohen, J. N. & Uphoff, N. T., 1981). Limit the use of plastic bottles and encourage reuse. And to bring plastic waste back to the dumping point at the entrance. Build a public health system to serve the people and establish a system for preventing the alarm in the event of an accident (Rueangpan, V., 2020a; 2020b). Build understanding between the community and the Lam Phaya Valley forestry organization value creation of antique/old houses in the area and set up separate conservation and trade zones for good views. and separate government zones and community locations to reduce congestion and traffic congestion (Lampaya Subdistrict Administrative Organization, 2018; Adisorn Phusara, 2021). The community of the community should understand and see the value of the Lam Phaya Valley forest. Creating social rules for coexistence helps to prevent deforestation. Penalties are imposed if there are violations of social rules. which must set the rules together and help to take care of the safety when using natural forest therapy (Rueangpan, V., 2020a; 2020b ; Kasem Chankaew, 2013 ; 2015). Leaders had morals, and ethics, no bias, no bias, and educate people about politics and governance. Developing citizenship for people. It should be a

political ideal, have a public mind, protects the environment, and focuses on the real benefit of the community. community development that creates a career and income and provide a safety system for the people's brothers and sisters (Somying Sunthornwong, 2011 ; Worakiat Chaichana, 2016). It was a pilot community in the field of natural healing forests. It is an academic center on natural forest therapy. and create youth as role models in coexistence with the forest (Mett Mettkarunchit, 2010; emphasis added). Kwanchai Unhawattanapaiboon, Pairach Wongyuttakhrai and Thanarat Taewattana, 2015). There was an environment-friendly system by relied on experts together with the community to set up the system and create a waste management concept for people in the community to practice routinely. There is an intermediary between government agencies and waste from people in the community. and to have a volunteer spirit in taking care of water sources (Masawat, J., Rueangpan, V., Thongmak, N., Kaewmanee, J., 2021). Creating warning signs in areas that are at risk of disasters such as landslides. Establishing a public health care center to help people from disasters. Build a body of knowledge and awareness of love for the forest and love for the community. and prepare materials and equipment ready. Prepare for disasters that may occur (Komkrit Chanchum, 2014). Clean food containers. Reduce the use of plates, and plastic cups, or use natural utensils. Ingredients used for cooking are fresh, clean, and safe, and the ingredients are kept completely. no swarming flies create an atmosphere surrounded by nature. Provide adequate food outlets. a person who cooks. There should be an annual health check. And food vendors should be vaccinated against the disease adequately. especially in the current epidemic situation (Yu, C. P., et al., 2017). There was communication and public relations with the public. The community knows if there is an initial illness. Where can I get generic home remedies and had a doctor in the hospital make a preliminary diagnosis through communication channels, synchronization, for and warding, when there was an emergency, will coordinate with any agency. Contact number 1669. Knowledge rehabilitation training every year. to the



person in charge of the first aid unit and the construction of a first aid center when people are involved in an accident (Vadakkanchary, J., 2003; Yu, Y. M., et al., 2016). Establish a cooperative as a source of funds for the community to organize a campaign to prevent deforestation and promote careers for people who meet their needs (Aminatun, T., et al., 2022). The use of natural sounds to stimulate memory and thoughts. The smell of the forest of nature contains oxygen. Safe from various pollution and application in the way of natural forest therapy for use in urban or public places. which does not require much investment but it promotes feelings of a good, relaxed, and happy mind (Fellow, 2018). Provide a few guides in the area that have communication tools and a network that can be called 24 hours a day (Aminatun, T., et al., 2022; Fellow, 2018). An assessment box with a pen or QR code is available for self-assessment to improve knowledge. There were nature sounds, wind, streams, animals, the smell of flowers, trees, air, and streams, and it's a place with a good atmosphere (Kasem Chankaew, 2015; Hansen, M. M., Jones, R., & Tocchini, K., 2017). Prepare and construct facilities such as restrooms, religious rooms, and explore natural resources. The place must be fertile both in terms of ecosystems. air purity a safe place and to study whether the community was safe or if there was a conflict in the community (Aminatun, T., et al., 2022). Develop a program to learn the context of the area. There were specialists in the implementation of the program. is a human program in public health and forest the same part and listen to the introductory lecture Introducing areas and locations (Song, C., Ikei, H., & Miyazaki, Y., 2016). There were experts in bringing There are clear instructions for trekking. get enough sleep and have all the amenities ready. Provide roadside seating as a place to relax. Prepare guides who are skilled and able to solve specific problems. First aid by professionals or volunteers must have an overall safety supervisor (Yu, C. P., et al., 2017; Yu, Y. M., et al., 2016). The convergence route should focus on the nature study route. and focus on converging paths in order to be able to meet. Corresponding to Qing Li (2522), mentions forest bathing. trees can

help people to be healthy and happy. The sparse forest path has easy entry and exit routes, clear, clear maps, not lost, safe and secure, forest creatures and walkers A walking path that traverses the existing nature path. and avoid cutting new routes that affect existing environments (Qing Lee, 2022). The distance may be determined individually according to the ability of the walker, and there are 2 distances for the general public. and elderly people (Kongkrit Somchai, 2020). They prepare walking guides for walkers. guide how to walk or how to behave while studying the nature path by a lecturer before walking Learn the benefits of herbs know the beautiful nature and help highlight the conservation of natural forests (Clifford, M. A., 2018a; 2018b). The contents of the manual are checked by experts. clarity of the manual the contents of the manual are designed by experts in related fields. The content covers first aid. Precautions for walking and a pamphlet for ease of portability (Jintana Suksomdan, 2011; Chirachaya Ketprom, Itthipol Raikriengkrai, Satree Thai Bush, and Naruchit Dampin, 2020). Development of a health communication model related to the model of health promotion through natural forest therapy that is modern Easy access to information, accurate and reliable. (Ministry of Public Health, 2020; 2017). Make it consistent with the way of life and a multicultural economy and a model of health promotion with natural forest therapy should be integrated with modern medicine and alternative medicine (Aminatun, T., et al., 2022). Making a healing forest in Lam Phaya Valley is considered to create an environment that is conducive to promoting the health of people in the community. and those who are interested There should be developed to build the potential of the community. Integrate organizations across all sectors to achieve realistic action (Clifford M. A., 2018a; 2018b). The analysis of environmental synthesis Natural forests or environmental changes affecting health (Vichit Ruangpan, 2018). Organizing an exhibition to educate both forest bathing and nature study emphasis on health tourism and the community is involved in tourism management (Arnstein, Sherry, R., 1969). For those who want peace, self-reflection,



and understanding of life, and those who want to increase their energy in life. Self-learning for people with depression It should involve the participation of family, and caregivers, and in perfect physical and mental health. and enjoys hiking (Clifford, M. A., 2018b).The strengthening community activities Personal skill development in health care and appropriate adjustments to the health care system (Berkley, G. E., 1975). Using folk wisdom in health promotion activities from co-thinking, co-planning, co-operation, and co-responsibility (Arnstein, Sherry, R., 1969; synonyms). Vichit Ruangpan, 2018). Everyone in the community had one heart should be carried out jointly by both the government and community appropriately and jointly determine project assessment issues (Wichit Ruangpan, 2018; Kasem Chankaew, 2015; Rueangpan, V., 2020a). It should be a form of participation. with academics on natural resources and environment Professional public health academics come to consult. Emphasis on participatory community forest management There is a committee in community forest management. and have a sign showing the community forest boundary (Dusit Vejkit, 2019). The report should provide a clear, concise framework for the assessment. It doesn't take too long to prepare. until it becomes an obstacle to the operation focusing on reporting until the disturbing time should see if the community forest performance has been successful or not. and report on the performance of community forests and whether they should be canceled or not (Somying Soonthornwong, 2011). The consultation with someone with specific knowledge of land use science or geology should be consulted. Use land resources to have the least negative impact on nature and the environment. and focus on building understanding with community members (Kasem Chankaew, 2013; 2015; Rueangpan, V., 2020a; 2020b; Sompong Nilphan, 2016) In organizing the process of brainstorming opinions from various agencies, there are government agencies to control or support them by law. Demarcate boundaries and have clear control measures. There are regulations for use, measures to be notified to everyone and to be aware of, comply

with, and should determine that What areas should be prohibited from burning garbage? (Wichit Ruangpan, 2018) Should be studied in detail. To determine the quality class, it covers, the second tier is the high area, the second with a slope of 30-50% focusing on natural forests, the fourth tier is the hillside with a 6-25% slope for fruit plantation, and the fifth tier is the sloping slope. a little Slope less than 5% used for farming (Kasem Chankaew, 2013; 2015). train people to speak the truth Actual and save time honor and honor people with special knowledge than those who rely on the bureaucracy has a special knowledge that he loves as a score higher than his field of study Do not destroy trees, water bodies, and valley areas, and always maintain good water quality (Tilden, F., 1982; Yu, Y. M., et al., 2016; Aminatun, T. et al., 2022).rely mainly on knowledge from irrigation experts. And the agricultural sector has inspected natural resources throughout waterways, soil, air, and has water storage facilities in case of dry water. and using water containers instead of releasing water (Kasem Chankaew, 2013; 2015; Rueangpan, V., 2020a). Build a sewage system without affecting the water resources in the forest. and be careful of the safe use of agricultural chemicals (Fellow, 2018 ; Hirano-Takemura, F., 2011)Emphasis on community members spending economically Emphasize community members to owe only what is necessary. and live in the middle way (Wichit Ruangpan, 2018) Strengthen local communities and societies that are aware of reducing risk factors affecting health. Adding factors contributing to good health and actively participate in health promotion operations by using forest resources cost-effectively (Kasem Chankaew, 2015). Emphasis on community members to be honest and honest Emphasis on community members to be diligent and instillingparticipating consciousness to work for the common good (Rueangpan, V., 2020b).

Developing an environmental management model for health promotion with natural healing forests, Lam Phaya Valley, Muang District, Yala Province. In the future, there should be places where people can safely enjoy water flowing in natural streams. Mixed experience (Opa San Ngam, 2014)

CONCLUSION



The model of health promotion with therapeutic natural forest, Lam Phaya Valley, Muang district, Yala province in the future was appropriate. The on ecological and environmental. And physical, biological, and useful values. and quality of life. Furthermore, such forms must contain meaningful labels under the health management and health promotion plan as well as have a relationship with people's participation as well taking into account the management of community forests as well as land use and land use planning. There was a fundamental relationship between watershed management and the development of water resources and such forms must be developed in local occupations according to the Sufficiency Economy Philosophy.

REFERENCE

- Adisorn Phusara. (2561). Community Forest: Government Management for People. Humanities **Journal and social sciences**. 9(1): 1-21.
- Aminatun, T., Kuswarsantyo, Suhartini, Rangan, V., Prasojo, S. H., Andreyani. (2022). Sustainable community forest management in West Kalimantan: A case study of the Dyak Katab Kebahan community. **Journal of Natural Resources and Environmental Management**.12(1): 158-174.
- Aphichit Wongtubtim. (2010). **National Forest Resource Conservation Day**. Department of Forestry, Ministry of Resources Nature and the environment.
- Arnstein, Sherry R. (1969). A Ladder of Citizen Participation. **Journal of the American Planning Association**,35(4): 216-224.
- Berkley, G. E. (1975). **The Craft of Public Administration**. Boston: Allyn and Bacon.
- Ching Lee. (2562). **Bathing in the forest. Trees help people to be healthy. How can you be happy? Translated by Amporn Onpairat**. Nonthaburi : Sukhothai Thammathirat Open University Press.
- Chirachaya Ketprom, Itthipol Raikriengkrai, Thai Women Bush and Naruchit Dampin. (2020). Development guidelines. Meaningful sign Self-study of mangrove forest nature: a case study, study project, research and development of the Laem Phak Bia environment under the Royal Initiative. **Journal of the Faculty of Humanities and Social Sciences Nakhon Sawan Rajabhat University**.7(1): 201-217.
- Clifford, M. A. (2018a). **YourGuide to Forest Bathing: Experience the Healing Power of Nature**. Newburyport.
- Clifford, M. A. (2018b). **Association of nature and forest therapy Guides and programs**. [Online]. Available: www. Nature And Forest Therapy. [13 December 2020].
- Cohen, J.M., & Uphoff, N.T. (1981). **Rural Development Participation: Concept and MeasureForProject Design Implementation and Evaluation: Rural Development CommitteeCenter forinternational Studies**. New York: Cornell University Press.
- Dusit Vejkit. (2019). **Benefits from Community Forests**. [Article]. Accessed from: [http://www.recoftc.org/thailand/projects/cf-net/stories/benefits from community forests](http://www.recoftc.org/thailand/projects/cf-net/stories/benefits-from-community-forests). [6 August 2065].
- Erwin, W. (1976). **Participation Management**. Concept Theory and Implementation. Atlanta G.: Georgia State University.
- Fellow. (2018). **Natural Therapy**. [Facebook]. Available:<https://www.facebook.com/152274428949096/photos/natural-therapy>. [24 มกราคม2564].
- Hansen, M. M., Jones, R., & Tocchini, K. (2017). Shinrin-yoku (Forest bathing) and nature therapy: A state-of-the-art review. **International Journal of Environmental Research and Public Health**. 14: 2532-2542.
- Hirano-Takemura, F. (2011). **The Project of Forest Bathing Trip Municipalities**. 1-6.
- Ikei, H., Song, C., & Miyazaki, Y. (2018). **Nature therapy**. In CU-MU Joint Symposium 2018: Toward the Researches & Innovations for Food and Global Health 26th January 2018. Bangkok: Mahidol University.
- Jidapha Wankarem. (2015). **Development of a map showing nature study points on the ecotourism route, Khao Chet Yot, Phatthalung Province and Trang Province**. Master's Thesis



Environmental Management Prince of Songkla University.

Jintana Suksomdan. (2011). **Manual development**. [Weblog]. Accessed from: http://jsuksomdan.blogspot.com/2011/02/blog-post_16.html. [15 April 2024].

Kanchaya Mao Siew and Jarunthorn Bunyanupar. (2014). Analysis of Changes, Causes and Effects of Land Use in the Lower Suan River Basin, Nan Province. **Journal of Forestry**.33(2): 131-148.

Kasem Chankaew. (2013). **Integrated Environmental Management**.3rd printing, Bangkok: Kasetsart University Press.

Kasem Chankaew. (2015). **Environmental Science**. Print No. 9. Bangkok: Kasetsart University Press.

Kasem Thiengtham. (2010). **Development of Phu Mangkon Khiao Nature Trail through the participation of Thap Lan villagers**. Buprahman Sub-district, Nadi District, Prachinburi Province. Master's Thesis Agricultural Development Program Faculty of Agricultural Technology King Mongkut's Institute of Technology Ladkrabang.

Komkrit Chanchum. (2014). **Application of Geographic Information System for Assessing Risk Areas. Landslide disaster in Yala province**. Yala Publishing House : Graduate School Yala Rajabhat University,.

Kongkrit Somchai. (2020). **Trekking. The benefits of an adventure that can both physically and mentally health**. [Weblog]. Accessed from: <https://hellokhunmor.com/health/knowledge/about-General-health/benefits-of-the-trekking/>. [6 April 2024].

Kuljira Saowaluckchinda. (2012). **Community Participation in Tourism Management: A Case Study of Inburi District. Singburi Province**. Faculty of Business Administration Rajamangala University of Technology Thanyaburi.

Kwanchai Unhawattanapaiboon, Pairach Wongyuttakhrai and Thanarat Taewattana. (2015). Development of a model for career promotion according to the philosophy of sufficiency economy. **Journal of Industrial Studies**.9(1): 34-45.

Lee, I., Choi, H., Bang, K. S., Kim, S., Song, M. K., & Lee, B. (2017). Effects of forest therapy on depressive symptoms among adults: A systematic review. **International Journal of Environmental Research and Public Health**. **14**: 321-368.

Masawat, J., Rangpan, V., Thongmak, N., Kaewmanee, J. (2021). Solid Waste Management in Banthreampunya School. La-ae subdistrict, Yala Province, Thailand. **Journal of Physics: Conference Series**. 1(1835).

Mett Mettkarunchit. (2010). **Local education management : by the community, for the community and Thai society**. Bangkok : Bookpoint Publishing House.

Ministry of Public Health, Office of the Permanent Secretary, Ministry of Public Health. (2017). **Strategic Plan, Ministry of Public Health,2017–2021**. Bangkok.:

_____. (2020). **Announcement of new health policy, dharma, Thai way, sufficiency economy Ministry of Public Health**, B.E. 2021-2027. Tho 02242/ Wor 1267.

Nordbo, I., & Prebensen, N. K. (2015). Hiking as mental and physical experience. **Advances in Hospitality and Leisure**, **11**: 169–186.

Ochiai, H., Ikei, H., Song, C., Kobayashi, M., Takamatsu, A., Miura, T., Kagawa, T., Li, Q., Kumeda, S., Imai, M., & Miyazaki, Y. (2015). Physiological and psychological Effects of forest therapy on middle-aged males with high-normal blood pressure. **International Journal of Environmental Research and Public Health**, **12**(3), 2532–2542.

Oh, B., Lee, K. J., Zaslowski, C., Yeung, A., Rosenthal, D., Larkey, L., & Back, M. (2017). Health and well-being benefits of spending time in Forests: systematic review. **Environmental Health and Preventive Medicine**. **22**(71): 1-12.

Opal Sang Ngam. (2014). **Nature study path design and interpretation on Khao Kho Hong, Hat Yai District, Songkhla Province**. Master of Science Thesis in Environmental Management Prince of Songkla University.

PTT Reforestation Institute Forest bath at Wang Chan Forest Learning Center Ep.2. [weblog]. Accessed from:



tp://www.pttreplantation.com/Storyview.cshtml?id=69. [February 2, 2064]. Sompong Nilphan. (2016). **Soil knowledge and spatial data analysis for land development**. [Lecture]. Bangkok : Soil Survey and Soil Resource Research Division.

Rangpan, V. (2020b). Guideline for Sustainable EcoSystem Development in the Manao Bay and Thanyong. Mountain National Park Narathiwat Province southern Thailand. **The 3rd NICE (2020), Thailand. 2020**, 156-170.

_____. (2020a). Guideline for Sustainable Eco System Development in the Wasuki Beach Pattani Province southern Thailand. **The 3rd NICE (2020), Thailand. 2020**, 547, 598.

Selhub, E. M., & Logan, A. C. (2012). **Your Brain on Nature: The Science of Nature's Influence on Your Health, Happiness and Vitality**. Mississauga, ON: John Wiley & Sons.

Shin, W. S., Shin, C. S., & Yeoun, P. S. (2012). The influence of forest therapy camp on depression in alcoholics. **Environmental Health and Preventive Medicine**, 17(1): 73–76.

Somnithip Vibhavanich and Narin Sangraksa. (2016). **Development of a health promotion model according to Philosophy of Sufficiency Economy for Community Health**. Journal of Silpakorn University. 9(2): 1207-1223.

Somying Soonthornwong. (2011). **Community forest and Thai society**. [online]. accessible from: http://www.recoftc.org/thailand/stories/community_forest_and_Thai_society. [February 5, 2065].

Lam Phaya Subdistrict Administrative Organization. (2018). Local development plan (2018-2022). Yala.

Song, C., Ikei, H., & Miyazaki, Y. (2016). Physiological effects of nature therapy: A review of the research in Japan. **International Journal of Environmental Research and Public Health**. 13: 781–797.

Tilden, F. (1982). **Interpreting Out Heritage**. 3rd ed. Chapel Hill. The University of North Carolina Press.

Vadakkanchary, J. (2003). **Homeopathy. in the narrative "Natural Therapy"**, June 9, 2003. Bangkok: Institute of Thai Traditional Medicine.

Vanbut Yuphakeset. (2019). **Forest bath, the invisible miracle drug**. [Weblog]. Accessed from: <https://web.tcdc.or.th/th/Articles/Detail/forest-bathing>. [25 January 2064].

Vichit Rangpan. (2012). **Development of a model of internal education quality assurance of Yala Rajabhat University towards excellence**. Yala Rajabhat University. Yala.

_____. (2018). **Sustainability of the environment according to the Sufficiency Economy Philosophy according to the Royal Initiative**. First Edition. Bangkok: Sahamit Pattana Ki Print (1992) Co., Ltd.

_____. (2017). **Coastal Aquaculture Ecology**. 3rd printing Yala : Yala Rajabhat University Press.

Worakiat Chaichana. (2016). **Social Welfare Arrangement for Persons with Disabilities In the area of Lam Phaya Subdistrict Administrative Organization, Muang District, Yala Province**. Independent Research Master of Public Administration Management College of Management for Development (TSU-MDC) Thaksin University.

Yala, Rajabhat University, Biodiversity Research Center. (2016). Virtual Museum Lam Phaya Valley Nature Study Route. [Online]. Accessed from: <http://lumphaya.stkc.go.th/About/002.html>. [10 December 2020].

Yu, C. P., Lin, C. M., Tsai, M. J., Tsai, Y. C., & Chen, C. Y. (2017). Effects of short Forest Bathing program on autonomic nervous system activity and mood states in middle-aged and elderly individuals. **International Journal of Environmental Research and Public Health**. 14(8): 1-12.

Yu, Y. M., Lee, Y. J., Kim, J. Y., Yoon, S. B., & Shin, C. S. (2016). Effects of forest therapy camp on quality of life and stress in postmenopausal women. **Forest Science and Technology**, 12(3), 125–129.

