

FACTORS INFLUENCING THE EFFECTIVENESS OF HERBAL CITY UNDER NATIONAL MASTER PLAN ON THAI HERBAL DEVELOPMENT

Wattanasak sornrung^{1*} Boonthai Kaewkhuntee² Tanapol Kortana³

College of Innovation Management Suan Sunadha Rajabhat University

1 U-tong Nok, Dusit, Bangkok, Thailand

E:mail: wsornrung@gmail.com,boonthai.ke@ssru.ac.th,tanapol.ko@ssru.ac.th

ABSTRACT

The objectives of this research were 1). To study the present condition and relationship of herbal city management model under national master plan on Thai Herbal Development 2). Factors influencing the effectiveness of herbal city of herbal development under national master plan by using quantitative research method, sampling group was executive and operator, herbal city project, the representatives of The Federation of Thai Industries, the representatives of Provincial Chamber of Commerce, Herbal City Development Team and Thai Herbs entrepreneur in 4 provinces for 280 people. The ratio of sampling group 1:20 of observable variables totally 14 variables using random sample sampling method, data collection analysis from questionnaire by using structural equation. Research result found that innovative factor was medium mean level at 3.4 when considered in each part found that all parts were medium mean level during 3.29 to 3.27. Organization and human capital was high level when considered in each part found that mission of government office and herbal establishment model were medium mean level at 3.46 and 3.36 respectively. Human management was high mean level at 3.72. Supporting system was medium mean level at 3.35 when considered in each part found that all parts were medium mean level between 3.13 and 3.47, effectiveness was medium mean level at 3.34 when considered in each part found that herbal product development, marketing process and sustainability were medium mean between 3.07 and 3.35 while research and development and happiness of people were high mean level at 3.59 and 3.54 respectively and innovation influencing the effectiveness at the path coefficient value .37 at statistical significant level .05 and indirect influencing through organization and human capital. Supporting system was path coefficient value .05 at statistical significant level .05

Key work: innovative management/ effectiveness of herbal city

INTRODUCTION

Currently, the trend of demand for health care increases especially using medicines from herbal for treatment is the natural product which has the value 1.31trillion baht. From survey the marketing value of health products in 2015 and have the increasing trend, average market value growth 5-9 percent in among Asia Pacific countries have the market value over 25 percent, have the highest growth rate when compared to other regions in the world (Euromonitor International, 2016)

Thailand is the country that has biodiversity. From survey found that the plants that know the science name more than 20,000 species or 8.1 percent of plants species found all over the world, this amount is herbal plants and threatened plants of 1,131 species. Health supplement food market has high market value at 8 billion baht in 2011 and has 3 percent

growth rate, in term of cosmetic has export value at 1.4 hundred million baht and raw materials are used to produce at 90 percent from foreign countries has value up to 20 billion baht. Thai government and related offices have to provide the development plan to be the sustainability system and carry out draft of the national master plan on the Thai herbs development of the first plan (2017-2021) is driving mechanism causes development herbal integration in provincial level/ province group through a systematic management process to develop herbal city (Department of Thai Traditional and Alternative Medicine, 2016)

Thailand will develop herbal plant which is the product to create the stability economy system and health system has been more concerned to solve problem in management. Development process throughout value chain and management innovation are the guideline to solve problems caused effectiveness in the future. Researcher see the importance and interested in studying to find the innovation management model to increase herbal city efficiency in 4 pilot provinces which are identified in the national master plan on Thai herb development for the first plan and lead to result expansion and driving national master plan on Thai herb development in the right direction for the future

OBJECTIVE

1. Current condition and relationship of Herbal City Management Model under National Master Plan on Thai Herb Development
2. Factors influence effective Herbal City on Herbal Development under National Master Plan

METHODOLOGY

Determination of population and sampling groups

1. Population is 479 people who is the executives or operation staffs who involve herbal city project in provincial level, representative of The Federation of Thai Industries- Province, representative of Provincial Chamber of Commerce who are the committee, steering committee and working team of herbal city development in 4 targeted provinces, Thai herb entrepreneur throughout the herbal product production chain

2. Sampling group determined the ratio 1:20 of observed variables which are 14 variables and get the sampling group size 280 people

Data collection

Using questionnaires to involve herbal city management and internal and external factors of herbal city development

Data analysis

Initial data analysis used descriptive statistic such as mean and standard deviation to distribute qualify of variables studied by SPSS program and analysis of structural equation model (SEM) by LISREL program

RESULTS

Study current condition of herbal city management under national master plan on Thai herb development, the further detail shown on table 1

Table 1 Mean, Standard Deviation and interpreting definition of current condition of herbal city management under national master plan on Thai herb development (n = 280)

Variable	\bar{X}	S.D.	Interpreting
-----------------	-----------	-------------	---------------------

1.Innovation (INNO)			
1.1 Product (PRODU)	3.47	.64	Medium
1.2 Process (PROCE)	3.29	.71	Medium
1.3 Organization (ORGAN)	3.43	.62	Medium
Mean	3.40	.66	Medium
2. Organization and Human Capital (ORHUC)			
2.1 Mission of state government (STAG)	3.46	.56	Medium
2.2 Human Capital Management (HUCA)	3.72	.63	High
2.3 Model of Herbal Enterprise (ENTE)	3.36	.56	Medium
Mean	3.51	.58	High
3.Eco-System (ECOS)			
3.1 Wisdom and Biodiversity (WIBI)	3.13	.61	Medium
3.2 Supply Chain Management (SUCH)	3.44	.66	Medium
3.3 Related policies (POLI)	3.47	.60	Medium
Mean	3.35	.62	Medium
4.Effective (EFFEC)			
4.1 Research and Development (REDE)	3.59	.63	High
4.2 Herbal Product Development (PEDV)	3.35	.58	Medium
4.3 Marketing Process (MARK)	3.07	.51	Medium
4.4 Happiness of People (HAPP)	3.54	.59	High
4.5 Sustainability (SUST)	3.16	.61	Medium
Mean	3.34	.58	Medium

From table 1 found that innovation (INNO) is medium level, mean 3.40 when consider in each part found that all parts are medium level, mean during 3.29-3.27, Organization and Human Capital (ORHUC) is high level when consider in each part found that mission of state government and model of herbal enterprise is medium level, mean 3.46 and 3.36 respectively but human capital is high level, mean 3.72, eco-system is medium, mean 3.35 when considers in each part found that all parts are medium level, mean 3.13-3.47, effective is medium, mean 3.34 when considers in each part found that herbal product development, marketing process and sustainability is medium level, mean 3.07-3.35 but research and development and happiness of people is high level, mean 3.59 and 3.54 respectively

Study result of model of herbal city management under national master plan on Thai herb development of empirical variables that study the structural equation model, detail shown on table 2

Table 2 Investigating result of empirical variables that study the structural equation model

Variables	\bar{X}	S.D.	%CV	Sk	Ku	χ^2	P-value
PRODU	3.470	.643	18.530	.038	-.349	.123	.940
PROCE	3.294	.716	21.736	.012	-.626	.392	.822
ORGAN	3.438	.625	18.179	.079	.007	.006	.997
STAG	3.465	.564	16.277	.155	.061	.028	.986
HUCA	3.728	.631	16.926	.003	-.528	.278	.870
ENTE	3.365	.564	16.761	.185	.146	.055	.973
WIBI	3.138	.617	19.662	.222	-.392	.203	.903

Variables	\bar{X}	S.D.	%CV	Sk	Ku	χ^2	P-value
SUCH	3.447	.666	19.321	.305	.019	.093	.954
POLI	3.473	.604	17.391	.440	-.012	.194	.908
REDE	3.592	.631	17.567	.821	-1.293	2.348	.309
PEDV	3.350	.580	17.313	.186	-.010	.035	.983
MARK	3.070	.511	16.645	.165	.106	.038	.981
HAPP	3.545	.592	16.700	.401	-.357	.288	.866
SUST	3.160	.613	19.399	.354	.105	.136	.934

Remark; Chi-square (χ^2) that has the statistical significant (P-value <.05) shown that skewed distribution

CONCLUSION AND FUTURE WORK

From table 2 testing result shown empirical variables that study all variables no statistical significant ($p > .05$) and empirical variables that study all variables as follow;

1. Innovation (INNO) has direct influence effective (EFFEC) that influence coefficient .37, statistical significant level .05 and indirect influence through organization and human capital (ORHUC) and eco-system (ECOS) has influence coefficient .50, statistical significant level .05

2. Eco-system has direct influence effective that influence coefficient .60 statistical significant level .05

3. Organization and Human Capital has direct influence effective that influence coefficient .21, statistical significant level .05

4. Innovation, eco-system and organization and human capital can join to predict effective at 87 percent

Recommendation

Recommendation for utilizing research result

1. Related state can take management innovation model to increase effectiveness of herbal city and create the knowledge involve various factors

2. Should have evaluation and monitoring and exchange and learn between each other after taking management innovation model to increase effective of herbal city under national master plan on Thai herb development

Recommendation for next research

1. Next research should study to find caused important factors more that help to increase effectiveness of herbal city under national master plan on Thai herb development for competition such as value-added and marketing

2. Next research should study producer development and entrepreneur to focus on the quality development of herbal raw materials, raise the value of production by developing quality raw material and standard to be able self-reliant and bring income into the country both from tourism and exporting herb product

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to Suan Sunandha Rajabhat University for invaluable help throughout this research.

REFERENCES

[1] Department of Thai Traditional and Alternative (2015). Herbal City Development

- Project Magnet Store in Bangkok
- [2] Noppadon Luengphirom, (2007). **Innovation Management: Development an Ability in Creating Innovation Model of Researcher.** Doctor of Philosophy (Public Administration), Ramkhamhaeng University
 - [3] Nilawan Sawangrat (2008) The Structural influence of entrepreneurship to focus on marketing, innovation and learning affecting performance of organization. Doctor of Business Administration, Ramkhamhaeng University
 - [4] Tanapat Sang ar-roon, Faykham Tiraporn. (2014) Creating supply chain between countries for Thai Farmers Institute Product study special case herbal products, Thailand Research Fund 4, Bangkok
 - [5] Payat Wuthirong (2014). **Innovation Management, Learning Organization Resource and innovation, Publisher Chula University, 153**
 - [6] Sunandha Satianmas, (2012). Management innovation affecting the successful of small and medium enterprise received of Thailand Award, Doctor of Philosophy Major Management Innovation, Suan Sunandha Rajabhat University.
 - [7] Dragana Radicic (2014). **The Effectiveness of R&D and Innovation Policy in Promoting Innovation in European SMEs: an Empirical Investigation of Additionality Effects.** Staffordshire University. P ii-iii
 - [8] Euromonitor International (2016). **Natural Healing and Prevention: Renewed Perspectives on Herbal and Traditional Products.** Passport, December 2016.
 - [9] Fondas, N. (1993). **Process Innovation: Reengineering Work through Information Technology.** Executive, May 1993, Vol.7 No 2, Page 100-103
 - [10] Hank Lim (2008). **SMEs Development Policy Environment and Challenges in Singapore.** Singapore Institute for International Affairs (SIIA),p 267
 - [11] Jea Hoo Na (2016). **A Study of Design Innovation Framework for Innovative Manufacturing Companies in the UK.** Brunel University London.
 - [12] John Buffington (2010). **Product Design and Supply Chain Fulfillment Through a Generative Customization Solution to Achieve Discontinuous Innovation.**Lulea University.
 - [13] Lisa Deutsch (2004). **Global trade, food production and ecosystem support: Making the interactions visible.** Stockholm University. p 1
 - [14] Lisa Deutsch (2004). **Global trade, food production and ecosystem support: Making the interactions visible.** Stockholm University. p 1