LOCAL ENVIRONMENTAL POLICY AFFECTING SUSTAINABILITY PERCEPTION OF LOCAL ADMINISTRATOR

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Abstract – The objective of research was to predict the local environmental law knowledge affecting sustainability perception of local administrators. The populations were local administrators of Sub-district Administrative Organization (SAO) of Maha Sarakham Province in fiscal year of 2022. The Simple Random Sampling technique was conducted with 400 local administrators. The questionnaire used an instrument for data collection. Multiple Regression Analysis is an inferential statistic for data analysis. Descriptive statistics were mean, and standard deviation. The finding showed that the prediction equation of relationship between independent variables of Local Policy 1, Local Policy 2, Local Policy 3, and Local Policy 4. These 4 local policy affected to sustainability perception of local administrator of Maha Sarakham province. The results illustrated the prediction power of Local Policy 1, Local Policy 2, Local Policy 3, and Local Policy 4 were 68.80%, 67.60%, 72.20% and 73.40% respectively. To accomplish the local sustainability, the proper local environmental policy formulation is a critical part that should be paid attention because the local environmental policy will issue the good plan and action for local administrators to be a best guideline to implement and persuade the local people to actively participate and collaborate in environment and ecosystem conservation with correctly knowledge and clear understanding in all aspects of local environmental policy such as raise the level of maturity in managing natural resources and environment and building partnerships in managing natural resources and environment.

Keywords: Local Environmental Policy, Affecting Sustainability Perception, Local Administrator.

Table of Contents

INTRODUCTION

Environmental policy is recognized as national public policy for longtime ago in Thailand. Even though, it was implemented for several decades according to Act of National Environmental Quality Promotion and Maintenance B.E. 2535 (Kodmhai.com., 2014). Afterward, the government has issued the Policies and plans to promote and maintain National Environmental Quality Act 2017-2036 (Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment, 2018, Thiengkamol, 2020, Kaewhao, 2022a). Like all other Public Policies, it is anticipated to alleviate an unacceptable situation which involves considerable number of people and environment. Public environmental policy, therefore, means the activities of the government that choose to act or not to act, mainly aiming at the values and benefits of the society in terms of the environment with legitimate provisions public environmental policy is consequently important to both policy makers and people and to success in developing the country. Thus, public environmental policy is an important tool for the government to meet the needs of the people in terms of preserving environmental quality, including the conservation of natural resources that are part of the environment. It can also indicate the direction of the country's development in terms of economy, society, and politics, considering the quality

of the environment. The success of the implementation of public environmental policies can effectively lead to the goals. After the policy has been launched, he government is able to maintain the power to continuously manage the national environment because it has been accepted by the public. However, to formulate a public environmental policy that meets the needs of the people is not an easy task. This is because society are made up of people from many different backgrounds. However, the state itself cannot avoid conflicts that will arise, exception only that there must be clear principles and procedures for formulating environmental policies and transparency that can be verified by the public, it can be inferred to be a true public environmental policy. (Thiengkamol, 2007, Thiengkamol, 2011e, Howlett, and Mukherjee, 2017, Kaewhao, 2022b). Moreover, generally, the formulation of Environmental Policy initiates with the recognition of environmental problems. Requests are raised when they are allowed by the government, they develop program for implementation. Environmental Policy formulation requires developing significant and adequate proposed course of action for managing environmental problems. The policy process is typically conceptualized as subsequent parts or stages. These are (1) problem appearance, (2) agenda set, (3) attention of policy selections, (3) decision-making, (5) implementation, and (6) assessment, these meet environmental sustainability (Jordan and Adelle, 2012, Wonah, 2017, Thiengkamol, 2020, Kaewhao, 2022a). Thus, Public Policy is a product of the environment that is a manifestation of social and governance to meet the political realities of sustainable development. The policy choice of the policy makers is considerably shaped by the interests of the people to make a better environmental policy formulation and implementation (Howlett, and Mukherjee, 2017, Wonah, 2017, Thiengkamol, 2020, Pesotskaya1 et al., 2020, Kaewhao, 2022a).

Public environmental policy, therefore, is an important tool for the government in the administration and development of the country in terms of economy, society and politics, which mainly takes into account the quality of the environment. But public environmental policies are only valid when they are implemented because public environmental policy is not a will or the intention of the government to act or not to act only. But it must cover the implementation to appear as a reality as will (Howlett, and Mukherjee, 2017, Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment, 2018, Thiengkamol, 2020, 2020, Kaewhao, 2022a). Policies and planning are very important in both the public and private sectors because policies are like the rudder that guides how a country, or an organization can achieve its goals. As for planning, it is like a method for controlling a ship's hull that must lead a country or an organization in a safe direction so that it can achieve its objectives, goals, and visions completely (Thiengkamol, 2007, Thiengkamol, 2020, Kaewhao, 2022a).

Thailand has a policy and plan to promote and preserve the national environmental quality (B.E. 2560-2579) that consists of 4 main policies (Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment, 2018). It was created in accordance with Section 13(1) of the Enhancement and Conservation of National Environmental Quality Act, 2535, to serve as a direction framework for the management of natural resources and the environment of the country for more than the next 20 years. Aiming for a country with a balanced and sustainable natural resource base that is environmentally friendly and aims to make policies and plans. It has been pushed as part of a 20-year national strategy that aims at the same goal of developing a prosperous, stable, and sustainable country (Policies and Plans for Promotion and Conservation of National Environmental Quality B.E. 2560-2579) as follows;

Policy 1: Stable management of the natural resource base for balance, fairness, and sustainability.

Policy 2: Creating growth that is friendly to the environment for wealth and sustainability.

Policy 3: Raise the level of maturity in managing natural resources and environment.

Policy 4: Building partnerships in managing natural resources and environment.

Thailand's natural resource and environmental planning has guidelines that must comply with all 4 policies mentioned above. Including planning for the society in terms of public planning and city planning that can conserve natural resources and the environment for everyone in society across the country, region and the world. This will lead to have a good quality of life to for the present and future generations. Thus, it can lead to real sustainable development. Another objective of the environmental

planning process is often an integrated framework that includes environmental assessments that must cover natural resource assessments. By considering the environment as a system (System) that must be covered from a point of scientific view and social science perspective (Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment, 2018, Thiengkamol, 2020, Kaewhao, 2022b).

Environmental planning must cover land use, economic and socio-economics, transportation and housing characteristics, including soil pollution, water pollution, air pollution and noise pollution. Wetlands, flood zones susceptibility, coastal zones erosion and habitat of the endangered species must also be considered. Including surveying and studying various things with the integration of Environmental Impact Assessment (EIA), Economic Impact Assessment (EcIA), Social Impact Assessment (SIA), and Health Impact Assessment (HIA) in environmental planning, these all together will be complete consideration (Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment, 2018, Thiengkamol, 2020, Kaewhao, 2022). As for the environment, Thailand has policies and plans to manage the environment both at the national and community levels. As shown in all National Economic and Social Development Plans, especially the current version, the 12th edition (2017-2021) in Strategy 4, Green Growth for Sustainable Development. There are 5 important goals (Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment, 2018, Thiengkamol, 2020, Kaewhao, 2022a).

According to the National Government Organization Act, the Thai government administration is divided into 3 levels: central, provincial, and local. As a result of the national protection problem, the Thai government emphasizes on centralization to the central administration and the provincial administration, rather than decentralization. The local government administration has been faced with several problems. As the administrative forms mentioned above, the problems of local government administration can be summarized into 4 aspects: work management, financial management, human resources administration, and public participation (Department of Local Administration, 2011, and Nuplord et al., 2018). Especially, the environmental policy formulation with public participation is a current hot issue. Therefore, LAO is motivated to pay attention on environmental policy formulation as a new work and function performance.

Sustainability is an umbrella term for many green concepts and corporate responsibility, while Environment, Social and Governance (ESG) has become the preferred term for investors and the capital markets. The industry may have started with sustainability efforts, but it has evolved to include ESG practices, performance , reporting and relevance to capital opportunities. ESG data helps identify risk-adjusted returns. Emphasis on all three pillars has aided the shift in how companies measure and disclose their performances (Doppel, 2017). The principles of sustainability are the foundations of what this concept represents. Therefore, sustainability is made up of three pillars: the economy, society, and the environment. These principles are also informally used as profit, people and planet. Social sustainability aims to preserve social capital by investing and creating services that constitute the framework of our society. The concept accommodates a larger view of the world in relation to communities, cultures, and globalization. It means to preserve future generations and to acknowledge that what we do can have an impact on others and on the world. Social sustainability focuses on maintaining and improving social quality with concepts such as cohesion, reciprocity and honesty and the importance of relationships amongst people (Bandarage, 2013). It can be encouraged and supported by laws, information and shared ideas of equality and rights. Social sustainability incorporates the idea of sustainable development as defined by the United Nations (UN, 2023). The principle of sustainable development addresses social and economic improvement that protects the environment and supports equality, and therefore the economy and society and the ecological system are mutually dependent (Diesendorf, 2000, Thiengkamol, 2020, Kaewhao, 2022a).

Economic sustainability aims to maintain the capital intact. If social sustainability focuses on improving social equality, economic sustainability aims to improve the standard of living. In the context of business, it refers to the efficient use of assets to maintain company profitability over time. As stated by the UK Government in Annual Report 2000, January 2001(Hansard, 2000).

"Maintaining high and stable levels of economic growth is one of the key objectives of sustainable development. Abandoning economic growth is not an option. But sustainable development is more than

just economic growth. The quality of growth matters as well as the quantity." However, currently, there is an obvious evident of Covid explosion during 2019-2022, the environmental quality is better because of the limitation of people migration. People are locked down at their house. This decreases the travelling to several places. Thus, the environment has recovered in all aspects such as water, sea, air, land, and forest (Kaewhao, 2022a). A latest approach to economics acknowledges the limited incorporation of the ecological and social components in this model. New economics is inclusive of natural capital (ecological systems) and social capital (relationships amongst people) and challenges the mantra of capital that constant growth is good and wider is better, but it risks producing damage to the ecological system (Benn, et al., 2014).

Environmental sustainability is the responsibility to conserve natural resources and protect global ecosystems to support health and wellbeing, now and in the future with aims to make better human welfare over the protection of natural capital (e.g. land, air, water, minerals etc.). Initiatives and programs are defined as environmentally sustainable when they certify that the requirements of the population are met without the risk of compromising the requirements of future generations. Environmental sustainability, as described by Dunphy, Benveniste, Griffiths and Sutton (2000), places emphasis on how business can accomplish positive economic results without doing any damage, in the short- or long-term, to the environment. According to Dunphy et al. (2000) an environmentally sustainable business seeks to integrate all three sustainability pillars, and to reach this aim each one demands to be treated equally.

The Thai local administration has grown over a hundred years, it is most likely longer than the democratic system until the Constitution of the Kingdom of Thailand was promulgated in 1997, the decentralization to local government and self-government administration of local people began to practically apply and implement. The environmental policy formulation has been paid attention by general people since 1997 when the Constitution of the Kingdom of Thailand was issued. Because it contains a section of local people participation in environmental conservation. At the beginning LAO performs environmental conservation according to the national environmental policy because they had no specific environmental policy. Therefore, this research intends to survey Local Organization Administrators (LOAs) perception on local environmental policy formulation affecting sustainability by applying the 4 national environmental policies as mentioned above as study guidelines for investigating their perception on local environmental policy formulation affecting sustainability.

To accomplish the local community sustainability, the local administrators need to understand the context of local community in all aspects covering the people lifestyles, their education level, beliefs and cultures. Thus they will able to apply the national environmental conservation policy to introduce to local people to participate by devoting participation for environment and ecosystem conservation with deeply understand the importance of environment conservation for their health and wealth. Therefore, to study the environmental local policy to affect the sustainability perception of local administrators, this will encourage the collaboration between local people and local administrators to support the environmental conservation.

1. METHODOLOGY

The research design was conducted step by step as follows:

1. The population were local administrators of 143 Sub-district Administrative Organization (SAO) in Maha Sarakham Province   and each SAO has 12 administrators, thus there are 1,716 local administrators in fiscal year of 2021 (Department of Local Organization, 2022). The simple random sampling technique was used to collect the samples of 400 local administrators from 143 Sub-district Administrative Organization (SAO) in Maha Sarakham Province, Northeastern in Thailand. The size of sample was calculated by Taro Yamane Formula $n = N / (1 + Ne^2)$. The sample size was 324 at least with a confident interval with 95% or 5% error (Yamane, 1973).

2. The research instrument was the questionnaire with 89 items and it was used for data collection. The content and structural validity were determined by Item Objective Congruent (IOC) by 5 experts in the aspects of environmental law, policy maker, social science, local administrative scholar, and environmental study. The accepted value of content validity was more than 0.5. The 5-rating scale of Likert's scale were used for each item evaluation by starting from 1 as strongly disagree to 5 as strongly

agree. There are 7 items for each issue of environmental law knowledge covering environmental damage, natural resource damage, ecological damage, civil liability, criminal liability and administrative liability. The environmental policy formulation covering natural resource and environment conservation, energy management, waste reduction, people participation, knowledge transferring, and behavior change. It was try out with the 30 local administrators of SAO in Roi-Ed Province that is an adjacent province. The reliability was determined by Cronbach's correlation level of whole questionnaire was 0.956. It is higher than 0.8 as the accepted (Hair, et al., 2010; & Thiengkamol, 2016).

3. The descriptive statistics was employed for mean and standard deviation explanation and inferential statistics as multiple regression analysis was used for data analysis for predicting the correlation of environmental policy formulation toward sustainability perception of local administrators (Hair, et al., 2010).

2. RESULTS

1. Results of Demographic Characteristics of Sample Group

The finding revealed that the demographic characteristics of local administrators, most of them are 256 males (64.00%), work experience more than 5 years 223 people (55.75%), married status with 278 people (69.50%), most of them got bachelor degree 328 people (82.00%), and live in the SAO area 350 people (87.50%)

2. Results of Local Environmental Policy Formulation of Policy 1

Perception of local administrators on Local Environmental Policy 1 of Stable management of the natural resource base for balance, fairness, and sustainability. The results of the local administrator perceptions are presented in Table 1. Local administrator perception on Policy 1 had Environmental regulation practice at the highest level with a mean of 4.22. Subsequences were Ecological balance management with the mean of 4.20, and Community forest conservation with the mean of 4.19 respectively.

Table 1. Mean and Standard Deviation of Local Environmental Policy 1 of Stable management of the natural resource base for balance, fairness, and sustainability.

Local Environmental Policy 1	Mean	Standard Deviation
1. Water quality conservation	4.15	1.20
2. Natural resource protection	4.18	1.26
3. Ecological balance management	4.20	2.02
4. Air quality conservation	4.12	1.69
5. Environmental regulation practice	4.22	2.01
6. Community forest conservation	4.19	1.82
Total Local Environmental Policy 1	4.19	1.75

3. Results of Local Environmental Policy Formulation of Policy 2

Perception of local administrators on Local Environmental Policy 2 of Creating growth that is friendly to the environment for wealth and sustainability.   The results of the local administrators perceptions are presented in Table 2. Local administrator perception on Policy 2 had People participation for environmental conservation at the highest level with a mean of 4.33. Subsequences were Waste management of friendly environment with the mean of 4.26, and Ecological management for local wealth with the mean of 4.25 respectively.

Table 2. Mean and Standard Deviation of Local Environmental Policy 2 of Creating growth that is friendly to the environment for wealth and sustainability

Local Environmental Policy 2	Mean	Standard Deviation
1. Waste management of friendly environment	4.26	1.45
2. Natural resource protection for local wealth	4.22	1.86
3. Ecological management for local wealth	4.25	2.02
4. Air quality for life quality	4.18	1.98

5. People participation for environmental conservation	4.33	2.01
6. Organic farming promotion	4.19	1.78
Total Local Environmental Policy 2	4.23	1.89

4. Results of Local Environmental Policy Formulation of Policy 3

Perception of local administrators on Local Environmental Policy 3 of Creating growth
that is friendly to the environment for wealth and sustainability. The results of the local administrators perceptions are presented in Table 3. Local administrator perception on Policy 3 had Raise responsibility of environmental conservation at the highest level with a mean of 4.30. Subsequences were Raise the people participation in environmental law with the mean of 4.27, and   Raise biodiversity conservation with the mean of 4.26 respectively.

Table 3. Mean and Standard Deviation of Local Environmental Policy 3 of Raise the level of maturity in managing natural resources and environment

Local Environmental Policy 3	Mean	Standard Deviation
1. Provide knowledge of environmental conservation	4.19	2.02
2. Raise awareness of environmental conservation	4.18	1.96
3. Raise the people participation in environmental law	4.27	1.88
4. Raise life quality of local people	4.24	1.91
5. Raise responsibility of environmental conservation	4.30	2.00
6. Raise biodiversity conservation	4.26	1.95
Total Local Environmental Policy 3	4.25	1.99

5. Results of Local Environmental Policy Formulation of Policy 4

Perception of local administrators on Local Environmental Policy 4 of : Building
partnerships in managing natural resources and environment. The results of the local administrators perceptions are presented in Table 4. Local administrator perception on Policy 4 had Building partnerships in managing natural resources and environment.at the highest level with a mean of 4.27. Subsequences were Encourage temple to participate in environmental management with the mean of 4.25, and   Encourage private sector to participate in environmental management with the mean of 4.24 respectively.

Table 4. Mean and Standard Deviation of Local Environmental Policy 4 of Building partnerships in managing natural resources and environment

Local Environmental Policy 4	Mean	Standard Deviation
1. Encourage private sector to participate in environmental management	4.24	1.23
2. Encourage school to participate in environmental management	4.19	1.56
3. Encourage temple to participate in environmental management	4.25	2.01
4. Encourage local people to participate in environmental management	4.27	1.78
Total Local Environmental Policy 4	4.23	1.92

6. Results of Sustainability perception

Perception of local administrators on Sustainability. The results of the local administrators perceptions are presented in Table 5. Local administrator perception on sustainability had Environmental sustainability at the highest level with a mean of 4.29. Subsequences were Social sustainability with the mean of 4.27, and   Economic sustainability with the mean of 4.25 respectively.

Table 5. Mean and Standard Deviation of Sustainability perception

Sustainability	Mean	Standard Deviation
1. Environmental sustainability	4.29	178
2. Social sustainability	4.27	1.64
3. Economic sustainability	4.25	1.91
Total Sustainability	4.28	1.88

7. Results of Multiple Analysis of the Correlation of Local Environmental Policy 1 toward Sustainability perception

The relationship between independent variables of Local Environmental Policy 1 affecting dependent variable of Sustainability perception of local administrators   presented in Table 6 and 7.

Table 6. Result Analysis Prediction Power of Local Environmental Policy 1 Affecting Sustainability perception.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.788	0.722	0.688	0.176

a: Predictors: Constant, Water quality conservation, Natural resource protection, Ecological balance management, Air quality conservation, Environmental regulation practice, and Community forest conservation

b: Dependent Variable: Sustainability perception

From table 6, after Multiple Linear Regression was analyzed between independent variable of Water quality conservation (X1), Natural resource protection (X2), Ecological balance management (X3), Air quality conservation (X4), Environmental regulation practice (X5), Community forest conservation affecting dependent variable Sustainability perception. It revealed that regression coefficient equaled to 0.788 (78.80%) and coefficient of a R Square was 0.722 (72.20 %) with statistical significance at level of 0.01. After it was adjusted, the coefficient of R Square with power of prediction was 0.688 (68.80%).

Table 7. Multiple Linear Regression Analysis between Local Environmental Policy 1 Affecting Sustainability perception.

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	52.453	6	8.742	267.033	0.000**
	Residual	17.642	393	0.045		
	Total	70.095	399			

a: Predictors: Constant, Water quality conservation, Natural resource protection, Ecological balance management, Air quality conservation, Environmental regulation practice, and Community forest conservation

b: Dependent Variable: Sustainability perception

Table 8. Coefficients of Independent Variables of Local Environmental Policy 1 Affecting Sustainability perception.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
3	Constant	0.054	0.157	-	1.076	0.545
	Water quality conservation (X1)	0.103	0.036	0.091	3.876	0.008**
	Natural resource protection (X2)	0.152	0.043	0.122	8.786	0.006**
	Ecological balance management X3)	0.254	0.039	0.329	10.674	0.000**
	Air quality conservation (X4)	0.276	0.036	0.362	9.871	0.000**
	Environmental regulation practice (X5)	0.332	0.038	0.210	12.049	0.000**
	Community forest conservation (X6)	0.210	0.037	0.333	9.721	0.000**

a. Dependent Variable: Sustainability perception

From Table 8, linear regression equation, it revealed that independent variables of Water quality conservation (X1), Natural resource protection (X2), Ecological balance management X3), Air quality conservation (X4), Environmental regulation practice (X5), and Community forest conservation (X6) are able to predict Sustainability perception (Y) of local administrators,

8. Results of Multiple Analysis of the Correlation of Local Environmental Policy 2 toward Sustainability perception

The relationship between independent variables of Local Environmental Policy 2 affecting dependent variable of Sustainability perception of local administrators   presented in Table 9 and 10.

Table 9. Result Analysis Prediction Power of Local Environmental Policy 2 Affecting Sustainability perception

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.776	0.711	0.676	0.169

a: Predictors: Constant, Waste management of friendly environment, Natural resource protection for local wealth, Ecological management for local wealth, Air quality for life quality, People participation for environmental conservation, and Organic farming promotion

b: Dependent Variable: Sustainability perception

From table 9, after Multiple Linear Regression was analyzed between independent variable of Waste management of friendly environment (X1), Natural resource protection for local wealth (X2), Ecological management for local wealth (X3), Air quality for life quality (X4), People participation for environmental conservation (X5), Organic farming promotion (X6), affecting dependent variable Sustainability perception. It revealed that regression coefficient equaled 0.776 (77.60%) and coefficient of a R Square was 0.711 (71.10 %) with statistical significance at level of 0.01. After it was adjusted, the coefficient of R Square with power of prediction was 0.676 (67.60 %).

Table 10. Multiple Linear Regression Analysis between Local Environmental Policy 2 Affecting Sustainability perception.9

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	54.586	6	9.098	277.067	0.000**
	Residual	16.664	393	0.042		
	Total	71.250	399			

a: Predictors: Constant, Waste management of friendly environment, Natural resource protection for local wealth, Ecological management for local wealth, Air quality for life quality, People participation for environmental conservation, and Organic farming promotion

b: Dependent Variable: Sustainability perception

Table 11. Coefficients of Independent Variables of Local Environmental Policy 2 Affecting Sustainability perception.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
3	Constant	0.066	0.211	-	1.076	0.545
	Waste management of friendly environment (X1)	0.213	0.045	0.091	8.876	0.005**
	Natural resource protection for local wealth (X2)	0.109	0.053	0.101	5.432	0.008**
	Ecological management for local wealth (X3)	0.235	0.040	0.356	9.564	0.000**
	Air quality for life quality (X4)	0.245	0.046	0.424	10.019	0.000**
	People participation for environmental conservation (X5)	0.205	0.038	0.178	8,049	0.005**
	Organic farming promotion (X6)	0.198	0.037	0.333	6.656	0.006**

a. Dependent Variable: Sustainability perception

From Table 11, linear regression equation, it revealed that independent variables of Waste management of friendly environment (X1), Natural resource protection for local wealth (X2), Ecological management for local wealth (X3), Air quality for life quality(X4), People participation for environmental conservation (X5), and Organic farming promotion (X6) are able to predict Sustainability perception (Y) of local administrators.

9. Results of Multiple Analysis of the Correlation of Local Environmental Policy 3 toward Sustainability perception

The relationship between independent variables of Local Environmental Policy 3 affecting dependent variable of Sustainability perception of local administrators   presented in Table 12 and 13.

Table 12. Result Analysis Prediction Power of Local Environmental Policy 3 Affecting Sustainability perception

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.812	0.776	0.722	0.201

a: Predictors: Constant, Provide knowledge of environmental conservation, Raise awareness of environmental conservation, Raise the people participation in environmental law, Raise life quality of local people, Raise responsibility of environmental conservation, and Raise biodiversity conservation

b: Dependent Variable: Sustainability perception

From Table 12, after Multiple Linear Regression was analyzed between independent variable of Provide knowledge of environmental conservation (X1), Raise awareness of environmental conservation (X2), Raise the people participation in environmental law (X3), Raise life quality of local people (X4), Raise responsibility of environmental conservation (X5), and Raise biodiversity conservation (X6) affecting dependent variable Sustainability perception. It revealed that regression coefficient

equaled 0.812 (81.20%) and coefficient of a R Square was 0.776 (77.60 %) with statistical significance at level of 0.01. After it was adjusted, the coefficient of R Square with power of prediction was 0.722 (72.20 %).

Table 13. Multiple Linear Regression Analysis between Local Environmental Policy 2 Affecting Sustainability perception.9

	Model	Sum of Squares	df	Mean Square	F	Sig.
2	Regression	54.586	6	9.098	277.067	0.000**
	Residual	16.664	393	0.042		
	Total	71.250	399			

a: Predictors: Constant, Provide knowledge of environmental conservation, Raise awareness of environmental conservation, Raise the people participation in environmental law, Raise life quality of local people, Raise responsibility of environmental conservation, and Raise biodiversity conservation

b: Dependent Variable: Sustainability perception

Table 14. Coefficients of Independent Variables of Local Environmental Policy 3 Affecting Sustainability perception.

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
3	Constant	0.097	0.209	-	1.243	0.768
	Provide knowledge of environmental conservation (X1)	0.301	0.026	0.078	10.911	0.000**
	Raise awareness of environmental conservation (X2)	0.231	0.042	0.2o7	7.989	0.004**
	Raise the people participation in environmental law (X3)	0.261	0.040	0.343	8.888	0.000**
	Raise life quality of local people (X4)	0.209	0.046	0.323	7.919	0.000**
	Raise responsibility of environmental conservation (X5)	0.234	0.038	0.178	6,989	0.006**
	Raise biodiversity Conservation (X6)	0.178	0.037	0.229	5.777	0.008**

a. Dependent Variable: Sustainability perception

From Table 14, linear regression equation, it revealed that independent variables of Provide knowledge of environmental conservation (X1),,Raise awareness of environmental conservation (X2), Raise the people participation in environmental law (X3), Raise life quality of local people (X4),,Raise responsibility of environmental conservation (X5), and Raise biodiversity Conservation (X6) are able to predict Sustainability perception (Y) of local administrators.

10. Results of Multiple Analysis of the Correlation of Local Environmental Policy 4 toward Sustainability perception

The relationship between independent variables of Local Environmental Policy 4 affecting dependent variable of Sustainability perception of local administrators   presented in Table 15 and 16.

Table 15. Result Analysis Prediction Power of Local Environmental Policy 4 Affecting Sustainability perception

Model	R	R Square	Adjusted R Square	St. Error of the Estimate
1	0.824	0.780	0.734	0.212

a: Predictors: Constant, Encourage private sector to participate in environmental management, Encourage school to participate in environmental management, Encourage temple to participate in environmental management, and Encourage local people to participate in environmental management

b: Dependent Variable: Sustainability perception

From table 15, after Multiple Linear Regression was analyzed between independent variable of Encourage private sector to participate in environmental management (X1), Encourage school to participate in environmental management (X2), Encourage temple to participate in environmental management (X3), and Encourage local people to participate in environmental management (X4) affecting dependent variable Sustainability perception. It revealed that regression coefficient equaled 0.824 (82.40%) and coefficient of a R Square was 0.780 (78.00 %) with statistical significance at level of 0.01. After it was adjusted, the coefficient of R Square with power of prediction was 0.734 (73.40 %).

Table 16. Multiple Linear Regression Analysis between Local Environmental Policy 4 Affecting Sustainability perception.

	Model	Sum of Squares	df	Mean Square	F	Sig.
2	Regression	53.314	4	13.329	234.023	0.000**
	Residual	14.978	395	0.022		
	Total	71.250	399			

a: Predictors: Constant, Encourage private sector to participate in environmental management, Encourage school to participate in environmental management, Encourage temple to participate in environmental management, and Encourage local people to participate in environmental management

b: Dependent Variable: Sustainability perception

Table 17. Coefficients of Independent Variables of Local Environmental Policy 4 Affecting Sustainability perception.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	0.088	0.211	-	1.243	0.768
Encourage private sector to participate in environmental management (X1)	0.289	0.043	0.078	8.911	0.000**
Encourage school to participate in environmental management (X2)	0.267	0.033	0.199	7.565	0.004**
Encourage temple to participate in environmental management (X3)	0.209	0.046	0.318	5.423	0.009**
Encourage local people to participate in environmental management (X4)	0.215	0.035	0.243	5.777	0.008**

a. Dependent Variable: Sustainability perception

From Table 17, linear regression equation, it revealed that independent variables of Encourage private sector to participate in environmental management (X1), Encourage school to participate in environmental management (X2), Encourage temple to participate in environmental management (X3), and Encourage local people to participate in environmental management (X4) are able to predict Sustainability perception (Y) of local administrators.

3. DISCUSSION

Local Environmental Policy 1 demonstrated that Environmental regulation practice (X5) was the highest prediction to sustainability perception of local administrators of Maha Sarakham province. This indicated that the local administrators realized to the important of Environmental regulation practice to accomplish the policy 1 of Stable management of the natural resource base for balance, fairness, and sustainability since if they can promote the local people to perform constantly and continuously environmental regulation practice. It would lead the community to meet sustainable development. The results go along with the studies of Bootrach et al., 2015a; Kamin et al., 2014; Tippalert et al., 2015; Sutthiphapa et al., 2015; Wongsueb et al, 2015; and Pesotskaya1, et al., 2020.

Moreover, the finding showed that Local Environmental Policy 2 of Creating growth that is friendly to the environment for wealth and sustainability, Ecological management for local wealth (X3) and Air quality for life quality (X4) was higher prediction to sustainability perception of local administrators of Maha Sarakham province than other factors. It is obviously seen that ecological management for local wealth) and air quality for life quality are play important role to their life quality. These results are pertinent to the studies of Cullen, et al., 2007; Langkarbindhu, 2018, and Nuplord, et al., 2018.

Consequently the Local Environmental Policy 3 of Raise the level of maturity in managing natural resources and environment, the result illustrated that Provide knowledge of environmental conservation (X1) was the highest prediction to sustainability perception of local administrators of Maha Sarakham province. This pointed out that to provide knowledge of environmental conservation is a successful key factor to achieve the sustainable development of local community in Maha Sarakham province. The results go along with the studie. of Borvornsakulcharoen, et al., 2015, and Kamin et al., 2014.

Finally, the research result found that Local Environmental Policy 4 of Building partnerships in managing natural resources and environment, the factors of Encourage private sector to participate in environmental management (X1) and Encourage school to participate in environmental management (X2) can predict sustainability perception of local administrators of Maha Sarakham province higher that the other factors. The results are congruent to Benn et al., (2014) concept and studies of Pesotskaya1, et al., 2020; Wonah, 2017; and Kaewhao, 2022b. Additionally, it might be able to explain that local administrators understand and perceive that to encourage the private sector to participate in environmental management and to encourage school to participate in environmental management will lead to the successfulness for local environmental management. This should accomplish real sustainable development because the students who are our next generation will assist environmental management subjectively because this young generation is our hope (Quintana-García, et al., 2022 and Kaewhao, 2022a).

However, to achieve the sustainable development of local community, beside the correct policy buy it also requires the local people participation from all stakeholders whether private sector, school, and temples to actively collaborate in environment, ecosystem conservation, maintain air quality, water preservation, and properly waste management, This will lead the community sustainability (Quintana-García, et al., 2022 and Kaewhao, 2022a).

CONCLUSION

The findings revealed that the 4 policies of Local Environmental Policy, the policy 1,Environmental regulation practice is the most critical factor to lead community to accomplish the community sustainability. Subsequently, ecological management for local wealth and air quality for life quality of policy 2, are also essential factor to support the community to understand and perform to manage their ecosystem for local wealth and to maintain their air quality for their life quality. Lastly, Local Environmental Policy 4 the results demonstrated that the factors of encourage private sector to participate in environmental management and encourage school to participate in environmental management take the important part in local community sustainability if these two sectors really understand and implement together. This will meet the hope actual sustainable development of community in Maha Sarakham province.

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