

HOW TO MEASURE SELF-SUFFICIENT ECONOMY, A NEW DEVELOPMENT'S CONCEPT AFTER THE ECONOMIC CRISIS IN THAILAND.

Dr. Nimit Kraivanit

Graduate School of Commerce, Burapha University

ABSTRACT

This concept encourages self-reliance or self-sufficient among the rural communities in Thailand. The purpose of this study is to explore 33 factors or indices determining the level of Self-sufficient Economy. The 33 factors can be categorized into three dimensions: participation, development, and efficiency. Calculation of the index is performed through both weighted and unweighted methods. Validation of the Index was then explored by comparing or benchmarking with qualitative data of each community at all level of the self-sufficient economy. It was found that both highest-index and lowest-index communities are corresponding to each other, which means that the different level of index can classify the level of each self-sufficient community. The focal issue of this study is that the community must explore the real need, in the sense of the self-sufficient concept, at all self-sufficient levels enhances its potential and immunity to social and economic crises.

16

INTRODUCTION

The concept of Self-sufficient Economy can be used as a strategy for economic and social development. It generates novel perspective and theory emphasizing on rural development as a country's development basis. The concept promotes self-reliance of the community and encourages production infrastructures, e.g. irrigation, transportation, utilities, which are fundamental to self-dependence and to other facets of the community development. Other capacities of the community, such as collective participation of its individual results in continuous system of management. It is imperative that self-sufficient economy be able to open the community to both domestic and international trade. The impact of globalization permeates every unit of the economy, and no exemption at the community level. Self-sufficient economy encourages the community to determine, as opposed to be determined, which produces, excess from consumption, to be sold. At present, producers of the community are dictated by price mechanism. Self-

sufficient Economy must also promote the efficiency of the production system and of the community support. Efficiency promotion is made possible by the advantage of job specialization within the community, resulting in continuous enhancement of capacities and skills. The focal issue is that the community must explore the true need at all levels, i.e. village, tumbon, and district, in order to be able to produce and satisfy the community's need in the sense of the self-sufficient concept. Measuring the level of sufficiency will gives a clear view of self-sufficient community and high level of self-reliance. Although the advancement of self-sufficient community is not equal to that of other communities whose development is influenced by external factors such as price mechanism, market mechanism, and even governmental intervention, self-sufficient community is capable of developing its own intellect and growing with strength and sustainability.

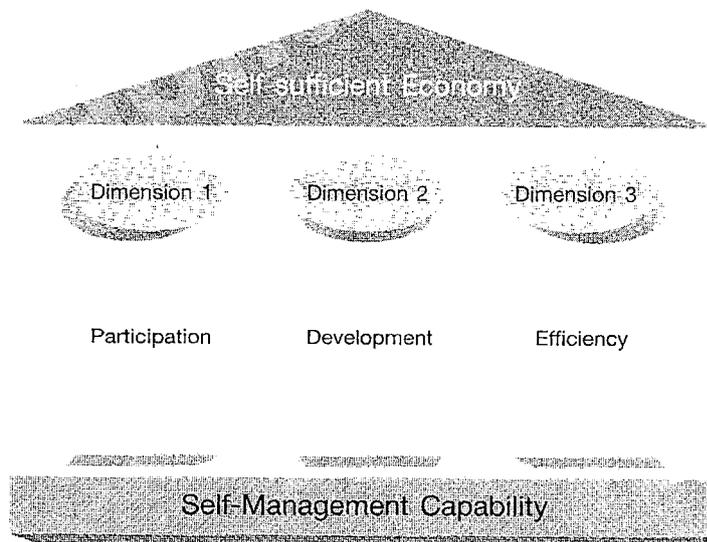
The purpose of this study is to explore 33 factors or indices determining the level of self-sufficient of the community, and also the model of self-sufficient community at each level. In this study, self-sufficient economy comprises three dimensions: participation, development, and efficiency, each factor was unweighted by expert suggestions. Due to time and budget limitations, efficiency of the community will not be explored in this study but using self-management capability in the sense of efficiency therefore is still opened to interested persons for future research. In addition, if ones can collect more data from communities of every region, confidence in the measurement used in this study will be even greater.

This study relies on both secondary and primary data, the secondary data was supplied by the Academic

and Planning Division, the Community Development Department, Ministry of Interior. The data was collected from every rural area of the whole country. Primary data was collected via questionnaire asking both quantitative and qualitative information. The survey was conducted among the 20 communities in northern region of Thailand. The preliminary results of the survey were sent to experts of the related field. The level of development and the level of participation were used to construct a model aimed to device indices of Self-sufficient Economy's level. Validation of the model was then explored by comparing with the qualitative data collected from each community. The derived model was used with each community sample of every region. In addition, this study also investigated the level of self-management capability in stead of efficiency.

DEFINITION :

Self-sufficient Economy comprises three dimensions: participation, development, and efficiency (self-management capability).



Self-management Capability

**Self-Management Capability
Maturity Continuum**

Systematically Build and Improve Capabilities

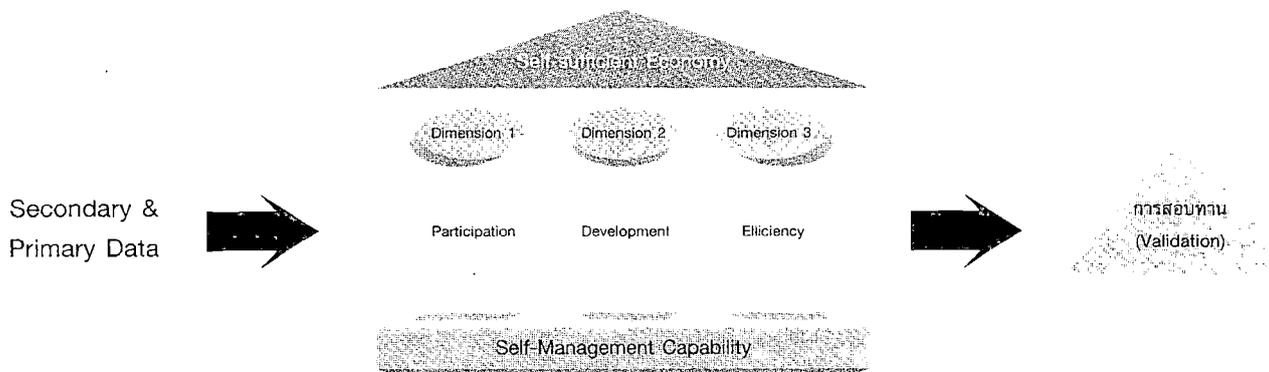
Capabilities are characteristic of individuals, not of the organization	Process established and repeating; reliance on people is reduced	Policies, processes and standards defined and formalized across the company	Managed quantitatively and aggregated on an enterprise-wide basis	Organization focused on continuous improvement of business management
Initial	Repeatable	Defined	Managed	Optimizing

Level of each capability:

18

1. Initial stage: capabilities are characteristics of individuals, not of community nor organization
2. Repeatable stage: necessary process discipline exists to allow for repetition of past successes in similar situation
3. Defined stage: all activities are documented, integrated and approved across the community or organization.
4. Managed stage: are managed quantitatively at community level and taken to correct situation
5. Optimizing stage: Entire community is focused on continuous improvement

Conceptual Framework:



Research design:

This study relies on both secondary and primary data, the survey was conducted in 20 communities of the North Region of Thailand. The preliminary results of the survey were sent to experts of the related field. The level of development and the level of participation were used to construct a model aimed to device indices of Self-sufficient Economy's level as follows:

Unweighted Index

$$I_n = \frac{\sum \{ [\sum D_1 + \dots + D_n]^{1/3} + [\sum P_1 + \dots + P_n]^{1/3} + [\sum C_1 + \dots + C_n]^{1/5} \}}{3} * 100$$

Where as

I_n = Self-sufficient Index

D = Level of development

P = Level of participation

C = Level of Self-management capability

Findings:

This study found that unweighted indices (by the suggestion of experts) of the highest-index and lowest-index community, after the validation with qualitative data of each community was ensured. This means that the Self-sufficient Index can classify the level of each community.

Conclusion:

The merit of this study lies in the development of an instrument upon which community can rely in order to seek the development pattern by exploring and comparing to neighboring community. The study has also established a benchmark upon which the community can base, under similar limitations and conditions. This benchmark allows the community to realize its current level of development and what it desires to be in the future. The instrument derived from this study can also categorize the communities according to their levels of Self-sufficient Index. Model and pattern of the communities of each level can be drawn in a more systematic fashion. Moreover, this study serves to encourage scholars in the related field to

seek a deeper understanding in the concept of Self-sufficient Economy. This will lead to the national strategy for development at last. The direction of country development probably has to focus on strength at the community level, which may lead to the restructuring of the Thai government bureaus in order to correspond with the strategy.

Keywords:

Self-sufficient Economy comprises of level of participation, level of development and self-management capability.

Annex

Table 1 33 Indicators of 20 samples of community

Indicators	Capability	Development	Participation
1) Basic Condition			
1) land title	3.85	2.60	2.55
2) electricity	3.90	2.60	2.80
3) transportation	3.75	2.75	2.65
4) right to use one's own land	3.80	2.60	2.55
2) Production Income and Employment			
5) entrepreneurship in the village	3.65	2.30	2.30
6) employment	3.50	2.40	2.30
7) wage	2.70	2.10	1.85
8) production from rice fields	3.25	2.20	2.25
9) production from farms	3.50	2.25	2.50
10) other professions	2.35	1.75	1.70
11) migration for employment	3.40	2.40	2.45
12) farmer union	3.90	2.55	2.45
13) off-season agriculture	3.75	2.30	2.30
3) Public Health and Hygieneity			
14) protection on pharmaceutical consumption	3.80	2.75	2.45
15) communicable disease control	3.90	2.70	2.75
16) mental health	3.55	2.55	2.35
17) environmental health	3.65	2.65	2.50
18) professional health	3.55	2.55	2.45
19) participation in health activities	3.85	2.60	2.50
4) Water Supply			
20) drinking water	3.15	2.25	2.05
21) water for use	3.65	2.35	2.40
22) water for agriculture	4.00	2.45	2.55
5) Knowledge Education and Culture			
23) Literacy rate	2.70	2.00	2.05
24) rate of higher education enrollment	3.00	2.40	2.40
25) governmental service in education	2.85	2.05	2.70

26) village's education center	3.20	2.05	2.05
27) information and sport center	3.70	2.35	2.40
28) religious cultural and sport activities	4.35	2.70	2.70
6) Natural resource and environment			
29) forest	3.90	2.55	2.65
30) soil	3.60	2.35	2.30
31) water	3.85	2.30	1.70
7) Financial Institution			
32) commerce cooperative	1.60	1.25	1.70
33) saving cooperative	3.00	2.05	2.45

Table 20 communities and level of development, participation and capability

Community	Development	Participation	Capability
1) First community in Chiangmai	2.53	2.44	3.67
2) Second community in Chiangmai	2.46	2.24	3.16
3) Third community in Chiangmai	2.00	1.82	2.83
4) Forth community in Chiangmai	2.00	1.80	3.16
5) Fifth community in Chiangmai	2.16	2.16	3.30
6) Sixth community in Chiangmai	2.29	2.03	3.07
1) First community in Lampang	2.46	2.28	3.58
2) Second community in Lampang	2.26	2.52	3.42
3) Third community in Lampang	1.98	1.86	2.47
4) Forth community in Lampang	2.71	2.72	4.35
1) First community in Payao	2.72	2.67	4.21
2) Second community in Payao	2.67	2.44	4.05
3) Third community in Payao	2.24	2.20	3.13
4) Forth community in Payao	2.22	2.19	3.18
1) First community in Chiangrai	1.84	1.97	2.86
2) Second community in Chiangrai	2.55	2.57	4.12
3) Third community in Chiangrai	2.52	2.48	4.10
4) Forth community in Chiangrai	2.24	2.27	3.41
5) Fifth community in Chiangrai	2.27	2.26	3.32
6) Sixth community in Chiangrai	2.61	2.35	3.76

Table 3 Self-sufficient Economy of each community

Community	Self-sufficient Economy Index (100)
1) First community in Chiangmai 2) Second community in Chiangmai 3) Third community in Chiangmai 4) Forth community in Chiangmai 5) Fifth community in Chiangmai 6) Sixth community in Chiangmai	79.68 73.28 61.30 63.28 69.99 68.45
1) First community in Lampang 2) Second community in Lampang 3) Third community in Lampang 4) Forth community in Lampang	76.52 75.90 59.12** 89.32*
1) First community in Payao 2) Second community in Payao 3) Third community in Payao 4) Forth community in Payao	87.94 83.76 70.19 70.19
1) First community in Chiangrai 2) Second community in Chiangrai 3) Third community in Chiangrai 4) Forth community in Chiangrai 5) Fifth community in Chiangrai 6) Sixth community in Chiangrai	61.39 84.34 82.88 72.83 72.45 80.16

*Maximum Index

**Minimum Index

REFERENCES:

James W. Deloach. Enterprise-wide Risk Management. Financial Times Prentice Hall 2000

Pravet Vasri , Self-sufficient Economy and Community. Research Report, Bangkok Thailand 1999.

Richard E.S. Bouldton, Barry D. Libert and Steve M. Samek. Cracking the Value Code. Harper Collins Publishers 2000.