

## EFFECTIVENESS OF AFFORDABLE HOUSING PROJECT MANAGEMENT\*

### ประสิทธิผลการบริหารจัดการโครงการบ้านเอื้ออาทร

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#### Abstracts

Objectives of this research were to study the effectiveness condition, factors affecting the effectiveness, Buddha-dhamma supporting the effectiveness and propose the appropriate approaches to the effectiveness of affordable housing project management.

Methodology was the mixed methods: the quantitative research collected data from 375 samples at Affordable housing projects at Huahin and Pranburi Districts, Prachuabkirikhan Province with questionnaire and analyzed data with descriptive and inferential statistics. The qualitative research collected data from 20 key informants, purposefully selected from experts and academicians who were involved in the affordable housing project with structured in-depth-interview scripts by face-to-face interviewing, also data were collected from 10 participants in focus group discussion. Data from both steps were analyzed by descriptive interpretation.

Findings were as follows: 1. The effectiveness condition of affordable housing Project Management was at the high level ( $\bar{X} = 3.15$ ). 2. Factors affecting the effectiveness of affordable housing project management by overall at high level ( $\bar{X} = 3.32$ ). 3. The appropriate approaches to the effectiveness of affordable housing project were found that management principle of POSDCoRB, integrated with Buddha-dhamma such as Sangkahavattu 4 was the most appropriate approach to the effectiveness of

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affordable housing project management. Findings from both methods confirmed that management by POSDCoRB, by overall were at high level ( $\bar{X} = 4.45$ ). This indicated that the Directing and Budgeting were the most important component with Staffing was still needed to be improved. The findings from the qualitative method were related to that of the quantitative method. In addition, the qualitative method mentioned the integration of POSDCoRB with Buddha-dhamma such as Sangkahavattu 4 would make the management of affordable housing project the most effective and sustainable.

**Keywords:** Effectiveness; Affordable Housing Project; Management; Sangkahavattu 4; Posdcorb

### บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์ดังต่อไปนี้ 1. เพื่อศึกษาสภาพของประสิทธิผลการบริหารจัดการโครงการบ้านเอื้ออาทร 2. เพื่อศึกษาปัจจัยที่ส่งผลต่อประสิทธิผลของการบริหารจัดการโครงการบ้านเอื้ออาทร 3. เพื่อเสนอแนวทางเพิ่มประสิทธิผลของการบริหารจัดการโครงการบ้านเอื้ออาทร ดำเนินการวิจัยโดยผ่านการเก็บข้อมูลจาก 375 ตัวอย่าง คือผู้อยู่อาศัยในบ้านเอื้ออาทรอำเภอหัวหินและปราณบุรี จังหวัดประจวบคีริขันธ์ ด้วยแบบสอบถาม วิเคราะห์ข้อมูลด้วยสถิติพรรณนาและสถิติอ้างอิง การวิจัยเชิงคุณภาพ เก็บข้อมูลจากผู้ให้ข้อมูลสำคัญจำนวน 20 คน เลือกแบบเจาะจงจากผู้เชี่ยวชาญและนักวิชาการที่เกี่ยวข้องกับโครงการบ้านเอื้ออาทรโดยการสัมภาษณ์เชิงลึกแบบต่อตัวด้วยแบบสัมภาษณ์เชิงลึกที่มีโครงสร้าง และเก็บข้อมูลจากผู้มีส่วนร่วมในการสนับสนุนกลุ่มเฉพาะจำนวน 10 คน วิเคราะห์ข้อมูลด้วยการพรรณนาความ

ผลการวิจัยพบว่า 1. สภาพของการบริหารจัดการโครงการบ้านเอื้ออาทรโดยรวมอยู่ในระดับมาก ( $\bar{X} = 3.15$ ) 2. ปัจจัยที่ส่งผลต่อประสิทธิผลของการบริหารโครงการบ้านเอื้ออาทร โดยรวมอยู่ในระดับมาก ( $\bar{X} = 3.32$ ) 3. แนวทางที่เหมาะสมสำหรับประสิทธิผลการบริหารจัดการโครงการบ้านเอื้ออาทรได้แก่ การบริหารจัดการตามหลัก POSDCoRB บูรณาการเข้ากับพุทธธรรมคือสังคಹัตถธรรม 4 ประการ เป็นวิธีการบริหารจัดการที่เหมาะสมและยั่งยืน ทั้งนี้ยืนยันจากการวิจัยเชิงคุณภาพซึ่งพบว่า รูปแบบการบริหารตามแนวทางของ POSDCoRB โดยรวมอยู่ในระดับมากมีค่าเฉลี่ยอยู่ที่ 4.45 ผลจากการวิจัยเชิงคุณภาพมีผลสอดคล้องกันและยังพบข้อเสนอว่า การบริหารโครงการบ้านเอื้ออาทร

ตามแนวว POSDCoRB บูรณาการเข้ากับหลักสังคหวัตถุ 4 จะทำให้การบริหารจัดการโครงการบ้านเอื้ออาทรมีประสิทธิสูงและยั่งยืน

**คำสำคัญ:** ประสิทธิผล; โครงการบ้านเอื้ออาทร; การจัดการ; สังคหวัตถุ 4; POSDCoRB

## Introduction

What is “affordable” housing? According to the definition of American context which is the very affluent society is “A decent home in a suitable living environment for every American family” was professed as a housing goal in the U.S. Housing Act of 1949 and reaffirmed in the 1990 National Affordable Housing Act, with the added condition that the housing should be affordable. The gap between this goal and the U.S. reality has been and remains large, however “affordable” is defined. Although affordable housing has no official definition, a widely accepted implicit definition is that monthly housing costs in adequate housing should be no more than 30 percent of household income. This is the rent payment standard currently used by the U.S. Department of Housing and Urban Development (HUD) for two of its major housing programs: public housing and the program called Section 8, which provides rental assistance. This implicit standard is by no means uniformly accepted. Michael Stone in his recent book, *Shelter Poverty: New Ideas on Housing Affordability*, argues that 30 percent of income is not an appropriate standard. He notes that, while other public programs have eligibility standards based on income, no other programs have an affordability standard (Stone 1993). Stone uses the U.S. Bureau of Labor Statistics “Lower Budgets” to define the cost of necessities other than housing as a function of household size and type. Once a household has paid housing costs, which typically are regarded as a preeminent item in the household budget. it is “shelter poor.”

However, whatever it may be the house, shack, shelter or whatever it maybe. It is a home sweet home, there is no place like home which is a famous quote since when who know? Because home is one of the necessary factors in human life besides food, clothing, and medicine. Home is a dream every people, poor and rich wish to own. But not everybody can afford the

decent home due to scarcity of resources and overpopulated big cities. Very low-income people do not have enough money to afford decent, safe, and good quality housing.

The phenomenon of globalization and urbanization seen before as a positive process because its link with modernization, industrialization and global integration has brought unprecedented negative effects to cities of the world like the growing urbanization of poverty which is posing a challenge to local, national, and international development policies. According to UNCHS, 91 percent of rapid urbanization process is occurring in cities of developing world and the number of urban dwellers will very soon outnumber those in the rural area. Large percentages of these city dwellers live in slums. (UNCHS, 2004). Urban poverty is often manifested by the growing backlog in the delivery of basic services as the demand grows beyond institution capacities, financial resources and environment carrying capacities; worsening state to shelter and societies of tenure accesses resulting in severe overcrowding, homelessness and environmental health problems; growing inequalities in cities evident in increasing residential segregation and violence which impacts more on women and the poor; lack of participation of communities in decision-making process and activities. Thailand is a country that is currently undergoing rapid urbanization. Based on the population registration data from Department of Provincial Administration in 2015, Thailand had a population of 62 million people at that time and 28 percent of that total population lived in urban areas, compared to 2005 with urban population up to 29 percent. It is anticipated that by the year of 2025 Thailand will possess a population of 72 million people and Bangkok will possess 50 percent of the entire total urban population. The distribution of urban population in Thailand is mainly focusing Bangkok Metropolitan Area and Vicinities. The specific area had accounted 42 percent total urban population in 2005 and Bangkok had possessed the share of 32 percent of them. Because Bangkok is an only city, which has the size of population beyond 6,000,000, therefore; the size of population is 20 times more than its second largest city, Nonthaburi. Within the top 10 largest city in Thailand most cities have population ranging from

100,000 -300,000 inhabitant and settled along Bangkok vicinities and in the major regional growth centers. It is noted that 7 percent of cities in Thailand has a smaller size population that is under 10,000. (National Housing Authority 2010, urban development towards sustainable cities and housing for urban poor in Thailand; (National Housing Authority, Annual report, 2010)

As a result of rapid and imbalance of urbanization, Thailand had encountered many problems. Such problems include traffic congestion, insufficient of facility and utility, social and housing problems, and environment pollution. Furthermore, the country

Inevitably faces the problem of disparity between urban and local area, rapid deterioration of nature and natural disasters. Thailand is also facing the challenge of urban poverty. Almost half of Thai lives in urban areas and 38 percent live below the poverty line. This people are found in slums and informal settlements. The Thai Government has made poverty alleviation its main target for the past several administrations and innovative approaches and strategies are being encourage, one of which is the active participation civil society in housing for the poor. Currently, there are many problems that are bringing about a rapid increase in the shortage of low-income housing; the housing backlog is presently increasing at the rate around 178,000 units per annum. (National Housing Authority, Annual report, 2010)

### Objectives of the research

1. To study the effectiveness condition of Affordable Housing Project Management
2. To study factors affecting the effectiveness of Affordable Housing Project Management
3. To study Buddha dhamma supporting the effectiveness of affordable housing project management
4. to propose the appropriate approaches to the effectiveness of affordable housing project management

## Research Methodology

This research was conducted by the mixed methods: the quantitative and qualitative research: The quantitative method was conducted by survey method, collecting data from 375 samples, derived from 5,781 people at 4 affordable housing projects. using Taro Yaname's formula with statistically significant value at 0.05. These were 1) 845 people of Huahin Community Town House 1, 2) 1,858 people of Huahin Community Town House 3, 3) 580 people of Kor Salak Aeuarthorn Village, and 4) 2,498 people of Pranburi Aeuarthorn Village. Data were collected with questionnaire that had reliability value at 0.0987 and analyzed data with descriptive and inferential statistics.

The qualitative method, data were collected from 20 key informants (John, 2014), purposefully selected from the groups of experts who involved in the affordable housing projects consisted of 4 groups, such as Administrators of government housing authority, Contractors who built the affordable houses, academicians in public administration and Buddhism and Local Administrators and Stakeholders, the residents in the affordable houses and also from 10 participants in focus group discussion. Data collecting instrument was structured In-depth-Interview script, collected by face-to-face in-depth-interviewing and panel discussion for the focus group discussion. Data from both steps were analyzed by content descriptive interpretation.

## Research findings

1. The findings from the quantitative method were concluded as follows:

1.1) Almost half of samples were Pranburi Aeuarthorn Village (43.2%), followed by Huahin Community Town House 3 (32.3%). The rest were Huahin Community Town House 1 and Kor Salak Aeuarthorn Village (14.7% and 9.9%, respectively and were female (60.5%), while the rest were male (39.5%) with the ages between 41-50 years old, followed by 50 years or more and 31-40 years old (21.9% and 18.7%, respectively). The rest were less than 30 years old (11.7%). educational level: almost half of sampled people had education in Secondary level (43.7%), follows by bachelor's degree, Primary level and

high vocational certificate level (21.1%, 17.6%, and 13.3% respectively). Only a few had educational level in master or higher (4.3%). The occupation: about one third of samples had occupation as seller (38.7%), followed by own business and government official or government enterprise (22.4%, and 21.1% respectively) with monthly income between 20,001-50,000 Baht (44.5%), followed by 10,001-20,000 Baht and 5,001 – 10,000 Baht (22.9%, and 14.4%, respectively. The rest were less than 5,000 Baht and more than 50,000 Baht (9.3%, and 8.8%, respectively

1.2 As for the effectiveness condition of the affordable housing project management was found that, by overall average mean was at high level ( $\bar{X} = 3.15$ ). Each aspect was also at high level as; When considering each aspect, it was also found that all aspects were at the high levels, with house construction responding to buyer needs had the highest mean ( $\bar{X} = 3.23$ ), followed by buyer's satisfaction, good environment, and good quality of life ( $\bar{X} = 3.15$ , 3.15, and 3.07, respectively. Findings from the qualitative method was also corelated with the finding from the quantitative method. Most of key informants agreed that government affordable housing project was effective in line with effectiveness factors that were house construction responding to buyer needs, buyers were satisfied with the quality, the price, the long-term payment with low interest rate. The affordable houses mostly are in good environment with convenient access to basic institutes such as hospitals, schools, monasteries, and Local Administrative Organization Offices. The quality of life of those dwellers in the affordable housing projects are quite good since they have home, sweet home, there is no place like home.

1.3 Factors affecting the effectiveness of affordable housing project were found that , that the overall average of factors, the need of buyers was at the high level ( $\bar{X}=3.32$ ). All aspects were at the high levels, with good quality of house had the highest mean ( $\bar{X}=3.49$ ), followed by affordable price, low interest rate, and long-term payment ( $\bar{X}= 3.29$  , 3.28 , and 3.23 , respectively. Findings from the qualitative method also confirmed these findings. Most of the key informants agreed that the affordable house and

town house for low-income people were built with good construction materials that will last for the lifetime. People with low income had decent sweet home with affordable price, low interest rates and long-term payment.

1.4 As of the objective 4, to propose the appropriate approach to the effectiveness of affordable housing project management. The management principle, POSDCoRB integrated with Sangahavattu 4 were proposed, the findings were that the effectiveness of affordable housing project management with the POSDCoRB management factors, by overall was at high level ( $\bar{X} = 4.45$ ). Each aspect was at high level in descending order as follows: Coordinating was at ( $\bar{X} = 4.67$ ). Directing and budgeting were at ( $\bar{X} = 4.49$ ). Organizing was at ( $\bar{X} = 4.48$ ). Planning was at ( $\bar{X} = 4.41$ ). Reporting was at ( $\bar{X} = 4.37$  and Staffing was at ( $\bar{X} = 4.33$  accordingly.

As for Sangahavuthu; principles of service, by overall, was at high level ( $\bar{X} = 3.20$ ). When considering each aspect, it was also found that all aspects were at the high levels. With Dana, giving had the highest mean ( $\bar{X} = 3.24$ ), followed by kindly speed, equal treatment and beneficial works were at ( $\bar{X} = 3.22, 3.18$  and  $3.17$ , respectively. Findings from the qualitative research also confirmed these findings. Most of key informants agreed that the administrators of affordable housing project needed to apply these 4 principles of good service so that the project would be effective. By Sangahavattu 4, the management gave good advice to the customers who wanted to buy the affordable house, starting from financial advice, how to look for the house in the good locations. They gave advice with kind and friendly words to customers every time with the same manners. it could be concluded that the appropriate approaches to the effectiveness of affordable housing project management were the management process of POSDCoRB; Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting, integrated with Buddha-dhamma; Sangahavattu 4, Dana, Giving, Piyavaja, kindly speech, Atthajariya, beneficial work and Samanattata, equal treatment. These two important factors induced the Effectiveness of the Affordable Housing Project Management.

## Research Discussion

Findings from the research could be discussed according to the objectives as follows:

1. The effectiveness condition of the affordable housing project management was found effectiveness by overall average mean was at high level ( $\bar{X} = 3.15$ ). Each aspect was also at high level as; When considering each aspect, it was also found that all aspects were at the high levels, with house construction responding to buyer needs had the highest mean ( $\bar{X} = 3.23$ ), followed by buyer's satisfaction, good environment, and good quality of life ( $\bar{X} = 3.15$ ,  $3.15$ , and  $3.07$ , respectively. Findings from the qualitative method was also corelated with the finding from the quantitative method. Most of key informants agreed that government affordable housing project was effective in line with effectiveness factors that were house construction responding to buyer needs, buyers were satisfied with the quality, the price, the long-term payment with low interest rate. The affordable houses mostly are in good environment with convenient access to basic institutes such as hospitals, schools, monasteries, and Local Administrative Organization Offices. The quality of life of those dwellers in the affordable housing projects are quite good since they have home, sweet home, there is no place like home. This finding is related to the research work of Krisda Plangsiri and others (2554) conducted research on Antecedents Affecting the Quality of Life of Residents in Baan Eua Arthorn Housing Project in Bangkok Metropolitan Areas with the objectives of this research were to study the present condition quality of life of residents in Ban Uea Athon Housing Project (BUAHP) and antecedents, namely, leadership of the community head, economic status of residents in the Project, the government's housing policy concerning the BUAHP, participation of community members, knowledge and understanding of community members, and conditions of the community environment; and to study the relationships of antecedents with quality of life of residents in the BUAHP. A questionnaire and interviewing were employed to collect research data from 396 residents in the BUAHP. Research data were analyzed with

descriptive statistics and multiple regression analysis with the use of structural equation modeling (SEM). Research findings showed that quality of life of residents in the BUAHP and antecedents, namely, leadership of the community head, the government's housing policy concerning the BUAHP, the economic status of residents in the Project, the community environment, and participation of community members were at the good level, while knowledge and understanding of community members was at the high level. Furthermore, findings from multiple regression analysis with the use of SEM indicated that the antecedents that significantly affected on quality of life of residents as follows: the community environment, the government's housing policy concerning the BUAHP, participation of community members, economic status of residents in the Project, and knowledge and understanding of community members. Also, those factors could predict the quality of life of residents at 75 percent.

Also the research work of Patmaporn Ratanapradab and Yingsawat Chaiyakul (2564) conducted research on Design Guidelines for Improving Energy Saving and Environmentally Friendly Building of Two-Story Detached House in Eur Arthorn Housing Project, Khon Kaen with two main parts: firstly the field surveys were conducted in eight houses to collect physical data and to make field measurement for evaluating energy savings and environmentally friendly aspects; secondly, the guidelines for improving the house design were proposed by analysis the results from the survey and the evolutions. The first field survey showed that the residents required more occupying space. Because of this, there were various methods to improve the original design in the project. The original design of the house was done with the limitation of the construction cost. The structure materials of building chosen were cheap and had little external protection. The results from evaluating energy savings and environmentally friendly building and from analyzing feasibility and costs compared with original design showed that two important criteria are the building envelopes and layout and landscape. The guidelines to improving the environmental and energy aspects for the house are first, installing ceiling thermal insulation, installing shading device panel

and secondly, reorganizing roofing structure to cover hardscape or using plants in landscape to reduce ambient temperature outside. The evaluation of design guidelines was done by finally conducting questionnaire to the residents. The results showed that the design suggestions are acceptable and could be used for improving the house.

2. Factors affecting the effectiveness of affordable housing project management were found that, by overall average of factors, the need of buyers was at the high level with the mean at 3.32. All aspects were at the high levels, with good quality of house had the highest mean at 3.49, followed by affordable price, low interest rate, and long-term payment with the means at 3.29, 3.28, and 3.23, respectively. Findings from the qualitative method also confirmed these findings. Most of the key informants agreed that the affordable house and town house for low-income people were built with good construction materials that will last for the lifetime. People with low income had decent sweet home with affordable price, low interest rates and long-term payment. The findings were related to the research work of Sekmon Sammapetch (2014) conducted research on the administrative resources and the effectiveness of the project management of special correctional treatment center staff Bangkok. The study was found that the overall project management resources were at a high level. The time management or the time frame for the operation of project, regulations, schemes or techniques, and information management were at high levels. The aspect that had the least mean was human resource management. For the effectiveness of the staff at a high level. With the power to solve drug problems to achieve sustainable results with the highest average value, followed by the enhancement of control efficiency.

Findings were also related to the research work of Premchai Sarobon (2007) studied the administrative factors that influenced the quality of education of Chulachomklao Royal Military Academy The results of the study revealed that 1. The administrative factors of Chulachomklao Royal Military Academy consisted of Man factors, management, material, money and management information system (MIS). Management by 4M's principle, Man,

Materials, Money, and Management had direct and indirect influence on the quality of management of Chulachomklao Royal Military Academy at statistically significant level at.01.

3. The appropriate approach to the effectiveness of affordable housing project management. The management principle, POSDCoRB integrated with Sangahavattu 4 were proposed, the findings were that the effectiveness of affordable housing project management with the POSDCoRB management factors, by overall was at high level with the mean value at 4.45. Each aspect was at high level in descending order as follows: Coordinating was at 4.67. Directing and budgeting were at 4.49. Organizing was at 4.48. Planning was at 4.41. Reporting was at 4.37 and Staffing was at 4.33 accordingly.

As for Sangahavuthu; principles of service, by overall, was at high level with the mean value at 3.20. All aspects were at the high levels. Dana, giving had the highest mean at 3.24), followed by kindly speed, equal treatment and beneficial works were at 3.22, 3.18 and 3.17, respectively. Findings from the qualitative research also confirmed these findings. Most of key informants agreed that the administrators of affordable housing project needed to apply these 4 principles of good service so that the project would be effective. These findings were related to the research work of Chalermporn Viran and friends (2011) who studied the use of POSDCoRB Model as an administrative tool for the local administrative organizations in Mae Taeng District Chiang Mai Province the study was found that the local administrative organizations in Mae Taeng District applied the POSDCoRB Model to manage the administration. The results were that Mae Taeng District, Chiang Mai Province managed the business with POSDCoRB effectively, specially Staffing by putting the right man in the right job resulting the management of its organization every effective.

Kunnadda Saisorn (2018) studied the management process that influenced the effectiveness of the organization for the construction of residential buildings in Bangkok. The results of the study were as follows: 1. Residential building construction business group in Bangkok There was level in the implementation of the management process. Planning and budgeting

were at high level and the process of managing Personnel, Direction, Organization, Coordination and Reporting were at the moderate level, respectively. 2 . Respondents of the test of the residential building construction business group. There were opinions about the effectiveness of the organization, quality of work and the side achieving the target within the specified time were at a high level and the effectiveness of the satisfaction organization and the organization adaptation aspect were at the moderate level respectively. 3. Management processes were in the same direction with the effectiveness of the organization. Coordination was the most significantly related to organizational adjustment, followed by budgeting and quality of work, and 4 . Management process for coordination, budgeting, and organization influencing the effectiveness of the organization for the construction of residential buildings in Bangkok with statistically significant level at 0.01.

### Body of knowledge

Body of knowledge from this research: Effectiveness of Affordable Housing Project Management can be drawn into a picture like this:

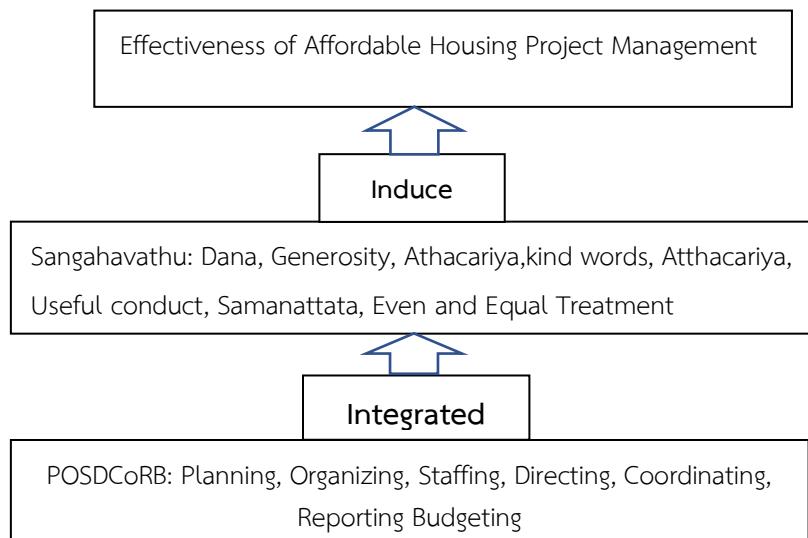


Figure 1: Body of knowledge

From this picture, it indicates that appropriate management by POSDCoRB principle, integrated with Buddha-dhamma, Sangahavathu 4: Dana, Generosity, Piyavaca, Kind words, Atthacariya, Useful conduct, Samanattata, Even and Equal treatment induce the effectiveness of Affordable Housing Project Management effectively. By Sangahavathu 4, the management gave good advice to the customers who wanted to buy the affordable house, starting from financial advice, how to look for the house in the good locations with kind and friendly words to customers every time with the same manners. These two important factors induced the Effectiveness of the Affordable Housing Project Management.

## **Recommendations**

The results of this research can be recommended for general purposes as follows:

### **Recommendation for policy formulation**

For the policy makers, the government agencies involved with the public service should apply the principle of management; POSDCoRB which is still well-known among the administrators and for more effective. This principle of management should be integrated with Buddha-dhamma, specially Sangahavathu-dhamma. These two factors will result the effectiveness of affordable housing project and other similar projects.

### **Recommendation for implementation:**

For those who implement the policy, apply the new principle of public administration, or New PA. to POSDCoRB. Each stage of management should integrate with Buddha-dhamma, especially Sangahavathu 4, such as planning stage, use the strategic planning, Organizing, use organization development, Directing, apply the participative management, Coordinating, use networking, Reporting, use two ways communication and Budgeting, the important one, use money for value in the principle of good governance.

### Recommendation for future research:

For the future research on this or similar topics should concentrate on the qualitative methods concentrating on in-depth-interviewing the key informants who are the role leaders, influent persons, and wise men in the communities to get in-depth-information from the research.

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