

EFFECTIVENESS OF POLICY IMPLEMENTATION ON LAND ALLOCATION AND LAND PLANNING IN LAO PDR

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Abstract: This study assesses the effectiveness of policy implementation on land allocation and land use planning in Lao PDR through assessing levels of input, process and product of policy implementation on land allocation and land planning. Stufflebeam's CIPP Model is tailored into EIPP Model was employed as the study tool for the assessment. Data collection was obtained from three Districts (two village for each district); one district in each region (Southern, Central and Northern Lao PDR) through interviews 312 households. Key informants include of 30 representatives of villages' authorities of six selected villages and in-depth interviews were made with 90 government officers from the district level.

The result of this study indicates that the implementation of land allocation and land use planning in Lao PDR has sufficient environment factors. However, the limited inputs incomplete implementation of land use planning procedures impacts on the low effectiveness of implementation of land allocation and land use planning policy in Lao PDR. With this regards, relevant organizations should develop a consistent mechanism for effective and efficient land governance and land planning to ensure the fully and effectively implementation of land allocation and land use planning in different villages with different environmental situation in Lao PDR. At the same time, further studies on how are different land use category had been effectively used and managed by local people at the village level are needed to support future government's policy revision and implementation.

Keywords: Land, policy, land use planning, policy implementation, Lao PDR

I. Background

Land is a natural resource, which widely used for different purposes including productions for food, other goods and services. At the present, market demands for agricultural products has widely influenced land conversion and land use changes in many different parts of the world, especially in developing countries, where socio-economic development is highly relying on land use. This requires long-term land use policies and regulations to cope with reduction of natural resources and sustainably use of land for agriculture and other purposes. In overall, land policy recognizes ownership and right over land, which area of land can be used by whom (Vandergeest and Peluso, 1995). Land use planning (LUP) help to demarcate the land use zones, which aims to increase recognition land ownership in different parts of geographical landscapes of the nations. LUP contributes to the efforts of governments in

putting socio-environmental representation into action and assigning rights to people and organizations; in other words, LUP help to facilitate the social power relation to recognize ownership over land and resources.

In the Lao People's Democratic Republic (hereafter "Lao PDR"), legislation on land and resources has been widely developed and issued since the late 1980s when the country open its door to international cooperation. Socialism reform in Lao PDR began in 1975, when the government focuses on subsistence-based agricultural practice and land was not distributed to individual people or households (Bourdet, 1995). After the recognition of independent, the government of Lao PDR (GoL) implemented collective farming policy, which allowed people to practice agriculture collectively and mainly for subsistence oriented (Worner, 1997). Since the government found that collective farming system would not be able to help people graduating from their poverty, rethinking the agricultural development policy from former collective farming to market oriented agricultural production system in 1986 by introduction the new policy called "new economic mechanism". In liberalizing the market, the GoL promotes private sector investment in land development by tax exemption as an incentive for farmers to productively use of land, particularly the agricultural land.

In early 1990s, the GoL developed legislation to promote the management of communal land, where officially defined as village land and forest areas. The roles in management of such land and forest areas within the village territories had legally been transferred to village level (i.e. village authorities). The Land and Forestland Allocation program (LFA) was piloted in Lao PDR in 1993 and has formally implemented since 1996, which recognizes the right over land of community and individual households in rural area of the countries (Fujita et al., 2006). LFA does not only delineate village boundary, but also distinguish village land and forested areas. Land in each village has been classified into maximum eight categories following the land law of Lao PDR; while forested area has been categorized into production forest, protected forest and protection forest. These land and forested area fall into the village's boundaries are managed by village authorities with closely be advised and coordinated with concerned state offices at the district and higher levels respectively.

The implementation of LFA has been divided into 8 steps, including preparation and consultation with village committees, data collection, village meetings, field measurements, village land-use planning, extension, and monitoring. The GoL considers LFA for protection of forest, environment, and biodiversity. One of the important aims of LFA is to increase

forest cover by reducing traditional shifting cultivation practice, mitigate deforestation and to reduce rural poverty (Ministry of agriculture and forestry, 1996).

During 1990 and 2000, a total of 7,117 villages comprising of 283,111 households which accounted for 83% of total villages in the country were successfully demarcated under the LFA (Ministry of Natural Resource and Environment, 2018). According to the evaluation of relevant government agencies, the implementation of LFA program and LUP policy in Lao PDR has contributed largely to a reduction of shifting cultivation area, many degraded forest patches have been recovered, water basins and biodiversity have obviously protected (National Land Authority, 2007). The progress of LUP in Lao PDR incentivizes the increasing private (both domestic and international investors) investment in Lao PDR. As a result income per capita has significantly increased from US\$210 in 1990 to US\$1,857 in 2015, while the poverty head count index has reduced from 48% in 1990 to 6.59% in 2015 (Choummaly Saingasone, 2015). This determines the success of LUP, coupled with the success of the implementation of many other socio-economic policies.

However, the debate of the implementation of LFA has been increasingly due to many reasons. One of the many issues has been raised widely is the lack of monitoring and evaluation processes upon completion of LFA at village level (Viphakone, 1999 and Phanvilay and Fujita, 2008). This leaves knowledge gaps on whether local people use land for agriculture and other purposes following the allocated zones that demarcated by LFA. There are numbers of reasons behind the LFA without monitoring and evaluation; these include (but not limited to) (1) insufficient budget to support monitoring and evaluation processes, (2) insufficient equipment and technologies to facilitate or support the monitoring and evaluation of LFA, and (3) insufficient technical knowledge to carry-out the monitoring and evaluation of LFA. LFA in Lao PDR has nicely introduced to village level, but whether the implementation of the program reaching required quantity and quality has not clearly seen (FAO, 2016).

This study looks at the effectiveness of the implementation of LUP in Lao PDR. The specific objectives of current study include (1) identifying suitable environmental factors that influence the success of LUP in Lao PDR, (2) analyzing the input factors that facilitate the implementation of LUP policy, and (3) assessing the process and products of LUP policy implementation. The results of the current study are highly expected to provide inputs for improvement the implementation of LUP in Lao PDR. At the same time, the authors of recent

paper also expect that concerned stakeholders at the national and local levels will use this paper as a reference for constructive debate at the policy development processes.

II. Conceptual Framework and methodological approaches

a. Conceptual Framework

This study assesses the perception of local villagers, officers and key informants towards the effectiveness of LUP policy implementation, which emphasizes to environment suitability, LUP processes, inputs and the products of LUP in Lao PDR. Figure 1 shows the conceptual framework of the study. It shows that statistical tests were employed to examine relationship between various independent and dependent variables.

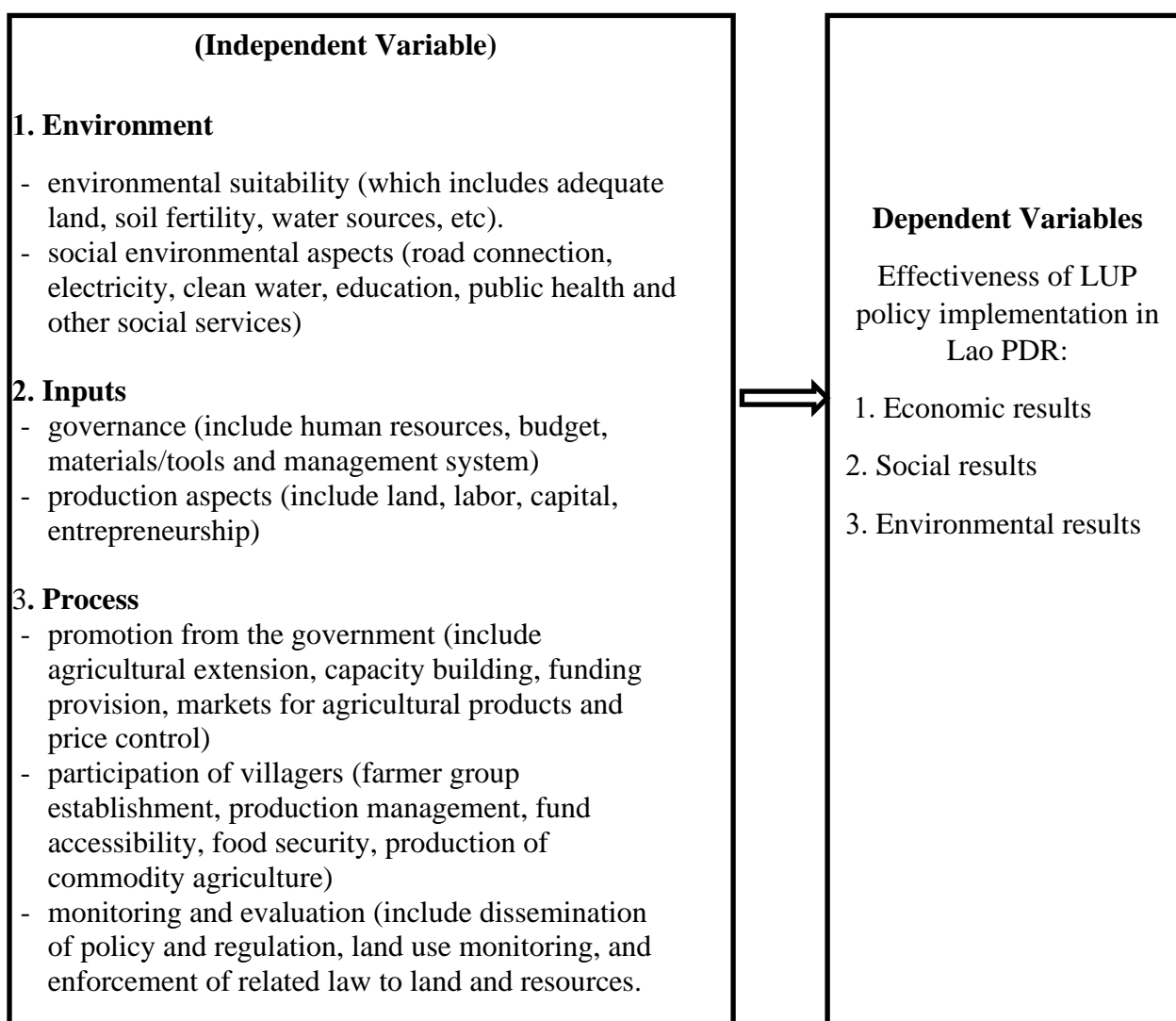


Figure 1: Conceptual Framework of the study

In this study, we adapted Stufflebeam's CIPP¹ Model to a new model called EIPP² Model and apply it as our main methodological approaches.

b. Methodological Approaches

This study uses a multi-method approach; which combines quantitative and qualitative approaches. These include in-depth interviews with selected households in the selected study villages, related experts and technical staffs working with concerned governmental organizations at the national, provincial and district levels. Before conducting household interviews, we discussed with representatives of the selected villages; participants of the group discussion include members of village's authorities (i.e. chief and/or deputy chief, elderly group, youth, women union, village guards, volunteer village foresters and mediation unit).

Since we have limitation in time and resources, we selected two village per district of Bortan, Longxan and Lamam districts in Xayabury province, Xaisomboun and Xekong provinces respectively. Criteria used for selection of target villages and districts for current study include:

- The villages and districts have implemented LUP policy during 1990s (LFA) and continue with other LUP models.
- Villages and districts are located in different geographical regions of Lao PDR, which include northern, central and southern regions. This is in order to ensure that the selected villages and districts can represent the context of Lao PDR as whole.
- Villages have implemented different LUP models by many different project such as GIZ's supported land use planning projects (i.e. Northern Upland Development Project "NUDP), Climate Protection for Avoiding Deforestation "CliPAD"), Swiss supported project called "The Agrobiodiversity Initiative in Lao PDR "TABI") and other projects that supported by international organizations and/or self-funded by the GoL (i.e. Micro-land use planning "M-LUP").
- Villages with accessibility with good road networks
- Two selected villages per regions should include the most advance villages in term of implementation of LUP policy; and the most weakness villages in implementation of LUP policies.

¹ CIPP = Context, Inputs, Processes and Products.

² EIPP = Environment, Inputs, Processes and Products

c. Field data collection approaches

A total of 1,185 households from different 6 villages in three different regions of Lao PDR were selected. Yamane's formula was used to determine the size of the samples (Yamane, 1973) indicating that 300 households are a minimum requirement of the sample size. The study was able to interview a total of 312 representatives of selected households. Interviewed households were selected from different units in the study villages by using systematic Random Sampling Approach. Apart from households interview, the group discussion at the village level made-up at about 4-6 representatives per village; there are 30 representatives of the study villages participated group discussion. Figure 2 shows the actual group discussion in Phoun village, Lamam district of Xekong province.



Figure 2: Pictures show actual group discussion with representatives of villagers in Phoun village, Lamam district of Xekong province

At district level, we interviewed 30 staff per district (total 90 staff in three districts) whom working as managers and technical staff at concerned district offices. These include District Agriculture and Forestry Office (DAFO), District Office of Natural Resources and Environment (DoNRE), District Office of Public Works and Transportation, District Office of Information and Culture, District Public Security and Military.

d. Household interview

Household interviews were conducted with 312 households in total (about 25% total households in each selected village). These households are representatives of the selected villages. As mentioned above, the interviewed households were selected by using Systematic Random Sampling based on the list of households given by village's chief and we selected

households for interview from the list. Then we visited selected households and conducted interview accordingly. In each household, we interviewed the head or/and other persons who know the historical land use within the households. Semi-structure interview forms were used to collect information from selected households in the study villages.

Apart from interview, field observation had been made in each village. The aims of field observation are to understand the actual land use, forest condition in general, and other aspects with regards to land use and forest management that delineated by different LUP in each village. We asked one or two representatives of each village to accompany us to walk across the land use and forest area around the selected villages. During the walk, we also discussed with the representatives with regards to the histories of land uses and forest management in each visited site.

e. Data analysis

All collected data was keyed into and analyzed in SPSS program. We used 4 variable information to run EIPP Model. These include Environment (E), Inputs (I), Process (P) and Product (Pr). These variable data were analyzed for determination of readiness and effectiveness of implementation LUP policy in Lao PDR. Collected data from field was analyzed using rating scales of indicators based on Likert Sariat (1967) whom defined the average of rating scales as following.

Table 1: rating scales for analysis of effectiveness in implementation of LUP policy in Lao PDR (using rating scales of Likert Sariat (1967)).

Rating scales (means of perception of interviewees)	Measures/explanation	(interpret) whether LUP policy in Lao PDR is effectively implemented
4.51-5.00	Highest level in readiness, suitability and sufficiency for implementation of LUP policy	Most effectiveness
3.51-4.50	High level in readiness, suitability and sufficiency for implementation of LUP policy	High effectiveness
2.51-3.50	Middle level in readiness, suitability and sufficiency for implementation of LUP policy	Middle effectiveness
1.51-2.50	Low level in readiness, suitability and sufficiency for implementation of LUP policy	Low effectiveness
1.00-1.50	Lowest level in readiness, suitability and sufficiency for implementation of LUP policy	No effectiveness

The average of rating scales is the means of perception of villagers and key-informants that responded to our interview and discussion. These rating scales indicate whether LUP policy in Lao PDR has effectively taken into implementation on the ground in each region of Lao PDR.

III. Result and Discussion

The results of the present study found that a good plan and well guidelines are available but they have not been fully implemented across the steps specified in guidelines. In addition, there lack of regular monitoring and vigorous inspection. The key reasons are that: 1) The detail of how to promote and monitoring & evaluation are not coherent, 2) Supporting factors are not practical for Government agencies at the district level. The following sections describe the level of effectiveness of each factor in LUP/LFA from the viewpoint of villagers and related government officials:

1. Environmental factors:

The study result found that the richness of natural environment is quite high ($\bar{X} = 3.52$) since the population per square meter is very low as well as plenty of empty land is available. It is however, the suitability of social environment in average showed only medium level with the score of 3.13. Although accessibility to electricity is considerably high with the score of 4.83, accessing to public health is completely poor with the score only 1.83. Based on the in-depth interview and field observation, many roads were still in gravel with only one season accessibility, and most of agricultural areas were not accessible. The development of education and public health remain limited especially the suitability of locations and human resources. In addition, facilities used in the organization were not fully supported.

2. Input factors:

The result of the study show that the input from the district to make an effective implementation of LFA policy show very low level of effectiveness with the average score of only 2.31. The score for human resource is only 2.48. According to our visit, there were only 2 offices that have staffs that were in charge of land use management namely the agriculture and forestry office, and the environment and natural resource office. Although, there were staffs but the number were limited. Their knowledge was inadequate to handle with the land use management. In addition, there is only 23.89% of all staff that have education background related land and forest management. The budget allocated for the job has limited with the effectiveness level of only 2.10. Furthermore, the factor for facilities to facilitate the policy implementation is considerably low with the score of effectiveness only 1.55. Despite

the central government has bared no effort to explore the market for villagers, the availability of markets for villagers to sell their products and goods remain very limited. All these factors have affected the effectiveness of land support management of many relating district level offices, and result in ineffectiveness of LUP/LFA implementation.

Input factor from the village production also show inadequate with the average score of only 2.66. This is because agriculture land, local labor, as well as the amount of investment showed limited.

3. Implementation process

Followings are 3 processes of implementation:

The process of implementation consists of three domains as follow:

1) **Land use supporting activities:** at the district level, land support management has following components/activities: production group establishment, technical training, raising funds, support of food production, product design, permanent job creation, finding markets for agricultural products, price control for agricultural and handicraft products. Conclusively, the study found that the performance of the support activities was ineffective with the score of only 2.46. This was because most activities have not fully implemented. In addition, there is lack of practical guideline for land use at the village and household levels.

2) **Land use activities:** activities in land use development include participation in agricultural production groups, access to sources of funds, participation in technical training, development for permanent job, alternative jobs to replacing swiden farming that lead to deforestation, participation in supporting food production and other business activities. Generally, the performance of the land use development activities is not as high as expected with the average effectiveness score of 3.00. This was due to limited production factors including land, labor, budget and entrepreneurship.

3) **Monitoring and Control of local authorities:** these activities include regulation formulation, dissemination of defined regulation, monitoring and control, and enforcement applied to individuals. The results of the analysis show that the performance of these activities has been quite low with the average effectiveness score of only 2.44. The main causes of the result came from the fact that the management for monitoring and control were not clearly defined and implemented. The assignment of monitoring and control for each authority at different managerial level is unclear with somehow overlapping tasks. In addition, there is lack of management factors, which include labor, budget, equipment, and management per se.

4. Production outputs/impacts

1) **Economic impacts** indicate in household income, house condition, and other facilities. The result of the study show that villagers have gained economic better off to some extent with the medium level of economic impact with the score of 3.06. This was because only were a few of agricultural productions established and implemented resulting from the fact that supporting factors for production were limited, and markets for such agricultural products were also limited.

2) **Social Impacts** indicated in the happiness given to the local society under LUP/LFA policy, reducing land use conflict among villagers, and land right security. The study found that the local has gained socially well off with quite high satisfaction level of 3.54. This was because coordination between authorities, law enforcement, and dissemination of defined law at the district level were done effectively.

3) **Environmental impacts** indicated in that Protected forest were still remained, wild animal, soil protection areas, and ecosystem were well preserved. The analysis result shows that LUP/LFA did not effectively help to protect environment as it results with low average effectiveness score of only 2.88. These were because the development of knowledge-based occupations were not promoted and supported enough. Most occupations are natural resources based especially forestland where deforestation could not be avoided from farming. The following table shows portion of forest areas before and after the land Use Allocation and Land Use Management between 1995 and 2015. In overall, it shows that forest has a tendency to reduce from 29,010 hectares in 1995 to 28,252 hectares in 2015. It is surprisingly however, Village A and B has slightly increased in forest cover. This is because LFA in these villages was so effective from the allocation and demarcation of the village forest within a national protected area. In addition, the villages have a better access to market and more effective in land management due to greater performance in soil improvement from so called Soil Doctor group. This group helps villagers to analyse and improve their soil to intensify agriculture production. This result in increasing land productivity and reducing their pressure to surrounded forest.

Table 2: A comparison of forest area between before and after LUP/LFA policy implementation in the 6 villages Study Cases

Village Name	Forest Area (ha)		Delta of Changes Increased (+), Reduced(-)
	Before 1996	After 2015	
Village A	2,571.76	2,581.29	+ 9.53
Village B	2,164.99	2,256.92	+ 91.93
Village C	5,459.50	5,351.70	- 107.80
Village D	7,355.97	7,002.28	- 353.69
Village E	1,111.08	1,053.16	- 57.92
Village F	10,717.25	10,376.82	- 340.43
Total	29,010.55	28,252.17	- 758.38

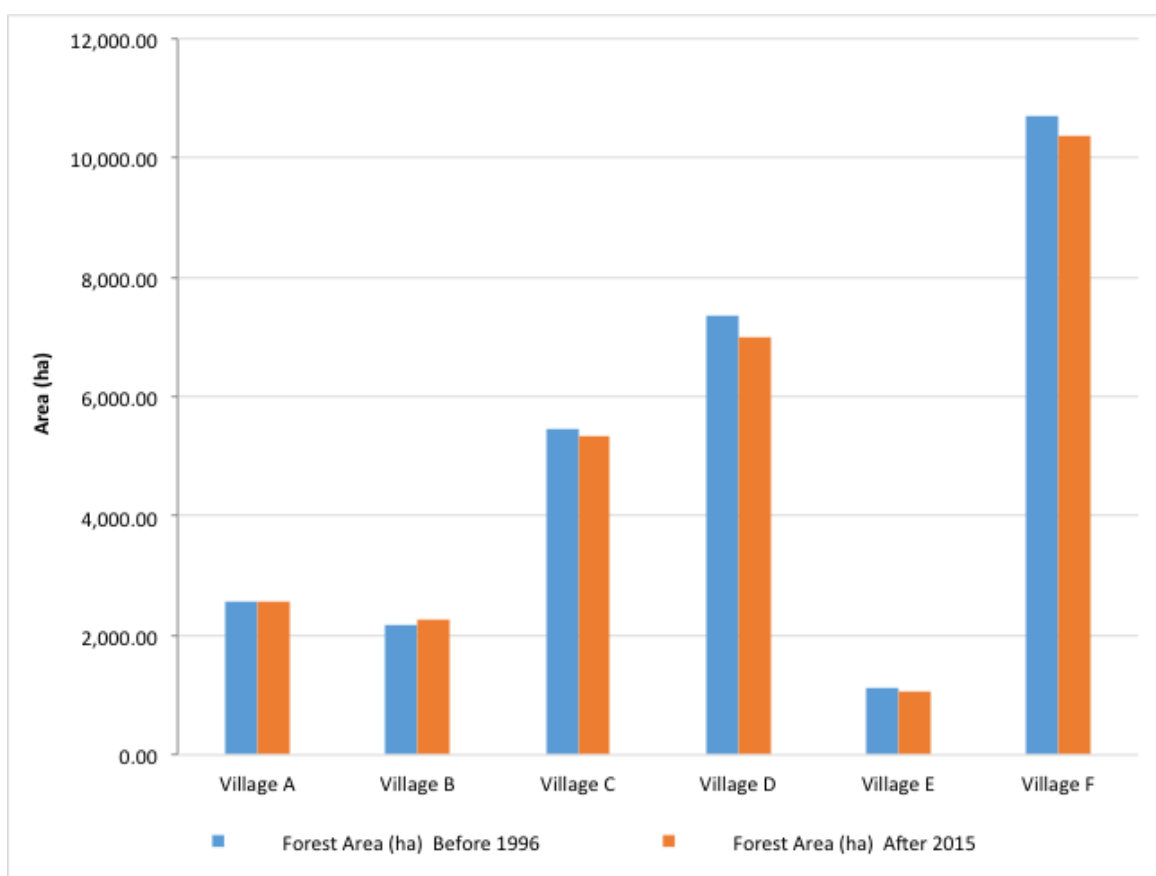


Figure 3: Land use area in the case study villages before and after land LUP/LFA

IV. Conclusion and Recommendations

This analysis is a review of Land Use and Land Allocation in Lao PDR since 1996 by adopting CIPP Model. CIPP Model was adapted and tailored into a new model so called EIPP Model. This model was used to assess the effectiveness of LUP/LFA with emphasizing in environmental factors, input factors, implementation processes, and benefits. The result showed that although there has sound environmental factors with the average score of 3.52, input factors to support the implementation of LUP/LFA show inadequate with the average

score of only 2.28. Implementation factors which include land use supporting activities, land use activities and monitoring and controlling activities in overall show medium level of performance with the average score of only 2.63. These result in medium level of outputs/impacts including social, environmental and economic impacts with the average score of only 3.16. The study finally found in overall medium level of effectiveness of the LUP/LFA implementation in Lao PDR with the average score of 2.93.

According to the analysis, it could be seen that there were many gaps in input and process of the LUP/LFA policy implementation. In order to drive a better implementation of LUP/LFA in Lao PDR, the study suggests:

- 1) Managing the Land in Lao PDR is principally based on the 8 categories of Land stipulated in the Land law. Therefore, related government sectors at the central level need to develop a clear mechanism in governing the land under their responsibility.
- 2) At the provincial Level, the related provincial authority should strategically define Land Use Plan that suite their development context and create enabling environment that facilitate the effectiveness and efficiency of Land Use. These include:
 - Re-organize manpower of the local government agencies at the district level to match and balance their workload and provide capacity building.
 - Allocate sufficient budget for field works of the concerned staff at the district level.
 - Provide sufficient equipment and vehicles for the field operation at the district level.
- 3) Related government sectors at the district level in cooperation with village authority should promote effective uses of land under their jurisdiction through providing technical training on land and soil improvement to increase their agriculture productivities and increase their accessibility to market. The district and village authority should enforce measures to individuals or groups that disobey the land use regulation under LUP policy.
- 4) Further studies are required to measure how each category of land is used and governed and how effective they are in order to provide complete comments and suggestion to the central government for a sound and effectiveness land policy improvement for Lao PDR.

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