

การประเมินความมีประสิทธิภาพของการควบคุมภายในของสหกรณ์การเกษตร
ในเขตจังหวัดอุบลราชธานี
Evaluating Efficiency of Internal Control in Agricultural Cooperatives
in Ubon Ratchathani Province

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Abstract

This paper aimed to study the evaluation efficiency of the internal control system in agricultural cooperatives in Ubon Ratchathani province. The sampling target group were 91 agricultural cooperatives in Ubon Ratchathani province. Using questionnaires to collect data with finance and account officers in agricultural cooperatives. Descriptive statistics were used to analyze data frequency, percentage, mean, and standard deviation and applied multiple regressions to inferential statistic. The results found internal control in accounting of agricultural cooperatives in Ubon Ratchathani province area was at high level, the total amount balance verified to match the general ledger account, cooperative registrar regulations have the lowest point which can be a major issue.

Keywords: Agricultural Cooperatives; Internal Control; Evaluate Efficiency

บทคัดย่อ (Abstract)

การวิจัยในครั้งนี้มีวัตถุประสงค์เพื่อศึกษาการประเมินความมีประสิทธิภาพของการควบคุมภายในของสหกรณ์การเกษตรในเขตจังหวัดอุบลราชธานี ประชากรและกลุ่มตัวอย่างได้แก่ สหกรณ์การเกษตรในเขตพื้นที่จังหวัดอุบลราชธานี จำนวน 91 แห่ง เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล

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การวิจัยครั้งนี้เป็นแบบสอบถามโดยสอบถามจากผู้ปฏิบัติงานด้านบัญชีการเงินของสหกรณ์การเกษตรในจังหวัดอุบลราชธานี สถิติที่ใช้ในการวิจัยครั้งนี้ ได้แก่ วิเคราะห์ข้อมูลเชิงพรรณนา (Descriptive Statistics) ในการวิเคราะห์สถิติเชิงพรรณนาจะใช้การหาค่าความถี่ (Frequency) ค่าร้อยละ ค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐาน และการวิเคราะห์สถิติเชิงอนุมาน (Inferential Statistics) ผลการวิจัยพบว่าการควบคุมภายในด้านบัญชีของสหกรณ์การเกษตรในเขตจังหวัดอุบลราชธานีอยู่ในระดับมาก ในขณะที่ ส่วนของสมุดคู่บัญชีเงินฝากถูกต้องตรงกับบัญชีแยกประเภททั่วไปและระเบียบนายทะเบียนสหกรณ์มีค่าคะแนนน้อยที่สุด ซึ่งสามารถก่อให้เกิดปัญหาใหญ่ตามมา

คำสำคัญ (Keywords): สหกรณ์การเกษตร; การควบคุมภายใน; การประเมินความมีประสิทธิภาพ

Introduction

In the present day, there is a major flaw that could be found in any organization which is failure in conveying the system. Failure in conveying the system is to disobey policies, laws, orders, regulations, and guidelines that has been determined within the organization. There also are many organizations that lacked proper and efficiency of internal control which really demand the internal control improvement. The volume of internal control depends on how crucial and liability. Over control may lead to less effectiveness, time consuming, cost consuming, and discouraging staffs and officers, on the other hand, under control may lead to inefficiency of work, goal achievement failure, and more corruption. Therefore, the management team should take the responsibility in supervising for sufficiency and efficiency work process, by selecting which control point should be aware in control system (Juntana S, Nipun H, Silapaphon S2014). In the past, agricultural cooperatives used to be small cooperatives which had not so many transactions and required only few cooperative officers to operate, and cooperative committee able to audit the whole performance of cooperative officers. However, the business scales of cooperatives have been increasing which have overwhelming transactions, and the business environments also have been changing in both economical perspective and political perspective. The cooperatives need to adjust their business strategy to be competitive in the market and generating more complex procedures among officers and cooperatives. The cooperatives committees would not be able to audit the whole performance of cooperatives officers, then it will cause operation failure, damage, leaking and losing in many circumstances such as cash shortage, goods shortage, overdue debtors, absent debtors, etc. There can also prevail corruptions which will enact in every aspect of cooperatives operation (Cooperative Promotion

Department, 2020). There was the news about cooperatives fraud in Ubon Ratchathani that cost more than 30 billion THB lost (source: <https://news.ch7.com>). This incident has affected the image of cooperatives and carried a bad reputation to cooperatives members. The fraud occurred because of inefficiency internal control in cooperatives.

Most of corruptions happened because of lacking effective internal control in financing and accountant which would grant an opportunity for officers or committees to arrange a corruption. The philosophy of cooperatives is to be independent in the long run, so the internal control is a major role in cooperative success. The effective of internal control help eliminate any lost or waste that will obstruct any achievements of cooperatives. The cooperatives committees have primary duty to arrange an effective internal control and verify a performance of internal control, and to encourage cooperatives officers and committees to realize how important of internal control and cooperate in defending the internal control system (the Stock Exchange of Thailand and the Institute of Internal Auditors of Thailand, 2005).

The research data could be use as guideline to develop more efficient and more performance internal control system. The financial reports of cooperatives would be more reliable and to prevent and save cooperatives properties. The research aids more decent cooperatives operations according to cooperatives laws, rules, regulations, orders, and any other related laws. Following the corruption in Ubon Ratchathani province, this paper aimed to study the evaluation efficiency of the internal control system in agricultural cooperatives in Ubon Ratchathani province.

Research objectives

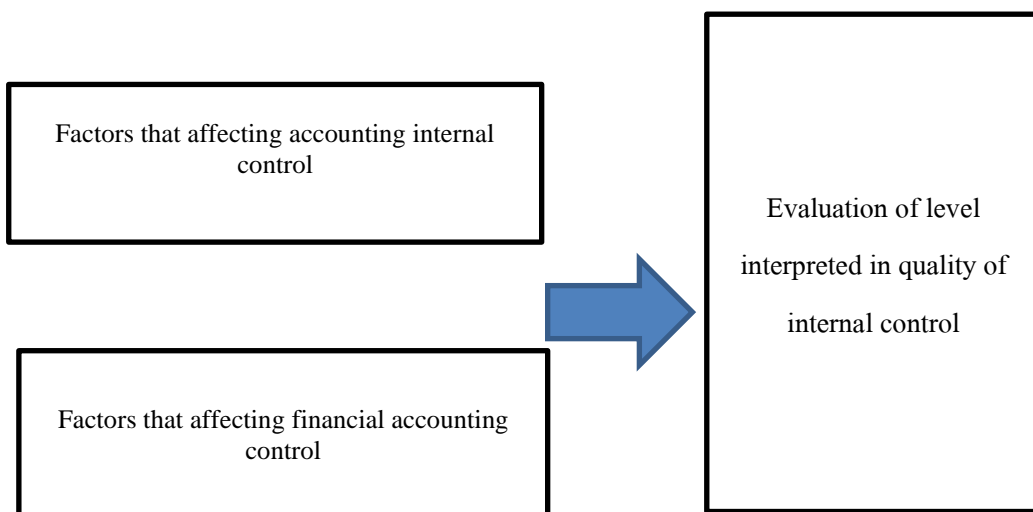
To study factors affect the internal control system and to evaluate the sufficiency of the internal control system in agricultural cooperatives in Ubon Ratchathani province.

Methodology

This research applied mix method on both quantitative and qualitative research. Collecting data by questionnaires survey with finance and account officers in agricultural cooperatives. The descriptive statistics were used to analyze data frequency, percentage, mean, and standard deviation and applied multiple

regressions to inferential statistic. Inferential analyze data by using multiple regressions. Area of target group is based on Taro Yamane formula (1973) by initiate simple target group in total samples of 91 agricultural cooperatives in Ubon Ratchathani province. The study period were from 1 January 2020 – 31 December 2020.

Table 1 Conceptual framework



Conceptual framework of this research compound by Independent variable as followed:

1) General information of participants 2) Information on accountant internal control 3) Information on financial internal control. The questionnaires distribute into 4 parts as followed: part 1 is general information of participants, part 2 is information about accountant internal control, part 3 is information about financial internal control, and part 4 is other suggestions. Interpretation of questionnaires criteria of level of consent to internal control by providing 5 levels (Chatchawan Ruengprapan, 2000).

Literature Review

The control of management in financial organization is to put measures in place that will certify an effective internal control systems. If the proper management on policies and procedures are not in place, the cooperatives may not be able to

prevent or reduce the circumstance of fraud. According to PwC (2019) Thailand contain 39% of listed companies and another 16% of private firms' encountered fraud, which is beneath the global average of 30%. The institute of chartered accountants in England and Wales (ICAEW, 1999) define internal control as the entire financial system of controls or otherwise created by management to perform the business of an enterprise in orderly and efficient manner, make certain adherence to management policies, protection the assets and stable the completeness and accuracy of records. According to Adeniji (2014) and ICAN (2016), fraud is an intentional act by one or more person among management, staffs or third parties, which results in a misrepresentation, concealment, or omission of the truth of financial statements for the unlawful attempt to steal.

Wanwisa Puangmali (2011) had studied about factors affecting internal control performance under COSO instructions, the case study of Provincial Electricity Authority region 1 (Southern Thailand), Phetchaburi province. This study had shown that there are factors in rules, regulations, and miscommunication which lead to misconception within PEA staffs that cause PEA staffs to disobey. PEA staffs also unknown major consequence of disobeying rules and regulations. More importantly, management team had no concern about having crucial internal control system and not provided intense internal control system. Malee Phromchaaon (2010) had studied on factors affecting internal control performance in registered business of industrial estate area, Phra Nakhon Sri Ayutthaya province. This study had shown that most businesses concern about data and financial report reliability and trustworthy, although reliability and trustworthy internal control system was at mediocre. Therefore, there are points to improve in internal control system. Researcher had suggested that companies should engaging secured protocol for data and financial reports transferring and educating related staffs to provide more reliable and trustworthy information. Chanetty Kongpreecha (2008) had studied on cooperative internal control, the case study of PTT cooperative and Thai Oil cooperative. This study had shown that both of PTT cooperative and Thai Oil cooperatives had managed to implement proper internal control system which can prevent error both from intentional and non-intentional operation. Even both PTT cooperative and Thai Oil cooperative have resembling in operating proper internal control system, there are some points that could be improved to achieve more performance and effectiveness.

Results

Researchers had illustrated data analysis results from returned questionnaires that had outstanding conditions, 91 papers in total, as per below descriptions. Part 1 is General interpreted information of participants. Part 2 is the results of interpreted data of accountant internal control of agricultural cooperatives in Ubon Ratchathani province area. Part 3 is the results of interpreted data of financial internal control of agricultural cooperatives in Ubon Ratchathani province area.

Table 2 amount and percentage of general information of participants

Personal information	Amount (people)	Percentage
Gender		
Male	5	4.4
Female	87	95.6
Total	91	
Age		
Under 30 years	18	19.8
30 – 40 years	43	47.3
41 – 50 years	13	14.3
51 - 60 years	11	12.1
61 years and above	7	6.5
Total	91	100.0
Education		
Primary school	14	15.4
Lower secondary school	19	20.9
High school/vocational certificate	40	44.0
Diploma/high vocational certificate	11	12.1
Bachelor's degree	6	6.8
Higher than bachelor's degree	2	0.9
Total	91	100.0
Personal information	Amount (people)	Percentage
Position		

Committee	4	3.2
Manager	16	17.6
Financial officer	28	30.8
Accounting officer	44	48.4
Total	91	100.0
Year in operation		
Less than 1 year	8	7.6
1-5 years	25	27.5
5-10 years	14	15.4
More than 10 years	45	49.5
Total	91	100.0

From the table 2 shown that the personal information of 91 participants separated by personal factor data is female (95.6%), age between 30-40 years (47.3%), high school/vocational certificate (44%), position in accounting officer (48.4%), year in operation more than 10 years (49.5%) respectively.

Table 3 the results of interpreted data of accountant internal control of agricultural cooperatives in Ubon Ratchathani province.

Internal control in accounting.	\bar{x}	S.D.	Level
(1) Accounting is in accordance with Cooperative act (2542BE) and additional clause (2543BE) clause 65, clause 66 and cooperative registrar regulations.	3.88	1.43	high
(2) Proper policies have been determined as instructions that suitable for business and obey accounting principles and cooperative registrar regulations.	4.27	1.28	high
(3) Record of verified documents in accounting in each type are up to date, e.g., record of verified receipt, record of verified manifests, record of verified member handbook, and record of verified check.	3.92	1.49	high

(4) Accounting documents have been prepared in numeric order and have been sequentially handled respectively to orders.	4.13	1.33	high
(5) Authority should have approved documents before recording accounting lists. E.g., - Approving accounting record documents. - Approving to file and summarize accounting lists before transferring primary book of account to general ledger account.	4.22	1.46	high
(6) Accounting is up to date and have integrated proper related documents for accounting record.	4.16	1.56	high
(7) Accounting records and transferring to general ledger account, subsidiary accounts and records should be accurately verified more often.	4.15	1.45	high
(8) The total amount of subsidiary account should be matched with ledger account. The total amount should be verified more often and if there is any diffraction, it must be resolved immediately.	4.39	1.35	high
(9) There should be monthly trial balance.	4.31	1.43	high
(10) Financial statement and record should be following the form that has been provided from cooperative registrar, with sufficient information disclosure, effortlessly understandable, and avoiding mislead information.	4.15	1.34	high
Total	3.88	1.43	high

From the table 3 shown that the internal control of agricultural cooperatives in Ubon Ratchathani province area in accounting perspective is in high level. Considering in separated indications shown that the total amount of subsidiary account should be matched with ledger account. The total amount should be

verified more often and if there is any diffraction it must be resolved immediately (\bar{x} = 4.39). Proper determined as instructions that suitable for business and obey accounting principles and cooperative registrar regulations (\bar{x} = 4.27). the authority should have approved documents before recording accounting lists, e.g., approving accounting record documents, approving to file and summarize accounting lists before transferring primary book of account to general ledger account (\bar{x} = 4.22), respectively.

Table 4 the results of interpreted data of financial internal control of agricultural cooperatives in Ubon Ratchathani province area.

Internal control in financial perspective.	\bar{x}	S.D.	level
1. Cooperative rules for guidelines			
(1) There are cooperative rules regarding receiving and securing cash.	4.23	1.42	high
2. Duties and responsibilities are properly distributed.			
(1) There is discretely separation between accounting officers' duties and financial officers' duties.	4.08	1.54	high
(2) Account has been recorded and authorized by person who is not on duty in paying, receiving, and securing cash.	3.75	1.71	high
3. Cash received			
(1) Cash received documents such as receipt, bill, voucher, deposit slip, have been filed in numeric order.	4.23	1.42	high
(2) There is signature in cash received documents.	4.16	1.46	high
(3) In case of cancelled cash received documents, original copy must be together with copy and being stamped "CANCELLED" sign.	3.98	1.41	high
(4) Record of verified financial documents is up to date.	3.98	1.47	high

(5) Receiving check or advanced check obeying the regulations.	4.00	1.51	high
(6) Record of received check is up to date.	4.22	1.42	high
4. Cash payment			
(1) Advanced cash limit has been properly determined for cash payment.	4.07	1.43	high
(2) Payment documents such as receipt and withdraw slip have been verified before assigned for authorization.	4.03	1.42	high
(3) Payment has been authorized by authority and obeying cooperative regulations.	4.16	1.46	high
(4) Payment documents have signature of receivers and stamped "PAID".	4.00	1.41	high
(5) Record of payment documents is up to date.	4.31	1.43	high
(6) Actual expense has been matched with budget during the year to ensure that the expense is in determined budget.	4.02	1.42	high
(7) Check payment is obeying cooperative regulations.	4.23	1.47	high
(8) Advanced limit has been properly determined for check payment.	4.16	1.46	high
(9) Check payment has been authorized by authority and obeying cooperative regulations without any authorized signature in advanced.	3.56	1.71	high
(10) Check payment is following numeric order and stating receiver's name with crossing on "BEARER". Check stub must be filled completely.	4.16	1.46	high
(11) In case of cancelled check, cancelled check must be stamped "CANCELLED" and keep it together with check stub.	4.08	1.54	high
(12) Record of payment checks is up to date.	4.23	1.47	high
5. Cash and check preservation.			

(1) There is assigned person who has responsibility in preserving cash and controlling cooperative financial documents usage.	4.23	1.47	high
(2) Cash, financial documents, and unused check have been preserved in secured place.	4.31	1.43	high
(3) Preserved cash limit has been determined properly.	4.22	1.42	high
(4) Cash on hand preservation is according to determined limit, if there is cash overflow, it should be proceeded according to cooperative regulations.	3.90	1.63	high
(5) Gathering financial documents should be authorized by authorization and obeying cooperative regulations.	3.91	1.64	high
6. Remaining cash			
(1) Revenue and expense report and remaining cash report should be regularly presented to board of committee.	4.31	1.43	high
(2) Counting remaining cash on hand occasionally.	3.83	1.61	high
(3) Officer responding for counting remaining cash has been assigned.	3.98	1.62	high
(4) The total amount of remaining cash should be matched with balance in cash book and ledger account. The total amount should be verified more often and if there is any diffraction, it must be resolved immediately.	4.23	1.47	high
7. Deposit			
(1) Deposit amount has been verified to be matched in other recorded bank/cooperatives book.	4.31	1.43	high
8. Withdrawal			
(1) Withdrawal from other bank/cooperatives has been authorized by authorization according to cooperative regulations.	4.31	1.43	high
9. Remaining deposit in other bank/cooperatives			

(1) The total amount of deposit should be matched with balance in deposit slip and bank book and ledger account. The total amount should be verified more often and if there is any diffraction, it must be resolved immediately.	3.89	1.74	high
(2) There should be budget to prove the balance in other bank/cooperatives in case that there is any diffraction between deposit slip/bank book and ledger account.	3.91	1.67	high
(3) Balance confirmation for deposit from other bank and cooperatives.	3.81	1.71	high
Total	4.11	1.38	high

From the table 4 shown that the financial internal control of agricultural cooperatives in Ubon Ratchathani province area is in high level ($\bar{X} = 4.11$). Considering in separated indications shown that cooperative rules for guidelines, there are cooperative rules regarding receiving and securing cash are in high level ($\bar{X} = 4.23$). Duties and responsibilities are properly distributed, there is discretely separation between accounting officers' duties and financial officers' duties ($\bar{X} = 4.08$). The account has been recorded and authorized by person who is not on duty in paying, receiving, and securing cash ($\bar{X} = 3.75$). Cash received documents such as receipt, bill, voucher, deposit slip, have been filed in numeric order ($\bar{X} = 4.23$). The record of received check is up to date ($\bar{X} = 4.22$). There is signature in cash received documents ($\bar{X} = 4.16$). Cash payment, Record of payment documents is up to date ($\bar{X} = 4.31$). Check payment is obeying cooperative regulations ($\bar{X} = 4.23$). The record of payment checks is up to date ($\bar{X} = 4.23$). Cash and check preservation, cash, financial documents, and unused check have been preserved in secured place ($\bar{X} = 4.31$). There is assigned person who has responsibility in preserving cash and controlling cooperative financial documents usage ($\bar{X} = 4.21$). Preserved cash limit has been determined properly ($\bar{X} = 4.22$). Remaining cash, revenue and expense report and remaining cash report should be regularly presented to board of committee ($\bar{X} = 4.31$). The total amount of remaining cash should be matched with balance in cash book and ledger account. The total amount should be verified more often and if there is any diffraction, it must be resolved immediately ($\bar{X} = 4.23$). Officer responding

for counting remaining cash has been assigned ($\bar{X} = 3.98$). Deposit, Deposit amount has been verified to be matched in other recorded bank/cooperatives book ($\bar{X} = 4.31$). Withdrawal, withdrawal from other bank/cooperatives has been authorized by authorization according to cooperative regulations ($\bar{X} = 4.31$). Remaining deposit in other bank/cooperatives, there should be budget to prove the balance in other bank/cooperatives in case that there is any diffraction between deposit slip/bank book and ledger account ($\bar{X} = 3.91$). The total amount of deposit should be matched with balance in deposit slip and bank book and ledger account. The total amount should be verified more often and if there is any diffraction, it must be resolved immediately ($\bar{X} = 3.83$). The balance confirmation for deposit from other bank and cooperatives ($\bar{X} = 3.81$).

Table 5 Displaying internal correlation of agricultural cooperatives in Ubon Ratchathani using Multiple Regression Analysis method.

Internal Control	Unstandardized Coefficients	Sig.	VIF
	B		
constant	3.187	0.000	
Accountant internal control	-0.745	0.000	1.789
Financial internal control	-0.864	0.000	1.468

Adjusted R Square	Std. Error of the Estimate	F	Sig.	n
0.419	1.0243	33.812	0.000	91

Table 5 showed that agricultural cooperative internal control in Ubon Ratchathani had influenced in both factors, accountant internal control and financial internal control. Both influencing factors had correlation level within 41.90 percentage at 0.000 statistically significant. Meaning that forecast equation had no correlation aberration. Therefore, independent variables and dependent variables could be analyzed by Multiple Regression Analysis method to create forecast equation as per follow:

Internal control equation of agricultural cooperatives in Ubon Ratchathani = $3.187 - 0.745^*$ (accountant internal control – 0.745^*), (financial internal control – 0.864^*)

These 2 aspects of variables had showed that both internal control factors had statistical significantly influenced agricultural cooperative internal control in Ubon Ratchathani Province.

Discussion

The fraud of organization based on the assumption that fraud is not an accidental occurrence but occurs where the conditions are right for it to occur. Enhancing organizational procedures to minimize or terminate the causal factors of fraud is the single best protection against fraud. Hence there is need for finance and account officers in agricultural cooperatives to maintain effective, efficient transparent governance and financial systems to reduce or terminate fraud. The internal control in accounting of agricultural cooperatives in Ubon Ratchathani province area is at high level. Considering from separated indications shown that the total amount balance had been verified to match the general ledger account which related to Chanetty Kongpreecha (2008) had studied about cooperative internal control, case study of PTT cooperative and Thai Oil cooperative. This study had shown that both of PTT cooperative and Thai Oil cooperatives had managed to implement proper internal control system which can prevent error both from intentional and non-intentional operation. Even both PTT cooperative and Thai Oil cooperative have resembling in operating proper internal control system, there is some points that could be improved to achieve more performance and effectiveness.

Research Suggestions

Internal control in accounting department, accounting is in accordance with Cooperative act (1999) and additional clause (2000) 65, clause 66 and cooperative registrar regulations has the lowest point, which can be major issue that because cooperatives officers has been lacking related regulations understanding. Therefore, cooperative should encourage accounting officers and financial officers to take course in accounting according to Cooperative act (1999) and additional clause (2000) 65, clause 66. Internal control in financial department, account has been recorded and authorized by person who is not on duty in paying, receiving, and securing cash has the lowest point, considering this as a major flaw that might lead to corruption

opportunities. Therefore, cooperative should discretely separate duties between account recorder officer, approval officer, and cash preservation officer to prevent any circumstance that can be occurred.

Suggestion for Next Study

This research is mainly focusing on internal control system of agricultural cooperatives in Ubon Ratchathani province. Therefore, this research might not cover and indicate all cooperative internal control process, then this research should be utilized as a base information for broadening the studies.

Reference

- Adeniji, A. (2014). *Auditing and Investigation*. Lagos: Value Analysis Publishers
- Chanetty Kongpreecha. (2008). *Internal control system case study of saving cooperatives in Thailand*. Bangkok: DPU publishing.
- Cooperative Promotion Department. (2020). retrieved from <http://www.cpd.go.th>
- Institute of Chartered Accountants Nigeria (ICAN). (2016). *Financial Reporting and Audit Practice*. Lagos: VI Publishing Ltd
- Malee Phromchaon. (2010). *Factors affecting the control of listed companies within the industrial state Ayuttaya*. Bangkok: DPU publishing.
- The Stock Exchange of Thailand. (2205). *the Institute of Internal Auditors of Thailand*. Bangkok: Amarin Publishing.
- Wanwisa Puangmali. (2011). *Internal control according to COSO guidelines influencing the efficiency of internal control of the revenue region 1 Phetchaburi*. Bangkok: Thammasat University Publishing.