## MINISTRY OF EDUCATION AND TRAINING MINISTRY OF FINANCE ACADEMY OF FINANCE

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# MANAGEMENT OF RECURENT EXPENDITURE OF THE STATE BUDGET FOR SCIENCE AND TECHNOLOGY IN AGRICULTURE AT THE MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

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SUMMARY OF ECONOMIC DOCTORAL THESIS

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#### THE SCIENCETISFIC PROJECTS IN FIELD STUDY OF THESIS

- 1. Pham Van Hao (2018), "Public spending on science and technology in Vietnam's agriculture and problems" Nature Nghien cuu tai chinh ke toan, Number 08 (181) 2018, page 51-55.
- 2. Pham Van Hao (2018), "Orientation of public spending on science and technology in agriculture in Vietnam" Nature Nghien cuu tai chinh ke toan, Number 10 (183) 2018, page 57-60
- 3. Pham Van Hao (2021), "State budget spending on science and technology in agriculture in Vietnam and the issues raised" Nature Nghien cuu tai chinh ke toan, Number 07 (216) 2021, page 13-18.
- 4. Pham Van Hao (2021), "Orientation of state budget spending on science and technology in agriculture in Vietnam" Nature Nghien cuu tai chinh ke toan, Number 10 (219) 2021, page 21-25

#### INTRODUCTION

#### 1. Background of study

Vietnam's agriculture is identified as the leading economic front. Resolution XIII of the Party defines: "Develop large-scale concentrated commodity agriculture in the direction of modernity, application of high technology, increase in added value and sustainable development"[39, pp. 124]. The Ministry of Agriculture and Rural Development (MARD) has implemented many national science and technology programs and projects using the state budget, providing society with quality science and technology products, and promoting agricultural development fast and sustainable.

However, besides the positive aspects that have been achieved, the management of recurrent expenditures of the state budget for science and technology in agriculture still has certain limitations: The level of spending has not met the demand, the expenditure is spread out, and has not been created make a breakthrough in science and technology; The mechanism, method and process of budget expenditure management for science and technology in agriculture still reveal limitations, not really associated with the goal of saving and improving the efficiency of budget spending. Therefore, the study of perfecting the management of recurrent expenditures of the state budget for S&T activities in agriculture is an urgent topical issue.

Therefore, the PhD student has chosen the topic "Management of recurrent expenditures of the state budget for Science and Technology in Agriculture at the Ministry of Agriculture and Rural Development" as the topic of his doctoral thesis.

#### 2. Overview of studies related to the thesis topic

- **2.1.** Research works related to the management mechanism of recurrent expenditures of the state budget for S&T: The author mentioned 3 domestic research works: 01 doctoral thesis, 01 scientific research topic and 01 article science related mechanism and content of recurrent expenditure management of state budget for science and technology from different perspectives.
- 2.2. Works related to allocation of recurrent expenditures and tools, policies, and solutions for managing recurrent expenditures of the state budget for science and technology: The author mentioned 5 domestic research projects and 01 overseas research project (03 theses, 02 scientific research projects and 01 article).
- 2.3. Research works related to the mode of management of recurrent expenditures of the state budget for S&T: 01 domestic thesis and 02 overseas research works.
- 2.4. Research works related to control and assessment of recurrent state budget spending for S&T: 01 report on assessment of public expenditure in agriculture in Vietnam, 01 domestic article, 01 foreign article.

#### 2.5. An overview of the research work related to the thesis topic

Through researches related to the management of recurrent expenditures of the state budget for accessible science and technology in agriculture, the researcher has drawn out the problems that scientists need to inherit and the problems that need to be further studied. At the same time, it is confirmed that the thesis conducted by the NCS does not overlap with the published research in terms of scope, space and time of research.

#### 3. Aims and mission of the thesis research

3.1. Aims of the study: Develop viewpoints, orientations and propose scientifically based and feasible solutions to improve the management of recurrent state budget expenditures for agricultural science and technology activities in the Ministry of Agriculture and Rural Development of Vietnam.

#### 3.2. Mission of the study

- Conduct an overview of the works related to the thesis topic, clearly indicate the gap and orientation of the PhD student's thesis research.

- Building a theoretical framework, explaining and clarifying the theoretical basis for management of state budget recurrent expenditures for science and technology activities in agriculture.
- Analyze, evaluate, draw comments and conclusions about the results achieved, limitations and causes leading to limitations of the current state of state budget recurrent expenditure management for S&T activities in agriculture in the Ministry of Agriculture and Rural Development.
- Propose views, orientations and solutions to improve the management of recurrent state budget expenditures for S&T activities in agriculture at the Ministry of Agriculture and Rural Development.

#### 4. Object and scope of the study

#### 4.1. Research subjects

The research object of the thesis is the theoretical and practical issues of recurrent expenditure management of the state budget for science and technology activities in agriculture.

#### 4.2. Research scope

- 4.2.1. Scope of content: The thesis studies the management of recurrent state budget expenditures for S&T activities in agriculture and approaches according to the state budget process, including: making, implementing, finalizing and inspecting and evaluating recurrent state budget expenditures for S&T activities in agriculture. The subject of management is the Ministry of Agriculture and Rural Development with functional assistance services.
- 4.2.2 Spatial scope: The thesis studies the practice of managing recurrent state budget expenditures for S&T activities in agriculture at the Ministry of Agriculture and Rural Development, including at the Ministry's agency as well as direct public S&T non-business units and organizations. under the Ministry include: 15 institutes, 01 institute, 03 universities, 01 staff school and centers... Regarding practical experience survey, research thesis in some countries such as Israel, Thailand Lan, Nigeria, European member countries... in the last 10 years.
- 4.2.3 Time scope: Study on the practical situation of state budget recurrent expenditure management for S&T activities in agriculture in the Ministry of Agriculture and Rural Development in the period 2016-2020. Perspectives, orientations and proposed solutions to be applied from 2022 to 2030 and the following years..

#### 5. Study methodology and methods:

• *Study methodology*: The Study methodology used throughout the thesis research is the dialectical and historical materialism of Marxism-Leninism.

#### • Detail methods:

Detail methods are used such as statistics, comparison, analysis, synthesis, systematization, inductive and deductive methods.... Used flexibly to solve problems of research content in chapters of the thesis..

#### 6. Study results and new contributions of the thesis

In terms of theory, a number of concepts have been researched and developed: Science and Technology in agriculture, Regular expenditure of state budget for science and technology in agriculture, Management of recurrent expenditure of state budget for science and technology. The thesis specifies the characteristics of S&T activities, the characteristics of recurrent state budget expenditures for science and technology in agriculture and the impact of these characteristics on the management of recurrent state budget expenditures for science and technology. The thesis has pointed out the subjective and objective factors affecting the management of recurrent expenditures of the state budget and has built a system of quantitative and qualitative indicators to evaluate the results of management of recurrent state budget expenditures for science and technology. in agriculture.

In practice, analyzing and evaluating the current status of state budget recurrent expenditure management for science and technology in agriculture in the Ministry of Agriculture and Rural Development in the period 2016-2020. Thereby drawing the achieved results, limitations and causes leading to limitations in the field of science and technology in agriculture. management of recurrent state budget expenditures for science and technology in the Ministry of Agriculture and Rural Development. The thesis has studied practical experience on management of state budget expenditures for science and technology in agriculture in some countries around the world and drawn 6 lessons that can be applied in Vietnam. The thesis has researched and proposed 04 viewpoints, 04 orientations, 06 major solutions and 01 group of supporting solutions to improve the management of recurrent state budget expenditures for S&T activities in the Ministry of Agriculture and Rural Development. The proposals of the above thesis are useful references for managers at MARD and units under the Ministry.

#### 7. Organization of the thesis

Except for the introduction, conclusion, references, appendices, the thesis is structured into 03 chapters:

Chapter 1: Theory and practical experience on management of recurrent expenditures of the state budget for Science and Technology in agriculture;

Chapter 2: Current status of state budget recurrent expenditure management for Science and Technology in the Ministry of Agriculture and Rural Development.

*Chapter 3:* Improving the management of recurrent expenditures of the state budget for Science and Technology in Agriculture at the Ministry of Agriculture and Rural Development.

#### Chapter 1

### THEORETICAL AND PRACTICAL EXPERIENCE MANAGEMENT OF REGULAR FUND FOR SCIENCE AND TECHNOLOGY IN AGRICULTURE

1.1. 1.1. SCIENCE AND TECHNOLOGY IN AGRICULTURE, REGULAR EXPENDATION OF THE STATE BUDGET FOR SCIENCE AND TECHNOLOGY IN AGRICULTURE

#### 1.1.1. An overview of science and technology in agriculture

#### 1.1.1.1. The concept of science and technology in agriculture

On the basis of analyzing and clarifying the content of science and technology, according to 04 concepts mentioned in the Law on Science and Technology and 03 published dissertations and scientific research topics, the thesis of the PhD student has drawn the following conclude: Science and technology in agriculture is understood to include a system of knowledge about the nature and laws of existence and development of things, natural, social and thinking phenomena as well as solutions, processes, technical know-how, tools and means used to transform resources into products and services in the field of agricultural production".

The thesis also specifies S&T activities in agriculture, including the following activities: Basic research; Applied research; Dissemination and transfer of application of scientific and technological research results to practical agricultural production (including service activities on information, consulting, training, fostering, dissemination and application of scientific and technological knowledge turmeric).

#### 1.1.1.2. Characteristics of science and technology in agriculture

Firstly, the products of S&T activities in agriculture are services with the nature of pure public goods.

Second, the products of S&T activities in agriculture are diverse.

Thirdly, activities of transferring science and technology into agricultural production practice are more diverse and complex than in other production industries.

Fourth, S&T activities in agriculture need high costs and high risks.

The author has pointed out the impact of these characteristics on the management of recurrent state budget expenditures for S&T activities in agriculture.

#### 1.1.2. Regular expenditure of state budget for science and technology in agriculture

### 1.1.2.1. Concept and characteristics of recurrent expenditure of the state budget for science and technology in agriculture

From the analysis and synthesis of the concept of recurrent state budget expenditure, the concept of S&T activities in agriculture, the researcher proposed the concept of recurrent state budget expenditure for S&T activities in agriculture as follows: State budget recurrent expenditure for S&T activities in agriculture is the process of distributing and using financial resources that have been concentrated in the state budget to meet the spending needs of maintaining the apparatus as well as for basic research activities, applied research and applied transfer of new achievements in science and technology for agricultural production carried out by public S&T non-business units and organizations.

State budget recurrent expenditures for science and technology in agriculture have the following characteristics:

Firstly, recurrent state budget expenditure for S&T activities in agriculture includes many expenditure contents with different characteristics.

Second, state budget recurrent expenditures for S&T activities in agriculture are made in various types of S&T non-business organizations with different financial management mechanisms.

Third, the recurrent expenditures of the state budget for the application and transfer of new science and technology products in agriculture usually account for a large proportion of the total recurrent expenditure of the state budget for science and technology.

### 1.1.2.2. Contents of recurrent expenditure of the state budget for science and technology in agriculture

The content of state budget recurrent spending for S&T activities in agriculture is understood through two classifications: according to the tasks of public S&T organizations using the state budget and according to the nature of S&T activities.

Based on the types of tasks of public S&T organizations using state budget funds, state budget recurrent expenditures for S&T activities in agriculture include: Expenses for recurrent activities; Spending on irregular activities; Expenses for implementation of S&T tasks at all levels.

Each type of recurrent expenditure mentioned above has different properties and characteristics. Depending on each expenditure, the appropriate mechanism and method of expenditure management shall be applied.

Considering the nature of S&T activities, recurrent state budget expenditure for S&T activities in agriculture is divided into: State budget recurrent expenditure for basic research activities; state budget recurrent expenditure for applied research activities; State budget recurrent expenditure for implementation and application of new S&T products created by applied research into the practice of mass agricultural production. Based on the nature of the expenses mentioned above and the location where they are incurred (in different types of S&T non-business units) to determine the appropriate mechanism and method of expenditure management.

### 1.1.2.3. The role of recurrent expenditures of the state budget for scientific and technological activities in agriculture

Firstly, Provide most of the financial resources for maintaining the operation of the apparatus and performing regular tasks according to the functions of public S&T non-business units in agriculture.

Second, state budget recurrent expenditure creates demand and provides most of the funding for S&T activities in agriculture.

Third, recurrent expenditures from the state budget play an important role in promoting the improvement of labor productivity and efficiency of agricultural production.

Fourth, state budget expenditure plays an important role in promoting sustainable agricultural production and enhancing international integration.

### 1.2. MANAGEMENT OF REGULAR BUDGET FOR SCIENCE AND TECHNOLOGY IN AGRICULTURE

### 1.2.1. Concept, objectives and requirements for management of recurrent expenditures of the state budget for scientific and technological activities in agriculture.

#### 1.2.1.1. Concept:

Management of recurrent state budget expenditures for S&T activities in agriculture is the process of applying objective laws to the organization and control of the distribution and efficient use of state budget funds in each period for different regions. S&T activities for agricultural production. Thereby ensuring the good performance of the State's functions and duties in state management of S&T activities in general and S&T activities in agriculture in particular.

Subjects of management of recurrent state budget expenditures for S&T activities in agriculture are competent agencies with management responsibilities in accordance with law. The entities that directly manage recurrent state budget spending for S&T activities at the central level are the Government, the Ministry of Finance, the Ministry of Science and Technology, the Ministry of Agriculture and Rural Development, and other ministries. Subjects of indirect management of state budget recurrent expenditures for S&T activities are state power agencies. This entity performs management by promulgating policies and laws for expenditure management and approving estimates and finalization of state budget expenditures.

Object of management are organizations and individuals that are responsible as prescribed by law for the distribution and direct use of state budget recurrent expenditures for S&T activities.

Management tools: tools are mainly used in the management of recurrent expenditures of the state budget for S&T activities in agriculture such as: legal, planning, administrative, economic tools......

#### 1.2.1.2. Goals and requirements

Goals of management of recurrent state budget expenditures for S&T activities in agriculture: to comply with fiscal discipline, rationally allocate and improve the efficiency of state budget recurrent expenditures for S&T activities in agriculture.

Management requirements:

- Must comply with legal regulations on management of state budget expenditures for S&T activities, limiting risks in budget expenditure management.
- Good implementation of accountability: to ensure the control power of the State as well as attach legal responsibility to units and individuals in the management and use of state budget expenditures.
- Enhance publicity and transparency: State budget recurrent expenditure is a content of public spending, so it must adhere to the principle of "publicity and transparency".

### 1.2.2. Principles of management of recurrent state budget expenditures for S&T activities.

- 1.2.2.1. Management by budget
- 1.2.2.2 Ensure the correct regime, standards and norms of state budget expenditure
- 1.2.2.3 Management by year
- 1.2.2.4. Publicity and transparency
- 1.2.2.5 Management according to the performance of tasks
- 1.2.2.6. Direct payment from the State Treasury
- 1.2.2.7. Accounting in Vietnam dong and in accordance with the state budget index
- 1.2.3. Mechanisms and methods of managing recurrent budget expenditures for science and technology in agriculture
- 1.2.3.1. Mechanism for management of recurrent expenditures of the state budget for science and technology in agriculture

From clearly explaining the connotations of the terms "management", "mechanism" and "management mechanism", the researcher draws out the concept of a mechanism for managing recurrent state budget expenditures for S&T activities in agriculture as follows: The management mechanism for recurrent expenditures of the state budget for S&T activities in agriculture is understood as a system of methods, forms and tools operated to manage recurrent state budget expenditures for S&T activities. in agriculture strictly comply with the regulations of the law and achieve the set management objectives.

Depending on the management mechanism for recurrent expenditures of the state budget for S&T activities in each period for each type of S&T organization, the management subject chooses different formal methods and management tools suitable to affect the management object.

### 1.2.3.2. Methods of managing recurrent expenditures of the state budget for science and technology in agriculture

1.2.3.2.1. Management of budget expenditure by input (by input item) for scientific and technological activities in agriculture

The state budget index is used to itemize recurrent expenditures from the planning stage to the organization and implementation of the spending plan and settlement of expenditures.

1.2.3.2.2. Managing budget expenditures according to the outputs of scientific and technological activities (according to the results of performing tasks of science and technology activities)

This is an advanced management method because it measures in detail and ties the costs out and the results generated from those expenditures. In essence, output-based budget management is a combination of budget management with output-based management model.

1.2.3.2.3. Management of budget expenditures according to the program of agricultural science and technology

This management method is used to manage budget expenditures for the implementation of national target programs on science and technology in agriculture such as the program for the development of new plant varieties and animals, the program for biotechnology, the program for the development of new plants and animals, high technology

### 1.2.4. Contents of management of recurrent expenditures of the state budget for science and technology in agriculture

### 1.2.4.1. Estimating state budget recurrent expenditures for science and technology in agriculture

The medium-term budget expenditure plan for S&T is the basis for making annual state budget expenditure estimates. The medium-term budget expenditure plan is usually made according to the period of the budget stabilization period (the period from 3 to 5 years). Short-term budget expenditure plans (annual expenditure estimates) are prepared by budget-using units for the recurrent spending needs of the year of the plan year.

- \* Process of making, approving, allocating and assigning state budget recurrent expenditure estimates for S&T activities in agriculture:
- Planning S&T activities and making state budget capital expenditure estimates:
- + Planning S&T activities:

The S&T activity plan of organizations in the agricultural sector is built based on the assessment of the situation and results of S&T activities of the previous year as well as the objectives and tasks set out for the plan year.

+ Prepare annual state budget recurrent expenditure estimates:

Estimating units make estimates of state budget expenditures for S&T activities according to the scope of their assigned tasks, send them to superior estimating units for approval and summarize in order from grassroots to superior levels and submit them to state authorities.

- Approving and assigning state budget expenditure estimates:

The National Assembly approves estimates of state budget expenditures for sectors, central budget allocation; The Ministry of Finance, on behalf of the government, assigns state budget expenditure estimates to the Ministry of Agriculture and Rural Development. The Finance Department, on behalf of the Ministry of Agriculture and Rural Development, assigns the task of regular state budget spending for S&T activities of organizations under the Ministry.

- The allocation of recurrent state budget expenditures is made as follows: Based on the check number, the Ministry of Finance shall notify the Ministry of Agriculture and Rural Development of the assignment of state budget expenditure estimates, including expenditures for S&T activities and functional departments of the Ministry of Agriculture and Rural Development allocates expenditure estimates for S&T organizations according to specific principles, bases, methods and allocation processes.

### 1.2.4.2. The implementation of the state budget recurrent expenditure estimates for science and technology in agriculture

The implementation of the plan (estimated) of recurrent state budget expenditures is an important step in the management of state budget expenditures and needs to well solve the following issues:

- Allocating detailed tasks over time to organize implementation
- Using a combination of economic, technical, financial and administrative measures to transform the tasks of state budget expenditure planning into reality.
- Check and control to ensure that the expenditures are made for the right purposes, in the quantity and in accordance with the recurrent regulations.
- Timely adjustment of the plan or request for adjustment of the spending plan in case of major force majeure changes.

### 1.2.4.3. Finalization of state budget recurrent expenditures for science and technology in agriculture

The final settlement of recurrent budget expenditure for science and technology in agriculture is carried out after the end of the projects and the end of the budget year.

The budget expenditure for science and technology topics and tasks under the contract shall be settled once upon completion, there is a record of acceptance and liquidation of the contract.

At the end of the year, the budget beneficiary shall make a report on recurrent expenditure and submit it to the competent authority for approval. The annual budget settlement report of the lower-level estimating unit shall be sent to the immediate superior unit for appraisal, and the Ministry of Agriculture and Rural Development shall summarize and make a report and send it to the Ministry of Finance.

### 1.2.4.4. Check and control recurrent expenditures of the state budget for science and technology in agriculture

\* Inspect and control recurrent state budget expenditures for S&T activities:

Through the inspection and control of the managing entity, detect and promptly handle errors in the management and use of recurrent expenditures of the state budget, ensuring that the expenditures are used for the right purposes, economically and efficiently. effective.

Inspections are carried out by leaders and professional staff on a regular basis. In addition, budget expenditures at S&T organizations must also be checked by superior specialized management agencies when approving the final settlement of recurrent expenditures for lower-level units.

### 1.2.5. Criteria for assessing the management of recurrent expenditures of the state budget for science and technology in agriculture

#### 1.2.5.1. Quantitative Criteria:

1. Reliability of the plan (estimate) of recurrent expenditures of the state budget for S&T activities in agriculture.

This criterion is used to assess the reliability of the state budget recurrent expenditure plan as a basis for the allocation and settlement of state budget recurrent expenditures for S&T activities in practice through the difference between the actual recurrent expenditure compared with the originally approved recurrent expenditure plan. This criterion measures the overall effectiveness of the entire process of managing recurrent state budget expenditures for S&T activities in agriculture.

This criterion is evaluated in detail on the following two aspects:

First, the difference between the actual total recurrent expenditure and the total recurrent expenditure in the original original plan (not compared with the adjusted plan) and is determined as a percentage between the absolute difference compared with the total expenditure in the original spending plan.

Second, the difference in the actual expenditure structure compared with the expenditure structure was determined in the original plan.

2. Approval rate of state budget recurrent expenditure estimates for units.

This criterion is determined by the percentage between the amount of expenditure in the approved estimate for the units and the amount of the expenditure in the cost estimate developed by the units. The approval rate of state budget recurrent expenditure estimates allows to assess the realism of construction units' expenditure estimates. The larger this ratio, the greater the reliability and quality of the cost estimates made by the construction units.

3. Ratio of settlement of recurrent state budget expenditures for S&T activities.

This criterion is determined by the percentage between the state budget recurrent expenditures approved for finalization and the actual state budget recurrent expenditures of the units requesting settlement.

The state budget recurrent expenditure finalization ratio allows to assess the accuracy of actual expenditures compared with the allocated expenditure estimates and the correctness (legality and reasonableness) of expenditures. The higher this ratio, the better the quality of the organization implementing the cost estimate.

#### 1.2.5.2. Qualifying Criteria:

1. The comprehensiveness and transparency of recurrent expenditures of the state budget for S&T activities in agriculture.

Through this criterion, it is possible to evaluate the level of publicity and transparency in the management of recurrent state budget expenditures and this is also a condition for thrifty management and use, improving the efficiency of state budget recurrent expenditures for science and technology.

2. To comply with the management of recurrent expenditures of the state budget for S&T activities in agriculture.

Through this criterion, the process, timeliness, accuracy and quality of the preparation, approval and implementation of budget expenditures for agricultural science and technology activities will be assessed.

3. Anticipate and control the implementation of recurrent expenditures of the state budget for S&T activities in agriculture.

Through the achievement of this criterion, it is possible to assess the extent to which all three management objectives have been achieved: compliance with fiscal discipline, reasonable allocation and improvement of the efficiency of state budget recurrent expenditures.

### 1.2.6. Factors affecting the management of state budget expenditures for scientific and technological activities in agriculture

#### 1.2.6.1. The objective factors:

*Firstly*, the socio-economic environment

Second, the state's economic development perspective and orientation.

Third, the investment perspective for S&T and the state's S&T development strategy

Fourth, Characteristics of S&T activities and S&T products in agriculture

#### 1.2.6.2. The subjective factor:

First, the Strategy for S&T development of the agricultural sector.

*Second*, the capacity and results of S&T activities of public S&T organizations in agriculture. *Third*, the degree of autonomy of public S&T organizations under the Ministry of Agriculture

and Rural Development

Fourth, awareness and responsibility of officials managing recurrent expenditures of the state budget, management of S&T activities in agriculture.

1.3. INTERNATIONAL EXPERIENCE ON STATE BUDGET REGULAR BUDGET MANAGEMENT FOR SCIENCE AND TECHNOLOGY IN AGRICULTURE AND LEARNINGS FOR VIETNAM

The author of the thesis has surveyed the practical experience of managing state budget expenditures for science and technology in agriculture in the following countries: Thailand, European member countries, Israel and Nigeria. The author has drawn six lessons from experience that need to be consulted and applied such as: State budget expenditure is the key to promoting growth and improving the quality of agricultural products; Increase budget allocation by project through fund and bidding mechanism; Implement research funding package according to output products; Enhance transparency in budget allocation and use for S&T; Spending on research on plant varieties and livestock and providing free of charge to farmers; Management of state budget expenditures in combination with management of investments of organizations and individuals.

#### Chapter 2

# THE SITUATION OF MANAGEMENT OF STATE BUDGET REGULATIONS FOR SCIENCE AND TECHNOLOGY IN MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

- 2.1. OVERVIEW OF SCIENCE AND TECHNOLOGY ACTIVITIES, STATE BUDGET REGULAR EXPENDITURE FOR SCIENCE AND TECHNOLOGY IN THE MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT FOR 2016 2020
- 2.1.1. System of units and organizations carrying out scientific and technological activities under the Ministry of Agriculture and Rural Development

The system of units and organizations carrying out S&T activities under the Ministry of Agriculture and Rural Development includes 03 systems of the following basic units and organizations:

- The system of public research institutes under the Ministry: 15 institutes;
- The system of schools directly under the Ministry: 03 universities, 01 academies and the School of Agricultural Managers participating in S&T research;
- The system of non-institute centers, 08 Departments and 04 General Departments under the Ministry are also funded by the state budget to perform a number of S&T tasks.
- 2.1.2. Overview of results of scientific and technological activities of units and organizations under the Ministry of Agriculture and Rural Development in the period 2016-2020.

During the 2016-2020 period, organizations under the Ministry of Agriculture and Rural Development have performed a total of 550 S&T tasks in agriculture:

\* S&T tasks for the high-tech agriculture program:

The total number of tasks in the past 5 years is 135 tasks, accounting for 25%. Up to now, the whole country has dozens of large enterprises in agriculture applying advanced and high technology on a par with the region; there are 199 high-tech agricultural cooperatives (accounting for 1.3% of the total number of agricultural cooperatives).

- \* S&T tasks under the program of biotechnology and organic agricultural production: 193 tasks have been implemented, accounting for 35% of the total tasks. The whole country has 33 provinces/cities that have organic agricultural production models with an area of about 90,000 ha.
- \* Performing S&T tasks under the national product program: performed 63 tasks, accounting for 11% of the total number of S&T tasks, and created 12 varieties of rice with salt tolerance; implemented 22 tasks of brackish water shrimp products, completed 08 tasks of gene conservation of seedlings.
- \* Implement new model of application of science and technology, agricultural extension: The units have researched, transferred and put into production 105 new technologies, built 85 new S&T application models, implemented 176 S&T projects.
- \* Regarding the research and development of Vietnamese standards and regulations for management in the agricultural sector: In the period 2016-2020, 455 Vietnamese standards and 28 Vietnamese standards have been researched and developed. South and approved. Thus, by the end of 2020, Vietnam has 1,124 VN Standards and 222 VN Standards used in agriculture; including 611 VN Standards and 83 VN Standards for specialized management and inspection. Vietnam has basically enough standards and regulations for state management in agriculture.

### 2.1.3. Regular expenditure of the state budget for science and technology at the Ministry of Agriculture and Rural Development

2.1.3.1. Central budget expenditure on science and technology in agriculture in the Ministry of Agriculture and Rural Development

In the period 2016-2020, the regular expenditure of the central budget for science and technology in agriculture in units under the Ministry of Agriculture and Rural Development is about 800 billion VND annually. In which, recurrent expenditure accounted for 86%, investment expenditure accounted for 14%.

2.1.3.2. Scale and structure of recurrent expenditures of the central budget for scientific and technological activities in agriculture at the Ministry of Agriculture and Rural Development.

If compared with the period 2010 - 2015, it shows that the scale of recurrent state budget spending on S&T in MARD in the period 2016 - 2020 has increased significantly compared to the average of the period 2010 - 2015 ((Average of five periods) 2016 - 2020 is: VND 805,462 billion, while the average expenditure in the period 2010 - 2015 is VND 499,623 billion. Specifically, an increase of 61% compared to the previous period) (Appendix No. 01) Considering the expenditure structure for the period 2016-2020, the expenditure on performing regular tasks by function accounts for about 40% and fluctuates with a decreasing trend. Meanwhile, the proportion of spending on performing S&T tasks (topics) accounts for over 50% and moves in an increasing trend. State budget expenditures for activities arising infrequently are relatively stable, accounting for about 8%.

2.2. ACTUAL SITUATION OF STATE BUDGET REGULAR MANAGEMENT FOR SCIENCE AND TECHNOLOGY IN THE MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT.

### 2.2.1. Legal basis for management of recurrent state budget expenditures for science and technology in agriculture in the Ministry of Agriculture and Rural Development

The thesis has outlined and generalized documents that are the legal basis for managing recurrent state budget expenditures for S&T activities in agriculture such as: Law on Science and Technology (2013) Law on Public Investment (2014) and Law on State Budget (2002) and its amendments. 2015 and documents guiding the implementation of the law such as:

Decree No. 95/ND-CP, dated October 17, 2014 Regulating investment and financial mechanism for S&T activities, Decree 54/2016/ND-CP dated June 14, 2016 stipulating automatic mechanism owner of a public S&T organization. Circulars issued by the Ministry of Science and Technology and the Ministry of Finance.

The above-mentioned legal documents have quite clearly defined the mechanism and method of managing recurrent state budget expenditures in particular for S&T activities at the

Ministry of Agriculture and Rural Development according to the following contents: making, allocating expenditure estimates, organizing project implementation expenditure accounting, settlement of expenditures and checking and evaluation of expenditures.

### 2.2.2. Actual situation of making estimates of state budget recurrent expenditures for science and technology in the Ministry of Agriculture and Rural Development

#### \* Preparing and allocating medium-term budget spending plans:

The medium-term budget expenditure plan for agricultural science and technology is one of the important bases for making estimates of state budget recurrent expenditures for science and technology in agriculture. Planning and Investment, Ministry of Science and Technology builds in certain phases, usually from 3 to 5 years. In our country, usually made according to the period of budget stability: 2011-2016; 2017 – 2019 and 2020 – 2022. The medium-term budget expenditure plan for S&T activities in agriculture is made for capital construction investment and implementation of the project under the national S&T program. The medium-term state budget expenditure plan is detailed and allocated for each year.

In fact, in the period from 2016 to 2020, there have been 9 state-level S&T programs and projects in agriculture that have been organized and implemented in a number of years (the shortest is 3 years, the longest is 8 years). However, in this period, the Ministry of Agriculture and Rural Development has not made a medium-term spending plan for the mentioned topics and projects. By 2020, the Ministry of Agriculture and Rural Development will only plan to spend the medium-term budget for science and technology in agriculture in the period of 2020 - 2022.

#### \* Making and allocating annual state budget recurrent expenditure estimates:

The annual state budget recurrent expenditure estimates are made based on the S&T activity plan of the organization under the Ministry and the ability to secure state budget funding for these activities.

#### Firstly, Planning S&T activities:

Every year (before making state budget expenditure estimates), public S&T units and organizations under the Ministry of Agriculture and Rural Development develop and propose S&T tasks at all levels or make registration documents for performing special-level S&T tasks. national, state, and ministerial levels under the guidance of the governing body as well as the Department of Science, Technology and Environment, MARD. The list of national and state-level S&T tasks that organizations under the Ministry have registered to perform shall be compiled and sent to the Ministry of Science and Technology for consideration, approval, and submission to the Government.

Second, Estimating state budget recurrent expenditures for S&T activities:

Before the plan year (July 15), the Ministry of Agriculture and Rural Development directs and guides the preparation and synthesis of estimates of recurrent expenditures from affiliated units (including public S&T organizations) and sends them to the Ministry of Finance for synthesis. submitted to the Government for submission to the National Assembly. Making estimates of state budget recurrent expenditures for S&T activities is carried out from the basic unit of estimate, aggregated at all levels from the bottom up. The S&T units under the Ministry of Agriculture and Rural Development prepare the recurrent expenditure estimation sections as follows:

- Making estimates of recurrent expenditures to maintain the operation of the apparatus and perform regular tasks according to their functions: The S&T organizations under the Ministry determine and clearly explain the funds needed to perform the tasks.
- Making estimates of state budget expenditures for activities arising infrequently: Based on the expected workload and norms to determine spending needs for each type of activity. In fact, this expenditure demand is usually determined by experience, based on historical data of spending years.

- Making estimates of recurrent state budget expenditures for performing S&T tasks: S&T units based on the number of projects will implement the plan year and approved budget estimates for each topic to determine. The Department of Science, Technology and Environment summarizes the expenses for performing tasks of the units and sends it to the Finance Department.

Summarizing the parts of the state budget recurrent expenditure estimates mentioned above, there will be expenditure estimates of each S&T organization. The cost estimates of the units are summarized by the Ministry of Agriculture and Rural Development and sent to the Ministry of Finance for submission to competent authorities for approval.

Third, to decide and allocate state budget recurrent expenditure estimates for S&T activities:

- Mechanism for allocating state budget expenditure estimates for S&T activities:
- + Funds for performing national S&T tasks shall be transferred to the National Science and Technology Development Fund.
- + Funds for performing ministerial-level S&T tasks are transferred to the S&T development funds of ministries, ministerial-level agencies or government-attached agencies, or if a S&T development fund is not established, this funding shall be transferred to the budget estimate unit at the ministerial level. I of ministries, ministerial-level agencies, agencies attached to the Government.
- Principle of allocation: allocating according to the needs and proposals of the units to perform S&T tasks assigned by competent authorities.
- Allocation process: The Finance Department of the Ministry of Agriculture and Rural Development prepares a plan for allocation of recurrent state budget estimates (including estimates of state budget recurrent expenditures for S&T activities) and submits it to the Minister of Agriculture and Rural Development, after the Minister signs the decision. assign expenditure estimates, notify units under the Ministry, Department of Finance notify the Department of Science, Technology and Environment and monitor management.

*Comment:* The medium-term state budget expenditure plan for S&T activities in agriculture has just been established by the Ministry of Agriculture and Rural Development from 2020 for the period of 2020 - 2022.

- The preparation and allocation of annual state budget recurrent expenditure estimates for S&T activities under the Ministry of Agriculture and Rural Development shall be conducted in the correct order and time in accordance with the State Budget Law. However, there are some issues that need to be further improved:
- The bases for making and allocating state budget recurrent expenditure estimates for S&T activities in MARD still need to be researched and perfected further, especially standards and norms of expenditure using state budget funds. Currently, there is a shortage of norms: expenditures to support research results publication fees, fees for registration of intellectual property rights protection, norms for experts to support technical issues for councils, etc. In addition, a number of expenditure norms are regulated but outdated such as: norms for hiring unskilled labor; Spending norms on specialized technical research surveys; The norms of expenditure for consultancy on assessment and acceptance of S&T tasks are still low, especially for comments and evaluations of council members and reviewers.
- There is still a situation of excess and lack of funds to serve the implementation of grassroots science and technology projects and some regular activities according to functions.
- In fact, funding for the implementation of S&T projects is still directly transferred to the Ministry's state budget expenditure estimates (MARD has not yet established a Science and Technology Development Fund).

### 2.2.3. Actual situation of implementing state budget recurrent expenditure estimates for Science and Technology in the Ministry of Agriculture and Rural Development.

On the basis of the assigned recurrent expenditure estimate of the State budget and the S&T activity plan determined according to the specific progress of the year, the Head of the S&T

unit directs to detail the monthly, quarterly and annual expenditure estimates. organize the implementation of the five plans.

Through actual data, it shows that the number of recurrent state budget expenditures for S&T activities in organizational units under the Ministry of Agriculture and Rural Development every year in the period 2016-2020 is relatively stable, without major fluctuations and fluctuates in the above range. less than 800 billion VND/year. In terms of expenditure structure for the whole period 2016-2020, it shows that the expenditure for performing regular tasks according to the functions of the units and organizations under the Ministry of Agriculture and Rural Development accounts for nearly 40%; Expenditure for performing S&T tasks (topics) at state and ministerial level accounts for about 52%, the rest for non-recurring activities is about 8%.

# 2.2.3.1. Organize the implementation of state budget recurrent expenditure estimates for regular tasks according to the functions of the units in the Ministry of Agriculture and Rural Development.

Funds for performing regular tasks by function include: Salaries, wages and salary-based contributions of people who directly and indirectly perform tasks; Direct and indirect costs of performing routine tasks by function.

Regular tasks according to the functions of the institutes are contracted by the Ministry of Agriculture and Rural Development, and are assigned directly to these organizations together with the amount of funding allocated to perform them in addition to the funding that the unit can self-finance under the autonomy mechanism. In fact, the annual funding only meets the salary needs and a small part of the operating expenses of the units.

In the period of 2016-2017, implementing the autonomy mechanism under Decree 54/2016/ND-CP and salary reform under Decree 47/2017/ND-CP, the burden of wages and salaries increased, causing institutes to research is forced to cut down on expenditures on apparatus operations or take part of public money to spend directly on S&T tasks.

The general trend is that the expenses for operating the apparatus are gradually reduced over the years. In which means of transportation, business trip expenses are the most cut content to save costs. The remaining funds are used directly for expenditures: statistics, reporting and acceptance of results, accounting for about 3% of the total allocated expenditure estimates and also tended to decrease.

In fact, compared with the initially assigned estimates, the amount of state budget expenditure for the performance of regular tasks according to functions at research institutes has exceeded due to both the increase in the need to pay salaries, wages as well as other direct expenditures. to perform the task. This shortage forces research institutes to find sources to make up. This situation needs to be rectified in the near future.

# 2.2.3.2. To organize the implementation of estimates of recurrent expenditures from the state budget for irregular activities of units in the Ministry of Agriculture and Rural Development.

State budget expenditures for irregular activities at research institutes are managed and allocated according to the budget expenditure management mechanism according to input estimates made by research institutes and approved by the Ministry of Agriculture and Rural Development. research institutes under the Ministry from the beginning of the year.

Through actual data, it shows that the state budget expenditure for irregular activities of research institutes in the period 2016-2020 is relatively stable in the range of 60-80 billion VND/year. In terms of structure, among the state budget expenditures for non-recurring activities, the expenditure for procurement and repair of assets in order to maintain and improve S&T research capacity for institutes is the content that accounts for the largest proportion. (about 32% - 42%).

Management and use of expenditures for procurement and minor repair of assets and tools to improve S&T capacity for institutes under the Ministry of Agriculture and Rural Development:

Although the expenditure on procurement and minor repairs is the largest among the non-recurring operating expenses, compared to the total expenditure on science and technology in the Ministry, this expenditure is still quite modest. During the 2016-2020 period, every year, the Ministry of Agriculture and Rural Development allocates a part of the S&T non-business spending (about 2.5% - 3.5%) for the procurement and repair of assets at research institutes.

# 2.2.3.3. Organize the implementation of the state budget recurrent expenditure estimates for the implementation of Science and Technology tasks at the Ministry of Agriculture and Rural Development

In fact, at the Ministry of Agriculture and Rural Development, the funding for the implementation of state and ministerial-level S&T tasks is transferred to the account of the estimating unit at the Treasury to be distributed to individuals and units in charge of the implementation. perform S&T tasks.

Through actual data, it is shown that in the period of 2016-2020, there is no state budget recurrent expenditure to perform special S&T tasks (with its own special mechanism) but only recurrent state budget expenditure to perform S&T tasks at home level. country and ministerial level. Total recurrent state budget expenditure for the implementation of state-level and ministerial-level S&T tasks in the 2016-2020 period is VND 2,144,266 billion, of which spending on state-level S&T tasks accounts for 30% - 45%, expenditures on state-level S&T tasks account for 30% - 45%. performing ministerial-level S&T tasks about 55% - 70%. This shows that there has not been proper attention to state budget expenditure for state-level S&T programs and tasks to promote the improvement of science and technology level in agriculture.

#### \* Expenses for performing State-level S&T tasks:

During this period, the State has allocated 836,457 billion VND for key State-level S&T programs. Considering the overall state budget expenditure for the implementation of state-level S&T tasks, the expenditure for performing tasks under the biotechnology program accounts for the largest proportion of 44 %. On average, about 73 billion VND per year. For science and technology tasks under the national product program: 290,055 billion VND (accounting for 35%) has been granted. The science and technology task under the program of high-tech agriculture has 19 topics with a total amount of support from the state budget of 99.6 billion VND.

#### \* Expenses for performing ministry-level S&T tasks:

In the 2016-2020 period, state budget expenditures for ministerial-level S&T tasks usually account for 65%-70% of the total expenditures on S&T tasks. Of the total state budget expenditures for the implementation of ministerial-level S&T tasks, nearly 90% is spent on institutes, about 10-11% on universities and academies, and about 2% on the implementation of S&T tasks. ministerial level at the Office of the Ministry, Center, Department, and General Department (*Data Table 2.12*). The management and allocation of state budget funding for S&T tasks at the state and ministerial levels has basically performed the contract payment to the final product or the partial payment of the work.

In practice, partial payments are applied to most S&T tasks. Very few outsourced tasks go to the final product. Although the payment has been made, in order to pay these expenses, it is necessary to complete a large number of invoice documents proving that the expenditure is valid, which is too large, leading to significant costs in both material and time. time.

2.2.3.4. Current status of state budget recurrent expenditure for the implementation of Science and Technology research results: The Ministry of Agriculture and Rural Development implements science and technology application implementation activities through: ministerial-level pilot production project and promotion project. farm.

\*For trial production projects: The Ministry has allocated from 1% to 1.5% of the annual S&T non-business budget to apply the results of ministerial-level S&T research into trial production.

In the 2016-2020 period, more than 61 billion VND has been invested in 27 pilot production projects to deploy new S&T applications (Appendix 03).

\*For investment funds for agricultural extension activities: from 2016 to 2020, an average of 1,500 billion VND/year has been spent. In which: cultivation 25%, animal husbandry 19%, forestry extension 10%, fishery extension 14%, information and propaganda 10%, training and training 12%.

Comments, Through detailed analysis of the implementation of state budget recurrent expenditure estimates for S&T activities at the Ministry of Agriculture and Rural Development, it shows that it is basically based on the assigned estimates. However, there are a number of issues that need to be considered and overcome, which is the lack of state budget funds for the performance of regular functions according to functions, especially funding for salary payments. In addition, recurrent state budget expenditures on purchasing and repairing assets to improve S&T capacity for research institutes are still quite low.

### 2.2.4. Finalization of state budget recurrent expenditures for Science and Technology at the Ministry of Agriculture and Rural Development

The appraisal of state budget recurrent expenditures for S&T activities at research institutes under the Ministry of Agriculture and Rural Development is basically done in a orderly and timely manner, ensuring the quality of settlement reports, clearly explaining the indicators. target in the report. However, a large part of the regular budget allocated by the State budget to perform regular tasks according to functions and irregular activities in S&T organizations is implemented under the total contract mechanism, but when used, it is still must comply with the norms of expenditure regime and accounting according to the state budget index. That situation leads to a long time to synthesize data for finalization and the situation that the difference between the final settlement number and the allocation estimate occurs is quite common. In the finalization of recurrent state budget expenditures for S&T, the most complicated is to check the finalization of expenditures for the performance of S&T tasks (themes) in the non-contracted part.

# 2.2.5. Inspect, control and evaluate the management of recurrent expenditures of the state budget for Science and Technology activities at the Ministry of Agriculture and Rural Development.

### 2.2.5.1. Check and control recurrent expenditures of the state budget for science and technology

Checking the management and use of recurrent state budget expenditures for S&T activities in S&T non-business units under the Ministry of Agriculture and Rural Development is mainly carried out by financial managers and leaders of research institutes under the Ministry, of state treasury officials.

Periodic inspection is conducted mainly by the Department of Science, Technology and Environment, Ministry of Agriculture and Rural Development, the unit in charge of the S&T task management agency, the direct management financial agency through periodic inspection as well as the periodical inspection. as when settling S&T tasks. In addition, periodic inspection is also carried out through the review and approval of monthly, quarterly and annual state budget recurrent expenditure reports.

Through actual data, it is shown that the inspection has saved the state budget recurrent expenditure for Science and Technology at the Ministry of Agriculture and Rural Development in the period 2016-2020 by about 40 billion VND per year.

Through practical inspection and control of recurrent expenditures of the state budget for S&T activities, some limitations need to be overcome, which are:

- The inspection and control of state budget expenditure for the performance of regular tasks according to functions is difficult because the spending norms using state budget funds are outdated.
- Expenses for performing S&T tasks at the state and ministerial level are mainly implemented by the method of partial payment. Therefore, the inspection and control of expenditures only focuses on checking documents, assigned norms, and assigned jobs.

# 2.2.5.2. Evaluate the results of management of recurrent expenditures of the state budget for science and technology activities at the Ministry of Agriculture and Rural Development according to the defined criteria.

- Evaluation of "Reliability of State Budget recurrent expenditure estimates for S&T": This criterion is one of the criteria used to measure the overall effectiveness of the whole process of managing recurrent state budget expenditures for S&T in agriculture. and is evaluated in detail on the following two aspects:

Firstly, the difference between the total actual expenditure and the original estimate of recurrent expenditures from the State budget for science and technology in agriculture.

The average annual difference between actual state budget recurrent expenditure and state budget recurrent expenditure estimate for S&T activities at MARD in the 2016-2020 period is not too large (4.44%). However, the difference between actual expenditure and estimated expenditure for years is not stable. Specifically: the difference between 2016, 2017, 2018, 2019, 2020 is 0.25 respectively; 1.93; 4.04; 10.00; 5.76. It is worth noting that in 2019 alone, the difference between actual expenditure and estimated expenditure is quite large.

Second, the difference in actual expenditure structure compared with the original state budget recurrent expenditure structure for science and technology in agriculture.

The degree of disparity in the structure of recurrent state budget expenditure for S&T activities in agriculture in MARD is unstable between the years from 2016 to 2020. If averaged over the whole period, the difference in expenditure structure is of the group spending on non-recurring activities is the highest 8.42%, the group spending on S&T tasks is 3.6% and the group spending on regular activities is the lowest 3.12%

- Evaluation of comprehensiveness and transparency in recurrent expenditure management:
- The comprehensiveness and transparency in the management of recurrent expenditures of the state budget for S&T activities in the Ministry of Agriculture and Rural Development are shown quite clearly. Information on recurrent expenditures of the state budget for the performance of regular tasks according to functions, expenditures for the implementation of S&T tasks, expenditures for the implementation of national programs on agriculture, high-tech agriculture, and organic agriculture ..., which is fully reflected in the annual state budget expenditure reports.
- Assessment of compliance in expenditure management: Compliance was performed quite well at all stages of making estimates, complying with estimates as well as controlling and finalizing expenses, especially in terms of time and cost. settlement reporting system,
- Assessing the ability to predict and control the implementation of recurrent expenditures of the state budget for science and technology: On the basis of spending needs and the assurance ability of the state budget to make and allocate recurrent expenditure estimates State budget for S&T activities but in reality does not meet the spending needs of the units. In the process of using state budget funds, leaders and financial managers in the units regularly carry out internal inspection and control over the expenditures already made.

### 2.3. GENERAL ASSESSMENT OF THE SITUATION OF MANAGEMENT OF REGULAR FUND CHARGES FOR S&T ACTIVITIES IN THE MINISTRY OF AGRICULTURE AND DARD

#### 2.3.1. These achievements

\* Mechanisms and methods of managing recurrent expenditures of the state budget for S&T activities are organized and applied relatively appropriately in practice.

- \* Estimates of recurrent state budget expenditures for S&T activities in agriculture in MARD are prepared within the allowable state budget budget (allocated check number).
- \* The allocation of recurrent state budget expenditure estimates for S&T activities of units and organizations under the Ministry of Agriculture and Rural Development is relatively timely and basically provides enough funding for the implementation of S&T activities.
- \* Complying with the actual recurrent expenditure estimates for S&T activities at the Ministry of Agriculture and Rural Development, which closely followed the assigned estimates.
- \* The settlement of recurrent state budget expenditures for S&T activities has been shortened in terms of time and workload.
- \* The inspection and control of expenditure and use of state budget funds for Science and Technology in the Ministry of Agriculture and Rural Development has had positive changes in recent years.

#### 2.3.2. Limitations and shortcomings

*Firstly*, the organization that applies advanced management methods according to outputs in managing recurrent expenditures of the state budget for science and technology in agriculture has certain limitations.

Second, the allocation of regular state budget funding for science and technology in agriculture is not reasonable

*Third*, the estimates of recurrent state budget expenditures for science and technology in agriculture have not been fully covered and are not close to reality.

*Fourth*, the level of compliance with spending regime norms and coordination among agencies in managing recurrent expenditures of the state budget for science and technology in agriculture is not good.

*Fifth*, administrative procedures in the stage of payment and settlement of recurrent state budget expenditures for science and technology in agriculture are still complicated.

Sixth, the inspection and control of recurrent state budget expenditures for science and technology need not be conducted regularly, continuously and somewhat loosely in some stages. Seventhly, State budget expenditure for the implementation of S&T tasks using the state budget is still allocated to the account of the estimating unit, not yet allocated through the Ministry's Science and Technology Fund.

#### 2.3.3. Reasons for the restriction

#### 2.3.3.1. Objective reasons

*Firstly*, the competitiveness in agriculture is still limited. The competitive bidding to receive and perform S&T tasks is still limited.

*Second*, the characteristics of S&T activities and products in agriculture limit the organization of bidding and contract spending to the final product.

*Third*, the link between S&T research and the demand for S&T in production is not tight. Research by order is very limited.

#### 2.3.3.2. Subjective reasons

*Firstly*, the transformation of the financial mechanism of public S&T organizations is still slow.

*Second*, the system of norms and spending regimes using state budget recurrent expenditures for science and technology activities in agriculture is outdated and inappropriate.

*Third*, responsibilities and management capacity of some officials in state budget expenditure management agencies and management of S&T activities at all levels are still limited.

*Fourth*, the situation and degree of autonomy of public S&T research organizations under the Ministry of Agriculture and Rural Development is still limited.

Fifth, the capacity and results of S&T activities of public S&T organizations in agriculture are still limited.

#### Chapter 3

#### COMPLETE MANAGEMENT OF STATE BUDGET REGULATIONS FOR SCIENCE AND TECHNOLOGY IN MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

3.1. OBJECTIVES AND MISSIONS FOR SCIENCE AND TECHNOLOGY DEVELOPMENT IN AGRICULTURE, ORIENTATIONS AND VIEWPOINTS FOR PERFECT MANAGEMENT OF STATE BUDGET REGULAR BUDGET FOR SCIENCE AND TECHNOLOGY IN THE MINISTRY OF AGRICULTURE AND AGRICULTURE

### 3.1.1. Objectives and tasks of science and technology development in agriculture in Vietnam to 2025, vision to 2030

### 3.1.1.1. Objectives of Science and Technology development in agriculture in Vietnam to 2025, vision to 2030

- \* General objective: Developing science and technology in agriculture is the key driving force for industrialization and modernization of agriculture and rural areas, selectively absorbing and mastering advanced technologies for agricultural development: modern, clean agriculture, organic agriculture, associated with processing, adapting to climate change and connecting the global agricultural product chain.
- \* Specific goals by 2030:
- Science and technology contribute about 60% of the added value of the agricultural sector. The rate of value of agricultural products produced by good processes is over 40%.
- The rate of results of S&T tasks that are put into practice/total number of tasks performed will reach over 90% by 2025 and over 95% by 2030. At least 60% of research results are recognized for progress, technical set. The rate of increase in total value of technology transfer and commercialization of research results from research institutes and universities under ministries/sectors to enterprises will reach 20% in the period 2021-2025 and 35% in the period 2026- 2030.
- Building and developing 200 hi-tech agricultural enterprises; to build 30 high-tech agricultural areas.
- Researching modern technology applied in preservation and processing of agricultural products in order to improve the value and competitiveness in the international market. The growth rate of added value of the processing industry is 8-10%/year.
- Agricultural products of high-tech agricultural programs account for 40% of the total production value of major products.

### 3.1.1.2. The task of developing Science and Technology in agriculture in Vietnam to 2025, with a vision to 2030

- \* Renovating mechanisms and institutions to promote agricultural innovation
- \* Improve scientific and technological research capacity for public S&T units and organizations under the Ministry of Agriculture and Rural Development
- \* Well implement international cooperation and integration in science and technology in agriculture.
- 3.1.2. Viewpoints and orientations to improve the management of recurrent expenditures of the state budget for science and technology in agriculture at the Ministry of Agriculture and Rural Development to 2025, with a vision to 2030
- 3.1.2.1. Perspective on improving the management of recurrent expenditures of the state budget for science and technology in agriculture
- \* Viewpoint 1: Improving the management of recurrent state budget expenditures for S&C activities must thoroughly grasp the Party's policy of budget investment for S&T.

- \* Viewpoint 2: Improving the management of recurrent state budget expenditures for S&T activities in agriculture must be carried out synchronously with the process of perfecting the autonomy mechanism of public S&T organizations under the Ministry.
- \* *Viewpoint 3*: Improving the management of recurrent state budget expenditures for science and technology in agriculture must be practical, thrifty, and efficient.
- \* Viewpoint 4: Enhance transparency, publicity and accountability in the management of recurrent expenditures of the state budget for S&T activities in agriculture.

### 3.1.2.2. Orientation to perfect the management of recurrent expenditures of the state budget for science and technology in agriculture

- \* Prioritize allocation of recurrent state budget expenditures for key national programs and tasks on science and technology in agriculture.
- \* Improve methods of managing recurrent state budget expenditures for S&T activities in agriculture according to output results.
- \* Expenditure to improve scientific and technological research capacity for public S&T units and organizations under the Ministry of Agriculture and Rural Development
- \* Develop and apply internal spending regulations in the management and use of state budget funds for S&T activities at the Ministry of Agriculture and Rural Development.
- 3.2. COMPLETE SOLUTIONS FOR MANAGEMENT OF RECURENT STATE BUDGET EXPENDITURE FOR SCIENCE AND TECHNOLOGY IN IN THE MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

### 3.2.1. Solutions on management of recurrent expenditures of the state budget for science and technology in agriculture according to output results

# 3.2.1.1. Widely apply the method of lump sum spending in the management of recurrent expenditures of the state budget for science and technology in the Ministry of Agriculture and Rural Development.

- \* Completing the basis for calculating the implementation of regular state budget contract payments for S&T activities in agriculture, including the following factors:
- Determine the research problem and the work contents of the tasks, determine the requirements in terms of quantity and quality to be achieved of the tasks.
- Determine the total cost estimate needed for S&T activities, including: remuneration for scientific labor, raw materials, fuel, materials...
- -The results of the evaluation and acceptance of the research products have met the requirements.

Based on the nature and content of state budget recurrent expenditures, the nature and characteristics of S&T activities as well as S&T products, the method of lump sum spending for these contents shall be determined appropriately.

\* Expenses for performing S&T tasks at state and ministerial levels:

Expenses for performing S&T tasks using state budget funds can be done by one of the following two detailed methods:

Firstly, Quan spends on the final product of S&T tasks.

This method applies in the following cases:

- S&T tasks with final products with clearly defined product names, key quality criteria of products, units of measurement, quality levels or scientific requirements to be achieved, quantity or scale of production. product creation, application address; directly selected, considered and assigned by the Science and Technology Council; accepted by the task manager and the lead agency.
- Estimates of S&T tasks have been correctly calculated and fully funded.
- Competent agencies approve the explanation and budget for implementation.

The process and procedures for contract payments to the final product include the following steps:

- ➤ Heads of units and individuals in charge of performing S&T tasks must commit in writing to accept the method of lump sum spending.
  - The unit in charge of completing the explanation and cost estimate for implementation.
- ➤ Competent agencies consider, approve explanations and cost estimates, including stipulating the task of contracting and spending up to the final product, signing contracts to perform S&T tasks with the presiding organization or individual.
- ➤ S&T tasks contracted to the final product are considered completed after the state agency has certified in writing the acceptance test results from the satisfactory level or higher. The S&T contract is liquidated.
- ➤ The settlement of funds is done after the S&T task is completed and the parties liquidate the S&T contract.

Second, Partial Payments are applied to high-risk S&T tasks, where specific criteria for the final product cannot be determined and the following criteria must be met:

- Having each part of work clearly defined contents, objectives, requirements, results and implementation cost; be considered and assigned directly by the Science and Technology Council by the partial payment method; accepted by the task manager and the lead agency. The cost estimate for the part of the work to be paid for has been correctly calculated, with sufficient funding for implementation on the basis of economic and technical norms.
- To be approved by the competent authority for the explanation and cost estimate. The process and procedure of partial payment contract is similar to that of final product. Currently, the Ministry of Agriculture and Rural Development has applied the method of contracting expenditures to perform S&T tasks at ministerial and state levels. However, it only stopped at contracting to spend part of the task (not yet paying for the final product).

#### \* Using the allocated funds:

The manager of the S&T task actively develops a plan to deploy the contents of the contracted work, has the right to adjust the spending content, spending norms, and funding between the parts of the contracted work (ensure within the scope of the contract). the total amount of funds allocated in a contract and must ensure the invoice and voucher regime as prescribed.

### \* Outsourcing to perform regular tasks according to functions at research institutes under the Ministry of Agriculture and Rural Development:

Currently, in practice, the management of recurrent expenditures from the state budget for maintaining the operation of the apparatus and performing regular functions according to functions in research institutes has been contracted but not yet implemented. methodical way with a scientific basis. Measures to complete the spending contract to perform regular tasks according to functions:

- Review the level of funding that institutes can self-finance from sources outside the budget.
- Increase the level of remuneration for researchers when performing assigned tasks (including grassroots S&T tasks decided by the Director).

#### \* Expenditure for irregular activities at institutes:

In the coming time, step by step consider the implementation of contract spending for these contents. First of all, it is possible to contract expenditures for procurement and minor repair of tools and equipment in research institutes because this expenditure is relatively stable and the level of allocation can be determined according to an amount of about 5%.

In order to properly implement the settlement solution, it is necessary to implement the following measures:

- Researching and perfecting the system of criteria, standards and regulations as the basis for determining the final product of the S&T tasks.
- Completing the system of technical-economic norms as a basis for calculating the contract level..

- Improve the responsibilities and qualifications of scientific council members in appraising and accepting the results of S&T tasks, appraising cost estimates

#### 3.2.1.2. Apply the method of ordering and bidding to perform S&T tasks.

\* For the method of ordering to perform S&T tasks:

State budget expenditure management according to the ordering mechanism is applied to new S&T products for mass application on a large scale, requiring State intervention or S&T products arising from actual production needs.

In the coming time, based on the strategy for development of science and technology in agriculture, the S&T activity plan of the Ministry of Agriculture and Rural Development selects key science and technology tasks to order for research institutes.

\* As for the bidding method: In the past time, bidding for S&T tasks at the Ministry of Agriculture and Rural Development has been almost nonexistent. In the coming time, it is necessary to apply public bidding for S&T tasks at the Ministry of Agriculture and Rural Development.

Measures to take to apply this solution well:

- Every year, the Department of Science, Technology and Environment, Ministry of Agriculture and Rural Development develops a list of S&T tasks that need to be tendered and widely announced to the units.
- The Department of Science, Technology and Environment must select capable and experienced scientists to join the Expert Group to appraise the bids.
- Accurately identify and publicize bidding-related information such as: bidding participants, bidding time, and bidding results.

# 3.2.2. Solutions on criteria and methods of allocating recurrent expenditures of the state budget for science and technology in the Ministry of Agriculture and Rural Development.

Allocating state budget expenditures for scientific and technological activities in agriculture in the Ministry of Agriculture and Rural Development in the coming period should well implement the following measures:

- Reviewing and perfecting criteria for allocating regular state budget funds for S&T activities: S&T activity plan, S&T capacity of S&T organizations and the degree of autonomy of research institutes.
- Balance between spending on performing regular tasks according to functions, expenditure on implementing S&T topics and tasks at all levels as well as spending on non-recurring activities to maintain and improve S&T capacity for research institutes under the Ministry of Agriculture and Rural Development. Increase state budget funding for ministerial-level S&T tasks and funds for procurement and asset repair of institutes.
- Pay attention to allocating state budget funds for science and technology tasks of national programs in agriculture such as hi-tech applied agriculture, national products, biological industry...

### 3.2.3. Solutions for making and notifying state budget recurrent expenditure estimates for Science and Technology at the Ministry of Agriculture and Rural Development

Stemming from the limitation mentioned in the planning of recurrent expenditures of the state budget, the following measures should be taken in the coming time:

- Re-determine the level of recurrent state budget allocation for performing regular tasks according to functions at research institutes under the Ministry.
- Review and supplement bases such as expenditure norms, specific workload of each type of irregular activities to make more realistic estimates.
- Timely notify annual budget expenditure estimates to beneficiaries as well as State Treasury agencies, especially estimates of expenditures for performing regular tasks according to the functions of public S&T organizations.

### 3.2.4. Solutions on organizing and implementing state budget recurrent expenditure estimates for science and technology in agriculture

The biggest limitation in this stage is compliance with prescribed state budget expenditure norms in the process of using state budget recurrent expenditures for S&T activities. The situation in which the actual spending amount is often larger than the assigned estimate, especially the recurrent expenditure on performing regular tasks according to functions and spending on irregular activities in the units. To work around this limitation, the following issues need to be addressed:

Firstly, Review, supplement and adjust the system of recurrent expenditures of the state budget for science and technology in agriculture to ensure scientific and reasonable.

Types of expenditure norms that need to be completed in the near future include:

- Types of recurrent expenditure norms in public S&T organizations such as: norms of administrative expenses, travel expenses, electricity and water, telephone, stationery, allowances need to be reviewed and adjusted because most of them need to be adjusted. These standards are outdated.
- The norm of spending on materials and remuneration for research on science and technology topics is also in a state of backwardness compared to reality, which needs to be adjusted such as: the norm of expenses calculated by day, hour and labor coefficient is not really suitable. The remuneration regime for staff doing S&T research as well as the spending norms for actual survey work is still quite low.

Second, Develop and implement internal spending regulations in the units:

Third, Propaganda to raise the sense of responsibility in the management and economical use of recurrent state budget expenditures for science and technology. At the same time, strengthen the inspection of the spending and use of state budget funds of the units.

### 3.2.5. Solutions on finalization and publicity of regular expenditures of the state budget for science and technology activities

In addition to the annual settlement of state budget recurrent expenditures for S&T activities, S&T non-business units must also make a report requesting the final settlement of recurrent expenditures for implementation of each project and each assigned S&T task to be completed. in year.

In fact, the final settlement of state budget expenditures to perform S&T tasks in recent times still requires payment documents that are too detailed, meticulous and complicated for the non-contracted funding, which has caused many difficulties for the work. settlement.

Specific remedies for this situation:

- Strengthen the application of advanced state budget expenditure management methods, especially contract spending associated with the final product of S&T tasks.
- Improve the inspection and settlement of recurrent state budget expenditures for the implementation of science and technology topics and tasks in science and technology units in a more practical, effective and timely manner.
- Simplify administrative procedures and system of invoices and reports to serve the settlement of recurrent expenditures of the state budget for science and technology, especially for the settlement of science and technology tasks at ministerial and state levels.
- After finalization, promptly publicize regular state budget expenditures for S&T activities to relevant stakeholders in various forms.

### 3.2.6. Solutions on checking and controlling recurrent expenditures of the state budget for Science and Technology at the Ministry of Agriculture and Rural Development.

In the coming time, the inspection and control of recurrent state budget expenditures for science and technology at the Ministry of Agriculture and Rural Development should be implemented in the process of making estimates, executing estimates and settling expenditures for assigned S&T activities. The Ministry of Finance, the Ministry of Science and

Technology, the functional departments of the Ministry of Agriculture and Rural Development need to coordinate in inspecting the following specific contents:

- Strictly inspect and control the payment contract: check the conditions of the payment contract; contents and norms of contract assignment; the observance of principles and regulations on the use of contracted business...
- Check and control the use of the allocated funds: focus on the following contents: The reasonableness of the expenditure content is consistent with the progress and consistent with the implementation results; Validity and legitimacy of goods purchase vouchers, service delivery services.
- Check and control the conditions and procedures for advance and payment of recurrent state budget expenditures to perform assigned S&T tasks.

#### 3.2.7. Support solutions

- 3.2.7.1. Coordinate state budget expenditure management for S&T tasks in agriculture with the implementation of national programs in agriculture to increase scientific and technological capacity in agricultural production
- 3.2.7.2. Completing the organizational structure and operating regulations of the Science and Technology Development Fund of the Ministry of Agriculture and Rural Development.
- 3.2.7.3. Restructuring and perfecting the organizational structure and autonomy mechanism of S&T non-business units under the Ministry of Agriculture and Rural Development.
- 3.2.7.4. Training and fostering to raise the responsibility and management capacity of officials who manage state budget expenditures and manage S&T activities of the Ministry of Agriculture and Rural Development.

#### 3.3. RECOMMENDATIONS TO RELATED AGENCIES

#### 3.3.1. Recommendations to the Government, the National Assembly

The Government needs to balance and propose the National Assembly to increase the allocation of state budget spending for S&T activities to 2%. On that basis, increase the allocation of recurrent state budget expenditure for S&T activities in the Ministry of Agriculture and Rural Development.

### 3.3.2. Recommendations to the Ministry of Finance, the Ministry of Science and Technology

- The Ministry of Finance and the Ministry of Science and Technology shall balance and increase the proportion of state budget allocations for science and technology in agriculture. In the past time, agriculture's contribution to GDP has increased significantly and in the coming period, agriculture still needs to be prioritized for investment.
- The Ministry of Finance shall coordinate with the Ministry of Science and Technology in reviewing, supplementing, and adjusting the standard norm for recurrent expenditures of the state budget for science and technology in accordance with reality.
- The Ministry of Science and Technology needs to closely coordinate with the Ministry of Agriculture and Rural Development in allocating state budget funds, notifying estimates and monitoring and checking the use of funds to perform state-level S&T tasks organized in different units. public science and technology institutions and organizations directly under the Ministry of Agriculture and Rural Development.

#### 3.3.3. Recommendations to the State Treasury agency

The State Treasury needs to study and improve the control of state budget expenditures for S&T activities in a practical way, reduce the burden of administrative procedures and the system of vouchers and invoices to serve the withdrawal of expenditure estimates for S&T activities that have been contracted. spend.

#### CONCLUSION

Developing science and technology in agriculture is the key to fast and sustainable development of our country's agriculture. Currently, strengthening the management of public expenditure in general and the management of recurrent expenditure of the state budget in particular for S&T activities in agriculture in our country is an important condition to realize the strategic objectives of scientific and technological development. Science and technology in our country's agriculture and at present are of urgent topicality.

With the research goal set out to perfect the epistemology as well as find possible solutions to improve the management of recurrent expenditures of the state budget for scientific and technological activities in our country's Ministry of Agriculture and Rural Development, The thesis has solved the following basic issues:

- 1) Theoretically, a number of concepts have been developed such as: "Science and Technology in Agriculture", "Recurring state budget expenditure for S&T activities in agriculture"; "Management of recurrent state budget expenditures for S&T activities in agriculture". The thesis also pointed out the characteristics of S&T activities in agriculture, the characteristics and contents of recurrent state budget spending on S&T activities in agriculture; Regarding the theory of management of recurrent expenditures of the state budget for science and technology in agriculture, the thesis has explained to clarify the concept, objectives, content, methods, principles of recurrent expenditure management of the budget and influencing factors. affecting the management of recurrent expenditures of the state budget for scientific and technological activities in agriculture. At the same time, a system of quantitative and qualitative criteria has been built as a basis for evaluating the results of management of recurrent state budget expenditures for S&T activities in agriculture.
- 2) In practical terms, the thesis has briefly introduced the system of public S&T non-business units and organizations under the Ministry of Agriculture and Rural Development and the results of S&T activities that those units and organizations have achieved during the period. period 2016 2020. The current situation of spending and management of recurrent expenditures of the state budget for S&T activities in agriculture in our country's Ministry of Agriculture and Rural Development in recent years has been analyzed and assessed in quite detail and evidenced by information sources, trust. Through the analysis and assessment of practice, it is possible to summarize the successful results as well as the basic limitations that still exist in the practice of managing recurrent expenditures of the state budget for S&T activities in agriculture at the Ministry of Agriculture and Rural Development. The subjective and objective causes leading to limitations in the management of state budget expenditures are also mentioned in the thesis.
- 3) Based on theory and analysis of practical situation, the thesis proposes basic views, orientations and possible solutions to improve the management of recurrent expenditures of the state budget for scientific and public activities, technology at the Ministry of Agriculture and Rural Development. The proposed solutions have a scientific basis, in accordance with the reality, and are feasible. Recommendations to the National Assembly, the Government, the Ministry of Finance, the Ministry of Science and Technology, the State Treasury to facilitate the implementation of the proposed solutions have been specified in the thesis.

With the seriousness and meticulousness in the research, the author hopes that the proposed solutions will be considered and applied to further improve the management of recurrent expenditures of the state budget for S&T activities in agriculture at the Ministry of Agriculture and Rural Development. next time.