



AgEcon SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

On the Preparation and Implementation of Research Budget in Agricultural Institutes

Xia LI, Hezhong DONG*

Cotton Research Center, Shandong Academy of Agricultural Sciences, Jinan 250100, China

Abstract Over the years, more attention has been focused on the implementation than on the preparation of the research budget in the agricultural institutes of China, resulting in the unscientific and unreasonable budgeting of research funds. The practical implementation of the research funds has also been adversely affected. In this paper, the problems as well as the root causes of those problems in the budgeting and implementation of research funds were analyzed, and corresponding solutions and suggestions were also presented.

Key words Research funds, Budget preparation, Budget implementation

As the government is investing more on the scientific research, more attention has been focused on whether the preparation of the research budget is scientific, foresighted and reasonable. The preparation of research budget is not only an important criteria to evaluating a project and arranging the fund, but also a major link in managing the science and technology project^[1]. It determines whether a project can be successfully implemented. However, for the recent several years, more emphasis is put on the implementation than on the preparation of the research budget, resulting in unscientific and unreasonable budgeting, as well as a great gap between the budget and practical demands^[2]. The author, by virtue of her years of practices in financial management, summarized the major problems in the preparation of research budgets in the agricultural research institutes of China and analyzed their root causes. Finally, some corresponding suggestions and solutions were also presented.

1 Problems in the preparation of research budget

It has become a very common problem that the preparation of research budget is unscientific and unreasonable without enough details. According to the investigation, there are usually five following problems; first, the structure of budget preparation is unreasonable. The budget is usually more than what is really needed, and the research institute would rather purchase everything they need than search for cooperation with other organizations; second, the budget often miss some routine expenses; third, the final account doesn't tally with the recorded data; fourth, the budget has

lots of minor errors and obvious logic mistakes; fifth, some of the budgets are far beyond the carrying capacity of the research institute.

1.1 The agriculture research activities have their own special features On the one hand, with the living organism as the major subject of study, agricultural science research activities are usually characterized by wide range of study subjects involved (agriculture, forest and fishery), large area affected and long duration, etc. . Since the agricultural studies, especially the field experiment, are usually affected by the uncertainties of natural conditions, such as season, climate, location, and so on, as a result, it has greatly increased the difficulties of an accurate estimate of the agricultural research expenses in advance.

On the other hand, the uncertainties of agricultural research mentioned above have also improved the risks of investment, which means that lots of agricultural studies cannot attract the investment from some enterprises and society like some industrial programs. Therefore, a majority of agricultural science studies are mainly invested by the government. Since most agricultural research programs are supported by the national budget, some research institutes even fabricate the basic data to apply for the investment, and that is why some of the research budgets have lots of problems^[3-5].

1.2 The budget prepared by the researchers is unscientific

It is required that the research budget should be prepared by the professional financial staff, who, however, neither have the intention to get involved nor are welcomed by the research group. Therefore, generally the research budget of agricultural research institutes is independently completed by the researchers themselves, who have little knowledge about finance. As a result, there are usually lots of problems in the budget prepared by the researchers alone. Even if some professional financial staff gets involved in the preparation of budget, the budget is still unscientific due to their lack of professional knowledge in the field studied

1.3 The budget preparation doesn't follow clear principles

The preparation of agriculture research budget should give a de-

Received: March 20, 2014 Accepted: May 28, 2014

Supported by the Key Laboratory Fund of "Exploration on the Fund Management in Provincial Agricultural Research Institutes" for the Genetic Improvement and Cultivation of Cotton in Huang-Huai-Hai District, Ministry of Agriculture(2012KL09); and the Soft Science Program of Shandong Province "Management of the Research Fund in Non-profitable Agricultural Institutes" (2013RKC02003).

* Corresponding author. E-mail: donghz@saas.ac.cn

tailed explanation of the uses and reasons of each expense. But in practical preparation, the description is so simple that the budget is not clear and scientific.

2 Problems in the implementation of budget

2.1 Lack of attention on the implementation of budget

Lots of researches pay great attention to the preparation of budget but lose sight of its implementation^[6]. They usually spend the money at their free will and without any plan. Therefore, the budget cannot spend on where it is really needed.

2.2 Mixed use of budget As the government is investing more and more on the agriculture research, a researcher sometimes is in charge of several different research programs. As a result, the budgets of these programs are usually mixed together, for example, the money which should have been spent on buying the chemical reagents was used for the field experiment.

2.3 Overspending on labors, consult and management It is prescribed in the laws that the money spend on labors, consult and management should not exceed the budget. But as a result of the fact that some research institute doesn't make a detailed plan of each expenses in the budget in advance, the money allocated for some items is more than what is actually needed, while that for other items is far less^[7].

Moreover, the procedures to apply for the money for labors and consult are also incomplete. For example, some researchers apply for the money in the name of buying office supplies and taking taxi. The whole application procedures are not strictly regulated, and the problems caused have greatly affected the practical implementation of the budget^[8].

2.4 Surplus of research budget On the one hand, lots of researchers usually spend the money in a thrift way, which, as a result, leads to the surplus of research budget; on the other hand, in the mind of some researchers, since the money left would not be withdrawn by the government, it is better to reserve the money for future use. There are usually four reasons leading to the two aspects: first, the budget is unscientifically prepared; second, the programs of the same kind often apply for the budget from multiple channels, and different budgets are often mixed; third, the researchers tried every means to save their expenses of budget; fourth, in order to save the money, the researchers purchased some domestically produced equipment rather than exported from foreign countries^[9].

2.5 Incomplete procedures of budget allocation for some cooperated research programs Currently, lots of research programs are cooperated by several institutes, which are in charge of different tasks. Generally the institutes would sign a contract to clarify the allocation of budget, the distribution of tasks, *etc.*, which requires that all the institutes should cooperate closely so that they can scientifically implement the budget. However, due to the restrictions from the current system, the budget isn't well implemented, and lots of problems appear during the whole implementation process^[10].

All in all, it has become a common problem that the agricultural research budget is not scientifically prepared. There are mainly three reasons: first, the unsmooth communication of research department, research group and finance department. Second, the accounts of different projects and items are mixed together. Third, the expense of self-collected money is not recorded separately.

3 To enhance the management of budget preparation

Everything should be planned beforehand. It has become a general trend that the budget should be prepared carefully, scientifically and in advance, which requires all research institute to reasonably plan the use of every expense so as to make sure the scientific and complete implementation of the budget.

3.1 To strengthen the leadership and make clear the responsibilities Whether the budget prepared is good or not is determined by not only the leader of the research program but also each member in the group. Therefore, both the leader and the members should be made awareness of the importance and seriousness of budget preparation.

3.2 To give full play to the role of research group The research group shoulders the responsibilities of managing the team and preparing the budget. The members in the group should notice the following three aspects: first, the expenses of research budget should strictly follow the related laws and regulations; second, the group should make clear the focus of the research group and avoid blind expense; third, the preparation of budget should follow the practical situation and avoid changing the budget plan repeatedly.

3.3 To play the function of the finance department It is required that the budget should be prepared and approved by the finance department before it is handed in. The expense of every program should be strictly planned and followed. The financial staff should be included in the research group and take part in the whole procedure of the research.

3.4 To clarify the structure and expense of research budget

Different kinds of research projects have different structures of expenses, but they basically cover the following aspects: the expense on equipments, the expense on materials, the expense on test and experiment, the expense on fuel and energy, the expense on travel, the expense on meetings, the expense on international cooperation, the expense on publishing, and information broadcasting, the expense on labors, the expense on consultation, the expense on management, *etc.* Generally, the more detailed and comprehensive the budget is prepared, the more scientific and practical it is^[11]. During the preparation of the budget, each item of expense shall be noted as clear as possible. The expense on the purchase of equipments and materials shall be planned in details to see if it is reasonable and follows the national rules. The preparation of budget should not be made in haste and must be examined by the finance department so as to ensure that it is scientific, comprehensive and practical.

4 To strictly implement the budget

4.1 No random change of budget The implementation of budget should strictly follow the plan, and avoid any random changes of budget. Any change of expense on materials, test and experiment, fuel and energy, publishing and information broadcasting, *etc.* should be applied for by the leader of the research group and then approved by the research institute, while the expense on equipments, trips, meetings, international cooperation, labors and consultation generally allows no increase^[12]. Any decrease should also be applied for first and then approved by the institute.

4.2 The expenses of the program should be specified The budget shall be used exclusively for the scientific research, and any misuse of the fund for other purposes should be forbidden. And even the necessary expenses shall be spent after careful planning and detailed calculation.

4.3 To regulate the allocation of expenses Both the man in charge of the whole research and the people in charge of each research subject should plan the use of money in advance to ensure the effective implementation of the budget.

4.4 Government procurement Government procurement aims to improve the openness and transparency of fund use. It overcomes some drawbacks of the decentralized procurement in the past. Besides, the whole procedures of government procurement are complete.

5 To execute the approval system of budget

The institute in charge of the research program should make sure reasonable expense of budget. The expense on consultation shall not be paid to those researchers from government institutes and who have been already paid.

In conclusion, both the preparation and implementation of the agricultural research budget should be carefully and seriously dealt with. Budget plays a vital role in the expense of agricultural studies. It is also of great importance to reasonably and effectively use the budget to the successful implementation of agricultural research projects. The preparation and implementation of budget should be given equal attention to. The research department

should supervise the application, execution and approval of the research project, while the finance department should examine the implementation of research budget regularly. The higher organization could assign the law firm to examine the use of budget and seriously punish those illegal uses of research budget. Only when the financial and research staff work together and the preparation and implementation of budget are strictly regulated will the budget be effectively used for agriculture research.

References

- [1] HUANG YQ. Reflections on the financial inspection of national science and technology supporting programs[J]. Chinese Agricultural Accounting, 2012 (9): 18–19. (in Chinese).
- [2] CHEN R. Discussion on financial management of agricultural scientific research institute in thenational treasury centralized payment system[J]. Assets and Finances in Administration and Institution, 2012, (3): 96–97. (in Chinese).
- [3] ZHANG LR. A brief discussion on funds management of scientific research task(project) [J]. Information Research, 2004, (1): 18–19. (in Chinese).
- [4] LIU CH, MENG HY. Innovating financial management to serve agricultural scientific research [J]. Management for Economy in March Scientific Research, 2011, (4): 4–6. (in Chinese).
- [5] HAN HB, LIU Y, SHANG JK. Considerations on financial management of programs funds in academies of agricultural sciences and suggestions[J]. Management of Agricultural Science and Technology, 2011, (3): 33–35. (in Chinese).
- [6] LI QM. Problems and countermeasures of the application of scientific research budget[J]. Chinese Health Economics, 2011(4): 94–95. (in Chinese).
- [7] CAI JL, LI JH. Opinions for scientific research project appropriation budgeting[J]. Manager Journal, 2007: 193. (in Chinese).
- [8] CHEN WM. Discussion on agricultural research project funding budget preparation and implementation[J]. Management for Economy in Agricultural Scientific Research, 2012(3): 11–13. (in Chinese).
- [9] LIU WJ. Problems in scientific research project budgeting and the countermeasures[J]. China State Finance, 2013(3): 60–61. (in Chinese).
- [10] SHE WY. Realities and countermeasures of scientific research budget management at colleges and universities[J]. University Logistics Research, 2011(6): 35–36, 39. (in Chinese).
- [11] SONG SQ, ZHANG YP. Appropriation budgeting of scientific research project[J]. Henan Science & Technology, 2012(11): 39. (in Chinese).
- [12] ZHANG JF. Research on finance management and supervision in agricultural research[J]. Nanjing Agricultural University, 2011. (in Chinese).
- [13] WANG RL, LI BF, QIU LC, *et al.* Development of a vibrating subsoiler [J]. Journal of Agricultural Mechanization Research, 2004(5): 134–135. (in Chinese).
- [14] SUN YJ, ZHOU Z, LI FH, *et al.* The improvement of ISZ-140 multifunctional vibratory soil improvement machinery [J]. Forestry Machinery & Woodworking Equipment, 2001, 29(5): 34–35. (in Chinese).

(From page 97)

- [10] CHAI YJ. Mechanization conservative tillage — subsoiling machinery[J]. Contemporary Farm Machinery, 2007(4): 42–44. (in Chinese).
- [11] LI HW, CHEN QD, LI WY. Study on subsoiling technique for conservation tillage field [J]. Transactions of the Chinese Society of Agricultural Machinery, 2000, 31(6): 42–45. (in Chinese).
- [12] GUO XR, GU YB, LIAO ZX. Capability analysis to ISQ–250 type bulk subsoiler[J]. System Sciences and Comprehensive Studies in Agriculture,