

The Study of Performance Management Process for Agricultural Scientific Research Units

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Abstract

Performance management is an effective means of promoting agricultural research institutes to improve the innovation capability, establish scientific performance management process is the guarantee for the performance management being successfully carried out. This paper discusses the establishment of performance management organization, developing performance plans mission objectives, establishing a scientific performance evaluation index system, the development of assessment criteria and scoring rules, conducting quantitative and qualitative evaluation, performance evaluation and verification, strengthening performance evaluation results communication and feedback, establishing performance evaluation complaint mechanisms and strengthening the effective use of the results of performance evaluation and other aspects, aims at establishing a performance management process suitable agricultural research institutes.

Key words: Agricultural research institutes; Performance management; Process

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INTRODUCTION

Performance management is a necessary way carried out to improve management efficiency and optimize the allocation of resources, making performance appraisal on agricultural research unit is a key issue for higher authorities to strengthen the management of agricultural research institutes management (Xin & Ji, 2013). Establishing suitable performance management process for agricultural research institutes, and giving full use of incentive of performance management, are with important practical significance for the promotion of management efficiency and the improvement of agricultural science and technology innovation capacity. This paper discusses the establishment of the performance management processes of agricultural research institutes in many aspects.

1. CARRY OUT THE PRINCIPLE OF PERFORMANCE EVALUATION

Performance evaluation needs to comply with an open, fair and impartial manner; adhere to the principle of combining quantitative and qualitative evaluation; adhere to the principle of management by objectives, that is the performance appraisal indicators need to break down and set up layer by layer, according to the strategic goal, and implement to specific teams and jobs, and finally by strengthening performance management, to achieve the purpose of achieving the strategic objectives of the unit (Zhang, 2009).

2. ESTABLISH A SCIENTIFIC PERFORMANCE MANAGEMENT PROCESS

Scientific performance management process is essential for the successful implementation of performance management, performance management process is

a closed loop management system, including the establishment of performance management organization, planning mission to develop performance goals, establishing a scientific performance evaluation index system, developing an assess criteria and scoring rules, carrying out a quantitative and qualitative evaluation, performance evaluation and verification; strengthening analysis and feedback communication of performance evaluation results; establishing the performance evaluation complaint mechanisms and strengthening effective use of performance evaluation results and other aspects.

2.1 Establish Performance Management Organization

The top leadership of higher authorities is in total charge of performance management organization of agricultural research institutes, responsible for the performance appraisal guidance, coordination, organizations of evaluation and other work. Performance management organizations regularly held a special meeting to study the performance appraisal embodiment, formulate the mission objectives of performance plans, supervise and inspect the performance management objectives, lead organization to carry out performance appraisal, and held a special meeting to review the results of the performance evaluation and so on.

2.2 Develop the Mission and Objectives of Performance Plans

Develop agricultural development objectives performance plan and annual work plans mission objectives according to scientific research units, establish a scientific evaluation index system according to the performance plan objectives tasks and performance evaluation of agricultural research institutes, clear the standards to be achieved of the quantitative and qualitative evaluation

of the indicators, the requirements to be achieved of conducting performance management; and developing standard indicators, methods and scoring rules according to the standards and requirements.

2.3 Establish a Scientific Index System of Performance Evaluation

The main content of the performance evaluation for agricultural research institutes technological are innovation and service capabilities, the overall level of talent, the social effects of scientific and technological achievements arising from the application of scientific research, the complete degree of basic conditions, sharing levels and quality of service. According to evaluation content and performance plans mission objectives to establish a performance appraisal system with scientific ration, distinct characteristics, and objective and accurate quantification (Li & Luo, 2011). Performance evaluation indicators are divided into qualitative evaluation index and quantitative evaluation indicators. Indicators can not be evaluated by quantified evaluation should be evaluated by qualitative evaluation, which includes the overall evaluation, as well as political direction, performance of duties, innovation, serving grassroots, unit construction, selection and employment, solidarity and cooperation, anti-corruption, and other aspects of the completion of key tasks evaluation. Agricultural research institutes quantitative indicators can refer to the ability research and comprehensive evaluation index of national agricultural research institutions'20 indicators which be divided into three levels (see Table 1). The nationwide assessment on the comprehensive capacity of scientific research institutions, is authoritative assessment for the independent agricultural research unit all around the country organized by the Ministry of Agriculture .

Table 1
Quantitative Evaluation Index System for the Performance of Agricultural Research Institutes

First level indicator	Second level indicator	Third level indicator
Input	Technology teams	1. professional and technical personnel
		2. ratio of Senior professional and technical personnel
	Research conditions	3. ratio of Master's degree and above of staff
		4. science expenses per capita
Activity	Technology activities	5. research equipment per capita
		6. technology platform per capita
		7. ratio of staff in task activities
		8. index of undertaking research task
		9. research funding per capita
Output	Achievements	10. academic exchanges per capita
		11. achievement per capita
		12. allowed intellectual property per capita
		13. achievement award per capita
		14. papers and books per capita

To be continued

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First level indicator	Second level indicator	Third level indicator
Output	Personnel	15. personnel number of significant contribution
		16. training graduate student per capita
		17. number of job training
	Benefits	18. input social benefit by unit
		19. technical income per capita
		20. IT services per capita

2.4 Develop Scoring Rules and Assessment Criteria

Performance evaluation indicators take scoring rules of "basis points + effect points", namely the completion of performance evaluation indicators gets 90% basis points, 10% effect points are given according to the quality and effectiveness of the completion of the sub-file. Each scoring rules of indicators is developed combining with performance plan mission objectives.

2.4.1 Scoring Standard for Completing Performance Evaluation Indicators

Completing the comprehensive performance indicators on timely, getting 90% basis points of the index score; working effectively getting 91%-92% of the index score; working with characteristics and bright spots, setting 93%-94% of the index score; work with outstanding effectiveness, getting 95% -96% of the index score; working with significant effectiveness, getting 97% -98 % of the index score; work remarkably, getting 99%-100 % of the index score. The same working effect corresponding to an indicator, does not use repeatedly. The same indicator effect score does not cumulative, and score it in accordance with the highest grade effects.

2.4.2 Scoring Standard for Unfinished Performance Evaluation Indicators

The unfinished Performance Evaluation Index should be deducted scores, taking 90% of the index value as a benchmark according to the standards set in the indicator system correspondingly. There are no scores on evaluation indicators for errors, mistakes, delays, or things causing serious consequences.

2.5 Carry out a Quantitative and Qualitative Evaluation

2.5.1 Quantitative Evaluation

Agricultural research institutions carry out self-assessment for completion of performance plan and achievement of performance management indicators tasks, collect the completion and implementation of the results of the evidence, according to the "basic points + effect points" approach and scoring standards, combine scoring details, evaluate and score for each indicator, make the overall evaluation on the completion performance tasks and performance management indicators.

2.5.2 Qualitative Evaluation

Qualitative test has four grades: A, B, C, D, representing great, good, fair, poor. Qualitative evaluation uses 360-degree assessment method, evaluating on the levels of superior, equal and subordinate (Wang & Xia, 2008).

2.6 Verify the Performance Evaluation

Performance management organizations verify the agricultural research institutes' self-assessment on the performance, access relevant documents, deeply understand the measures taken to the tasks indicators and the results achieved, and finally make a general evaluation of the performance management of agricultural research units', descript scoring and verification results, analyze shortcomings and problems and make recommendations for improvement.

2.7 Strengthen the Analysis and Feedback Communication on Performance Appraisal Results

To promote the communication and feedback of the performance evaluation results is a key for good performance management. Feedback communication is not informing the result of performance evaluation, but to reach a consensus between the two sides, taking improve work performance as a starting point, analyze the main reason for the incompleteness of indicators, develop performance improvement plans on this basis, in order to promote the improvement and enhancement of performance of agricultural research institutes continuously (Meng, 2010).

2.8 Establish Performance Evaluation Mechanism for Complaints

Establishing complaint mechanisms allows complaints on the unfair and unreasonable phenomenon in the performance appraisal process and promotes the rationalization of work performance evaluation in institution, improving the use of performance evaluation results. When handling complaints on performance evaluation, respect issues raised by agricultural research institutions, organize analysis on the results of the performance evaluation, identify causes of problems, and take the appeals process as interactive and advanced process. Complaints mechanism is an important part to improve the performance appraisal of performance management, needing to give full attention, and discover

and solve problems continuously. Finally, the results of appeals should be fed back to the agricultural research institutions.

2.9 Strengthen the Effective Use of Results of the Performance Evaluation

Scientifically use performance evaluation results, take active measures to continuously improve and use incentives, fully leverage performance management, and avoid the formalization of performance management, to reform a virtuous cycle of assessment.

2.9.1 Achieve Results of Performance Appraisal Link to the Interest

Taking performance appraisal results as an important basis of the total increase or decrease in wages of agricultural research institutions', as an important basis for assessment, appraisal, reward and punishment of leaders,, as an important basis for the building of leadership members and cadres' selection and appointment, training and education, management and supervision.

2.9.2 Implement Positive Incentives

Give recognition and reward to outstanding agricultural research institutes ranking great in performance evaluation; criticize and educate the institutes for the general and poor grades of performance evaluation results, if necessary, the higher authorities of the leadership give admonishing conversation to the agricultural research institutes or adjust leadership accordingly.

CONCLUSION

Conduct performance management having important practical significance for the promotion of the development of agricultural research institutes, establish scientific performance management process is the key to

successful implementation of performance management. This paper locates the principles of carrying out performance management and discusses the establishment of scientific performance management processes from establishing organizations of performance management, developing performance plans mission objectives, establishing a scientific performance evaluation index system, developing assessment criteria and scoring rules, conducting quantitative and qualitative evaluation, verifying performance evaluation, strengthen analysis and feedback communication of the results the performance appraisal, establishing complaint mechanisms and strengthening the effective use of the performance evaluation results, and other aspects.

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