



## THE IMPORTANCE AND NECESSITY OF THE "LEARNING AND DEVELOPMENT" DIMENSION IN THE BALANCED SCORECARD: A STUDY ON THE AGRICULTURAL CREDIT COOPERATIVES OF TURKEY

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### ABSTRACT

The balanced scorecard has been developed to overcome the shortcomings of the traditional measurement approaches and find the practical solutions to the measurement problems. It consists of finance, customers, internal processes, and learning/development dimensions. The objectives in these four dimensions are linked to each other through cause and effect relations, and the intangible assets included in the learning/development dimension constitute the basis of these dimensions, as it has been stated in strategy maps by Kaplan and Norton. In this study, the goals and objectives of the learning and development dimension of the balanced scorecard created by cooperatives specifically for themselves were identified, and the criteria to test these goals and objectives were determined by conducting a questionnaire study with 105 white-collar employees working in the Agricultural Credit Cooperatives in Central Union of Turkey, and 17 Regional Unions. The results of the study showed that the goals and objectives determined for the learning and development dimension, and the criteria to test these goals and objectives are applicable and validated for the cooperatives.

**Keywords:** Learning and Development, Organizational Performance, Balanced Scorecard, Cooperative.

### INTRODUCTION

In today's world in which globalization exists, and the destructive effects of competition are felt closely, businesses should establish an effective performance management system in order to survive. Until the end of the 20th century, businesses used traditional measurement systems which have been expressed as one-dimensional performance evaluation systems, and in which evaluation has been made solely based on the financial consequences. In this context, the balanced scorecard gained importance with the innovations it brought to eliminate the deficiencies of traditional measurement systems.

In the recent period, during which change has been experienced very fast, the ability of businesses to continue to exist depends on their learning and development abilities. Indeed, Kaplan and Norton (2015:153) emphasized that the infrastructure required for businesses to reach their strategic goals and objectives and to achieve long-term success and development can be established in the learning and development dimension of the balanced scorecard. Also, Rafique et al., (2018) in their study proposed a research framework to understand the role of innovation in business performance with a focus on inter-organizational learning influence.

The agricultural sector is of great importance for countries regarding the economic and strategic aspects. As Suvorov et al., (2018) studied the electrochemical and electrostatic decomposition technologies as a means of improving the efficiency and safety of agricultural and water technologies. And, cooperatives provide financing especially for the agricultural sector with small family businesses, and they also contribute to the accumulation of capital, ensuring the continuity in production, the creation of new employment areas, and the regulation of markets for the benefit of both producers and consumers. Multidimensional measurement and valuation systems are required so that the cooperatives in which tangible and intangible resources and capabilities with different qualities existing simultaneously can be managed successfully and can continue their existence.

*The aim of this study was to determine the goals and objectives related to the learning and development dimension constituting the basis of the balanced scorecard that would provide an increase in the performance of cooperatives that are critical for the agricultural sector with a strategic position in terms of Turkey's economy, and the criteria to test these goals and objectives.*

*In the study, the concepts of the balanced scorecard and cooperatives were first discussed. Then, the sample objectives and criteria that cooperatives could use in the learning and development dimension of the process of creating their own balanced scorecard were evaluated in accordance with the data obtained from the study, and they were summarized in the tables.*



## THEORETICAL FRAMEWORK

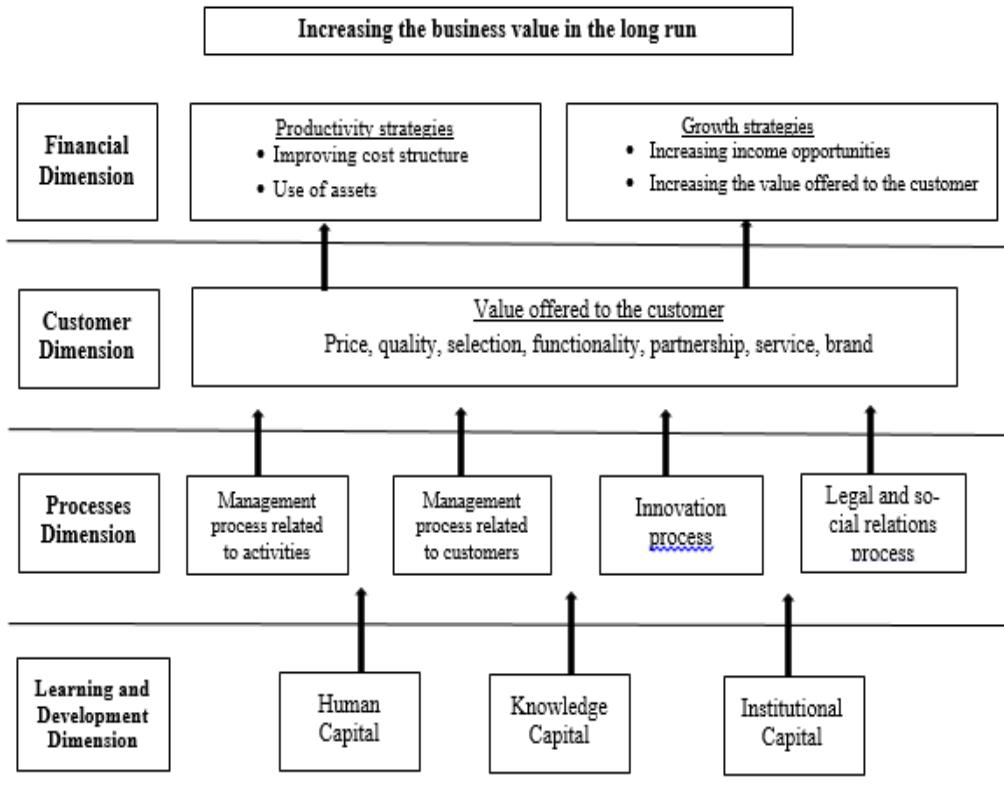
### *The Concept of the Balanced Scorecard (BSC)*

The balanced scorecard has been primarily developed to overcome the shortcomings of traditional measurement approaches and find practical solutions to the measurement problems (Perkins et al., 2014: 149). Kaplan and Norton (1992) defined the balanced scorecard as a strategic performance management system based on the measurement which expresses the organizations' missions and strategies by converting them into an understandable performance measurement set and forming a framework for the strategic performance measurement and management. The balanced scorecard puts strategy and vision at the center of the business and converts them into the measurable objectives (Letza, 1996: 58; Griffiths, 2003: 70).

The balanced scorecard is a strategic management tool that develops measurement systematics which is valid to be used in the areas of an organization in which more measurements should be performed to continue "competitive" success in the long run by balancing its financial performance with customers, internal processes and learning/development performances (Albright et al., 2015: 45). In this context, businesses should consider non-financial data such as customer satisfaction, employee satisfaction, learning and development, creativity, internal processes, technological innovations; apart from the financial data so that they can continue their existence, realize their strategies, and make permanent and continuous success (Lawrie and Cobbold, 2004: 611).

As a result of their studies, Kaplan and Norton (1993) divided the balanced scorecard into four dimensions. These four dimensions of the balanced scorecard have been listed as the financial dimension, customer dimension, internal processes dimension, and learning and development dimension. The relationships of these dimensions with each other have been presented in a

general framework in Figure 1. As can be seen in Figure 1, the objectives of these four dimensions have been linked to each other through cause and effect relations.



**Figure 1: Framework of the Balanced Scorecard**

(Reference: Kaplan and Norton, 2004: 33)

#### • *Learning and Development Dimension*

The criteria and objectives regarding the fact that businesses gain a competitive advantage and achieve high performance, the development of employee skills, providing development opportunities for employees and increasing employees' motivations have been considered within the scope of the learning and development dimension (Tatikonda and Tatikonda, 1998: 51). The learning and development dimension has been related to the question of how businesses can continue and develop their learning and development abilities, so that they can reach the goals and objectives they have determined (Baxendale and Hornsby, 2001: 37).

The learning and development dimension determines the intangible assets that are the most important ones for the strategy. While the internal processes dimension expresses the processes that convert intangible assets into customer and financial results, the customer dimension clarifies the conditions that would produce values. Finally, the financial dimension defines intangible assets with traditional financial statements by converting them into material values (Kaplan and Norton, 2004: 33). When it is considered in this context, the learning and development dimension constitutes the infrastructure of the balanced scorecard.

The fulfillment of the objectives related to financial, customers and internal processes depends on the institution's learning and growth abilities. *Based on their studies and the experiences gained by them, Kaplan and Norton (2015: 154) discussed the dimension of learning and*

*development in three basic categories consisting of the abilities of employees, the adequacy of information systems and motivation, the authorization and establishing a connection. In this context, increasing the level of the existing skills of employees, gaining new skills, and motivating employees to act in accordance with the business interests are possible by the fact that businesses have the freedom of decision-making and implementation, so that they can adapt to the radical change they experienced with a balanced scorecard. Just the motivation and skills of employees are not enough to achieve the goals and objectives determined, therefore, there is a need for obtaining information about customers, internal processes and the financial results of the decisions taken (Kaplan and Norton, 1996; 133-136).*

### ***The Concept of Cooperative***

Cooperatives are defined as the businesses established to meet the needs of the partners including the owners and also their customers, and increase their income (Szabó, 2006: 3) The International Cooperative Alliance (ICA) defines a cooperative as an autonomous organization established by individuals to meet common economic, social and cultural needs and expectations through a business which is jointly owned and managed by democratic rules (International Co-operative Alliance [ICA], 1995). Russell et al. (2017) regarded a cooperative as a type of enterprise which is different from the businesses, and the primary objective of which is to gain profit. While the aim in businesses is always maximizing their profits to serve their shareholders, the aim in cooperatives is serving their partners in a sustainable way (MacPherson, 1994: 8). Staatz (1983) also defined a cooperative as "an independent community formed by people who have come together on a voluntary basis to meet the common economic, social and cultural requirements through a jointly owned and democratically controlled economic initiative" in a way to cover both economic and non-economic aspects of cooperatives. The expressions, such as a voluntary merger, joint ownership, management through democratic rules, meeting common needs, an autonomous organization, have been included in the definition of the ICA clearly indicating the difference between the cooperative business model and other types of business (Polat, 2017: 19).



### ***Agricultural Credit Cooperatives of Turkey***

The establishment of the Agricultural Credit Cooperatives of Turkey dates back to 1863. This institution has been one of the institutions financing the agricultural sector, along with Ziraat Bank in Turkey. It provides services to its partners and other producers with 4705 employees in 1 Central Union, 17 Regional Unions, and 1625 Unit cooperatives. The Agricultural Credit Cooperatives fulfills the needs of its partners and other producers, such as fertilizers, agricultural pesticides, feeds, diesel oil, agricultural tools and equipment, seeds, and seedling-sapling.

## **METHOD**

### ***The Aim of the Study***

The aim of the study was to determine the importance of the learning and development dimension in the evaluation of the performance by determining the objectives that can be used to establish the learning and development dimensions of the balanced scorecard of the cooperatives, and the criteria to test these objectives.

### ***Method***

The data constituting the content of the study were obtained by the survey method. The questionnaire form used in the data collection process was created by reviewing the balanced scorecard and institutional performance measurement and valuation literature, and it was the result of the study done in a total of 40 hours performed by the team consisting of deputy managers of two regional unions in the institution, a controller, an expert and an assistant director. The study was done 2 days in a week, lasting for 2 months. Then, the content of the questionnaire and the significance of the expressions were evaluated with randomly selected ten people, and the necessary corrections regarding the expressions and content were made. Finally, the questionnaire form was finalized by referring to the opinions of the relevant academicians. The five-point Likert-type scale was used in the questionnaire study.

### ***Population and Sample of the Study***

The Agricultural Credit Cooperatives of Turkey constituted the population of the study. Out-of-scope employees working in the Central Union and 17 Regional Unions constituted the sample. White-collar staff were consisted of general managers, deputy general managers, heads of the department, unit managers, inspectors, experts, and lawyers in the Central Union. The staff in regional unions were consisted of regional managers, deputy regional managers, controllers, and experts. In this context, the questionnaire was sent via post and e-mail to 140 out-of-scope personnel working in the Central Union and Regional Unions. 105 of the sent questionnaires were returned. The return rate of the questionnaires was 75%.

## **RESULTS**

The results of this study for the creation of the balanced scorecard in the agricultural cooperative businesses included the experiences and evaluations of white-collar employees in Agricultural Credit Cooperatives. The demographic characteristics of the study's participants have been presented in Table 1.

**Table 1. Demographic Characteristics Related to the Sample**

| Characteristics             | Groups                  | Frequency (n) | Percentage (%) |
|-----------------------------|-------------------------|---------------|----------------|
| Position in the Institution | Deputy General Manager  | 1             | 0.95           |
|                             | Head of Department      | 2             | 1.90           |
|                             | Unit Manager            | 9             | 8.57           |
|                             | Regional Manager        | 14            | 13.33          |
|                             | Deputy Regional Manager | 33            | 31.43          |
|                             | Expert                  | 10            | 9.52           |
|                             | Inspector               | 8             | 7.62           |
|                             | Controller              | 28            | 26.67          |
|                             | Total                   | 105           | 100.00         |
| Years Worked                | Less than 5 years       | 8             | 7.62           |
|                             | Between 5-10 years      | 15            | 14.29          |
|                             | Between 11-15 years     | 40            | 38.10          |
|                             | Between 16-20 years     | 9             | 8.57           |
|                             | More than 20 years      | 33            | 31.43          |
|                             | Total                   | 105           | 100.00         |

The vast majority of the sample were consisted of Deputy Regional Managers (31%), followed by controllers (27%), and experts (10%). Furthermore, the vast majority of the participants in

the sample were consisted of the employees with 11-15 years of the experience (40%), followed by the employees with more than 20 years of experience (33%), and the employees with 5-10 years of experience (14%).

The balanced scorecard method was used for the evaluation of the organizational performance in the investigated agricultural credit cooperatives. While 77.14% of the executives who participated in the study stated that the existing balanced scorecard was insufficient, 22.86% of them stated that it was sufficient. It was stated by the executives that the existing balanced scorecard was insufficient because it was only consisted of the goals and objectives related to the financial dimension and the criteria to test whether these objectives were achieved.

The average of the answers given by the participants to the question of "What should be the total weight of each dimension in case of using a balanced scorecard" was 35% for the financial dimension, 30% for the customer dimension, 20% for the learning and development dimension, and 15% for the internal processes dimension.

The strategic goals and objectives in the dimension of learning and development were discussed in three groups, including human capital, technology capital, and organizational capital (Table 2). While 69% of the participants considered increasing the employees' satisfaction which was evaluated within the scope of human capital very important, 57% of the participants considered increasing the employees' participation in management very important. Within the scope of the technology capital, the objective of new service, and technology leadership supporting partner satisfaction in accordance with strategic goals and objectives was considered very important by 58% of the participants. Within the scope of the organizational capital, increasing individual and institutional compliance was considered very important by 63% of the participants.

In the learning and development dimension, increasing the employees' satisfaction and also enhancing the individual and institutional compliance are among the strategic goals and objectives highlighted by the vast majority of the participants.



**Table 2. Distribution of the Answers Regarding the Goals and Objectives in the Learning and Development Dimension**

| What Should Be the Strategic Goals and Objectives of a Cooperative Business?  | 1-Unimportant |      | 2-Slightly Important |      | 3-Moderately Important |      | 4-Important |       | 5-Very important |       |
|---|---------------|------|----------------------|------|------------------------|------|-------------|-------|------------------|-------|
|   | f             | %    | f                    | %    | f                      | %    | f           | %     | f                | %     |
| Human Capital   |               |      |                      |      |                        |      |             |       |                  |       |
| Increasing Employee Satisfaction  | 0             | 0.00 | 0                    | 0.00 | 0                      | 0.00 | 33          | 31.43 | 72               | 68.57 |
| Developing Service Quality and Service Production Skills - Gaining New Skills | 0             | 0.00 | 0                    | 0.00 | 0                      | 0.00 | 56          | 53.33 | 49               | 46.67 |
| Increasing the Participation of Employees in Management                       | 0             | 0.00 | 0                    | 0.00 | 4                      | 3.81 | 41          | 39.05 | 60               | 57.14 |
| Technology Capital  |               |      |                      |      |                        |      |             |       |                  |       |
| Applying New Technologies   | 0             | 0.00 | 1                    | 0.95 | 3                      | 2.86 | 51          | 48.57 | 50               | 47.62 |

|   |   |      |   |      |   |      |    |       |    |       |
|---|---|------|---|------|---|------|----|-------|----|-------|
| New Service-Technology Leadership Supporting Partner Satisfaction                               | 0 | 0.00 | 0 | 0.00 | 5 | 4.76 | 39 | 37.14 | 61 | 58.1  |
| Organizational Capital  |   |      |   |      |   |      |    |       |    |       |
| Developing Continuous Improvement Culture Following the Developments in the Agricultural Sector | 0 | 0.00 | 0 | 0.00 | 5 | 4.76 | 51 | 48.57 | 49 | 46.67 |
| Realizing a Concentric Culture Ensuring Cooperative Partner Integration                         | 0 | 0.00 | 0 | 0.00 | 7 | 6.67 | 51 | 48.57 | 47 | 44.76 |
| Increasing Individual and Institutional Compliance  | 0 | 0.00 | 0 | 0.00 | 3 | 2.86 | 36 | 34.29 | 66 | 62.86 |

The criteria to test whether the goals and objectives in the learning and development dimension were achieved, have been presented in Table 3. Within the scope of the criteria to test the human capital objectives, 59% of the participants considered the employees' satisfaction questionnaire very important , 58% considered the ratio of staff trained on the issues such as customer relations, accounting and legislation very important, and 52% considered the effect of training on employees (end of training satisfaction questionnaire) very important. Furthermore, in the criteria to test the customer satisfaction objectives, 63% of the participants considered the number of awards given to successful employees very important.

**Table 3. Distribution of the Answers Regarding the Criteria to Test the Goals and Objectives in the Learning and Development Dimension**

| What Should Be the Criteria to Test Whether These Objectives are Achieved?   | 1-Unimportant | 2-Slightly Important | 3-Moderately Important | 4-Important | 5-Very important |       |    |       |    |       |
|--|---------------|----------------------|------------------------|-------------|------------------|-------|----|-------|----|-------|
| Criteria to Test Human Capital Objectives                                    | f             | %                    | f                      | %           | f                | %     | f  | %     | f  | %     |
| Employee Satisfaction Questionnaire  | 0             | 0.00                 | 0                      | 0.00        | 5                | 4.76  | 38 | 36.19 | 62 | 59.05 |
| Attended Training Hours per Person   | 0             | 0.00                 | 0                      | 0.00        | 8                | 7.62  | 62 | 59.05 | 35 | 33.33 |
| Number of the Days of Training Given to Employees                            | 0             | 0.00                 | 0                      | 0.00        | 13               | 12.38 | 56 | 53.33 | 36 | 34.29 |
| Training Expenditure/Number of Employees                                     | 0             | 0.00                 | 1                      | 0.95        | 15               | 14.29 | 62 | 59.05 | 27 | 25.71 |
| Realized Training Budget/Targeted Training Budget Rate                       | 0             | 0.00                 | 2                      | 1.90        | 16               | 15.24 | 62 | 59.05 | 25 | 23.81 |
| The Ratio of Staff Trained on Customer Relations, Accounting and Legislation | 0             | 0.00                 | 0                      | 0.00        | 5                | 4.76  | 39 | 37.14 | 61 | 58.10 |
| Effect of Training on Employees (end of training satisfaction questionnaire) | 0             | 0.00                 | 1                      | 0.95        | 4                | 3.81  | 45 | 42.86 | 55 | 52.38 |
| Number of Suggestions Received/Number of Employees                           | 0             | 0.00                 | 0                      | 0.00        | 6                | 5.71  | 54 | 51.43 | 45 | 42.86 |

| Criteria to Test Knowledge Capital Objectives  |   |      |   |      |   |      |    |       |    |       |
|--|---|------|---|------|---|------|----|-------|----|-------|
| Development of New Technologies/Time of Implementation   | 0 | 0.00 | 0 | 0.00 | 5 | 4.76 | 51 | 48.57 | 49 | 46.67 |
| Number of Newly Developed Technology-Product-Service   | 0 | 0.00 | 0 | 0.00 | 5 | 4.76 | 51 | 48.57 | 49 | 46.67 |
| Criteria to Test Customer Satisfaction Objectives  |   |      |   |      |   |      |    |       |    |       |
| The Ratio of Adoption and Implementation of Continuous Improvement and Information Sharing Culture (Questionnaire) | 0 | 0.00 | 0 | 0.00 | 4 | 3.81 | 57 | 54.29 | 44 | 41.90 |
| Number of Successfully Applied (Working) Suggestions   | 0 | 0.00 | 0 | 0.00 | 5 | 4.76 | 49 | 46.67 | 51 | 48.57 |
| The Rate of Increase in Employees' Success of Making Their Partners Feel Valuable                                  | 0 | 0.00 | 0 | 0.00 | 3 | 2.86 | 53 | 50.48 | 49 | 46.67 |
| Number of Awards Given to Successful Employee  | 0 | 0.00 | 0 | 0.00 | 2 | 1.90 | 37 | 35.24 | 66 | 62.86 |
| Number of Social Activities for Employees  | 0 | 0.00 | 0 | 0.00 | 2 | 1.90 | 58 | 55.24 | 45 | 42.86 |
| The Ratio of Employees' Understanding the Institution's Vision Strategy and Contributions (Questionnaire)          | 0 | 0.00 | 0 | 0.00 | 2 | 1.90 | 51 | 48.57 | 52 | 49.52 |

## DISCUSSION AND CONCLUSION

In this study, it was attempted to determine the strategic goals and objectives of the learning and development dimension of the cooperatives, and the needed criteria to test these goals and objectives for the creation of the balanced scorecard in agricultural cooperatives. The human capital, knowledge capital and organizational capital discussed within the scope of the learning and development dimension have been the components constituting the basic dynamics of the institutional performance. The achievement of the result regarding the performance objectives were determined in the internal processes. Customer and finance dimensions, which have been the other dimensions of institutional performance, depended on the quality, adequacy, effectiveness, and efficiency of these three basic capitals.

The fact that the vast majority of the participants (77%) indicated the balanced scorecard applied in the institution and focusing on financial results as insufficient showed that the performance evaluation should also include the dimensions of customer, learning and development and internal processes.

According to the results of the study, the average weight of the learning and development dimension in the balanced scorecard was found to be 20%, which was a value close to 22% suggested by Kaplan and Norton (2015). These results indicated the importance of the learning and development dimension for the cooperatives. Furthermore, the participants stated that they considered the goals/objectives and expressions in the dimension of learning and development as meaningful and appropriate, very important, and important (90% - 100%).

The criteria determined to test the goals/objectives in the learning and development dimensions were also considered very important and important between 80% - 100% in total by the participants. This result showed that the expressions in the questionnaire form and the criteria were found applicable and fully validated by the cooperatives.



In conclusion, the learning and development dimension constituted the basis for the balanced scorecard, while the employees constituted the basis for the learning and development dimension. In this context, cooperatives should first improve the existing skills of their employees, or teach them new skills, and ensure their participation in decisions by motivating them to achieve the strategic goals and objectives they have determined.

## References

- Albright, T., Christopher M.B. and Davis S. (2015). The Balanced Scorecard and Twenty-First Century Thoughts on Motivation, *Journal of Corporate Accounting & Finance*, 23(1), 73-80.
- Baxendale, S.J and Donavan D. Hornsby (2001). Building A Balanced Scorecard for Entrepreneurs, *Journal of Cost Management*, 15 (6), 33-38.
- Griffiths, J. (2003). Balanced Scorecard Use in New Zealand Goverment Departments and Crown Entities, *Australian Journal of Public Administration*, 62(4), 70-79.
- ICA. 1995. ICA Adopts New Co-Operative Principles, *Victorian Co-operative News*, 2(3), 1-4.
- Kaplan, R. and David N. (1993). Putting the Balanced Scorecard to Work, *Harvard Business Review*, 71(5), 2-17.
- Kaplan, R. and David N. (2004). *Strategy maps: Converting Intangible Assets into Tangible Outcomes*. Harvard Business School Press, Boston.
- Kaplan, R. and Norton D. (1996). *Translating Strategy Into Action The balanced Scorecard*, Harvard Business Review Press. Boston.
- Kaplan, R. and Norton D. (2015). *Transforming the Corporate Report Card Strategy into Action*, (Translated by: Serra Egeli), Sistem Bookstore, İstanbul.
- Kaplan, R. and Norton David (1992). The Balanced Scorecard ~ Measures That Drive Performance, *Harvard Business Review*, 70(1), 71-79.
- Lawrie, G. and Cobbold, I. (2004). Third-Generation Balanced Scorecard: Evolution of Aneffective Strategic Control Tool, *International Journal of Productivity and Performance Management*, 53(7), 611-623.
- Letza, S. (1996). The Design and Implementation of the Balanced Business Scorecard, *Business Process Re-Engineering and Management Journal*, 2(3), 54-76.
- MacPherson, I. (1994). The Co-operative Identity in the Twenty-First Century. A Background Paper. *Review of International Co-operation*, 87(3), 8-26.
- O.A. Suvorov, A.L. Kuznetsov, M.A. Shank, S.Yu. Volozhaninova, I.O. Pugachev, O.V. Pasko, Yu.V. Babin. (2018) Electrochemical and Electrostatic Decomposition Technologies as a Means of Improving the Efficiency and Safety of Agricultural and Water Technologies. *International Journal of Pharmaceutical Research & Allied Sciences*, 2018, 7(2):43-52.



- Perkins, M., Grey, A. and Remmers H. (2014), What do we really mean by Balanced Scorecard, International Journal of Productivity and Performance Management, 63(2), 148-169.
- Polat, H. (2017), Tomorrow's Cooperative, Orkide Matbaasi, Ankara (in Turkish).
- Rafique1, T.Khan, N.A. Rahman, H. Abbas, A. Saeed, T. Effect of Innovation In Relationship Between Interorganizational Learning and Performance of Construction Industry. Journal of Organizational Behavior Research. 3(1). 2018, Pages: 247-267.
- Russell, L., Briggeman B. and Featherstone A. (2017). Financial Leverage and Agency Costs In Agricultural Cooperatives, Agricultural Finance Review, 77(2), 312-323.
- Staatz, J. (1983). The Cooperative as a Coalition: A Game- Theoretic Approach, American Journal of Agricultural Economics, 65(5), 1084-1089.
- Szabó, G. (2006). Co-operative Identity: A Theoretical Concept for Economic Analysis of Practical Co-operation Dynamics, Studies in Agricultural Economics, 105, 5-22.
- Tatikonda, L. U. and R. J. Tatikonda. 1998. We need dynamic performance measures. Management Accounting (September): 49-53.

