

# **The Role of the Balanced Scorecard in assessing Sustainable Performance (Case study in Iraqi Agricultural Companies)**

**By**

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## **Abstract**

The research aims to reveal the reflection of the application of a balanced scorecard on the evaluation of sustainable performance in agricultural institutions operating in Iraq and draw attention to the ingredients and requirements necessary to apply the balanced scorecard, financial and non-financial indicators have been applied within the five dimensions of the balanced label card, and the research has reached conclusions including the importance of the role played by the Balanced Marks Card (BSC) in evaluating the performance of the company in question as it helps the balanced performance card to develop a full understanding of how to measure and evaluate Sustainable performance.

**Keywords:** Balanced Scorecard, Sustainable Performance, Agricultural Companies

## **1. Introduction**

Institutions face many pressures resulting from the rapid and successive changes taking place in the contemporary business environment and this has made them continuously seek development and creativity, and improvement as the only way to continue and grow, and in this context institutions use many performance evaluation tools and systems to strategic decision-making processes, but still measure sustainable performance The development of an effective strategy is an ongoing challenge for institutions because of the complex nature of institutions on the one hand and the increasing number of variables affecting these institutions on the other. As a reaction to the shortcomings in traditional evaluation systems, which necessitated the introduction of a new performance evaluation model called the "Balanced Label Card", which serves as a comprehensive system to evaluate performance from a sustainability perspective in its three dimensions, which seeks to link both the vision, mission, and strategy of the organization with the daily activities of the employees within this organization and thus allows for efficiency and efficiency as a performance evaluation system leading to improved performance of the organization. Therefore, assessing sustainable performance is concerned with providing the economic, environmental, and social performance of the enterprise through the interaction between the financial and non-financial measures it contains

## 2. Research Methodology

- The problem of research

The problem of current research crystallizes in the fact that most agricultural facilities are excluded to follow modern scientific methods in improving their performance and continue to use and follow traditional methods and methods that are limited to financial indicators and which do not fit the current stage, which will hurt the evaluation of their performance accurately, which in turn will lead to the failure to provide reliable indicators for their management in the conduct of annual performance evaluations thus sustainable performance, and the problem can be formulated by asking what effect the use of the card Balanced signs I assessing sustainable performance in agricultural facilities?

- Search objectives
  1. Highlighting the concept of a balanced scorecard
  2. Provide a theoretical framework for performance evaluation to sustainability using the balanced scorecard
  3. Statement of the role of the balanced label card in evaluating the results of the activities of agricultural enterprises
- The hypothesis of the research

The research hypothesis states that (the use of a balanced label card contributes to the assessment of the sustainable performance of agricultural enterprises).

### ***Balanced Performance Card and Sustainable Performance Assessment***

- The concept of a balanced performance card

The balanced label card is defined as a set of metrics that give senior management a quick but comprehensive look at the organization's work and include financial measures that indicate the results of previous actions and complement financial standards with non-financial operational measures on customer satisfaction, internal processes, learning and organization growth, and operational measures are engines of future financial performance. (Atkinson et.al,2012). The balanced scorecard is a multidimensional system that defines, implements, and manages the organization's strategy with a focus on the organization's objectives and translates its vision into a range of performance methods and indicators, and determines the expected results and means of implementation, it provides an overview of the performance of the organization by integrating financial indicators with other performance indicators through the financial perspective of the customer perspective, the perspective of internal processes and the perspective of learning and growth, as indicated by a balanced term through the balance of external factors from shareholders Clients and internal factors of innovation, learning and growth. (Garrison et. al.,2021). The balanced performance card concept is based on the assumption that competitive advantages are not only derived from measurable concrete physical indicators but primarily refer to the effective use of capital, as well as the effective use of soft intangible assets, which are manageable and measured such as intellectual property, knowledge, capabilities or customer relationships (Datar and Rajan, 2021).

- Dimensions and indicators of a balanced scorecard

The balanced scorecard stems from a multidimensional idea of measuring overall performance as it allows measurement at a four-axis level, for each of these four axes the objectives are identified and demonstrated through indicators with their target values and the integration of initiatives to adjust with strategic objectives, the overall harmony between the four axes presents a model for measuring the performance of the enterprise through an occasional vision of its activities to coordinate the strategy with the executive systems, these axes are:

### **3. Financial Perspective**

The financial dimension is one of the axes of measuring and evaluating performance, where the results of this dimension represent indicators directed to achieve the objectives of the institution and to stand on the level of results achieved by following its strategy as the financial indicators provide a clear picture of the financial performance of the institution allows to certainly allow whether the implementation of the strategy contributes to improving the results of the institution, and achieving its desired goals and considering that all indicators included in balanced performance must translate the vision and strategy of the institution, the determination of appropriate financial objectives and indicators The stages of the enterprise life cycle, which include three basic stages: the growth phase, the stage of stability and maturity (Bose & Thomas,2007).

### **4. Customer Perspective**

The strategic goal of achieving customer satisfaction and gaining their continued loyalty to the facility results in an increase in the share or share of the enterprise in the market, through the acquisition of new customers, and the preservation of existing customers, and the organization needs to direct its attention to meeting the needs and desires of its customers because these customers are the ones who pay the organization to cover the costs and achieve profits, through this perspective develop indicators that reflect the position of the client for the organization such as customer satisfaction, market share, loyalty degree, ability to retain the customer, the ability to attract the customer and the profitability of the customer (Mowen et. al., 2014). It can be said that the proposed value of the customer is the range of features provided by the organizations, which includes three key areas:

1. Characteristics of products and services.
2. Relationship with the customer.
3. Mark and reputation.

#### ***Internal Operational Perspective***

This dimension focuses on important internal operational factors and procedures that enable the organization to excel and thus lead to the realization of the expected wishes of customers (efficiently and effectively, as well as to achieve outstanding financial results satisfactory to shareholders, and also introduces inventions and innovations that lead to the introduction of new products and services to achieve the satisfaction of existing and new customers (Mowen et. al., 2014).

#### ***Learning and Growth Perspective***

The growth and learning aspect are one of the determinants of the success of the enterprise and its continued competition, as it depends on the capabilities and skills of the workers in creativity, development, and growth, as well as the acquisition of new production

techniques and advanced technology with high efficiency, achieved renewed innovations to improve quality, increase productivity, shorten production time and reduce defects (Datar and Rajan, 2021).

### ***Environment and Community Perspective***

The view of the social environment is defined as a series of actions or contributions made by an organization to the community, consisting of providing social welfare services in the areas of health, education, and infrastructure rehabilitation. (Garrison et. al.,2021). To analyze the role of the BSC car in the environment and society on performance results, it is necessary to review the broader literature linking the various structural SBSC and its impact on environmental stewardship objectives. The units are part of the society in which they operate, which needs to contribute in terms of achieving the well-being of society to maintain the continuity of its success although it is not the only responsible for this, the first thing to pay attention to is to follow up its social responsibility and ensure that it contributes to its continuity by providing high-quality products and services, protecting the safety of the environment and the health of surrounding citizens and their workers by avoiding the risks of pollution and improving the performance of workers through mobilization and saving, thereby promoting The role of economic units in meeting the requirements of surrounding communities. (Garrison et. al., 2021), there are two main reasons for this dimension of the balanced scorecard model (Kalendar and Vayvay, 2016):

1. Is whether environmental performance and society are an important part of the current regulatory strategy, and therefore, the objectives and measures of this dimension cannot complement the role of the card.
2. The second expansion of the balanced performance card is to evaluate the sustainable performance of the organization and adapt to changes in the modern environment and society.

### ***Steps to Apply a Balanced Scorecard***

Writers and researchers have varied opinions on the steps needed to design and apply a balanced scorecard, but most of them agreed that the order to be taken and the time needed to implement each step is adapted to the characteristics and circumstances of each facility. (Garrison et al,2021) the strategic balanced performance card from theory to action, a balanced performance card is not a measurement system per se and in short, is a directional tool for moving the strategy to action at all levels of the organization. (Nair, 2004).

The balanced performance card gives a comprehensive view of the managers, employees, and shareholders of the company based on financial and non-financial aspects and reveals the balanced performance card's short- and long-term goals and company strategies as it emphasizes the harmony between daily activities and the overall vision of the company, and it is known that the best application of the balanced performance measurement card is strategic units within the businesses where it has a series of integrated activities that form a chain of value in the stages of development processes, marketing, distribution, Sale, customer service (Atkinson et. al,2012).

### ***Assessing Sustainable Performance***

The concept of performance is broad and its contents are renewed by the renewal and development of any component of the institution, no matter how different its types, it is a stage of strategic management aimed at measuring the effectiveness and efficiency of economic units, in achieving their goals through continuous improvement, harmony and interaction with changes in the internal and external environment (Neely, 2007). This is done by relying on a

set of metrics (financial and non-financial) to show the extent to which the goals set are achieved," or "the process of comparing the results achieved with the desired results and providing the feedback necessary for performance to evaluate the results and make the necessary adjustments" (Wheelen & Hunger). The concept of sustainable performance: Sustainable performance is intended as the interaction between the performance of organizations in their businesses and between the economic, environmental, and social performance (Henri and Journeault,2008) is the organization's ability to achieve its business and business, and to increase the value of shareholders taking into account long-term economic, environmental and social responsibility. Measuring sustainable performance is no longer limited to quantitative and financial standards to reflect the true success of institutions, so strategic performance reports based solely on financial indicators do not reflect the real performance of these institutions because they give a narrow and limited vision of their strategic performance (Neely,2007) and there are several non-financial measures to measure strategic performance in addition to financial measures, including balanced performance card measures.

According to the Organization for Economic Cooperation and Development (OECD), sustainable performance is measured in three main dimensions: Social performance: is one of the aspects of sustainability that refers to people's mentality and ways of thinking, as well as goals, living standards and equity, social dialogue, a delegation of responsibilities and protection of culture and wealth. Economic performance: Means sustainability in growth, development, and stable financial performance. Environmental performance: is to continue to conserve and protect natural resources, and to avoid pollution of those resources.

***Indicators of Sustainable Performance Measurement:***

Sustainable performance can be measured in its three dimensions) Chua, 2005):

1. Economic performance indicators through Direct economic impacts of customers, suppliers, workers, capital providers, and the public sector.
2. Environmental performance indicators through Environmental impacts water energy materials biodiversity emissions, toxic waste, waste suppliers' products, and services conductors' general effects.
3. Social performance indicators through:
  - Decent work and work practices, expressed in employment, management and worker relations, health and safety, training and outreach, diversity and opportunity.
  - Strategic human rights and management Non-discrimination Freedom of association and collective bargaining Child labor Forced labor and forced labor Discipline practices Security practices Indigenous rights.
  - The local community Bribery and corruption Political contributions, Competition and prices Product responsibility Health and safety of customers Products and services.

***Agricultural Projects***

The concept of agricultural activity and its types

The concept of agricultural activity is not limited to the exploitation of agricultural land through tillage, agriculture, and water to obtain plant products such as grains, cotton, cane, fruits, vegetables, etc., but also extends to many activities aimed at achieving many agricultural products. (Doğan et al,2013) Therefore, agricultural activity in its proper sense includes activities below:

### ***Vegetarian Activity***

This activity is represented in agricultural projects by reclaiming agricultural land, plowing, agriculture, and cultivation to obtain agricultural products for marketing and selling them. Known, studied, and decided, e degree of soil fertility, weather suitability, seed quality, fertilizer, and other vital factors certainly interfere with the amount, quality, and cost of output. (Doğan et al,2013) plant activity includes the following types of crops and products: -

### ***Field Crops***

They are made up of two types of plant crops such as wheat, barley, corn, and rice. The second type is vegetables such as tomatoes, beans, and other known vegetables. It is worth noting that these crops of both types cannot be said to be fixed assets for the farm because their life cycle or survival cycle in the field does not exceed one year, some of these crops are only four months old and others are eight or nine months old and, in any case, do not exceed one year, so these crops are considered to be a common asset for the farm. (Anandajayasekeram et al, 2004) Orchard products and fruit gardens: These products are different from the first type of crops, as the characteristic of these products is that they remain for more than one year on the farm before they bear fruit and they need large fixed capital and most of them take more than three years such as pomegranates, oranges, dates, grapes and others and this type of tree is a fixed asset of the f because these trees take a nonperiodic be able to bear fruit and it's going through three stages. The first is the construction or configuration phase. The second stage is the production and fruiting phase. The third phase is degradation or decay (Doğan et al,2013).

### ***Animal Activity***

It includes all matters relating to the acquisition of animals on the farm to obtain their products, where livestock on the farm are divided into the following species (breeding cattle, fattening cattle, work cattle, dairy cattle) in addition to raising livestock on the farm. Some agricultural establishments engage in poultry farming or the establishment of plants to obtain their products (Al-Ghaban, et al,2019)Food industry activity: Some agricultural establishments practice some simple industrial activities in food industries that depend on farm products from crops and animal products such as canning, feed industry, or dairy industry and others(Anandajayasekeram et al, 2004).

### ***Characteristics of Agricultural Activity***

Agricultural activity has characteristics that distinguish it from other industrial and service activities, the most important of which are (Anandajayasekeram et al,2004),( Lošoák and Hudečková,2008), The high proportion of fixed assets in agricultural activities is affected by agricultural activities by the high proportion of fixed assets, which may reach %75of the invested capital, consisting of (land, buildings, sheds, warehouses, dump stations, breeding wards), agricultural machinery and equipment, as fixed assets are represented in fixed living assets such as livestock and sheep for use and not for sale, resulting in high costs for fixed in agricultural facilities and low variable costs, which in turn requires The farmer should go to his various agricultural activities and carry out additional agricultural activities that will not bear the farmer at great cost due to the low rate of variable costs (Anandajayasekeram et al,2004). The time difference between the production process and the production itself is that the waiting period in agriculture between the start-up of production factors and access to production is long, for example, wheat does not bear fruit four months ago and cotton nine months ago and corn for three months, i.e., the cycle of agricultural production is long due to the seasonality of agricultural production (Lošák and Hudečková,2008). The association of agricultural activity with rural living is an individual farm is a production unit and the farmer depends on his family members as the source of the element of humanitarian work and he exploits his livestock in the

completion of the agricultural work that requires it, on the other hand, the farmer consumes part of the farm's products to meet his living needs, his family members and some of his workers as well as feed his clothes, livestock and poultry (used for his person with a portion of agricultural products ( Lošťák and Hudečková,2008).

Some agricultural products consume "self-consumption" within the farm, which makes it difficult to calculate the cost and revenues of products even after careful analysis of all elements of costs and revenues and the work of the necessary transformational restrictions between branches of activity. The farmer consumes meat, dairy, poultry, and grains from farm production, and farm food and consumption may be from the main production or the farm's accidental production, and it is difficult to determine the cost of the farm's consumption of such products (Doğan et al,2013) Flexible use of factors of production: where it is easy to switch from one product to another in the field of agricultural or animal production, the same plot of land can be used in the cultivation of more than one product, livestock can be used in the production of animal breeds or meat and dairy, and many agricultural production supplies such as fertilizers and feed can be used as inputs for more than one product (Helmy, et al. 2021).

### ***Sustainable Performance Indicators within the Balanced Scorecard***

The study community is represented by agricultural enterprises operating in Iraq, the Iraqi Agricultural Products Marketing Company. In light of what we discussed in the second topic, we will identify the most critical strategic performance indicators of the balanced performance card system according to each of the axes of this card and reflect it on the field and applied realities and agency: -

### ***Evaluating the Financial Perspective***

This focus focuses on measuring short-term financial performance, showing the results of events and decisions that are already being made, not the causes and drivers of these results, and in this study has been selected financial measures that fit the specificity of the field of application in the Iraqi Company for the Marketing of Agricultural Products and the data available in them and the aim is to improve strategic performance. In this dimension, we will focus on the asset turnover index: It measures the company's ability to exploit all available assets in achieving and increasing sales and indicates that the company uses its assets highly efficiently in achieving sales and according to the following relationship. Asset turnover = net sales/total assets.

**Table 1. Increases in Asset Turnover Rates**

<b>Year</b>	<b>2016</b>	<b>2017</b>
sales	187515000	375000000
Total assets	2836690100	2977955196
Rate	0.06	0.12

We note that the turnover of assets continues to increase, registering %0.06 in 2016 as the lowest rate, and in 2017 at a rate of %0.12 as the highest rate, due to increased sales volume during the two years.

### ***Evaluating Customer Perspective***

It is the basis of non-financial measures, achieving customer satisfaction and gaining their continued loyalty means increasing the share, or share of The Iraqi Company for the Marketing of Agricultural Products in the market, by acquiring new customers and maintaining existing customers. The objectives of the company are to meet the customer's studies and meet their needs and the measure customer satisfaction through the conduct of questionnaires that

the company numbers to see the satisfaction of customers with the service provided to them and thus achieve the goal. One of the most important indicators contained in the customer hub and located in the company is the market share index, The market share index is the most important indicator and the evolution of the company's sales volume can be determined by the information provided to us and by the following equation: Growth rate = previous year sales / current year sales.

**Table 2. Sales Volume Growth Rates**

Year	2016	2017
Sales	187515000	37500000
Growth rate	2.0	0.5

According to the data given, the data obtained from the company in measuring the satisfaction of its customers show that there is a significant decrease in the indicators announced on December 31, 2017 compared to the same period in 2016 and we believe that the company's strategy in dealing with customers is towards the proposed value of customers, which serves as a binary standard for establishing both relationships with customers and the quality of products and services. From the table above, we note the importance of using a balanced performance card on companies by identifying the growth rate from year to year, though these estimates companies can determine their ability to retain and increase customers

### *Evaluating the Perspective of Internal Operations*

The process of converting the inputs or economic resources available to the Iraqi Company for the marketing of agricultural products into valuable outputs and areas of creativity for the company is one of the important axes in its work, and the objectives that the company seeks through the axis of internal operations to determine the measures of internal operations necessary to be well performed, the company is interested in the quality of its performance in the short term through attention to internal operating processes as well as in the long term through innovation and creativity processes by focusing on the quality of its performance in the short term through the interest of internal operating processes as well as in the long term through innovation and creativity processes by focusing on The quality of its performance in the short term through the interest of internal operating processes as well as in the long term through innovation and creativity processes by focusing on The time and quality of the company's production processes. Among the indicators on which the company relies for this axis is the daily sales rate, which can be calculated through the following relationship: Daily selling rate = average daily sales for the previous year ÷ average daily sales for the current year.

**Table 3. The Company's Daily Selling Rate**

Year	2016	2017
Number of units sold	520875	104166
Daily selling rates	2.0	0.5

From the table above and the attached data, our study found a decrease in daily sales through the company in measuring the axis of internal operations that there is a significant decrease in the indicators announced in December 2017,31 compared to the same period in 2016 and we believe that the company's activities critical in the performance of the internal process perspective, can be classified in several high levels of operations, namely creating excellence and excellence through innovation and development such as finding new services and gaining new customers, and increasing the value of new customers, and increasing the

value of new customers. Customers through customer management processes that include deepening relations with existing customers, because these internal operations mean the success of the strategy of the four operations are contributing to the achievement of financial objectives Evaluating the learning and grammar axis: After investing effort and money in training and developing the capabilities of employees serves as a solid ground to improve the current and future performance of the company by the achievement of its strategic objectives, as growth and development initiatives come not only from the senior management of the company but also must come from lower-level workers who have direct contact with the production process and with customers can hear their observations and complaints and thus achieve their satisfaction by extent the o which this perspective has been achieved in the field of application. The focus on growth and learning is one of the determinants of the company's success and continued competition, as this aspect depends on the capabilities and skills of working on creativity, development, and growth, and the acquisition of new production techniques and advanced technology with high efficiency, to achieve renewed innovations to improve the quality of service, as there must be a strategy followed by the company each year focused on the development of different skills of employees, where certain amounts of budget are allocated to employee cycles. Among the indicators on which this axis depends in the company under current study is the employment rate and the employment rate reflects the company's employment rates, which can be determined by determining the company's employment rate from one year to another and by the following equation: Employment rate % = total salaries and wages during the previous year / total salaries and wages during the current year.

**Table 4. Increases in Employee Turnover Rates**

Year	2016	2017
Salaries and Wages	122604750	122640500
Rate	0.78	0.99

From the table above we note an increase in salaries and wages. The learning perspective shows that the data obtained by the researcher from the company in measuring the axis of learning and growth show that there is a significant increase in the indicators announced in December 2016, 31 compared to the same period in 2017. We believe that the learning and growth perspective, which includes a definition of the required skills, technology, and organizational culture, is developed through which the organization's learning strategy, which is the cornerstone of increasing organizational expertise and skills, is developed in such a way that internal processes are effectively completed and the proposed value of customers is achieved and thus achieve financial objectives.

#### ***Evaluating The Perspective of The Environment and Society***

Agricultural companies are no longer only interested in maximizing profits but have a set of social objectives to play towards the society within their borders and there are many indicators to measure efforts in each of these areas through which they can be used to measure these axes, but in the light of the available data as follows:

- Adopting modus operable through which to protect and develop society and pay attention to its requirements
- : Amounts spent on environmental protection.
- Training and development programs related to the environment.

- Number of staff participating in environmental development programs.
- Programs Amounts spent on benefits and services granted to employees Creating new jobs for the local environment.

Through the above study themes, we note the importance of applying a balanced scorecard system in agricultural companies and the above advantages that help them move forward towards their outstanding strategic performance to meet the conditions and challenges that negatively affect the levels, which supports the realization of the research hypothesis.

## 5. Conclusions

A balanced scorecard is an effective tool in the field of sustainable performance assessment, as it is a modern technology that transforms the organization's long-term strategy. Through the five dimensions of the balanced performance card, management can monitor and evaluate the company's day-to-day operations. A balanced scorecard method is a modern and integrated method that contributes to integrating financial perception with the market, operation, production, human resources, environment, and society to ensure that specific strategies are achieved and controlled to ensure that the goals set are achieved and performance is assessed and developed in the light of those objectives.

## References

- Al-Ghaban, Thaer, Sabri, Al-Ghaban, Faiza, Ibrahim, 2019," Specialized Accounting Systems Agriculture - Hotel \_ Crude Oil," Higher Institute of Accounting and Financial Studies, Department of Accounting Studies, Cost and Administrative Branch, Baghdad University, Baghdad - Iraq, First Edition.
- Anandajayasekeram, P, Rooyen, CJ Van, Liebenber, F., 2004," Agricultural Project Planning and Analysis", A Sourcebook, Second edition, UP University of Ghent FARMESA IFPRI.
- Atkinson, Anthony, Kaplan Robert S., *Matsumura*, Ella Mae, Young, S. Mark,2012," Management Accounting, Information for Decision-Making and Strategy Execution", 6<sup>th</sup> edition, Library of Congress Cataloging-in-Publication Data.
- Bose, S, Thomas K, ,2007," Applying the balanced scorecard for better performance of intellectual capital", Journal of intellectual capital, vol (8) No (4), 2007.
- Chua, waiting,2005, " Extended performance reporting: An overview of techniques ", The institute of chartered.Accountants in Australia, the University of new south wales, Sydney Australia.
- Datar, Srikant M., Rajan, Madhav V., 2021," Horngren's Cost Accounting A Managerial Emphasis" Seventeenth Edition, Global Edition, Pearson Education Limited
- Doğan, Zeki, Arslan, Seçkin, Köksal, Ayşe Gül,2013," Historical Development Of Agricultural Accounting And Difficulties Encountered In The Implementation Of Agricultural Accounting", International Journal of Food and Agricultural Economics ISSN 2147-8988 Vol. 1 No. 2 pp. 105-114.
- Garrison, Ray H., Noreen, ric W, Brewer, Peter C., 2021," Managerial Accounting", McGraw-Hill Education.
- Hansen, Erik G., Schaltegger Stefan,2018," Sustainability Balanced Scorecards and their Architectures: Irrelevant or Misunderstood?", J Bus Ethics (2018) 150:937–952 <https://doi.org/10.1007/s10551-017-3531-5>.

- Helmy, Iman, Abbas,2021,," Scientific and Practical Assets of Accounting in Agricultural Facilities," Faculty of Commerce, Cairo University, First Edition.
- Henri, Jean-Franc-is, Journeault, Marc,2008,," Environmental performance indicators: An empirical study of Canadian manufacturing firms", Journal of Environmental Management 87 (2008) 165–176.
- Kalendar, Zeynep Tuğçe, Vayvay, Özalp,2016,," The Fifth Pillar of the Balanced Scorecard: Sustainability", 12th International Strategic Management Conference, ISMC 2016, 28-30 October 2016, Antalya, Turkey.
- Lošťák, M, H. Hudečková, H.,2008,," Agriculture and farming-related activities: their actors and position in the Leader approach", Agric. Econ. – Czech, 54, 2008 (6): 245–262.
- Maryanne M. Mowen, Hansen, Don R., Heitger, Dan L.,2014,," Cornerstones of Managerial Accounting", South-Western, Cengage Learning.
- Nair, Mohan,2004,," Essentials balanced scorecard", John Wiley & Sons, Inc, 2004.
- Neely, Andy,2007,," Business Performance Measurement", Cambridge University Press.
- Organisation for Economic Co-Operation and Development (OECD),2008,," Measuring Sustainable Development", Report of the Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development, United Nations New York and Geneva.