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LINEAR ECONOMY AND CIRCULAR ECONOMY - CURRENT STATE ASSESSMENT AND FUTURE VISION

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ABSTRACT

Economic Research of Agricultural Activities in Georgia, based on the experience of developed countries, it has become apparent that the key to comprehensive management of economic efficiency is the transition to a circular economy, which implies the creation of an alternative model to the traditional linear economy. In the proposed model, agricultural products will have maximum use in terms of yield, and the remaining agricultural products, given the value of each production cycle, are given the opportunity for new consumption after processing. The purpose of this paper is to present a new model of effective economic management of agricultural production based on the principles of circular economy.

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Introduction. The widespread application of modern technological advancements in the process of forming the market economic relations requires a completely new approach to the theoretical and practical issues of increasing the economic efficiency of agricultural activities.

The circular approach and the sustainability of the agro-food system are important steps to designing green growth strategies. Policy makers, researchers and representatives from the agro-food sector should explore the potential contribution of circular approaches to sustainable production and productivity growth in the agro-food system.

Research Methodology. At present, the world is facing the challenge with the existing reserves of natural resources in order to achieve sustainable economic development of leading industries, based on the principle of effective economic management, using the enabling factors of the circular economy. The determinant of the implementation of which is the sustainability of resources and the optimization of the application and extraction of natural resources is an essential issue in the further sustainable economic development of countries.

The current economic system in Georgia, the so-called the linear economy operates on the principle **"take-consume-throw away"** and consumes resources inefficiently. As a result, the resource scarcity and environmental pollution problems are becoming more acute day by day.

Linear business activities are characterized by the following factors: use of non-renewable resources; prioritize sales of new products; the failure to collaborate; and failing to innovate or adapt. Operational risks include risk factors that threaten the company's internal operations; these factors are as follows: Supply Chain Disruption; Business risks; Legal risks; Market risks; Operational risks; Normative Acts; Socioeconomic development:

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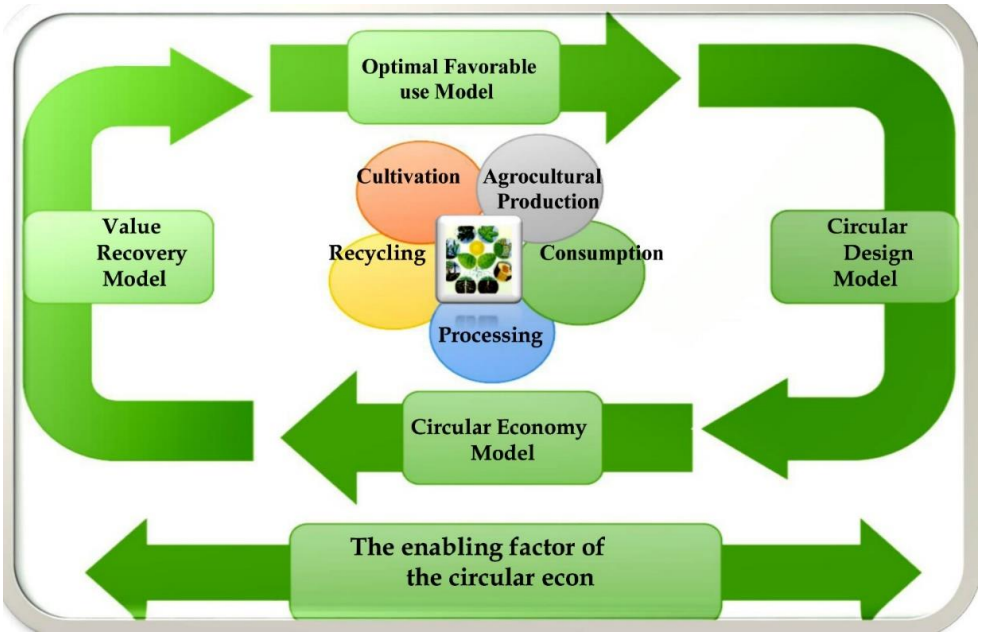

Fig. 1. Auxiliary Business Models – Driving Forceson the Circular Economy

Presented business model of the circular economy based on proposed agricultural production in the field of agriculture better regulates factors that encourage resource efficiency: long-term agreements for private financial initiatives; new design and specifications; producing products with a longer life span; long-term infrastructure; the application of refrigeration technologies and prolongation of product life-time encourages production, reduces overall costs and resource consumption; the calculation on product reuse, flexible, easily adjustable and reusable products / agroecological infrastructure; the calculation on the recovery of the product is conditioned by the circumstances that its recycling should be done optimally after consumption; agricultural production working on a profitable economically efficient management system; resource efficiency, critical assessment of the current state in order to reduce costs and resources / energy / water consumption.

The transition of agricultural production to the form of management of economic efficiency and to the circular economy is important because in addition to the new development opportunities:reduces agricultural waste; increases resource productivity; increases the competitiveness of the economy; allows countries to address resource security / scarcity problems; reduces environmental impacts and causes less damage to infrastructure at the expense of new approaches to production and consumption.

Core Principles of the Circular Economy

- Products and assets are planned, grown / made/ produced in such a way that consumption of new raw materials and waste generation is reduced;

- New business models and strategies are used that optimally consume capacity and prolongs the period of consumption of products / raw materials;

- By processing products and raw materials that have reached the last stage of the life cycle, cycles for resource and agricultural crop production, manufacturing, prolongation of consumption, processing and reproduction are connected again;

The Main Challenges of the Circular Economy in Agriculture:

• Circular economy requires that methods of production and consumption along the entire value chain should be fundamentally changed in terms of product design, managing resources wisely and customer habits.

• The transition to the circular economy will also change corporate risks, cash flow and business relationships. The consumer financial sector will need to adapt to these changes in order to provide businesses with the products and services they need, because such a transition has many aspects and has many stakeholders. To compare the capabilities of the circular economy and traditional, linear economic models, it is important to understand and clearly articulate the risks of linear economic activity.

Resource Optimization - prospective calculation, optimization of resource consumption and maximum productivity. The growing fear that it is a vital raw material and that water resources are not inexhaustible in terms of its prospective calculation and scarcity, the same applies to other natural resources, arable land/cropland, as demand for grain and other agricultural crops increases.

Technological development, modern Nanotechnologies, the Internet, and data processing tools allows the new business models to be developed and implemented, often based on shared use and leasing. The new business model of the circular economy proposed today provides the re-use and processing of raw materials. At the same time, the circumstance that production develops at the expense of resource savings is taken into account. Along with the development of agro-technologies in the production of agricultural products, agricultural marketing opportunities are also developing;

Transition to the circular economy

Living by the circular economy model won't reduce the standard of living of the community and wellbeing, in any case. On the contrary, it will be more economical in terms of both cost and natural resource savings. The proposed circular business model in the form of management in agriculture is financially profitable compared to the linear model, used according to the principle of the following economic approach, with minimum costs and maximum economic efficiency.

The difficulty of transition to the circular economy

Especially for companies which structure, strategies, activities and supply chain forms are based on a linear approach, even if the transition to the circular economy is economically viable. First it will be necessary to move the production process from linear to circular, which may require: primary capital investment; change of technological process; raw materials, equipment and production capacity; staff retraining; coordination of broader value chains.

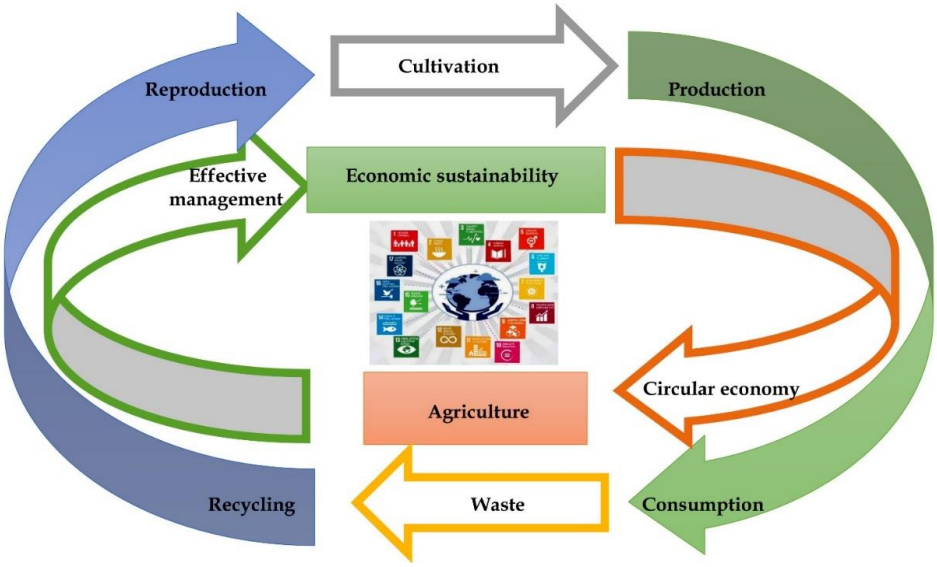

Fig. 2. Circular economy managements chemein agriculture

Research Results. Self-insurance / Eliminate the risk of unpredictable delivery of consumer goods. The circular economy gives us the means in the future to increase flexibility toward the unpredictable supply of consumer goods and price volatility and to eliminate such risks;

Reduction of production costs: growth / manufacturing the product in such a way that it can be processed and reused for the purpose of modernization and re-launching;

Processing agricultural products is often cheaper than growing / producing new products with new raw materials.

Reduced costs and new revenues: evaluation of the production chain in order to identify such associated products and wastes, for which the use of waste management companies will not even be

necessary, but their avoidance, reuse or recycle will be possible with the help of resource management partners, which will reveal the possibility of re-use of associated products and waste - such an approach reduces costs and increases efficiency, as well as reduces resource consumption and environmental impact.

New Business Opportunities and New Markets: through processing and renewal, possibility to increase the useful life of any asset and the income received from it, enables us to apply new, service-based business models and to strengthen relationships with customers.

Conclusions and recommendations.

The transition to the circular economy requires a change in management system and the cooperation of all players, companies, consumers, legislators, academia and financial institutions at different levels;

Circular economy requires new approaches to agriculture, where control and collaboration are enhanced and resource consumption is optimal. It is possible to create such new structures that provide access to products along with the delivery of products through services;

In the circular economy, the country's dependence on imported strategic resources decreases.

The transition to a circular economy shall take into account the expected risk factors, which often fail over time while carrying out the current economic changes, because the existing culture (belief, vision and behavior) prevailing in the management of production is incompatible with what the organization aims to achieve in the future.

The transition to the new model should include an assessment of the changes and measures to be taken, which will have an impact on the organization, future economic activities and the value chain of cooperation and partnerships with its other companies.

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