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THE MAIN ASPECTS OF MARKETING STRATEGY IN AGRICULTURAL WASTE RECYCLING

Khrystyna-Iryna YEVCHUK

Yuriy Fedkovych Chernivtsi National University, Ukraine h.vevchuk@chnu.edu.ua

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Abstract:

Waste recycling is currently one of the main problems of society. Processing of agricultural products is one of the main aspects and factors of integration of processing in general. Also, this type of processing is the most difficult in global and holistic integration, as it has the largest number of processes and stakeholders. Also, in the processing of agricultural waste there are many points of waste generation such as production, transportation, warehousing, storage, retail and consumption. At each of these points, there are different stakeholders who are more or less interested in recycling. Which in turn increases the number of problem points for integration and has an extensive number of business processes at different levels. If the integration of industrial waste or hazardous waste recycling has 2-3 stakeholders, then agricultural waste recycling has 7 stakeholders, which form more links between them, which increases the number of problem points and stagnation points for recycling.

Key words: sustainable marketing, green marketing, recycling, agricultural waste, marketing strategy, recycling integration

JEL classification: M31, A14

1. INTRODUCTION

Waste recycling is one of the main problems of today, both from an economic and environmental point of view. On the other hand, the limited resources of our planet lead to a reduction in unnecessary consumption of food by humans. Thus, the main problem in the implementation of waste recycling is the habits of consumption and recycling of waste by the population. Marketing, which deals with the methods and strategies of changing the behavior of the population, primarily helps to change the behavior of the population. On the other hand, many marketing strategies of companies are aimed at completely different indicators, namely to increase consumption. Thus, recycling marketing raises the issue of changing the goals of traditional marketing and customer habits. Which in turn can change the main philosophy of marketing.

A significant number of publications focus on the economic and environmental part of the study of the problem, and to integrate the system it is also necessary to look at it from the cultural point of view. Thus, to begin with, it is necessary to analyze the total number of stakeholders who should use and can influence the system of processing of agricultural products.

Thus, the article describes the types of recycling of agricultural waste, as the classic recycling, the process of "zero" waste and a mix of recycling processes. Depending on the mix of parties, the cultural or regional type of stakeholders, the type of processing may vary. All this leads to the conclusion that the comprehensive implementation of waste recycling in the agricultural sector can not be successful without a good and structured marketing strategy. When agricultural waste recycling programs are integrated into one of the types of stakeholders and the other is not worked out, agricultural recycling will not be comprehensive and cannot meet the general need for agricultural waste recycling.

In general, different types of marketing approaches are also distinguished, as equal types of marketing approaches affect different types of audiences. So they can affect one audience and have no effect on another. That is why the article highlights the main approaches in marketing for waste

management, such as: environmental marketing, social marketing, critical marketing and marketing with a focus on sustainable development.

Thus, the main purpose of the article is to describe all parties involved in the processing of agricultural waste and parties that have an indirect impact on waste processing. The article also describes the processing process with the stages of their work and types of processing. The main audiences of waste recycling, which consist of customers, suppliers, employees, finance, media regulators and the public are analyzed. Due to the structural analysis and elaboration of all items, it is possible to create a comprehensive and effective marketing strategy for the region, which will help to implement waste recycling in general.

2. CRITICAL LITERATURE REVIEW

In his work, Biloskursky R. (2019) describes 4 main types of enterprises for waste management and control, namely: enterprises that do not have the material costs of basic production; enterprises that do not have material costs of processing; enterprises with net production; enterprises with environmentally friendly secondary production. By this list of types of enterprises through proper management and balancing between environmental and economic goals is possible the proper waste management. Also, in this article, R. Bilskursky clarifies that without cooperation between regions, a good level of implementation and achievement of sustainable development goals is not possible.

In her article, Nastase C. (2019) analyzed and described that the circular economy has had a good impact on different regions of the European Union. Also, this article proved the positive impact of the circular economy on the economic, environmental and social spheres of activity of each of the states of the European Union. It was also suggested that the member states of the European Union implement a strategy of circular economy, in order to accelerate the integration of sustainable development goals.

Sinčić Ćorić D. (2020) proves that companies with an integrated strategy of sustainable marketing are more financially stable, and their employees understand and trust companies more. Sustainable marketing orientation (SMO) includes in its strategy the development of organizational culture, integration of social and economic goals, expanding the focus on market orientation of consumers.

The book "Energy Transformation Towards Sustainability" by Smaliukiene R. and Monni S. highlight the problem of social responsibility of enterprises. In general, the book defines that social responsibility and social marketing work together and have the ability to change the demand for goods and even change the demand for certain goods. If there is no social responsibility and social marketing in the company or in the region as a whole, then economic degradation and irreversible climate change take place. Thus, there are 7 steps to implement social responsibility in the company's strategy: identifying the provocateurs of the problem; evaluation of values; creating a business environment; call to action; integration and resource gathering; involvement of stakeholders in the process; efficiency calculations and reports.

In Duncan A. article on agricultural marketing (1993), he points out that prices and agricultural marketing in general are heavily regulated by the state. In general, both the price of agricultural products and the entire agricultural sector of the economy are highly dependent on public policy. Despite the fact that since the 90s of the last century there have been actions by farms and enterprises of the agricultural sector to reduce state control. Despite all efforts, it is still impossible to completely abandon state regulation.

With the help of scientific research, the authors of this article came to the conclusion that a good price reform is not possible if the state is involved in it. Thus, it should be understood that all control points in waste recycling should be taken over by the state, however, there should be no levers of influence in regulating waste recycling or setting a price for it. Because it can lead to corruption schemes (at inflated prices for secondary raw materials) or to a decrease in interest from enterprises (at inflated prices for secondary raw materials).

In the article Nematollahi M. (2020) describes the study of agricultural development in terms of analysis of supply. After all, it is known that it is due to incorrect distribution of products that 20% of good products are lost during delivery, and another 15% when stored in stores. The article describes that most of the articles that have been analyzed focus on environmental security of the supply chain rather than social security. Also, it was noted that a large role is played by the carbon footprint, although the minimum number of articles is not aimed at the correct storage, delivery and continuity of food consumption.

3. PAPER CONTENT

According to the definition of the Organization for Economic Cooperation and Development, "agricultural waste is waste generated as a result of various agricultural operations. It includes manure and other waste from farms and poultry houses; waste collection; runoff of fertilizers from the fields; pesticides that get into water, air or soil; and salt and chalk flow down from the fields." (OECD, 2001).

According to the Chartered Institution of Wastes Management, agricultural waste is divided into two types: natural and unnatural waste. Unnatural agricultural waste is a type of waste that is created during the production of an agricultural product, but is not natural. Such wastes include: pesticide containers, injections and unused animal medicines, plastic bags and sheets.

Natural agricultural wastes are wastes of plant and animal origin that do not contain foreign chemical additives. Therefore, their processing is not as labor-intensive and expensive as the processing of unnatural agricultural waste. (CIWM, 2016).

Although the types of agricultural waste are different, the scheme of its processing may also change depending on the mechanics of waste reduction and its natural or unnatural type. Thus, recycling approaches can be divided into:

Classic waste recycling process:

- sorting of waste on the basis of waste creation;
- transportation of waste to the warehouse for storage of sorted waste;
- waste recycling.

The process of "zero" waste (possible only for natural agricultural waste):

- the process of primary processing of the product;
- the process of secondary use of the product on the basis of product processing to zero processing rates.

The process of mixing agricultural waste:

- sorting of waste on the basis of waste creation;
- the process of secondary use of the product on the basis of product processing;
- transfer of residual waste to the storage warehouse of sorted waste;
- waste recycling.

Depending on the recycling process are set the main goals for the marketing strategy. Thus, marketing goals can be divided into the purpose of sorting, recycling and zero waste.

One of the main and primary aspects of marketing is strategy. All the right marketing approaches should start with a strategy and move into a marketing plan. From the point of view of marketing in agriculture, there are many approaches and models of strategy creation depending on the specifics of the market and in general of each of the enterprises. From B2B marketing for agricultural holdings to extensive B2C marketing for certain types of products. Approaches to creating, writing, selecting channels and setting up CRIs will be very different, as different markets and audiences create different environments for this. However, if we consider the marketing strategy in waste recycling, one of the key problems arises, because recycling marketing includes many objects from different segments.

Thus, the waste recycling strategy should include an extensive array of channels and tools for the various participants in the agricultural waste recycling process. Therefore, participants in waste recycling can be divided into the following groups:

- agricultural economy;
- companies transporting agricultural products;
- companies that store agricultural products;
- companies that sell agricultural products;
- the final buyer of agricultural products;
- a company that processes agricultural products.

Because of this, we see that we have 6 different audiences that have different needs and different factors. Also, these audiences have different types of behavior. However, in recycling marketing it is necessary to combine all 6 audiences and make a general concept of promoting the brand of recycling of agricultural waste and initiating a change in thinking and behavior of each entity with 6 audiences.

Recycling marketing is divided into social marketing, green marketing, critical marketing and recycling marketing. Each of these types of marketing has its pros and cons, goals and overall needs and opportunities. Thus, a mix of these approaches to marketing can divide the main goals and meet the needs of each of the marketing audience.

According to Christina Calvo-Porral (2019), a green marketing product should include tools to reduce the negative impact on the environment, environmentally friendly packaging or recyclable packaging, environmental optimization of the product life cycle and business processes, a product that can be recycled. This is what can distinguish a real green product from scammers who only pretend to be a green product to increase sales..

On the other hand, social marketing is considered as marketing, the main purpose of which is to change people's behavior. In this case, social marketing should take into account the goals of consumers and the purpose of business owners. Thus, the orientation of social marketing is to constantly change the behavior of the audience with the help of marketing tools. That is, social marketing does not just change attitudes, it must change behavior, which is the biggest factor in the development of sustainable development goals.

In other words, environmental marketing aims to change the perception of waste recycling, and social to change behavior. Social marketing makes people more focused, at the same time, environmental marketing refers to production. Therefore, the best option for the rapid implementation of waste recycling in people's daily lives is to combine the orientation of environmental and social marketing.

Critical marketing focuses on the critical evaluation of marketing theoretical approaches and highlights the main goal of sustainable integration. Unlike traditional marketing approaches, which aim to increase consumption and social approaches to reduce unnecessary consumption, critical marketing aims to encourage sustainable development, encourage sustainable marketing practices and support the customer in making an informed decision. Thus, critical marketing can fundamentally change the main goals of classical marketing, and reorient the theory of classical marketing, in which the main goal is to increase consumption to focus on classical marketing on quality of life, nature conservation, sustainable development and quality of products and services 2019).

Sustainable marketing, in turn, is a reflection of classical marketing, as it has completely different strategic and tactical goals, as well as theory and practice. According to the OECD (2002), the concept of sustainable marketing is to meet the needs of the user without endangering the lives of future generations. The general assessment of experts suggests that current marketing approaches are not sustainable. [32] Namely, sustainable marketing considers commercialization in "needs", while classical marketing considers commercialization in "desires". Thus, sustainable development reduces unnecessary consumption and increases responsible consumption. [33]

Marketing with a focus on sustainable development has such main components as:

• society - which is associated with the influence of companies on people on the one hand, and the influence of society's behavior on the overall result of the enterprise on the other;

- ecological environment the main purpose of this component is to check the impact of the enterprise on the natural environment and the company's contribution to the development and implementation of the main aspects of environmental sustainability;
- economic which is responsible for the economic performance of the company, although it must be consistent with the environmental performance, it can not fall sharply.

With these approaches, you can work out the main points of the marketing strategy of waste recycling. From these all parameters follow the following main stages of marketing strategy of processing:

- ideology creation of the main key ideas of processing marketing and philosophy of processing marketing. Setting the mission and goals of processing and nature conservation. The sustainable marketing approach should help with this point;
- statement of the main problems analysis and definition of the main problems that need to be solved in order to implement a holistic system of agricultural waste processing. Critical marketing is best at this stage;
- involvement of the necessary tools creation and involvement of all necessary materials and resources to ensure the purposes of processing. It is the right provision of materials and resources that mainly affects the speed and quality of system implementation. At this stage of implementation, environmental marketing helps, which provides environmental packages, garbage sorting systems and more;
- change the behavior of selected audiences the promotion of new types of behavior of the subject from a particular audience to the desired behavior and habits for the purposes of marketing recycling. This stage is the most labor-intensive and long-term, for certain cultures this stage can take several generations. At this stage, it is best to use social marketing.

In general, the problem of waste recycling is also quite difficult in terms of integration and promotion of this culture and system of behavior at the national level. In general, the re-treatment system is divided into two parts: the processing of agricultural waste on the side of the enterprise and on the side of the end customer. Over the years, certain cultural and economic principles of waste management have been established, so the new system needs to be integrated in two ways. Thus, it is possible to separate stakeholders their effect and business drivers of interest, more details in Table 1.

Table 1. Types and influence of interested parties in the system of waste agricultural products

Stakeholder	The effect	Business driver of interest
Customers	high level of interesthigh social responsibilityhigh level of sales	Wages and expenses
Suppliers	low priceslow level of interesthigh level of supplyhigh loyalty to partners	Price / production price / income
Employees	 high social responsibility low cost of finding employees low cost of staff training high level of loyalty of citizens to the main goals of work 	Price / salary
Finances	long cycle of return on investmenta high level of capital for business in this area	Weighted average cost of capital
Regulators	high impact on the creation of the financial base of the waste recycling structurehigh level for the development of waste processing	Long-term development and sustainable development of the state / community
Media	direct impact on the promotion of processing among citizensindirect influence on the decisions of managers or regulators	
Public	- influences the decisions of direct stakeholders	

Source: made by author

The main stakeholders that influence the integration and success of the global waste management strategy are customers and suppliers who are influenced by employees, finance, regulators, the media and the public. Also, depending on the type of audience and function and the state in which it is now, stakeholders may vary. That is, one and the same person can be both in one interested party and in another depending on where he is.

4. CONCLUSIONS

Processing of agricultural waste is a rather complex and multicomponent product. In most cases, this is due to the large number of stakeholders that affect the efficiency of waste recycling. Also, the processing process itself is rich in components, which in turn increases the moment of distraction and motivation and the involvement of even more participants in the processing process. Thus, marketing is one of the main tools that can increase the efficiency of waste recycling. After all, the behavior of stakeholders plays an important role in the efficiency of waste recycling, which can be changed through marketing. With the help of the table of the effect of the parties and business drivers of interest, you can develop a full-fledged marketing strategy that will ensure the continuous integration of agricultural waste recycling in society.

BIBLIOGRAPHY

- 1. Biloskurskyy R., Verstiak A., Vinnychuk I., 2019. *Sectoral analysis of environmental economics: The view from Ukraine*. Scientific annals of Economics and Business, 66 (3). 321-334. http://dx.doi.org/10.47743/saeb-2019-0028
- 2. OECD., 2001. *Glossary of statistical terms*. Retrieved from: https://stats.oecd.org/glossary/detail.asp?ID=77#:~:text=Agricultural%20waste%20is%2 Owaste%20produced,and%20silt%20drained%20from%20fields.
- 3. OECD., 2002. Towards sustainable househol d consumption? Trends and policies in OECD Countries. Paris: OECD.
- 4. CIWM., 2016. *Agricultural Waste*. Retrieved from: https://www.ciwm.co.uk/ciwm/knowledge/agricultural-waste.aspx
- 5. Calvo-Porral C., 2019. The Role of Marketing in Reducing Climate Change: An Approach to the Sustainable Marketing Orientation. University of A Coruña, A Coruña, Spain
- 6. Nastase C., 2019. *The circular economy: Importance and evolution in European Union*. Theoretical and Applied Economics, 26. 69-87.
- 7. Sinčić Ćorić D., 2020. An Exploration of Start-ups' Sustainable Marketing Orientation (SMO). Industrial Marketing Management, 91. 176-186.
- 8. Smaliukiene R., Monni S., 2020. *Energy Transformation Towards Sustainability*. Chapter 14 Social responsibility, social marketing role, and societal attitudes. 289-308.
- 9. Duncan A., 1993. *Agricultural marketing and pricing reform: A review of experience*. World Development, 21(9). 1495-1514.
- 10. Nematollahi M., 2020. *Past, present, and prospective themes of sustainable agricultural supply chains: a content analysis.* Journal of Cleaner Production 271. https://doi.org/10.1016/j.jclepro.2020.122201