

Covid-19 Pandemic and Sustainable Green Product Strategies: The Case Study for Textile Recycle Sector

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ABSTRACT

The concept of recycling, which is one of the most important issues that the whole world has focused on for the last quarter century, has become a business issue that cannot be ignored in terms of businesses. Businesses have come face to face with different reasons such as legal obligations from time to time, and the idea of making more profit by thinking that this is areas that other businesses do not prefer. However, the recycling strategies of businesses in the world seem to be a problem because they are not clear in many respects. The aim of this study is to discuss and interpret the situation and differences of business strategies on recycling before and after the covid-19 pandemic and the innovations that the covid-19 pandemic crisis has brought to this field. For this purpose, the information obtained by applying the method of interviewing with the recycling operators was subjected to content analysis. The study is important because it is an original study on the subject of recycling, which opens a different window in the increasingly polluted world with industrialization. It is expected that this study will guide and be beneficial to businesses related to recycling and academics studying in this field

INTRODUCTION

Businesses often make plans for the future and these plans are made for the long term. These are called strategic plans. In order to be able to make strategic plans, first of all, it makes some analyzes in order to determine the situation in which the enterprise is located. SWOT analysis is one of them. After the strategic goals and strategic intentions are clear, the focus is on the statements that determine the mission, that is, the near future and the present. The point to be reached in the future is determined by adhering to the strategic purpose, strategic intent, mission and considering the conditions, and this situation is expressed in simple sentences. This is also called a vision statement. The vision statement should be difficult enough to be exciting and easy enough not to discourage. Strategies are the statements about what activities the business should do and implement while going from the point where it is located to the point it wants to reach. Policies and tactics are formed from strategies. The procedures related to all these, namely the documents on how the works will be carried out in detail, are determined. Regardless of where the business is in the life cycle process, it must adhere to some principles. Although these principles are few in number, they are ethical and social values that must be followed while leading the business towards the vision. It can also be expressed as strategic values. When making strategic plans, they are usually made in an alternative way. Because the future for the business is full of uncertainties. In order to be flexible against these uncertainties, plans B and C must be determined as alternatives.

The textile sector in Turkey constitutes an important part of the country's economy and plays a key role in both domestic production and exports. Some of the remarkable features of the Turkish textile industry are as follows:

- Has a wide range of textile products, including cotton and synthetic fibers, yarn, fabric and finished products such as clothing and home textiles.
- Strong export market: Turkey is one of the world's largest textile exporters, with a significant portion of its production destined for the European, Middle East and North African markets.
- Well-developed infrastructure: Turkey has a well-developed textile industry infrastructure, which includes spinning and weaving mills, dyeing and finishing facilities, and ready-to-wear production centres.
- Skilled workforce: Turkey has a large and skilled workforce that is a major force in the country's textile industry.
- Innovation and sustainability: The Turkish textile industry has made significant investments in research and development and is committed to sustainable production practices.

Despite these strengths, the Turkish textile industry faces challenges such as increased competition, changing consumer preferences and fluctuations in the global economy. However, it remains an important sector in the Turkish economy and is expected to continue to grow and develop in the coming years. Is defined as "Any substance or material that is thrown or released into the environment or has to be disposed of by the producer or the real or legal person

who actually holds it" in the Zero Waste Regulation published in the Official Gazette dated 12.07.2019.

Birute (2012) stated that waste refers to any material or product that is considered useless by its owner and should be disposed of or discarded (Birute, 2012: 1).

Wastes; It can be classified according to various factors such as consumption, production, chemical and physical properties. According to this, wastes in general; solid wastes, liquid and gaseous wastes, packaging wastes. Industrial waste, which is the input of textile recycling, which is the subject of this study, is handled within the scope of solid wastes (domestic solid wastes, industrial wastes, hazardous wastes, special wastes, medical wastes, agricultural and garden wastes, construction residues and rubble wastes) (Gündüzalp and Güven, 2016; 2).

In recent years, increasing consumption in parallel with economic and technological developments and population growth causes the amount and type of both domestic and industrial waste to increase day by day. Accordingly, the unsustainable use of natural resources causes negative effects on both the environment and the world economy. Triggering climate change from the deterioration of the natural balance due to unconscious behaviors and increasing population; air, soil and water pollution, destruction of forests and wildlife, desertification, reduction of biodiversity, and unmanageable wastes. It is seen that solid wastes generated as a result of consumption in food and non-food areas turn into a problem that awaits solutions both nationally and internationally, and solid waste management is becoming increasingly important (Yılmaz, Niyaz and Toma, 2021: 379).

As stated above, industrialization and globalization of the economy, along with environmental deterioration, solid waste, greenhouse gases, destroyed forests, water and air pollution problems resulting from the market growth of enterprises (Karaman, 2021: 156), have increased consumers' concerns about nature, they started to be more sensitive and put forward their demands for this (Öndoğan, 2018: 97; Polonsky, 1994). Compared to the past, the fact that today's consumer is more conscious, very concerned about sustainability and has tremendous power to disseminate information and ideas (Nogueira, 2020: 352) has led businesses to make changes in their activities such as production, distribution, promotion in order to provide solutions to these problems and reduce the anxiety of consumers. opened (Karaman, 2021: 156). The fact that businesses are socio-economic entities, it is not possible for them to remain unresponsive to the 'Environmental Sensitivity' that affects consumers' behavior and preferences. In particular, marketing managers are faced with consumers who are sensitive to environmental problems. The old understanding, which considers businesses as institutions only trying to make a profit, has lost its importance in the face of a new understanding that considers it as institutions sensitive to social problems and aiming at quality (Erbaşlar, 2012: 94), which has led businesses towards green marketing.

Green marketing, which is a part of the social marketing approach, is the organization of planning, implementation and control activities that are

implemented in order to minimize the effects of these activities on the natural environment by considering the consumer needs and company purposes of the product, price, promotion and distribution activities of the enterprises (Chamorro and Bañegil, 2006: 12).

In the universal marketing dictionary, green marketing is defined as the development and marketing of products that are assumed to be environmentally safe (i.e. designed to minimize adverse effects on the physical environment or improve their quality), and also to produce, promote, package and sell products in a way that is or is responsive to ecological concerns. can be used to describe recovery efforts (web1, 2023).

Çelik, Akman, Ceyhan and Akman (2016), They define it as a marketing approach that sheds light on the negative aspects of energy and natural resource consumption, raises public awareness on this issue, prioritizes sustainability, and is compatible with the developments in the market.

There are five possible reasons why businesses adopt green marketing (Saxena and Khandelwal, 2010: 281);

- Seeing it as an opportunity to achieve their goals
- Because they need to be more ethical and socially responsible
- As they are compelled by government agencies to be more responsible
- Environmentally-conscious competitors forcing businesses to change their environmental marketing activities
- Waste disposal or reduction in material use are forcing businesses to change their behavior in favor of green marketing.

Solid waste management, taking into account various functional elements, is the storage, collection, transfer and transportation, reuse, recycling and effective treatment and disposal of wastes in management, economics, engineering, public health, conservation, aesthetics and other aspects. It can be defined as a discipline that includes administrative, financial, legal, planning and engineering functions in the entire spectrum of solutions in accordance with the best principles of environmental conditions (Anand, 2010: 1-2). Studies on the management and recycling of additives resulting from increased consumption in parallel with the increase in the human population in the world have become increasingly important (Seacat and Northrup, 2010: 393).

Basic principles of solid waste management; waste, which aims to reduce the amount of waste and its toxic properties. It can be listed as reducing the amount of waste, recycling the wastes that have economic value from the garbage, recycling them and thus reducing the amount of garbage, and disposing of the non-recoverable solid wastes without harming human and environmental health (Lüy, Varnca and Kemirtlek, 2007)

What a Waste: 2.0 A Global Snapshot of Solid Waste Management to 2050" published by the World Bank, it is stated that the amount of solid waste in the world was 2.1 billion tons in 2016 and the amount of waste will reach 2.59 billion tons in 2030 and 3.40 billion tons in 2050 (Word Bank, 2018: 25). In Turkey, the total amount of waste produced in 2020, including hazardous waste, is around 105 million tons. 23.9 million tons (4.6 million tons of hazardous waste) of the total waste amount was generated in manufacturing industry workplaces. 6.7%

of the total waste generated in the manufacturing industry workplaces is generated during the manufacture of weaving, clothing and leather products (TÜİK, 2021).

The amount of waste processed in waste disposal and recycling facilities in Turkey in 2020 was 127.4 million tons, of which 78.3 million tons were disposed of and 49.1 million tons were recycled. Plastics accounted for 6.13 million tons of 49.1 million tons of recycled waste (Sputnik Türkiye, 2022).

Textile wastes are classified as pre-consumption or post-consumption wastes because they are wastes generated in textile factories during production or after consumption by consumers. Pre-consumption wastes consist of textile, fiber and cotton industry by-product materials that are regenerated for automotive, aerospace, home building, furniture, bedding, coarse yarn, household goods, paper, clothing and other industries. Post-consumption waste is defined as household items made from any clothing or textile materials that the consumer no longer needs and decides to throw away (Üçgül and Turak, 2015: 40).

It contributes to less need for energy, water, chemical fertilizers and dyestuffs, reduction of waste amount, protection of natural resources and less deterioration of natural balance with the recycling of textile wastes generated before and after production in the textile industry, which has an important place in our country's economy.

The share of recycling products in Turkey's exports of approximately 33.15 billion dollars by the textile and ready-made clothing industry in 2021 is 11.6 billion dollars (Öztañ, 2022).

According to the TOBB database, as of 2019, the province with the highest number of registered manufacturing enterprises, according to the number of enterprises that recycle textile solid waste, is Usak and its number is 67 (T.C. Sanayi ve Teknoloji Bakanlıđı, 2020: IV).

METHODOLOGY

In this study, the aim was tried to be achieved by the interview method. In the qualitative research method, one of the most basic techniques used to obtain data about the social world is the interview, Davies, 1999:93). It is carried out by asking the interviewees questions about their lives and listening to their answers and stories. In this regard, interview is a special form of communication and conversation. From structured to unstructured interviews, all interviews involve an interaction between the researcher and the participant. Interviewing can also be defined as the meaning-making process in which the researcher and the participant are actively involved (Holstein & Gubrium, 2004). There is no one-to-one representation in the interview, the interview is based on the interaction between the researcher and the researched, but this does not mean that information about the social reality beyond the interviewee cannot be obtained (Aull Davies, 1999). In this study, semi-structured technique was used. In the semi-structured interview type, the interviewer has prepared the questions in advance, but provides partial flexibility to the participant during the interview. Allows for questions to be rearranged or for discussion on the relevant topic if necessary. There are some open-ended questions in this type of interview. The interviewer can get deeper information by dwelling on these questions. This type

of interview is more flexible than the structured interview type. In this technique, the researcher prepares the interview protocol, which includes the questions he plans to ask in advance. On the other hand, the researcher can affect the flow of the interview with different side or sub-questions in accordance with the flow of the interview, allowing the person to expand the answers given. If the interviewee answered some of the questions in other questions, the researcher may not ask these questions again. Average the results. (Çifçi, 2022) Interview questions and questions about the recycling sector and the covid-19 pandemic crisis were asked by associating them with their positive and negative aspects, and questions that were not structured according to the progress of the interview were passed. Using the content analysis method, one of the qualitative methods, the prominent topics were categorized and interpreted. As of 2019, according to the number of enterprises that recycle textile solid wastes, the province with the highest number of registered producer enterprises is Uşak, with 67 (Web 4). For this reason, the managers of the recycling enterprises operating in the province of Uşak were taken as the universe, especially the senior and middle level managers, and were accepted as the sample that could be reached and represented the manager universe.

The data obtained from the study were evaluated with semantic content analysis, which is a sub-type of the interview method. Semantic Content Analysis was developed by Charles Osgood (1967) as a method of investigating people's feelings, attitudes or thoughts towards certain concepts. If we assume that these feelings, attitudes, and thoughts are largely due to one's social and cultural experiences, then Osgood's Barthes It can be seen that he is trying to measure what is described as connotations by him (Yüksel, 2022). The main concepts related to the main theme of the interview questions asked to the managers were coded, the information obtained from the interview was summarized and evaluated together with the code concepts.

Main code concepts, "Covid-19, Export, Loss, Positive Impact, Negative Impact, Development, Decline, Decrease in Production, Increase in Production, Market Share, Demand-Order Increase, Demand-Order Decrease, Collection Difficulty, Delivery Difficulty, Credit Difficulty was determined as Payment Difficulty, R&D Increase, Government Support, Positive Future Expectation" and made easily visible with a matrix table.

DISCUSSION

1. Interview with M1-Manager:

With the start of the pandemic process, the impact on production and sales efforts was high, production fell a lot. They stated that they produce semi-finished products and that the producers they supply export 90% of their production. The low demand for the production of importers in Europe caused them to significantly reduce the demand for Turkish products. As the pandemic process continued, the demand for yarn from ready-made clothing manufacturers increased a lot as of the beginning of 2022, and things became very active. This movement showed a decrease in demand as of August 2022, more than when the pandemic started. Manufacturers and sellers producing for large textile chain stores have significantly reduced their yarn purchases. They faced difficulties in

collecting goods from the stores they supplied, and they reduced their orders at a rate that has not been seen for many years, and they started to act slowly in receiving their orders. Their slowness in receiving orders causes them to slow down in their payments. We also experienced financing difficulties in growth decisions.

The amount of yarn to be produced is decided according to customer demand. The future of the textile yarn industry is not very bright. It is not clear who will remain in the market. Businesses that focus on automation, are open to innovation and adapt to market changes in a short time can survive.

2. Interview with M2-Manager:

At the beginning of the pandemic period, a short working payment of up to 1 month was made. There was no decrease in orders and production continued at full capacity.

the pandemic period, more importance was given to R&D studies. Work continues on product development and design (there is blanket production as well as recycling). Despite the delays in the payments of the sales made to the domestic market during the pandemic period, there was no problem in the export payments.

3.3 Interview with M3-Manager:

Uşak has the distinction of being a city that meets 75% of the total production in the field of textile recycling in Turkey. The heavy impact of the Covid-19 pandemic process in China and India, the domestic and foreign markets supplying the products they need from these countries, have largely directed their orders to Uşak manufacturers during the covid-19 pandemic process.

With the decrease in the effect of the Covid-19 pandemic, people who have been confined to their homes for a long time both in Turkey and in the world have created a high demand for textile products, which they postponed for a long time. This high demand has caused clothing and textile products to become hard-to-find products. According to the past, the constant change in fashion in textile products according to seasons and years, independent of the covid-19 pandemic, and the fact that businesses that produce and/or sell ready-made clothing and textile products change their showcases 4-5 times in a year are seen as another important reason for the high demand.

Due to the reasons stated above, the Uşak recycling textile recycling sector has survived the covid-19 pandemic process without any damage and has increased its production significantly during the covid-19 pandemic process.

In addition to the contraction in demand due to the recession expectation, it also caused delays in the collection of the costs of the goods sold. Troubles in collection, difficulties in finding loans and the covid-19 pandemic have caused an increase in the cash needs of businesses that make new investments to meet the increasing demand. When they want to meet their cash needs from banks, they face difficulties in obtaining loans.

It is getting harder and harder to do industrialism in Turkey. It is difficult to find credit, it is difficult to get the amount of credit you want when you find it, it is difficult to find the support given to industrialists in many countries in Turkey, it is difficult to find trained personnel. It is difficult to retain qualified personnel. Due to these difficulties, the future does not seem very bright. Apart from these

difficulties, industrialists also have difficulties in marketing activities. Exports take place directly and mostly indirectly. Participation in national and international fairs for promotional purposes is made from time to time. What to produce and how much to produce is decided according to market conditions. Sometimes the socks business, sometimes the carpet business, sometimes the ready-made clothing business accelerates. By following the developments in the market, it is decided which yarn will be made. For this winter season, it is planned to focus on socks yarn production with the expectation that the demand for socks will be high, especially from Central and Northern European countries due to the problems in natural gas supply in Europe.

3. Interview with M4-Manager:

The textile recycling field had a good time during the pandemic period. Due to the cheapening of commodity prices, the strict implementation of the measures against the pandemic in China, and the high cost of freight in transporting Far Eastern goods to the European market, production in Turkey exploded.

European countries has led to an increase in the need for human resources and new investments. In the last two months, things have turned upside down. "The tulip era is over". The recession caused by the increase in energy prices in the USA and European countries caused a rapid decrease in demand. High costs stemming from domestic and international inflation led to an increase in costs and thus prices. It is seen that US and European customers have difficulty in accepting the new high prices.

Competition with countries such as China, India, Pakistan and Bangladesh increased due to the decrease in freight costs and new investments with the summer months. At the same time, domestic competition from new investments is increasing in Turkey. Problems began to be experienced in the supply of raw materials from countries such as Turkmenistan and Uzbekistan. Problems have increased in the supply of machinery from abroad. The delivery of the machine orders given can only take place between 7 months and 30 months. With the increasing new investments, the expected time for the assembly of imported machines has approached almost 2 months. Most of the orders were placed when things were going well.

4. Interview with M5-Manager:

Decreased demand due to the recession expectation caused a decrease in production, which led to an increase in the reluctance to make new investments. The vast majority of industrialists are over-indebted due to new investments. The high electricity consumption of the machines used in textile recycling and the high cost compared to countries such as China and India cause a decrease in competitiveness. The expectation that excessive machinery investment will lead to increased difficulties in raw material supply and a decrease in the capacity utilization rate is gradually increasing.

Textile industry in Uşak Being one of the largest clustering areas in the world, easy access to an experienced workforce in the textile industry, being close to the European market compared to China, famous brands aiming to increase the use of recycled inputs to 50-70% by 2025, It is a great advantage of the Uşak textile recycling industry that orders for new products are directed to Turkey due to its proximity to Europe.

5. Interview with M6-Manager:

Textile recycling enterprises in Turkey recycle around 1,000,000 tons of cotton to the economy, thus paving the way for agricultural lands to produce other crops.

In the coming years, the biggest rivals of Turkish textile recycling enterprises are seen as China and India, as it is currently. Due to the trade wars between the USA and China, it is seen that after the Covid-19 pandemic, textile raw material importers in the USA started to leave China gradually and turned to India. Compared to Turkey, China and India seem to have some advantages. The biggest advantage is that the electricity energy prices are 60-65% cheaper than the prices in Turkey. Since the machines used in textile recycling consume a lot of energy, Turkish textile recycling companies are losing their ability to compete against countries such as China and India.

As a sign that China and India will increase their competitiveness against Turkish textile recycling enterprises in the coming years, Chinese and Indian enterprises are buying 7-8 out of 10 machines with the latest technology used in textile recycling sold in the world. In addition, it was difficult to find a loan in case of need.

30-35% of textile products exports from Turkey are manufactured from yarns obtained from textile recycling. The usage areas of textile recycling products are increasing in Turkey and in the world. Again, with the message that they contribute to the global market with the message that they contribute to the sustainable environment, many famous brands that produce are increasing their recycling product usage rates.

6. Interview with M7-Manager:

Recyclers are not supported in Turkey. The recycling industry has an important contribution to reduce electricity consumption, reduce environmental and water pollution, and reduce the use of chemical fertilizers and pesticides. Recently, the state has begun to understand the importance of this issue.

Turkey's proximity to Europe is a great advantage. Despite the fact that China and India have cost advantages in large-scale productions with continuous release, the flexible structure of the Turkish textile industry allows us to respond quickly to small-scale orders due to the rapid change in fashion, which causes us to be preferred.

One of the important problems of recycling and other textile sector enterprises established in Uşak is the supply of trained technical personnel. In particular, the need for employees who are graduates of industrial vocational high schools and vocational schools is increasing day by day. It is necessary for the state to make industrial vocational high schools attractive as before. For example, while one business graduate is required for a business, more labor force is needed. As in European countries, after secondary school, the student should take high school education in accordance with which field he has talent.

7. Interview with M8-Manager:

Although there was no problem in the supply of personnel during the Covid-19 pandemic process, the quarantine of the villages, streets and neighborhoods of those who came from the villages of Uşak, close to the Uşak Organized Industrial Zone, and the villages of Gediz and Selendi, caused production disruption from

time to time. In order to reduce the damage of such disruptions, employees who received a medical report were placed in hotels in the center of Uşak. With the war between Russia and Ukraine before the Covid-19 pandemic process is fully overcome, and the rising energy prices after this war, there is a great economic recession expectation in Europe and the rest of the world. The global recession expectation caused a significant decrease in the demand for textile products. There were difficulties in terms of financing.

8. M9-Interview with the manager:

The number of workers, which has increased with the increasing demand from the beginning of 2022, is now pushing the competitive power of the enterprises as a big cost problem with the shrinkage in demand. Turkey's high costs compared to the Far East cause difficulties in exporting. The high logistics costs and long logistics times in exports from the Far East to Europe during the pandemic period, and Turkey's proximity to the European market have led to an increase in Turkey's competitiveness. However, at the point we have reached today, the high costs of labor, energy and raw materials and the decrease in logistics costs have led to a decrease in Turkey's ability to compete.

One of the biggest problems of industrialists in Turkey is about financing. Despite rising financing costs, banks are very reluctant to lend. In addition to high interest rates, their tendency to give short-term loans makes it difficult for businesses. Eximbank provides a limited amount of credit for those who export directly.

Table 1. Recycling Sector Managers Interviewed and Concept Codes Table

		Recycling Industry Managers Interviewed									
Concept Codes		M1	M2	M3	M4	M5	M6	M7	M8	M9	TOTAL
	Covid-19	1	1	1	1	1	1	1	1	1	9
	Export	1									1
	Damage								1		1
	Positive Influence	1	1	1	1			1			5
	Adverse Influence				1	1	1		1		4
	Development	1		1							2
	Decline				1						1

Decrease in Production	1				1					2
Increase in Production	1			1		1				3
Market share							1			1
Demand-Order Increase	1	1	1							3
Demand-Order Decrease	1				1	1			1	4
Collection Difficulty	1	1	1						1	4
Delivery Difficulty	1			1						2
Difficulty in Obtaining Credit		1	1			1		1	1	5
Payment Difficulty	1					1				2
R&D increase		1			1	1				3
support of government		1		1			1	1		4
Positive future prospects	1		1		1		1	1		5

Considering the frequency of the coded concepts; Covid-19 9 times, Exports 1 time, Loss 1 time, Positive Impact 5 times, Negative Impact 4 times, Development 2 times, Decline 1 time, Decrease in Production 2 times, Increase in Production 3 times, Market Share 1 time, Demand-Order Increase 3 times, Demand-Order Decrease 4 times, Collection Difficulty 4 times, Delivery Difficulty 2 times, Difficulty in Obtaining Credit 5 times, Difficulty in Payment 2 times, R&D increase 3 times, Government support 4 times, Positive future expectation 5 times.

According to this; Since Covid-19 is the main theme, it is included in the statements of all managers (9 times), and the following concepts with the highest frequency are Positive Impact 5, Difficulty in Getting Credit 5, Positive Future Expectation 5, Negative Impact 4 Demand-Order Decrease 4, Collection It is seen that the difficulty is 4, the State support is 4. Expressions that repeat less than 4

are: Increase in Production 3, Increase in Demand-Order 3, Increase in R&D 3, Increase in Production 2, Decrease in Production 2, Difficulty in Delivery 2, Difficulty in Payment 2, Export 1, Loss 1, Decline 1, Market Its share is seen as 1. Looking at all frequencies, it is understood that businesses are positively affected by covid-19, have difficulty in meeting their financing needs, are strengthened in terms of looking to the future with hope, there are also parts that are negatively affected, there are businesses that experience a decrease in demand, and government support has increased in this period. It is seen that there is a slight increase in production, increase in R&D, increase in market share, delivery difficulties and regression. Numerical expressions are insufficient to describe the whole result. According to the information obtained from the interview data, qualitative results were also obtained. For the textile recycling industry, although the covid-19 pandemic is a crisis, when we look at the general situation, it has created a positive opening beyond the numbers in subjects such as positive impact, government support, R&D increase, increase in market share, increase in production.

CONCLUSIONS AND RECOMMENDATIONS

Textile recycling has become increasingly important globally as the world becomes more environmentally conscious. Textile products that cannot be used, textile products that are left over from production, are converted into another textile product and become the raw material of another new product. There is no recycling from second-hand used fabrics, as it sounds when it is first heard. The Covid-19 pandemic has demonstrated the importance of the need for more sustainable practices, including textile recycling. Efforts are being made globally to increase textile recycling rates and reduce waste. The development of new technologies and partnerships between government, industry and communities are critical to the success of textile recycling efforts. Turkey has been making efforts to improve recycling and waste management practices in recent years.

The establishment of the Waste and Recycling Industry Assembly as the 62nd Sector Assembly on 16.01.2021 under the umbrella of the Union of Chambers and Commodity Exchanges of Turkey (TOBB) Turkey Sector Assemblies, and the publication of the "zero waste regulation" in the Official Gazette numbered 30829 on 12.07.2019 can be given as examples.

Some of the notable features of recycling in Turkey are:

There is a growing awareness and interest in recycling in Turkey and more people are taking steps to reduce, reuse and recycle waste. Collection and sorting of recyclable materials has improved in many parts of the country as cities and towns adopt more organized and efficient waste management systems. The recycling industry in Turkey is growing with the increasing number of companies specializing in the processing and recycling of different types of waste materials.

Has made efforts to encourage and support recycling, including by providing subsidies, tax incentives and technical support to the recycling industry. Despite these efforts, challenges remain such as limited public awareness, lack of investment in recycling infrastructure, and inadequate recycling facilities. Overall, Turkey, and Uşak in particular, is making progress in recycling and waste

management, but there is still more work to be done to fully develop a sustainable and effective recycling system. Recycling allows them to reconstruct their waste products, conserving natural resources. Recycling during the Covid-19 pandemic has yielded some results. It has been caused by the increase in the amount of waste during the stay in the houses. The cessation of many processes or operations due to Covid-19 has also led to more use of the recycling system. At the same time, staying at home during the covid-19 pandemic has caused the idea of recycling to be adopted by more people.

According to the results obtained from the study, when all the interview data are examined, it is seen that businesses are affected positively and negatively by covid-19, have difficulty in meeting their financing needs, are strengthened in terms of looking to the future with hope, and that there are businesses that experience a decrease in demand in terms of the parts that are negatively affected. appears to have increased during this period. It is observed that production increase, R&D increase, market share increase, delivery difficulties and regression are experienced. In addition, qualitative results were also obtained according to the information obtained from the interview data. For the textile recycling industry, although the covid-19 pandemic is a crisis, when we look at the general situation, it has created a positive opening beyond the numbers in subjects such as positive impact, government support, R&D increase, increase in market share, increase in production. In the case of Uşak, textile recycling is also special. Because Uşak has one of the leading industries in Turkey in terms of textile. Evaluation of recyclable wastes of industries of this size can also be carried out in the same center in the most efficient way. Another feature is that Usak is an important center in terms of non-textile recycling. For example, there are specific waste industries such as aluminum waste, powder aluminum plants for automobile engine thermal insulation systems, soft walking track material production from waste vehicle tires. This seems to be an element that increases awareness and motivation.

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