ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

Solutions to Promote Vietnamese Consumers to Use Environmentally Friendly Products Made From Coffee Grounds

Ngo Thi Hong Hanh¹, Nguyen Hoang Khang Nhu² and Le Dang Huy³

¹University of Labour and Social Affairs

²Nguyen Thi Minh Khai High School

³Nguyen Du High School for the Gifted

DOI: 10.46609/IJSSER.2024.v09i07.001 URL: https://doi.org/10.46609/IJSSER.2024.v09i07.001

Received: 28 June 2024 / Accepted: 10 July 2024 / Published: 15 July 2024

ABSTRACT

This research explores environmentally friendly products made from coffee grounds and examines the trend of using these products. The results illustrate: (i) Those who have never/do not use products made from coffee grounds often do because the products are not yet widespread, but this group is likely to purchase and use the products in the future; (ii) For those who have used/currently using these products, they mainly started using them recently and a high percentage said they would definitely continue to purchase and use these products; (iii) The percentage of environmentally friendly products from coffee grounds is primarily between 20% to less than 40% within the group of environmentally friendly products; (iv) Common products made from coffee grounds include biodegradable coffee straws and cosmetics, with social media being the primary source of product information; (v) The purpose of using environmentally friendly products is to support the trend of environmentally friendly products; (vi) The factor of others around them using environmentally friendly products has the greatest impact on the trend of using products made from coffee grounds; (vii) Consumers are most concerned about the hygiene and quality of environmentally friendly products made from coffee grounds. Based on the research results, the authors propose several short-term and long-term solutions for businesses producing and trading products from coffee grounds to encourage Vietnamese consumers to use these products.

Keywords: Consumers, Vietnam, environmentally friendly products, coffee grounds.

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

1. Introduction

In daily life, environmentally friendly products are increasingly present and bring practical value. On average, humans generate 2.5 to 4 billion tons of plastic waste each year. By 2050, there will be more than 13 billion tons of waste on Earth. This enormous amount will continue to increase if timely interventions are not implemented. One solution to reduce environmental waste is to use environmentally friendly materials. The introduction of these products provides positive values for nature conservation and enhances the quality of living environments. (congnghiepmoitruong.vn, 2024)

Coffee grounds, if not properly treated before being discarded, will produce methane gas during decomposition - a gas that warms the Earth 86 times more than CO2. Therefore, the emergence of natural products made from coffee grounds is seen as an optimal and effective environmental protection solution. Currently, coffee grounds are widely used in the production of everyday items, potentially replacing single-use plastic products that are difficult to decompose. Each product from coffee grounds possesses different utilities but shares a common trait of being environmentally friendly. (shopequo.com, 2023)

Although coffee ground products are still relatively new to the market, they receive considerable interest and affection from consumers. The emergence of this natural product line not only helps reduce plastic waste but also provides consumers with more options when shopping for safe, environmentally friendly biological products.

In this article, the research group uses desk research methods to systematize basic issues regarding environmentally friendly products from coffee grounds and employs survey methods to examine the usage trends of these products, thereby proposing solutions to encourage Vietnamese consumers to use environmentally friendly products from coffee grounds.

2. Overview of environmentally friendly products from coffee grounds in the Vietnamese market

2.1. General characteristics of environmentally friendly products from coffee grounds

Environmentally friendly products

In today's era, when environmental pollution is becoming a serious global issue, the use of environmentally friendly products has become more necessary than ever. Environmentally friendly products are those produced from recyclable, reusable, or biodegradable materials that do not harm the environment during production and use. (laravietnam.vn, 2024).

Characteristics of environmentally friendly products

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

Environmentally friendly products are designed to replace plastic products, especially single-use plastics. According to congnghiepmoitruong.vn (2024), these products have the following characteristics:

Firstly, the products can be reused, which helps reduce the amount of plastic waste generated each year and saves costs for waste management.

Secondly, the products decompose easily in natural environments, creating organic matter beneficial for soil and plants.

Thirdly, products made from natural materials (e.g., straws made from sugarcane, coffee grounds, or reed) are safer and of higher quality.

Fourthly, the products ensure health safety, containing no microplastics or harmful chemicals that affect humans and the environment (soil, water, air).

Characteristics of environmentally friendly products from coffee grounds

Coffee is famous for its unique flavor and health benefits. According to the UK Coffee Association, more than 2 billion cups of coffee are consumed daily worldwide, resulting in over 6 million tons of coffee grounds annually. Only a small portion of these grounds are used as fertilizers, with the majority being wasted. (shopequo.com, 2023)

Coffee grounds are a valuable yet underutilized resource. Utilizing coffee grounds in production can create various products with standout features. Environmentally friendly products from coffee grounds share the following characteristics:

- (1) *Biodegradable:* Coffee ground products decompose completely in natural environments, taking approximately 6 to 12 months to break down into water, CO2, or biomass, which are beneficial for soil and plants. (biopolymer.vn, 2022a) (biopolymer.vn, 2022a)
- (2) *Coffee scent and color:* Products made from coffee grounds retain the enticing aroma and natural brown color of coffee, creating a close-to-nature and refreshing feel (biopolymer.vn, 2022a)
- (3) *Retain PP plastic properties:* Although derived from renewable materials, coffee ground products maintain properties like durability, impact resistance, and heat resistance. (biopolymer.vn, 2022a)
- (4) *Free of harmful substances:* Coffee ground products are 100% natural, containing no harmful chemicals, colorants, or preservatives, ensuring user safety (shopequo.com, 2023). Thus, another worthy reason to use products made from coffee grounds is their

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

safety for users' health. These products are completely free from harmful substances such as BPA, Styrene, artificial colors, and phthalates. The aforementioned substances can cause many dangerous diseases, including cancer, stomach diseases, immune deficiency, etc. (biopolymer.vn, 2022a)

Box 1. Products made from coffee grounds - Veritas Vietnam

Veritas Vietnam Joint Stock Company focuses on developing biodegradable plastic products made from environmentally friendly biodegradable materials, applied in the domestic plastic, packaging, construction, and technical industries.

Vision: To produce highly applicable products made from coffee grounds for daily life, supplying both the Vietnamese and global markets.

Mission: Veritas Vietnam addresses environmental pollution issues, ensures health safety for everyone.

Product Idea: The reason Veritas ventured into coffee grounds stemmed from the desire to show the world that Vietnam is not only the coffee capital but can also use its creativity to turn the annual waste of 113,232 tons of coffee grounds into useful materials.

To complete the production of a finished product made from coffee bioplastic materials, the production process includes two main stages:

Stage 1: Producing bioplastic materials from coffee grounds

Stage 2: Using these bioplastic materials to produce finished products.

Source: Veritas (2022)

2.2. Classification of environmentally friendly products from coffee grounds

Products made from coffee grounds are still new to the market today, but there are still products that have received a lot of interest and are purchased in large quantities by customers. With the internal composition of the product containing coffee grounds, it helps the product achieve optimal biodegradability into beneficial compounds for plant growth. Thus, it brings many benefits to both people and the surrounding environment. Here are some popular products made from coffee grounds today.

www.ijsser.org

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

Coffee ground straws

Straws made from coffee grounds are one of the types of environmentally friendly straws that can completely replace plastic straws. Coffee grounds straws are durable and strong, do not break or disintegrate when soaked in water, can completely decompose in the natural environment and become a type of biofertilizer that brings beneficial nutrients to the soil and plants. In addition, this line of self-destructing straws does not contain preservatives or toxic chemicals, and is made from 100% natural ingredients, so it is very safe for the health of users. (shopequo.com, 2023)

Knife, spoon, and fork set from coffee grounds

Coffee ground straws are among the environmentally friendly straws that can completely replace plastic straws. Coffee ground straws are durable and sturdy, do not break or disintegrate when soaked in water, can fully biodegrade in the natural environment, and become bio-fertilizers that provide beneficial nutrients for the soil and plants. Moreover, these biodegradable straws do not contain preservatives or harmful chemicals, are made from 100% natural materials, making them very safe for users' health (shopequo.com, 2023).

Coffee ground cutlery sets

Single-use cutlery sets like knives, spoons, and forks are no longer unfamiliar to consumers and are highly favored for their convenience and high demand. If these products are made from plastic, with the "dense" frequency of use every day, the amount of plastic waste discharged into the environment is enormous. Therefore, coffee ground cutlery sets are a perfect alternative to plastic products (shopequo.com, 2023). (shopequo.com, 2023)

Shoes made from coffee grounds

Facing the severe impact of plastic waste, entrepreneurs have created shoes made from coffee grounds and recycled plastic bottles. This is considered an effective environmental protection solution. In fact, shoe production is one of the most polluting sectors in the global fashion industry, emitting over 700 million cubic meters of CO2 annually. Thus, using shoes made from coffee grounds not only creates an opportunity for manufacturers to reduce plastic waste). (shopequo.com, 2023)

Coffee ground masks

These masks are made from thin, lightweight coffee fibers, providing comfort and convenience for consumers when used. Coffee ground masks are environmentally friendly products that not only effectively protect against viruses and dust but are also designed to be fashionable and

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

modern, not inferior to conventional masks, and even better in quality than some masks available in the market (shopequo.com, 2023)

Coffee ground cups

This environmentally friendly product has received a lot of support from consumers. Designed with a minimalist handle and modern brown color, coffee ground cups are very suitable to replace single-use, hard-to-decompose plastic cups (shopequo.com, 2023)

In addition, other environmentally friendly products from coffee grounds include to-go cups, coffee bioplastic pens, coffee bioplastic bags, coffee bioplastic non-woven fabrics, single-use coffee plastic cups, and personal hygiene products (shopequo.com, 2023)

Coffee ground pens

Coffee ground pens are not just regular writing tools but also symbols of creativity and environmental protection. Through the production process, coffee grounds are recycled and combined with other materials to create unique pen bodies with diverse shapes and colors. These pens provide a smooth writing experience and are symbols of sustainable living, helping reduce waste and optimize resource use. Using coffee ground pens is a great way to connect with creativity and protect the environment every day (shopequo.com, 2023)

Box 2. AirX Coffee

AirX Coffee is not just a brand but a story of creativity, where coffee grounds are transformed into interesting and meaningful products. AirX Coffee, a pioneer in Vietnam in producing finished products from coffee grounds, sets a new standard for creativity and environmental protection.

Every year, by reusing 10 tons of coffee grounds, AirX Coffee not only helps reduce waste but also reduces the use of 10 tons of plastic. This positive action is not just the beginning of a new journey but also a motivation to achieve greater milestones in environmental protection and sustainable development. AirX Coffee is not just a business but a symbol of innovation, creativity, and social responsibility.

Source: biopolymer.vn, 2023a

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

3. Research methodology

3.1. Desk research method

The authors used document research methods to systematize basic issues about environmentally friendly products, the characteristics of environmentally friendly products in general and those made from coffee grounds in particular, and to classify environmentally friendly products from coffee grounds. Data in the article were collected from books, scientific journals in Vietnam and abroad, and aggregated data from articles on various media.

3.2. Sociological survey method

The research team developed a survey form to conduct sociological surveys, aiming to clarify the consumption trend of environmentally friendly products from coffee grounds among Vietnamese consumers. The survey form includes general information collection about the respondents such as occupation, gender, age, living area, income/monthly allowance. The main content of the survey is to understand the usage trend of environmentally friendly products from coffee grounds, with information including:

- Whether they have accessed environmentally friendly products from coffee grounds
- The usage situation of environmentally friendly products from coffee grounds
- Types of environmentally friendly products from coffee grounds they often use
- Purpose of using environmentally friendly products from coffee grounds and factors influencing their use
- Aspects of concern when using environmentally friendly products from coffee grounds...?

The data collection method was conducted by the research team using two methods: convenience sampling and the "snowball" method - finding the next respondents based on suggestions or introductions from previously surveyed respondents. The survey form was created on Google Drive and was piloted on 10 people who frequently use environmentally friendly products from coffee grounds to finalize the survey form. The finalized survey form was then sent to Vietnamese consumers via a survey link

through social media such as Facebook, Zalo, Email, etc. A total of 305 survey forms were collected.

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

3.3. Data Analysis and Processing

Survey data were compiled and statistically processed using Excel software. The synthetic analysis method was then used to analyze, synthesize, compare, and contrast the survey content.

For questions built on the Likert scale of 5:

- 1. Very unaffected / Very unconcerned
- 2. Unaffected / Unconcerned
- 3. Neutral / No opinion
- 4. Affected / Concerned
- 5. Very affected / Very concerned

The research team determined the interval value and the average value of each factor, and identified the average score range for each response category. Interval value = (Maximum - Minimum) / n = (5-1)/5 = 0.8

Evaluation thresholds based on the average score value:

- + 1.00 1.80: Very unaffected / Very unconcerned
- + 1.81 2.60: Unaffected / Unconcerned
- + 2.61 3.40: Neutral / No opinion
- + 3.41 4.20: Affected / Concerned
- + 4.21 5.00: Very affected / Very concerned

From the collected information and survey results, the research team discussed and proposed some solutions to encourage Vietnamese consumers to use environmentally friendly products from coffee grounds.

4. The current situation of using environmentally friendly products from coffee grounds: Perspectives from survey results

4.1. Description of the survey participants

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

Table 1: Descriptive statistics about survey participants

Gender	Number of people	Proportion (%)	Living area	Number of people	Proportion (%)
Male	123	40.33%	Northern	52	17.05
Female	171	56.07%	Central	51	16.72
Not want to be specific	11	3.61%	Southern	202	66.23
Total	305	100,0%	Total	305	100%
Academic level	Number of people	Proportion (%)	Income	Number of people	Proportion (%)
Common	161	52.79%	Under 1 million VND	96	31.48%
Intermediate college	31	10.16%	1 to under 5 million VND	55	18.03%
University	80	26.23%	5 to less than 10 million VND	41	13.44%
Graduated	33	10.82%	10 to less than 20 million VND	42	13.77%
Total	305	100%	20 to under 30 million VND	31	10.16%
Age	Number of people	Proportion (%)	30 to under 40 million VND	15	4.92%
Under 22 years old	173	56.72%	40 to under 50 million VND	7	2.30%
22 - 30 years old	41	13.44%	Over 50 million VND	18	5.90%
31 - 40 years old	42	13.77%	Total	305	100%
41 - 50 years old	29	9.51%	Know about environmentally friendly products from coffee grounds	Number of people	Proportion (%)
Over 50 years old	20	6.56%	Yes	196	64.26%
Total	305	100,0%	No	109	35.74%
			Total	305	100%

Source: Survey results

Regarding the educational level of survey participants. Of the 305 people participating in the survey, 161 people are in high school (accounting for 53%); 80 students are at university level (26%); 33 participants in the survey were at the graduate level (11%) and 31 were in intermediate/college education (10%).

Regarding the gender of survey participants. Of the 305 people participating in the survey, 171 were female (accounting for 56%); 123 people were male (40%) and 11 survey participants did not want to specify their gender (4%).

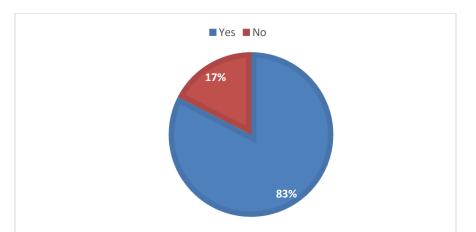
About the living area of the survey participants. Of the 305 people participating in the survey, 202 people are in the South (accounting for 66%); 52 people in the North (17%) and 51 people participating in the survey in the Central region (17%).

Regarding the age of survey participants. Of the 305 people participating in the survey, there were 173 people under 22 years old (accounting for 57%); 42 people aged 31 - 40 years old (14%); 41 people are 22-30 years old (accounting for 13%); 29 people are 41 - 50 years old (accounting for 10%) and 20 survey participants are over 50 years old (7%).

About the income and amount of money parents and relatives give monthly to survey participants. Of the 305 people participating in the survey, 96 people have a monthly income of less than 1 million VND (accounting for 31%); 55 people have a monthly amount of 1 to less than 5 million VND (18%); 83 people have a monthly amount of 5 to less than 20 million VND (27%) and 71 people participating in the survey have a monthly amount of over 20 million VND (23%).

About the level of awareness of environmentally friendly products from coffee grounds. Of the 305 survey participants, 196 of them knew about the product (accounting for 64%) and 109 of the survey participants did not know about the product (36%). Thereby, it can be seen that survey participants are mainly interested in products from coffee grounds.

Figure 1. Percentage of survey subjects who want to learn about environmentally friendly products from coffee grounds



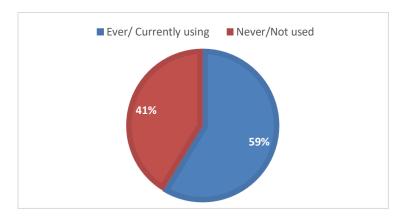
(with subjects unfamiliar with the product)

Source: The survey results

Of the 109 survey participants, they did not know about environmentally friendly products made from coffee grounds, *There are 90 people who want to learn about the products (83%)* and 19 survey participants wanted to learn about the product (17%).

Volume:09, Issue:07 "July 2024"

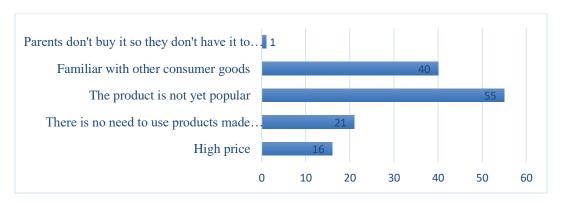
Figure 2. Percentage of survey participants who are using environmentally friendly products from coffee grounds



Source: The survey results

Of the 196 people participating in the survey, there are 115 of you have used/are currently using the products (accounting for 59%) and 81 survey participants have never used the product (41%).

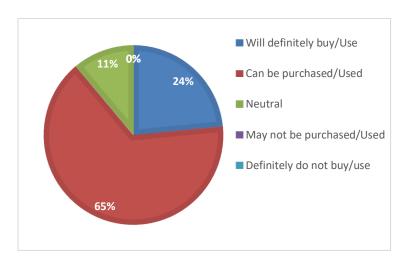
Figure 3. Reasons for not/never used environmentally friendly products from coffee grounds



Source: The survey results

Of the 81 people who have never used the product and do not use it, 55 people do not use it because the product is not popular (accounting for 41%); 40 of you are familiar with other products (accounting for 30%); 21 people do not need to use products made from coffee grounds (16%); 16 people don't use it because of the high price (12%) and 1 person who participated in the parent survey didn't buy it so they don't have it to use (1%). Thereby, we can see the main subjects participating in the survey **Do not use because the product is not yet popular.**

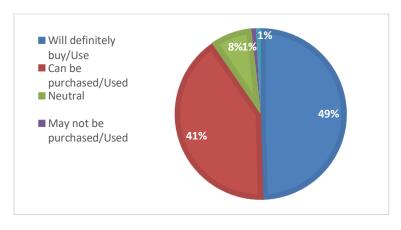
Figure 4. Trend of using environmentally friendly products from coffee grounds in the future



Source: The survey results

Out of 81 of you have never and do not use the product, *There are 53 you can buy and use* (accounting for 65%); 19 you will definitely buy or use (23%); 9 people are neutral (11%) and there is no friend who does not buy or use it. Thereby, it can be seen that the survey participants can mainly buy, use, and pay a lot of attention to products made from coffee grounds.

Figure 5. Trend of buying and consuming environmentally friendly products from coffee grounds



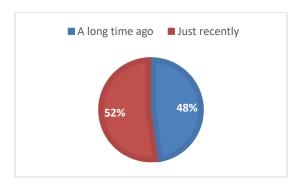
Source: The survey results

Of the 115 people who have used/are currently using the product, there are 57 people who will definitely buy and use it (accounting for 50%); 47 you can buy and use (41%); 9 people

Volume:09, Issue:07 "July 2024"

participating in the survey were neutral (8%) and 2 people probably, definitely would not buy or use (2%). Thereby, it can be seen that the majority of survey participants will definitely buy and use products from coffee grounds.

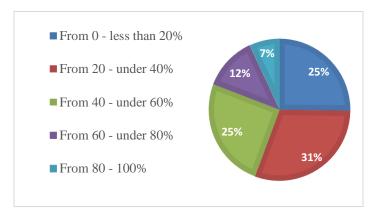
Figure 6. Time to access environmentally friendly products from coffee grounds



Source: The survey results

Of the 115 people who have used/are currently using the product, 60 of them learned about the new product recently (accounting for 52%) and 55 of the survey participants knew about the product a long time ago (48%). Thereby, it can be seen that the survey participants mainly approached and used a lot of products made from coffee grounds recently.

Figure 7. Percentage of environmentally friendly products from coffee grounds compared to total consumer products

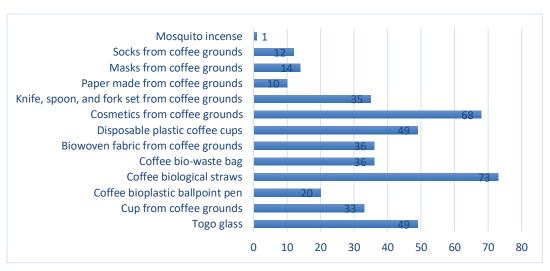


Source: The survey results

Of the 115 people who have used/are currently using the product, there are 35 people using the product, accounting for 20-under 40% (accounting for 30%); 29 people use from 0 to less than 20%/ from 40 to 60% (accounting for 25%); 14 people use 60-under 80% (12%) and 8 people

use 80-100% (7%). Thereby, it can be seen that survey participants mainly use 20 - less than 40% of environmentally friendly products.

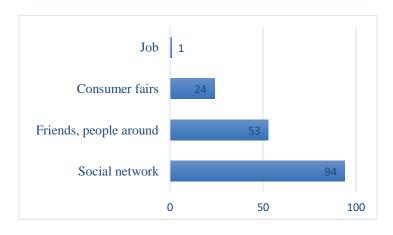
Figure 8. Environmentally friendly products from coffee grounds are often used



Source: The survey results

Of the 115 people who have used/are currently using the product, there are 131 people using cups made from residue (accounting for 29%); 108 people use straws and knife sets (25%); 63 of you used trash bags, masks, socks, incense (14%) and 134 of you used ballpoint pens, cloth, cosmetics, and paper (31%). Thereby, it can be seen that survey participants mainly use coffee biological straws.

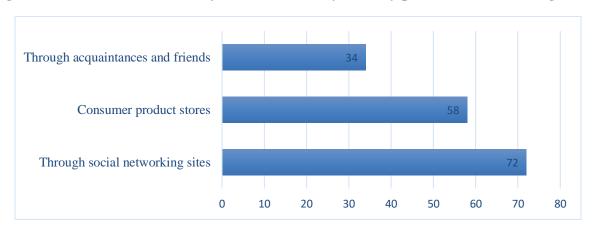
Figure 9. Channel to learn about environmentally friendly products from coffee grounds



Source: The survey results

Of the 115 people who have used/are currently using the product, 94 people learned about it through social networks (accounting for 55%); 53 people learn through friends and people around them (31%); 24 people learn through consumer fairs (14%) and 1 person learns through work (1%). Thereby, it can be seen that survey participants mainly researched through social networks.

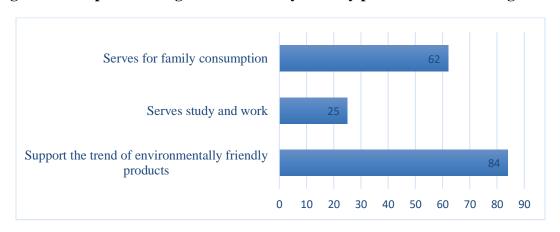
Figure 10. The location often buys environmentally friendly products from coffee grounds



Source: The survey results

Of the 115 people who have used/are currently using the product, 72 people bought it through social networking sites (accounting for 44%); 58 of you bought it at consumer product stores (35%) and 34 of you bought it through acquaintances or friends (21%). Thereby, it can be seen that survey participants mainly buy through social networking sites.

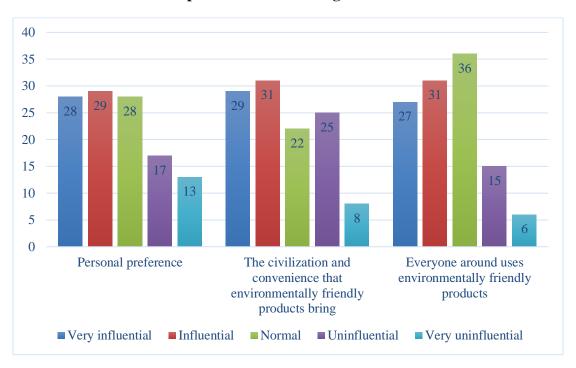
Figure 11. Purpose of using environmentally friendly products from coffee grounds



Source: The survey results

Of the 115 people who have used/are currently using the product, 83 users support the trend of environmentally friendly products (accounting for 49%); 58 people use it for family consumption (accounting for 34%); 25 of you use it for study and work (15%), and 5 of you use it for self-care, environmental protection, and feel it meets your needs (4%). Thereby, it can be seen that survey participants mainly use it because they support the trend of environmentally friendly products.

Figure 12. The influence of factors on following the trend of using environmentally friendly products from coffee grounds



Source: The survey results

Based on the survey results shown in Figure 12 and the research team's calculations, the personal preference factor achieved an average score of 3.4, demonstrating a normal level of impact; The civility and convenience factor that environmentally friendly products bring has an average score of 3.4, showing a normal impact level and the factor that everyone around uses environmentally friendly products. achieved an average score of 3.5, showing that the factor of people around using environmentally friendly products affects consumers' tendency to consume environmentally friendly products from coffee grounds. Therefore, in 3 factors considered, the factor that everyone around uses environmentally friendly products has the greatest impact on the tendency to use environmentally friendly products from coffee grounds.

Interested

■ Very interested

60
50
40
30
20
10
9 7
17 9 8 24
21 9 4 23
24 9 2 13
38
32
10 0 Price Reliability Convenience Hygiene and product quality issues

Figure 13. The level of influence of factors that survey subjects are interested in environmentally friendly products from coffee grounds

Source: The survey results

Normal

Uninterested

■ Very uninterested

Based on the survey results shown in Figure 13 and the research team's calculations, the price factor achieved an average score of 3.5; The durability factor of environmentally friendly products achieved an average score of 3.6; The convenience factor of environmentally friendly products achieved an average score of 3.7; Hygiene issues, product quality achieved an average score of 3.9 and origin achieved an average score of 3.8, showing that consumers are concerned about the above factors of environmentally friendly products. made from coffee grounds. From the figure and the research team's calculations, it can be seen that *consumers are most concerned about hygiene and quality of environmentally friendly products made from coffee grounds*, then other factors such as origin, convenience, durability and price are the least important of the factors mentioned above.

5. Solutions to promote Vietnamese consumers to use environmentally friendly products from coffee grounds

5.1. Short-term solutions

Promoting coffee grounds products can be a very effective marketing strategy, expecially when emphasizing the outstanding uses and advantages over conventional plastic products. Some specific solutions to focus on promoting products that businesses can implement:

Create educational content. Articles and videos show the environmental benefits by explaining how coffee grounds help reduce waste and plastic pollution. Show viewers the production process, and illustrate the process of turning coffee grounds into useful products, emphasizing sustainability and environmental friendliness. Organize workshops on recycling and production

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

of coffee grounds products, helping consumers better understand the process and meaning of the product.

Visual comparison. Compare the features and benefits between coffee grounds and plastic products in terms of durability, environmental friendliness, aesthetics, and longevity of coffee grounds products.

Social media campaigns. Come up with consumer stories. Share stories from people who have been using coffee grounds products. Collaborate with influencers in the field of environmental protection and green lifestyle to promote products. Use social media platforms like Facebook, Instagram, and TikTok to reach customers effectively.

Promotions and offers. Offer product exchange programs such as the policy of exchanging old for new, encouraging customers to exchange old plastic products to get products from coffee grounds at preferential prices. Special discounts, which offer discounts to new or returning customers.

Events and seminars. Direct interaction through the organization of events for consumers to experience products firsthand and better understand their uses. Organize symposiums, invite experts in the environment and sustainable production to talk about the benefits of using coffee grounds.

Diverse products. Expand product portfolios, develop new products: Take advantage of coffee grounds to create a variety of products such as household items, accessories, and decorations. Creativity in design so that coffee grounds products are not only durable but also beautiful and fashionable.

Certifications and accreditations. Businesses need to obtain international certifications, obtain environmental protection certifications to enhance the reputation and trust of customers. Participate and win awards for innovation and sustainability to assert your position in the market.

Cooperation and community development. Collect coffee grounds from coffee shops to create a sustainable source of raw materials and promote the brand together. Implement programs that support the community and the environment, thereby building a friendly and responsible brand image. Participate in and organize community events to promote products and raise awareness of environmental protection.

Businesses can not only effectively promote coffee grounds products, but also contribute to raising public awareness about environmental protection and sustainability.

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

5.2. Long-term solutions

Improving quality and diversifying products. Businesses need to excel in research and development (R&D) activities. Investing in advanced production technology will improve product quality, enhance durability, and diversify products made from coffee grounds. Creating a variety of product designs suitable for different customer segments, from household items and decorations to fashion accessories, is essential.

Investing in modern equipment. Optimizing the production process and investing in modern equipment and machinery will increase productivity, minimize waste, and reduce production costs. Automating the production process will decrease manual labor, thereby reducing labor costs and lowering product prices.

Ensuring a stable supply of raw materials. Signing cooperation contracts with coffee shops to regularly collect coffee grounds ensures a stable supply of raw materials. Using processed coffee grounds maximizes benefits and reduces material costs.

Raising consumer environmental awareness. Creating engaging videos and articles to promote products while raising consumer awareness about the harms of plastic and the benefits of using products made from coffee grounds is crucial. Sharing stories about the production process and the brand's environmental protection efforts can inspire and motivate consumers.

Pricing strategy. Minimizing costs and lowering prices. Closely monitoring and controlling production costs to find savings and optimization opportunities. Reducing product prices enhances market competitiveness and makes products more accessible to various customer segments.

By implementing these solutions, businesses can not only improve the quality and diversify products made from coffee grounds but also easily reach consumers, reduce production costs, and lower prices while raising community environmental awareness.

Conclusion

Proposing solutions to promote the consumption of products made from coffee grounds is extremely important, not only for businesses but also for society and the environment. Using products made from coffee grounds helps reduce plastic waste, a severe environmental pollution issue. Coffee ground products are biodegradable, reducing the burden on landfills and oceans. Utilizing coffee grounds—a byproduct often discarded—helps reduce resource waste and optimize raw material use. Promoting recycling and resource reuse trends within the community is crucial. By proposing solutions to promote the consumption of coffee ground products,

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

businesses not only contribute to environmental protection and sustainable economic development but also create value for society and the community while building a strong and responsible brand.

References

- airxcoffee.com (2024a). <u>Unique and practical eco-friendly recycling product</u> Cups <u>made from coffee</u> <u>grounds</u>. <u>https://airxcoffee.com/blogs/news/san-pham-tai-che-than-thien-voi-moi-truong</u>
- airxcoffee.com (2024b). *Eco-friendly products <u>made from coffee.</u>* https://airxcoffee.com/blogs/news/cac-san-pham-than-thien-voi-moi-truong
- biopolymer.vn (2022a). *10 products <u>from coffee grounds that are popular on the market.* <u>https://biopolymer.vn/tin-tuc-su-kien/san-pham-tu-ba-ca-phe/</u></u>
- biopolymer.vn (2022b). <u>Unique cup</u> products <u>made</u> <u>from</u> <u>coffee</u> <u>grounds</u>. <u>https://biopolymer.vn/tin-tuc-su-kien</u>
- biopolymer.vn (2023a). <u>Finished</u> products <u>made</u> <u>from</u> <u>coffee</u> <u>grounds</u> <u>and</u> <u>what</u> <u>you</u> <u>need</u> <u>to</u> <u>know</u>. https://biopolymer.vn/thong-tin-san-pham/thanh-pham-lam-tu-ba-ca-phe/
- biopolymer.vn (2023b). <u>Plastic from coffee grounds</u>: <u>The solution to the waste crisis</u>. https://biopolymer.vn/tin-tuc-su-kien/nhua-tu-ba-ca-phe/
- congnghiepmoitruong.vn (2024). *Eco-friendly products <u>and how to identify them.</u>* https://congnghiepmoitruong.vn/san-pham-than-thien-voi-moi-truong-va-cach-nhan-biet-12396.html
- congnghiepmoitruong.vn (2024). *Protecting the environment from taking advantage of coffee grounds and sawdust*. https://congnghiepmoitruong.vn/bao-ve-moi-truong-tu-viec-tan-dung-ba-ca-phe-va-mun-cua-12427.html
- dimension.coffe (2022). Solutions to protect the natural environment in the coffee production and consumption industry. https://dimension.coffee/giai-phap-bao-ve-moi-truong-tu-nhien-trong-nganh-san-xuat-tieu-thu-ca-phe
- humanactprize.org (2023). <u>Research on the application of Coffee Fiber Fabric</u> environmentally <u>friendly in the Vietnamese market</u>. <u>https://humanactprize.org/nghien-cuu-ung-dung-vai-soi-cafe-than-thien-voi-moi-truong-tai-thi-truong-viet-nam-1991000000170.htm</u>

ISSN: 2455-8834

Volume:09, Issue:07 "July 2024"

- laravietnam.vn (2024). *Eco-friendly products*. https://laravietnam.vn/san-pham-than-thien-moitruong
- metagent.vn (2023). *Does <u>coffee fiber fabric production technology bring sustainable value?* <u>https://metagent.vn/tin-tuc/bai-viet/cong-nghe-san-xuat-vai-soi-ca-phe-93</u></u>
- rdplastic.vn (n.d). *Advantages of recycling coffee packaging*. https://rdplastic.vn/thong-tin-san-pham/uu-diem-cua-viec-tai-che-bao-bi-ca-phe/
- shopequo.com (2023a). <u>Coffee</u> <u>grounds</u> <u>products</u> <u>are <u>popular</u> <u>on</u> <u>the market today</u>. <u>https://shopequo.com/vi/blogs/ong-hut/san-pham-tu-ba-ca-phe</u></u>
- shopequo.com (2023b). *15+ Uses of <u>Coffee Grounds</u>: <u>From Beauty to Life and Environment</u>. <u>https://shopequo.com/vi/blogs/ong-hut/cong-dung-ba-ca-phe</u>*
- skhcn.kontum.gov.vn (2024). *Turning <u>coffee grounds and bagasse into ... plant pots, chess sets.* <u>https://skhcn.kontum.gov.vn/PrintNews.aspx?id=29337</u></u>
- tapchicongthuong.vn (2023). Fabrics from coffee grounds The potential of the fashion industry. https://tapchicongthuong.vn/bai-viet/vai-tu-ba-ca-phe-tiem-nang-cua-nganh-cong-nghiep-thoi-trang-110070.htm
- Veritas (2022). <u>Coffee grounds</u> Veritas Vietnam. https://tuoitre.vn/san-pham-lam-tu-ba-ca-phe-veritas-viet-nam-20221213151944455.htm
- vietcetera.com (2024). <u>Coffee</u> is <u>not just for drinking</u>: 6 eco-<u>friendly products from coffee</u>. <u>https://vietcetera.com/vn/ca-phe-dau-chi-de-uong-ban-co-biet-nhung-san-pham-moi-truong-nay</u>
- vovgiaothong.vn (2024). *Applying technology to produce fabric from coffee grounds*. https://vovgiaothong.vn/newsaudio/ung-dung-cong-nghe-de-san-xuat-soi-vai-tu-ba-cafe-d38291.html
- 43factory.coffee (n.d.a). Efforts to extend the life cycle of coffee grounds to protect the environment.https://43factory.coffee/news/no-luc-keo-dai-vong-doi-ba-ca-phe-bao-ve-moi-truong/
- 43factory.coffee (n.d.b). <u>Environmental</u> issues <u>in</u> <u>the</u> <u>coffee</u> <u>industry</u> <u>and</u> solutions. https://43factory.coffee/news/van-de-moi-truong-trong-nganh-ca-phe-va-giai-phap/