

# SRI LANKAN COCOPEAT ON THE GLOBAL STAGE: A STRATEGIC EXPLORATION OF LOCAL DYNAMICS, MARKET ENTRY, AND GLOBAL OPPORTUNITIES



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## **1. Introduction**

## **1.1 Historical Evolution**

The cocopeat industry in Sri Lanka traces its roots to traditional coir extraction for basic products. It is commonly believed that the initiatives by Chas P. Hayleys marked a pivotal shift of coir industry from a cottage industry to a commercial enterprise in the 1960s where Raw fiber, yarn, and twisted fiber were the primary exports, leading to the emergence of 'cocopeat- the by-product'. Before the 1980s, the residual cocopeat resulting from the fiber extraction process was a significant problem, often seen as waste and left in large heaps on unused lands. However, in the early 1980s, by several foreign investors, recognized the potential of this discarded cocopeat as an excellent growth medium. This led to the inception of exports involving cocopeat and value-added cocopeat products. Its qualities, including high absorbency, water retention, nutrient richness, aeration, neutral pH, anti-microbial qualities etc. make it an ideal growing medium and soil conditioner for agriculture.

The industry has experienced substantial growth, with cocopeat now constituting a significant portion of the total coconut production. The extraction process has evolved, addressing environmental concerns and turning what was once considered waste into a valuable commodity as it offers a sustainable and eco-friendly alternative

## 2. Cocopeat Production and Exports

## 2.1 Annual Production

Out of the 3 billion coconut husks produced annually, approximately 70-75% is utilized for fiber and peat production whilst the rest remain at household level or buried in coconut pits at estate level. The cocopeat industry has seen a surge, producing around 324,000 MT of cocopeat annually.

Sri Lankan cocopeat product portfolio includes grow bags, cocopeat disks, cubes, open tops, nursery plugs, 5kg/25Kg bales, bricks/briquettes and other types of customized value added products.

## General cocopeat based product basket of Sri Lanka



## Figure 1: Cocopeat product basket of Sri Lanka

These products are generally available as washed (low EC), unwashed (high EC) or buffered with  $CaNO_3$  and as 100% cocopeat, cocopeat & coco chips/fiber mixtures which depend on the requirements of the plants.

## **2.2 Export Dynamics**

Today Cocopeat exports play a pivotal role in the Sri Lankan economy, earning USD 181.14 Million in 2022 which was 22.2% from total coconut exports. A significant portion of the cocopeat produced are primarily allocated for the export industry, with only a small fraction being utilized for local greenhouse production in both the horticulture and floriculture sectors.



Figure 2: Sub-sector contribution to the total coconut exports – year 2022

Intrinsic qualities such as water holding & expansion capacities driven by the tropical climate and the soil has created specific demand for Sri Lankan cocopeat products directing our exports to reach more than 100 destinations around the world.

Table 1: Sri Lankan Moulded coir & cocopeat exports to top 15 markets (2017-2022)

| Country           | try 2017      |           | 2019          |           | 2020          |           | 2021          |           | 2022          |           |
|-------------------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
|                   | Quantity      | USD<br>Mn |
| Mexico            | 28,655,690 Kg | 14.33     | 49,055,479 Kg | 26.39     | 36,733,090 Kg | 20.14     | 43,638,160 Kg | 25.68     | 36,245,857 Kg | 22.88     |
| China             | 23,836,549 Kg | 6.24      | 10,345,502 Kg | 3.38      | 15,379,300 Kg | 5.53      | 32,424,692 Kg | 13.06     | 38,708,255 Kg | 15.53     |
| Netherlands       | 7,880,852 Kg  | 4.98      | 7,643,694 Kg  | 5.15      | 13,444,034 Kg | 7.36      | 11,024,897 Kg | 7.34      | 8,738,486 Kg  | 15.05     |
| Japan             | 49,503,634 Kg | 11.53     | 48,089,792 Kg | 12.55     | 49,891,277 Kg | 13.38     | 53,454,449 Kg | 14.33     | 50,364,600 Kg | 15.03     |
| United<br>States  | 20,551,001 Kg | 8.22      | 17,372,762 Kg | 8.09      | 26,347,531 Kg | 11.8      | 30,702,736 Kg | 15.37     | 24,199,887 Kg | 14.22     |
| South<br>Korea    | 28,457,061 Kg | 9.97      | 18,420,042 Kg | 9.04      | 26,920,553 Kg | 11.51     | 22,288,002 Kg | 11.05     | 19,376,646 Kg | 9.83      |
| Morocco           | 5,074,968 Kg  | 2.69      | 6,299,998 Kg  | 3.59      | 7,531,127 Kg  | 3.85      | 11,896,726 Kg | 6.92      | 13,982,227 Kg | 9.02      |
| Canada            | 9,977,874 Kg  | 5.63      | 10,118,524 Kg | 6.18      | 9,468,914 Kg  | 6.18      | 11,984,867 Kg | 8.63      | 14,056,699 Kg | 8.98      |
| United<br>Kingdom | 10,569,177 Kg | 8.19      | 11,599,324 Kg | 8.95      | 13,396,785 Kg | 9.36      | 13,256,206 Kg | 9.48      | 10,099,257 Kg | 8.16      |
| Peru              | 783,009 Kg    | 0.4       | 1,815,010 Kg  | 0.84      | 1,774,799 Kg  | 0.84      | 6,888,879 Kg  | 4.96      | 9,347,935 Kg  | 7.07      |
| Australia         | 3,700,465 Kg  | 2.13      | 4,856,904 Kg  | 3.07      | 5,995,566 Kg  | 4.02      | 8,708,168 Kg  | 5.87      | 7,029,928 Kg  | 5.91      |
| France            | 10,271,305 Kg | 5.69      | 11,146,017 Kg | 6.99      | 10,469,527 Kg | 6.46      | 10,394,057 Kg | 6.83      | 7,065,679 Kg  | 5.01      |
| Turkey            | 3,248,253 Kg  | 1.59      | 7,268,222 Kg  | 4.05      | 12,624,934 Kg | 5.97      | 9,984,395 Kg  | 4.99      | 10,152,060 Kg | 4.76      |
| Spain             | 10,363,811 Kg | 4.19      | 9,404,878 Kg  | 4.06      | 12,484,854 Kg | 4.88      | 14,954,905 Kg | 6.73      | 5,742,926 Kg  | 3.24      |
| Iran              | 8,982,184 Kg  | 2.92      | 7,443,165 Kg  | 2.58      | 2,453,721 Kg  | 1.06      | 6,141,893 Kg  | 2.67      | 6,903,887 Kg  | 2.65      |
| Other             | 56,483,270 Kg | 25.21     | 58,351,777 Kg | 28.92     | 66,130,222 Kg | 32.79     | 78,007,659 Kg | 41.61     | 62,111,846 Kg | 33.79     |
| Markets           | _             |           | _             |           |               |           | _             |           |               |           |
| Total :           |               | 113.9     |               | 133.83    |               | 145.14    |               | 185.53    |               | 181.14    |

Source: SL Custom Statistics, 2023

Currently cocopeat products cater mainly to the horticulture & floriculture industries-both indoor & out door, as an animal bedding & flooring and for other industries.

## 2.3 Global Market Position

Being the 4<sup>th</sup> largest coconut producer in the world and 3rd largest cocopeat exporter Sri Lanka has established itself as a key player in the global cocopeat market. As per the ITC data, the world imports significant quantities, with Japan, United States, South Korea, and China leading the importers.

| Exporters          | 2018<br>USD Mn | 2019<br>USD Mn | 2020<br>USD Mn | 2021<br>USD Mn | 2022<br>USD Mn |
|--------------------|----------------|----------------|----------------|----------------|----------------|
| World              | 1385.88        | 1460.83        | 1694.81        | 2053.46        | 2102.79        |
| Indonesia          | 171.41         | 214.11         | 323.04         | 424.91         | 500.27         |
| India              | 284.90         | 304.28         | 352.94         | 472.45         | 344.90         |
| Sri Lanka          |                | 186.56         | 215.56         | 255.78         | 232.96         |
| China              | 43.27          | 53.08          | 72.15          | 97.69          | 155.03         |
| Malaysia           | 77.50          | 82.40          | 91.99          | 79.99          | 128.12         |
| Kenya              | 42.01          | 36.87          | 30.03          | 49.49          | 54.78          |
| Russian Federation | 9.03           | 18.46          | 17.37          | 15.20          | 50.94          |
| Netherlands        | 34.70          | 37.41          | 57.15          | 49.54          | 48.75          |
| Brazil             | 42.02          | 45.77          | 40.91          | 49.31          | 47.46          |
| Peru               | 41.18          | 34.77          | 33.72          | 52.78          | 43.08          |
| Chile              | 25.29          | 31.34          | 25.90          | 29.61          | 40.68          |
| Viet Nam           | 46.71          | 39.96          | 37.16          | 33.77          | 39.75          |
| Philippines        | 40.94          | 32.41          | 39.12          | 43.31          | 34.25          |
| Mexico             | 52.52          | 0.25           | 0.35           | 42.69          | 33.65          |
| Ukraine            | 32.94          | 51.22          | 46.31          | 17.10          | 31.37          |

 Table 2: World Exports for last 5 years (top 15)
 Part 10

Source: ITC Trade Map, 2023

| Table 3: | World | imports fe | or last 5 | years ( | (top 20) |
|----------|-------|------------|-----------|---------|----------|
|----------|-------|------------|-----------|---------|----------|

| Importers      | 2018    | 2019    | 2020    | 2021    | 2022    |
|----------------|---------|---------|---------|---------|---------|
| -              | USD Mn  |
| World          | 1487.77 | 1637.68 | 1737.95 | 2150.99 | 2273.67 |
| Japan          | 123.69  | 161.93  | 218.62  | 330.12  | 433.28  |
| China          | 333.74  | 321.94  | 292.23  | 363.40  | 337.23  |
| USA            | 136.02  | 159.04  | 221.16  | 289.27  | 232.42  |
| South Korea    | 82.16   | 93.25   | 88.90   | 88.90   | 110.87  |
| United Kingdom | 55.63   | 94.72   | 97.66   | 91.88   | 86.47   |
| Netherlands    | 65.30   | 65.49   | 82.21   | 103.39  | 84.15   |
| Thailand       | 33.99   | 48.15   | 48.86   | 44.59   | 64.93   |
| Poland         | 42.86   | 57.98   | 54.72   | 32.05   | 64.77   |
| France         | 31.12   | 32.66   | 35.93   | 66.51   | 61.72   |
| Belgium        | 26.12   | 27.36   | 34.20   | 39.50   | 50.10   |
| Germany        | 40.38   | 43.74   | 38.33   | 45.29   | 45.84   |
| Spain          | 58.99   | 50.94   | 47.28   | 71.51   | 41.08   |
| India          | 19.05   | 17.81   | 29.24   | 41.41   | 38.78   |

| Mexico          | 36.63 | 45.12 | 38.92 | 34.37 | 38.22 |
|-----------------|-------|-------|-------|-------|-------|
| Taipei, Chinese | 20.76 | 21.26 | 17.93 | 20.41 | 35.67 |
| Pakistan        | 33.76 | 33.31 | 36.29 | 37.64 | 33.83 |
| Canada          | 20.99 | 25.40 | 23.44 | 30.74 | 33.08 |
| Peru            | 16.26 | 6.77  | 10.56 | 16.17 | 32.54 |
| Singapore       | 18.18 | 11.99 | 12.27 | 18.85 | 29.61 |
| Denmark         | 9.04  | 7.26  | 12.80 | 16.56 | 25.40 |

Source: ITC Trade Map, 2023

## 4. Global Market Trends and Forecasts

#### 4.1 Market Overview

The global cocopeat market, valued at over USD 2.27 billion in 2022, is projected to reach 3.8 billion USD by 2031 with a CAGR of 4.4%. Manufacturers are strategically focusing on essential applications in agriculture, horticulture, floriculture, animal bedding/flooring, packaging and other industries.

#### 4.2 Global Competition

Indonesia stands at the forefront among global cocopeat suppliers, exporting approximately USD 500.27 million worth of this resource. Following closely, India earned around USD 344 million in 2022. Their involvement in this industry dates back to Sri Lanka's initial cocopeat exports.

While countries like Vietnam, Brazil, the Philippines, and Thailand traditionally focused on coconut kernel products, they've now ventured into cocopeat and fiber production. This shift poses a challenge to Sri Lanka's cocopeat exports, intensifying price competition due to these countries' low-cost exports of cocopeat products to the global market.

As seen in Tables 2 and 3, nations such as China, the Netherlands, Russia, and Kenya function as reexporters within the cocopeat industry. Their role creates both opportunities and challenges for us. On one hand, their re-exporting activities open up new avenues for market expansion and trade partnerships. However, on the other hand, this also presents potential threats as they might influence market dynamics and competition, impacting our position within the industry.

#### 4.3 Global Price Fluctuation

In recent years, the global coir pith market has witnessed significant price fluctuations due to various factors. In 2022, according to the International Coconut Community (ICC), all markets encountered a decline in prices throughout the year. The prices of coir and coir-based products, including cocopeat, experienced an average drop of 68%.

This decline was primarily attributed to the industry's heavy dependence on the Chinese market for raw materials. The outbreak of the Covid-19 pandemic resulted in the closure of the Chinese market, disrupting the supply chain for coir fiber and causing a substantial decrease in demand. This disruption significantly impacted prices, leading to substantial discounts observed across the market.

## 4.4 Global Trends & Opportunities

#### I. Eco-friendly farming

There has been a notable increase in emphasis on eco-friendly farming practices that prioritize minimal environmental impact. In this regard, farmers are significantly focused on reducing soil damage by minimizing the use of chemicals. Such initiatives have garnered substantial support within the European region. Due to its extended shelf-life and reusability, farmers increasingly prefer cocopeat over other growing media.

#### II. Rising population and concerns on food security

With the global population surpassing 8 billion, the challenge of providing sufficient food for everyone has become more pronounced. Issues related to food security have gained prominence, particularly in the wake of unexpected events such as the COVID-19 pandemic. Consequently, many nations are prioritizing the pursuit of sustainable year-round crop production to address these concerns. The conventional concept of seasonal crops is now outdated, as efforts are underway to ensure the continuous production of nearly all crops throughout the year, regardless of specific climatic conditions. Such initiatives are receiving elevated importance on the global stage. When coupled with a commitment to sustainability and environmental friendliness, a myriad of opportunities has opened up for cocopeat to explore and tap into global markets.

#### III. Conversion and acceptance of modern farming techniques

With a heightened emphasis on consistent, high-quality year-round production and space optimization, many nations are transitioning to polyhouse farming, vertical farming, and hydroponic farming. These innovative farming techniques are expected to drive the demand for cocopeat in the upcoming years. New trade events on global platforms are currently being organized, focusing on vertical farming, greenhouse technologies, and other advancements in farming techniques. These events are garnering significant attention from a diverse range of stakeholders interested in exploring the latest developments in agriculture.

#### IV. Organic farming

The surging demand for organically produced goods has reached unprecedented levels, and cocopeat has emerged as an ideal product to meet this demand. Its compatibility with organic farming practices and eco-friendly characteristics have positioned cocopeat as a sought-after choice in organic agriculture. Cocopeat offers an array of benefits beyond its role as a growing medium. It provides essential phytohormones that effectively regulate various aspects of plant growth, development, reproductive cycles, and longevity. Moreover, cocopeat contributes to enhancing the native microflora within the soil, augmenting the soil's cation exchange capacity, and fostering increased microbiological activities. Its reusable nature for up to five years adds to its sustainability, and once its primary use is complete, it serves as an excellent component for composting, completing its lifecycle in an environmentally friendly manner.

#### V. More advantages compared to substitutes (peat moss/ rockwool)

Cocopeat stands out among traditional growing media like rock wool and peat moss due to several key advantages. Its extraction has a minimal environmental impact and causes reduced damage upon disposal. Additionally, cocopeat is easy to handle, less prone to compaction, and suits a wide variety of crops, making it a versatile choice.

Beyond its role as a growing medium, cocopeat offers a multitude of benefits. It provides vital phytohormones that effectively regulate numerous aspects of plant growth, development, and

reproductive cycles while contributing to soil health by enhancing native microflora, increasing cation exchange capacity, and promoting microbiological activities. Its reusability for up to five years adds to its sustainability, and post-use, it serves as an excellent composting component, completing its lifecycle in an eco-friendly manner.

Due to these advantages, cocopeat has been steadily gaining prominence in soil-less farming, gradually replacing other conventional growing media.

## VI. Cannabis cultivation

The global surge in cannabis cultivation, driven by changing regulations and increased recognition of its medicinal and recreational value, has opened doors for cocopeat. As a reliable growing medium, cocopeat's export for cannabis cultivation, indoors or outdoors, presents a lucrative opportunity. With the expanding cannabis market and evolving regulations, cocopeat stands well-positioned to cater to this growing demand.

## VII. Ready-to-grow peat products

Tailored to the specific demands and needs of plants, considering factors such as soil composition, climate conditions, and the plant's growth stage, readily usable peat products are being developed. These products eliminate the necessity for pH, electrical conductivity (EC), and nutrient adjustments since these properties are pre-adjusted to meet the precise requirements of the plant or its growth stage. Notably, this is particularly advantageous for instant applications, such as nursery plugs designed for the efficient cultivation of strawberry seedlings.

## VIII. Demand for "black-peat"

A notable trend in the global market is the increasing demand for "black peat," a type of cocopeat that naturally undergoes decomposition, resulting in a composted texture and a dark brown/black color. Over time, these peats have been naturally washed by rainwater, rendering them with inherent properties that negate the need for chemical adjustments typically required in raw or fresh cocopeat. This characteristic makes black peat a sought-after choice, offering a distinctive quality shaped by natural processes and environmental factors.

# 4.5 Key market segments to focus

i. Horticulture/floriculture segment



#### ii. Green house constructors



# iii. Pet industry



iv. Home gardening/Indoor gardening/decorations



#### **4.5 Regional Opportunities**

Asia Pacific, North America, and Europe present lucrative growth opportunities. India's agricultural sector's rapid growth, North America's acceptance of modern farming techniques, and Europe's environmental-friendly policies contribute to the industry's expansion.



Figure 3: Region wise export potential of cocopeat Source: ITC Trade Map, 2023



Figure 4: Market wise potential for cocopeat exports

Source: ITC Trade Map, 2023

#### 4.6 Major international trade fairs for cocopeat products

- IPM Agritek Usbekistan
- Agritechnica , Hanover Germany
- London International Landscaping fair- London
- International Floriculture Trade Fair Netherlands
- Floriade Expo- Netherlands
- Greentech Amsterdam Netherlands
- Landscape Istanbul- Turkey
- Greentech Americas Mexico
- Gowtech Turkey
- Essen Germany
- agriteQ- Doha

## 5. and Future Outlook

#### **5.1 Recommendations**

- Diversification of Product Portfolio: Continue diversifying the range of cocopeat products to cater to various industries and their specific needs. Customized blends, variations in size and composition -production of plant specific ready-to-grow peat products, can capture niche markets and offer a competitive edge.
- Quality Assurance and Innovation: Maintain a strong focus on quality control and innovation to uphold the intrinsic qualities that make Sri Lankan cocopeat unique. Developing enhanced formulations or value-added products can attract new market segments.
- Market Penetration and Partnerships: Explore new markets and strengthen existing partnerships. Engage in strategic collaborations with agricultural research institutions, governments, and private enterprises to further promote cocopeat's advantages and expand its applications.
- Sustainability Practices: Uphold sustainable practices throughout the production process to bolster the eco-friendly reputation of cocopeat.
- Market Intelligence and Adaptation: Stay vigilant about global market trends, demand shifts, and evolving consumer preferences. Adapt swiftly to changes and leverage technological advancements for efficient production and market responsiveness.

## **5.2 Conclusion:**

Sri Lanka's cocopeat industry has transformed from managing waste to producing a valuable commodity with substantial contributions to the economy. The evolution from a cottage industry to a commercial enterprise, has propelled the country into a leading position as the 3<sup>rd</sup> largest cocopeat exporter.

Despite facing challenges such as global price fluctuations and heightened competition from emerging producers, Sri Lanka's cocopeat retains a strong market presence due to its superior qualities and inherent advantages. The industry's growth trajectory aligns with global trends, emphasizing eco-friendly farming, sustainable practices, and the rising demand for organic products.

To maintain and enhance this position, continuous innovation, market diversification, sustainability measures, and strategic partnerships will be pivotal. Sri Lanka's cocopeat industry stands poised for further growth by embracing these recommendations and leveraging emerging opportunities in various regional and global markets.

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