

## Gendered and caste tragedies in the coir industries: Evidence from Kerala

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**Abstract:** This study examines the historical evolution of women's participation in Kerala's coir industry, focusing on their role in the spinning sector and the socio-economic contexts shaping their engagement. The research relies on secondary data collected from government reports and previous scholarly studies. A historical and comparative approach was used to analyze women's labor participation across the 1980s, 1990s, 2000s, 2010s, and 2020s. The analysis shows that women remain a significant part of the coir workforce despite persistent challenges such as low wages, gender-based discrimination, and limited opportunities for advancement. Globalization, technological changes, and government policies have significantly influenced their employment patterns, leading to both opportunities and constraints. Women's continued participation in coir production reflects resilience and underscores their struggle for economic empowerment, social recognition, and gender equality. The findings highlight the need for policy interventions to ensure fair wages, strengthen social protection, and promote inclusive development for women in traditional industries.

**Keywords:** Coir Industries, Gendered Analysis, Marginalised, Traditional Sector, Women's work.

### 1. Introduction

The coir industry, one of Kerala's traditional industries, has provided labor for numerous individuals and continues to do so to this day. When examining the impact of coir industries on Keralite' daily lives, we must look beyond the present, as they have played a significant role in the daily lives of many people, particularly those who are marginalized. The coir industry is currently concentrated mainly in the Alappuzha region. However, this wasn't always the case. Before globalization and industrialization, trade was based on coastal ports. These coir products are primarily transported through water sources. So that's an early period. Foreigners came and purchased coir from Kerala. This coir, known by various names in the north, south, and central coastal regions, gained fame and popularity even among foreigners. The traditional coir enterprises in Kerala has ancient origins, as shown by the accounts of Arab writings and early European merchants. Currently in its first phase, it operates as a cottage industry, employing over half a million individuals, mostly from disadvantaged societal segments. The first factory for product manufacturing seems to have been established by a European entrepreneur called "Darrgh." He established his business in 1859 at Alleppey, Kerala. Subsequently, further foreigners arrived, leading to the establishment of many enterprises, such as Pierce Lesley & Co., William Goodacre & Sons, Volkat Brothers, and Aspinwall & Co. The industry thrived in Alleppey and its vicinity. The presence of inexpensive labour, an abundance of raw resources, and a robust infrastructure environment facilitated industrial expansion.( Report on Coir Yarn Spinning Units of Panoor Ward,2015).

Various research works has been conducted in the field coir and its related fields. The spinning segment of the coir industry employs 82.5% of workers, mostly women [1]. The coir industry employs a total of 19,613 individuals, with 18,200 being female and 1,413 being male. Women are the predominant workforce in conventional job sectors in Kerala. [2]. The fact that women are more

prevalent in the spinning profession in Kerala's coir sector is shown by this. It is essential to look back at the past in order to conduct an analysis of the current state of the feminization of this industry and the several key challenges that it has encountered. The current research has defined various goals in order to accomplish this. This is shown in the following:

### 1.1. Objectives of the Study

- Narrate the historical evolution of women's participation in traditional industry like coir in Kerala and explores the related social contexts about that. (Time periods -1980s, 1990s, 2000s, 2010s, and 2020s.)
- Emphasizes the difficulties encountered by women workers in this field with a gender-perspective
- Examines the effects of globalization, technological advancements, on women's participation in the coir sector.
- With a gender perspective, the objective is to examine the primary factors that contribute to the increased number of workers in this sector and to enquire about the underlying causes of this phenomenon.

## 2. Methodology

The study largely used diverse data from governmental sources and prior studies. The study mostly used diverse data sourced from governmental sources and prior studies. The data was meticulously examined to discern trends and patterns, yielding significant insights into the subject matter. The results were then used to formulate conclusions and provide suggestions for future study or policy initiatives. The research sought to enhance the current knowledge base and provide viable solutions to the identified difficulties. The meticulous examination of facts facilitated an extensive comprehension of the topic. One of the primary obstacles encountered throughout the investigation is the lack of emphasis on data categorised by gender. Only categorised reports of this kind were used in the current investigation.

### 2.1. Reflections on the significance of women's work in Kerala

Kerala presents an intriguing contradiction of economic stagnation and social progress. Despite having more prestige and standing than women in other regions of the nation, women in the state participate in the economy at relatively low rates. In Kerala, a majority of educated women are employed full-time in the unorganised sector, and their share is on the rise. However, their efforts remain unacknowledged and unrecorded. Kerala is a female-dominated state, with a female population of 52% according to the 2011 census. The labour force participation rate is lower than men. The female work force is disproportionately concentrated in the unorganised sector. Despite educational advancements, women's jobs are multifaceted and not stable [3]. Kerala has not been immune to the transitory factors that have been brought about by structural changes in the Indian economy, which were started under the New Economic Reforms in 1991. Neoliberalism established a new paradigm of occupational status characterised by a sophisticated and diverse division of labour. It is thought that many of these changes will have a significant impact on the types and amounts of work and economic activity involvement, especially for women.

Radha Devi [4] found that women in Kerala mostly engage in professional or semi-skilled professions, and their educational qualifications significantly above those of other working women. Marriage and family were shown not to affect the employment participation rate; however, familial disruption due to divorce or separation did have an impact. It encompasses several interconnected and underlying elements. The elevated developmental indicators of Kerala, along with decreased workforce engagement and enhanced educational attainment among women, are affected by the subjection of women and the male breadwinner paradigm. Panda [5] observed that Kerala's low levels of female

economic participation are partially attributable to gender discrimination in the labour market, specifically regarding occupational sex-segregation. Increased women's workforce participation will improve several developmental indicators related to women's growth and empowerment. Psacharopoulos and Tzannatos [6] observed that the proportion of women in the workforce is favourably influenced by the rate of economic development and the level of education.

The societal impacts of women's employment are equally considerable. Employment options outside the home diminish women's economic reliance on males, hence enhancing their financial authority inside the household. The participation of women in the workforce would transform the notion of the male breadwinner and significantly diminish cultural prejudices about women's roles, which principally contribute to the undervaluation of women's labour. Women's earnings provide women with access to and control over an independent income, so making their economic contribution to the home both visible and significant Basu [7].

Nagaraj [8] contends that elevated unemployment rates among women in states like Kerala, compared to less developed states such as Uttar Pradesh, Madhya Pradesh, and Rajasthan, are mostly attributable to limitations in 'talent utilisation'; job searchers may be reluctant to take positions at the salaries provided. Over time, this may dissuade women from participating in the work field, leading them to choose the role of housewives. Azeez and Akhtar [9] investigate the correlation between education and unemployment in Kerala, aiming to elucidate the reasons behind the state's elevated unemployment rates despite its high literacy levels. They assert that the current rise in educated unemployment has been instigated by Kerala itself. The state has traditionally allocated substantial resources to education, but has invested comparatively little in productive sectors like as industry and agriculture. Consequently, despite a significant number of educated individuals, the scarcity of chances inside the State has compelled the majority of youngsters to seek employment abroad, while some resort to temporary work or remain jobless.

The NSSO 64th round report combines numerous techniques to assess labour force participation. The PS method indicates that women's labour force participation was markedly low in both rural and urban regions. Several studies have provided strong evidence that educated women have different choices for jobs [10, 11]. This job choice partly elucidates the elevated prevalence of educated unemployment among women in rural regions. Employment opportunities in remote locations may not align with the preferences of educated women, leading some to choose unemployment. Educated unemployment had a markedly different impact on women residing in rural vs urban locations. The unemployment rate among educated women in rural areas is much greater than that of their counterparts in urban districts. Conversely, regarding general unemployment, women in urban regions have a higher jobless rate than their rural counterparts. This indicates a disparity between the types of jobs available to educated women and those preferred by uneducated women. Educated women in rural regions may have restricted work prospects owing to inadequate infrastructure and resources, and those in metropolitan areas may find it challenging to get positions commensurate with their degrees. This gap underscores the need for tailored efforts to tackle the distinct issues encountered by educated women across various locations. A potential answer is to provide skill development programs customised for educated women in rural regions to enhance their employability. Furthermore, generating additional career possibilities in fields requiring advanced education may assist in closing the disparity between urban and rural female employment rates. A holistic strategy that takes into account the distinct situations of educated women in both rural and urban settings is crucial for advancing gender equality in the workforce. By rectifying these inequities, society may harness the whole potential of all its members, irrespective of their geographic location. This may result in economic expansion and social progress, together with a more fair allocation of resources and opportunities. Policymakers and stakeholders must cooperate to adopt targeted policies that enable educated women in rural regions to engage fully in the workforce. This may include offering access to high-quality education, skills development, and employment opportunities particularly designed to meet their requirements.

Investing in the potential of educated women in rural regions may lead to enhanced gender equality and general prosperity for society.

Historically, there exists a strong correlation between castes and occupations. Neo-liberalism, political awareness, education, and modernisation influence caste and occupational mobility. The Land Reforms Act, Green Revolution, and quota system in Kerala during the 1960s facilitated socio-economic progress. It diminishes the correlation between caste and occupational rank. The educated Scheduled Castes of Kerala deliberately disregard their identity and want to assimilate with higher castes. They adopted upper caste views and embraced their practices, rituals, beliefs, and lifestyle [12]. Women belonging to lower castes (scheduled castes/scheduled tribes) and other backward castes (OBC)) exhibited a greater incidence of poor health compared to women from advanced castes. Health disparities were seen across socioeconomic factors, including schooling, women's work status, and family landholdings. The multilevel multinomial models demonstrate that the relationships between socioeconomic variables and health differ by caste. Among SC/ST and OBC women, socioeconomic determinants had a "magnifying" impact, but among advance caste women, a "buffering" effect was seen. Among women of lower castes, the correlations between socioeconomic characteristics and self-assessed health are hierarchical, with the largest relationships seen when contrasting the lowest and best health evaluations [13].

Ashik [14] observed that the workforce in coir industries mostly comprises individuals from the OBC caste, with the least representation from the general caste, followed by a secondary presence from the SC/ST caste. Meera [15] depicts the coir industry in Kerala and the caste structure. She said that the Ezhava caste in Kerala constituted the predominant segment of the coir labour force. The 1921 Industrial Census indicated that 65 percent of workers in the coir weaving industry were Ezhavas. In the conventional Hindu caste order, the Ezhavas were positioned under the Nairs and Namboodiri Brahmins. They were compelled to keep a distance of 32 feet from the Namboodiris. The Pulayyas and Cherumas were positioned below the Ezhavas. When a Namboodiri went by, the Ezhava was compelled to crouch, tremble, and cover his/her mouth with a hand. Footwear and umbrellas were prohibited. Ezhava women were prohibited from covering their breasts, which led to a struggle in Cochin. They have separate water tanks and were prohibited from milking cows. The Ezhavas mostly consisted of landless individuals, minor tenants, agricultural labourers, and toddy tappers.

According to Isaac [16] the upper castes of Kerala, who made up approximately twenty percent of Travancore's population in the 1921 census but were almost entirely missing from the coir workforce. A little less than one percent of the coir workforce belonged to the Nayars, the largest savarna caste and accounting for nearly seventeen percent of the overall population. Ezhava people made up the majority of the workforce (65%), while making up fewer than seventeen percent of the overall population. Keep remembering that the Ezhavas' caste occupations included things like growing coconuts and making other goods from them. A study conducted in 2023 by Antony and Biju revealed that 86% of coir workers are women, and 44% of the workers fall within the age bracket of 50-60. Social categorisation of coir workers indicates that 42% are categorised as OBC, followed by 28% of the General category.

Investigations conducted in the past have shown evidence of the caste system that exists within the coir industry. It is the Ezhava caste that is the source of the bulk of the women who are working in the workplace. Additionally, their low caste standing further contributes to their marginalisation in society, since they have already been deprived of essential rights and resources over the course of many years. Despite the fact that social reform movements have taken place, they continue to face a variety of problems that are connected to caste, gender, and employment. Despite the fact that social reform organisations have made steps to address these issues, there are still barriers that women of the Ezhava caste face while working in the coir industry. Despite the fact that there have been significant gains, prejudice that pertains to caste, gender, and professional qualities continues to have an impact on their means of subsistence and their general well-being.

On the basis of this background knowledge, the present article is making an effort to get an understanding of the condition those women workers have been in within the coir industries throughout the course of the last four decades. The purpose of this research is to investigate the patterns, difficulties, and possibilities that women have encountered in the coir sector throughout the course of time. We are able to acquire a better understanding of the progress that has been made and the obstacles that women workers in this industry face by analysing the changes that have occurred in regulations, social norms, and economic considerations. Additionally, the study will investigate the influence that globalisation and technical improvements have had on the roles that women play in the coir business as well as the experiences that they have had. Furthermore, it will study possible solutions for increasing gender equality and empowerment within this particular sector of the economy. Furthermore, in order to give a thorough picture of the experiences that women have in the coir business, the research will analyse the intersectionality of gender with other characteristics such as caste, class, and education level. Through the identification of critical areas for improvement and the implementation of focused interventions, we may work towards the goal of establishing an environment that is more inclusive and equitable for women working in this industry.

### 2.2. Reviewing the Status of Women Coir Workers in Kerala from 1980 to 2020

For the purpose of gaining a better knowledge of the position of women workers, this section of the present study looked at a variety of data that had been previously published in the field of coir workers and was used to analyze the data. Globalization has arrived in the interim period between these two times. It had an impact on the field as well. Therefore, the repercussions of it have also been seen in the coir processing sectors. This research begins by doing an analysis of the report that was compiled from surveys of coir workers. During that time period, it will provide an idea of the male and female workers who were working with various age groups.

**Table 1.**  
Coir Workers in Kerala During 1981.

Age Group	Number of workers		Total
	Male	Female	
Below 15 years	1375	4642	6017
15 to60 years	38159	214989	253148
60 years and above	5145	19168	24313
All ages	44679	238799	283478

### 2.3. Report on Survey of Coir Workers-1981, Directorate of Economics and Statistics, Government of Kerala.

The data indicates that a greater proportion of the workforce during that period consisted of women compared to men. The majority of the workforce falls within the age range of 15 to 60 years. However, individuals over sixty also contributed to this traditional industrial sector. A study conducted by Gulati [17] revealed that children are engaged in this sector, with a significant proportion of the workforce comprising women and individuals from the Ezhava caste. It is evident that women and children are increasingly engaged in this sector. Workers were included from all age groups. It presents itself as a manual piece-rate system; coir spinning generated income for deprived individuals, yet it naturally exploited them through the piece-rate wages. The feminization of labor presents a distinct aspect, closely linked to the phenomenon of feminization of poverty. The feminization of poverty goes beyond mere statistical growth; it demonstrates the complex connection between the social and economic oppression of women Menon-Sen [18].

Shah, et al. [19] posited that the new economic policy initiated in the 1980s, indicating that industrial restructuring began during that period. The social and political implications of these policies affected women's lives and work. Taking a glance at the present state of the coir work, it is clear that beginning during that time period, this sector began to experience challenges as a result of the implementation of new economic policies. The problem is still present in the report from 1988 as well.

**Table 2.**  
Details of coir workers of Kerala in 1988.

Number of coir households	Average of coir workers per household	Total coir workers in Kerala		
		Male	Female	Total
212813	2	60601	322793	383394

*2.4. Report on coir workers census in Kerala 1988, Department of Economics and Statistics, Government of Kerala.*

The popularity of coir employment in Kerala is shown by the fact that the average number of coir workers per family in Kerala was two, as stated in the report on the census of coir workers in Kerala in 1988. According to the survey, it is clear that 84 percent of the workforce is comprised of female employees. Isaac and Raghavan [20] noted that an unsettling factor about coir industries of Kerala is the distinctive gender segregation of work that currently exists in the fibre sector. Although all the workers involved in manual fibre tasks are female, the job in the mill is mostly done by males. This gender-based segregation in the workplace is mirrored in both the horizontal and vertical aspects of the working relationship.

Horizontal segregation is often portrayed as the unequal distribution of women and men across different fields of work and professions. Additionally, there is the possibility of vertical employment segregation, which involves gender differences in jobs and functions while also including different in terms of job progression opportunities or statuses [2]. There is a lot of complexity around the employment pattern in the state, especially with relation to the employment of women. Several reasons, including those related to politics, economics, society, and demographics, have contributed to this scenario. A paradoxical situation has arisen as a consequence of the fact that the rate of social development in Kerala has greatly outpaced the rate of economic growth. The participation of women in economic activities has been encouraged as a result. On the other hand, structural changes in the economy have resulted in the casualization of the female labour force and have put considerable constraints on the prospects available to women employed in higher-level positions [11]. There is a similar phenomenon occurring with regard to caste. One of the distinguishing characteristics of the process of economic restructuring among the many castes is the inclusion of class growth within the framework of caste. On the other hand, as compared to the experiences of other castes and community groups, the lowest caste, which traditionally constituted the dependent class of agricultural labourers, has essentially little upward occupational mobility and almost no class reorganisation in Kerala Sivanandan [21].

Rammohan [22] noticed in coir sector of Kerala, The raw husk is transported to the backwater side, while the retted husk is returned to the defibrillation site by women. Retting is primarily performed by males of the 'out' castes (Pulayar), with the assistance of women of the 'low' (primarily Ezhavar) and 'out' castes. Defibring, the second sub-operation, is the process of preparing fibre from retted grain. The fibre is separated from the pith by beating the retted hull with a pestle (kottuvadi). This labour was performed by women who settled on the backwater side. The majority of them are from the 'low' castes, of which the majority are Ezhavar. According to Thressia [23] caste, gender, and socioeconomic status do not all equally benefit from improvements in quality of life. The research revealed that different societal groups often have different cultural perspectives on and interpretations of the discourses around health and development. Examining the cashew processing sector High rates of illiteracy, poverty, illness, infertility, gender-based violence, caste-based inequality, and limited access to healthcare and political support are just a few of the difficulties faced by female labourers. Disparate gender power dynamics are shaped by larger structural inequities and are detrimental to women's health. These women have common issues that are deeply ingrained in social structures and conventions. Overcoming these problems calls for an integrated approach that tackles issues related to individual health as well as the social barriers that uphold inequality. Establishing programs and policies that address the underlying causes of these disparities—such as the advancement of gender

equality, economic empowerment, and education—is crucial. By addressing these systemic inequalities, we can promote a fairer community where every individual has the opportunity to thrive. Workers in Kerala's coir work, a historic sector similar to the cashew industry, are in need of assistance and resources to enhance their standard of living and end the cycle of unfavorable living circumstances. They need to be given the authority to pursue possibilities for training and education.

In addition to all of the factors when we examine the condition of the coir business over the previous ten years in order to gain a clear image of the present situation, one of the most important reports was published during that time period. It is noted in the Report on Coir Yarn Spinning Units of Panoor Ward [24] that the coir industry in India employs around seven lakh coir labourers. The bulk of these labourers come from rural areas and belong to economically disadvantaged groups. Additionally, women make up seventy percent of the labour force. When looking at the employment data for the years 2010–2011, 2011–2012, 2012–2013, and 2013–2014, it is clear that there has been a decline in the number of younger people and newcomers working in the coir business. This is visible when the context of Kerala is taken into consideration. According to the investigation that was conducted about the states, Kerala had the greatest share, which was 65.28 percent.

**Table 3.**

Details of coir workers in 2015.

Women workers (%)	Male workers (%)	Total (%)
52.91%	47.08%	100

Source: Executive-Summary-Survey-of-Coir-Industries-in-India.

According to the Executive Summary Survey of Coir Industries in India, the following table provides information on the workers who work with coir. The fact that women are higher than in this field is shown by this. Given this, a great number of reasons were concealed. According to Parida and Raman [25]. Kerala is the Indian state that takes the top spot in terms of the amount of money it receives from abroad remittances. The indigenous low-skilled labour market in Kerala is negatively impacted by large-scale emigration and the subsequent improvement in living standards that are a direct outcome of this phenomenon. As a result of a lack of young workers brought on by emigration and a rise in the percentage of the elderly population (the ageing crisis), the supply of low skilled workers in Kerala has been severely decreased. This is due to the fact that the state is experiencing an ageing crisis. Nevertheless, the expansion of labour-intensive industries and the rise of private investment in housing and construction (induced by remittances) have combined to increase Kerala's need for workers with low and semi-skilled levels of expertise. According to Mehrotra and Parida [26] a significant number of state migrant workers went to Kerala, either permanently or temporarily, in order to rectify the demand-supply imbalance described above. It is because of this that the coir business is experiencing a scarcity of labour force, which in turn has an impact on the growth of technology. Hand spinning is utilised by the majority of women who work in the spinning industry, which results in a decrease in both productivity and pay for these women. The effects of globalisation and young migration, as well as the progression of education and attitudes, all have an impact on that.

The employment market in Kerala, much like the labour markets in other regions of the nation, is characterised by gender-based disparities, with women having a disproportionately high presence in the informal labour market. Nevertheless, a distinctive and distinguishing characteristic of the labour market in Kerala is the unionisation of workers in unorganised sectors, which includes the most important traditional industry, coir, and subsequently other traditional sectors, such as cashew and agriculture, in which the proportion of women workers is extremely high [27]. Although it is lower than the pay rate for male workers, the average wage rate for female workers in the state has been higher than the wage rate for all of India for a considerable amount of time. Women workers who are registered with Welfare Fund Boards are eligible for certain social security benefits. This is yet another distinctive aspect of the labour market in Kerala, which is characterised by the presence of Welfare Fund Boards. On the other hand, a significant number of women are employed

in lower-level positions within the informal sector, and they are employed in a variety of jobs. A significant number of these jobs are characterised by a high degree of informality, as well as low salaries and terrible working conditions [28].

Prior research has shown the coir industry of Kerala more prominently than its historical and social effects. It has now become a sector characterised by piece rate pay, resulting in lower earnings for women. The gender segregation within this business, along with women's worse health status, poses significant challenges to their lives. Coir enterprises in Kerala lack crèche facilities, compelling pregnant mothers to bring their babies, who are then forced to sleep in unsanitary working circumstances. Despite Section 11A of the Maternity Benefit (Amendment) Act of 2017 mandating that all establishments with 50 or more employees offer a creche, some manufacturers violate this legal obligation. The societal obligations placed on women complicate the enforcement of regulations requiring creche or childcare facilities. Female workers from nuclear households have substantial difficulties in the lack of these essentials. Several factories primarily flout the provisions of the Act, claiming that they employ less than 50 permanent staff members Nagaraj [8].

Sahu, et al. [29] noted that, the coir fibre production process requires significant labour, often conducted in a loud and dusty environment, resulting in health issues for coir workers. Health issues include respiratory conditions such as sinusitis, bronchitis, and asthma, ocular difficulties, and various musculoskeletal disorders including headaches and back pain. Additionally, these workers experience ailments such as hand discomfort, leg pain, and knee pain. Hazard also includes cough, cold, and ocular and auditory issues. It is clear from this that the working conditions of coir workers are quite deplorable. They are finding it difficult to make ends meet in this industry because of decreasing pay and piece rates combined with an unsuitable working environment. Since there are more women working in this field, they must deal with Women have a legal right to a safe workplace. WCD Kerala argued that harassment on the basis of gender is a blatant violation of women's equality and dignity. Patriarchy, and the resulting conviction that men are superior to women and that certain forms of violence against them are acceptable, are the roots of it. The Constitution of India asserts that both women and men possess equal rights in social, economic, and political spheres, and forbids discrimination based on sex. The Constitution emphasises equal rights and opportunities across three dimensions: (i) social; (ii) economic; and (iii) political. The challenges these women face are not solely related to work; they have numerous other underlying causes and connections. The 'woman issue,' now referred to as the gender question in development, is seldom recalled in connection to the unequal gender relations rooted in socially assigned duties and obligations, and their consequences for women's agency in their own development [30].

### 3. Conclusion

Gender equality in the coir sector in Kerala is an urgent problem that requires attention. Although women are significant contributors to the sector, they often experience marginalisation and discrimination over compensation, working conditions, and prospects for growth. To foster a more equitable workplace, it is essential to enact regulations that rectify these inequities and guarantee fair representation and treatment for all employees. It is essential to consider the circumstances of coir working women in Kerala alongside the Kerala model of development. The working circumstances must be examined in the context of Kerala's high development indices. It is evaluating it. The concept of women's empowerment, within the broader framework of gender equality, has compelled the state to prioritise the coir industry. Its significance in Kerala's development is well recognised, and it is one of the primary traditional businesses mostly operated by women. Economic and social advancement cannot be fully achieved without a concomitant emphasis on the maintenance of gender equality. It is essential to tackle the fundamental reasons and solutions for a just work environment, rather than only concentrating on job-related challenges.



## Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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