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The Legacy of Yarn Dyed Cotton Lungis of Cuddalore, Tamil Nadu:
A Case Study

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Woven cotton textiles of India are ancient, diverse, and steeped in tradition, an amalgam of different ethnic influences, much like reflection of the country itself. Having had the advantage of possessing a unique raw material for more than 5000 years of recorded history, she has been a benefactress of her rich cotton textile heritage to the entire world. In a world where the trends are dictated by the mass producers and the consumers no longer make out the difference between the hand crafted and the machine made, it is a miracle that these textile traditions have been persistently passed on from generation to generation, still catering to the clothing requirements of the domestic and export requirements even though to a miniscule extent. In the wake of sustainable design campaign of twenty first century, the legacy of these textiles is waiting to be reinvented for a circular movement in the evolution of textiles.

This case study traces the origin of one such legendary fabric of India, the traditional yarn dyed hand woven, cotton lungi of Cuddalore, situated about 160 km from Chennai (formerly “Madras”) the capital of Tamil Nadu, the southernmost state of India (Fig. 1). This state had plethora of textiles techniques since Sangam era (1st century BC to 6th century AD)1. Be it the most exquisite of the textiles or the ubiquitous one meant for daily wear, each had a distinctive character as imbued by the hereditary weavers. From ancient times, Cuddalore is a seaport located along the historical Coromandel Coast which produced a rich variety of textiles that was much in demand outside India. It was part of South Arcot District in the Madras Presidency of British India2. Ethnographic field research was undertaken in the villages in Cuddalore district - Vandipalayam, Palayam, Pudupettai, Kurinjipadi and Naduveerpattu to observe the making of yarn dyed cotton lungis in the present day. A wide range of people including weavers, master weavers, third generation exporters, Government officials, and buyers from Malaysia and Indonesia were interviewed to explore the way in which urbanization, technological upgradation and changing market dynamics have influenced these textiles.

Figure 1. Location of Cuddalore District in Tamil Nadu, India

1Vijaya Ramaswamy, Textile and Weavers in Medieval South India (Delhi: Oxford, 1985), 1-7.
Origin & Prevalence of Lungi:

In India, the traditional garment styles from ancient time to the present day of both the genders is a simple drape, which leave the loom in a ready-to wear format. This could be a reflection of their simple lifestyle and also a wise solution for protecting oneself from the hot humid weather prevalent throughout the year. A Lungi (Hindi from Persian lungi) is an unstitched length of cloth draped around the waist and falling like a narrow skirt. As evidenced by the wealth of sculptures and paintings from ancient sites, the skirt cloth simply knotted at the waist could have initiated the simple Indian Lungi\(^3\). Originally, a small scarf of plaid worn across the shoulders by a male was referred to as "Loongee" and the unbleached white lower wrap tied around the waist or tucked in between the legs was called as "dhoti"\(^4\). In the company paintings of early nineteenth century, men belonging to a Muslim trading community known as "Lubbays" were depicted wearing coloured dhoties, patterned with checks and stripe, as a loose skirt and not tucking it between the legs\(^5\). This checked waist wrap became increasingly popular among Muslim men and came to be known as “lungi”. Later, it was passed into common use by Hindus largely as a kind of dress worn at home due to its comfort (Fig. 2). In twentieth century, the checked lungi was exported to several countries where Tamil migrants had settled\(^6\). The term lungi was coined probably to differentiate it from dhoti for trade purposes and it is also referred by various other trade names such as sarong, Kaili, Saaram/ Sarem, Comboy and Kambayam and usually measures 2m x 1.25m. Today, it exists in both sheet and tubular form. In India, it has evolved more as an informal dress for men and it is not a permitted dress code especially in certain formal places and Hindu temples. Interestingly, the people of Bangladesh, Brunei, Indonesia, Malaysia, Sri Lanka and Myanmar also can be seen in lungis though the names by which they are referred to, vary depending on the region. The origin of lungi in these countries was initiated due to the long period of interaction of textile trade which led to spread of Indian influence to the realm of costumes as well\(^7\).

Figure 2. Steps in Draping of a Tubular Lungi (i - iv) and Draping styles. Image by: Gayathri Kannan

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4 Forbes J Watson, "The Textile Manufactures and the Costumes of the People of India" (London, 1866), 21.
6 Amalsad, D.M. "The Development of the Madras Handkerchief and Lungi or Kaily Industry in Madras" Department of Industries Bulletin (22) (Madras, 1926), 7,8.
7 Hema Devare, "Cultural Implications of the Chola Maritime Fabric Trade with Southeast Asia "Nagapattinam to Suvarnadwipa (2009), 180.
Research studies in the history of yarn dyed checked cotton yardage of South India have indicated that it existed in Madras Presidency of South India hundreds of years before the British arrived. Variations on the basic checked or plaid cotton fabric are known by many names including Lungi Rumal, Lungi Madras, Rumal, Asia Rumal, Bandana, Guinea cloth, Real Madras Handkerchief (RMHK), bleeding Madras, Injiri, George cloth, Indian Madras and Madras checks, representing their use in Southeast Asia, Africa, Europe, the Middle East, the Caribbean, and the Americas & became closely associated with ritual observation all over the world. Although there were adaptations of various techniques and designs according to the market, they were invariably cotton fabrics with simplest of patterns such as stripes, checks and plaids. Originally, the checkered fabric was known as “Palicat” referring to Pulicat on the Coromandel Coast where it was produced. In the eighteenth century, the British called them as “Madras Checks” denoting the shift in the production province to Madras.

Evenson reports that the checked cotton cloth arrived at West Africa via the Portuguese maritime trade routes possibly even from the earliest days of trade in the 1400's. She further reports that it was not simply a trade commodity, but financed in whole or part, the two major global trade systems - the spice trade and the slave trade. John Guy reported on the earliest depiction of a cotton black and white check lungi from coastal south India as spotted in a painting commissioned at Lisbon, Portugal in the early seventeenth century. Southeast Asia imported the checked cotton cloth from ancient times which can be seen in the murals in temples. The checkered cotton cloth was traded to Malaya and was essential for all ceremonial occasions. The men had to wrap it around the waist before entering in to the mosque. It continues even now as an essential part of the formal dress of the Malay people. According to Maxwell, the generic Indonesian term for this form of plaid textiles, Kain Pelekat, refers to Pulicat on the Coromandel Coast referring to its provenance. She reports that the checked and plaid sarong found everywhere across the Indonesian islands stem from early imports of bales of simple patterns from south India and the Islamic influence further strengthened the use of stripes and checks here.

The handkerchiefs and lungis were the two main formats of these special lines of yarn dyed cotton hand woven fabrics which found large sale outside India. They were similar in the fact that they had a composition of 60s X 40s dyed cotton yarns. However, the size of the handkerchief was 36"x 8 yards with 80 ends by 128 picks per inch while the lungi measured 29" x91/2 yards with 88 ends by 84 picks and the wages for weaving lungi was about half as that of handkerchiefs. The principal markets for the lungis were Penang, Singapore, Burma and the Malay States while the handkerchief format famously known as Real Madras Handkerchief (RMHK) catered to the West African countries where it was reported to be culturally authenticated into the social structure of some of the communities there. In the beginning of

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8 Jasleen Dhamija, "The Geography of Indian Textiles: A study of the movement of Telia Rumal, Asia Rumal, RMKH, George cloth & Guinea Cloth" (1994), 5.
9 "Madras et têtesmarrées aux Antilles."
10 Sara Evenson, "Real Madras Handkerchief Trade Relations with West Africa 1498-1989" (1994), 14.
12 Dhamija, The Geography of Indian Textiles, 6.
13 Robyn Maxwell, Sari to Sarong: Five Hundred Years of Indian and Indonesian Textile Exchange, National Gallery of Australia (2003), 147.
twentieth century, the handloom lungi export outstripped its Handkerchief counterpart. In spite of introduction of its power loom products, the hand-woven lungi had a field of its own in the foreign market owing to the superiority of its weaving qualities which engaged about 45,000 looms involving 180,000 people in Madras Presidency. In the latter part of twentieth century, the dominant production of checked cloth was lungi cloth, which employed over half a million of people. It is a simple cloth which employs a number of skills and requires skilled artisans. Yet it has none of the exotic effect and thus very little is known about it.

**Origin of Lungi Weaving at Cuddalore:**

The inscriptive evidence show that Cuddalore was one of the chief weaving centers along the Coromandel Coast during the medieval South India AD 1000-1500. In Cuddalore, there is a mention of production of lungi, or long cloth as staple varieties in chain of handloom workshops of Dutch East India Company which extended from Southern Coromandel, through Pulicat in the centre of the coast, to Cuddalore in the early years of the decade 1610–20. Guinea cloth, of the same texture and weave as the long cloth, was woven of brightly colored cotton yarns and was manufactured in Cuddalore. It continued to be an important weaving centre during eighteenth and nineteenth centuries. Being a part of South Arcot District of the Madras Presidency in the British India, it has been stated as one of the chief centers of manufacture of lungi in the beginning of twentieth century and the colored cotton sarongs were exported to the Straits Settlement, Ceylon, Federated Malay States, Java, Sumatra, Borneo, etc. In the last three decades of 20th century, due to rapid urbanisation, the lungi production was phased out in major handloom centers in Tamil Nadu such as Washermanpet, Saidapet, Anakaputur, Ami, Gummidipundi, Kundrathur, Thirumazhisai and Sulurpet in and around Chennai, the capital city of the state as well as Chenglepet and North Arcot districts. Cuddalore emerged as the primary centre of production of handloom lungis for export to Sri Lanka, Singapore, Malaysia, Indonesia and Middle Eastern markets.

The export of lungis from Cuddalore has always remained within the domain of Private agencies. Most of the export houses preferred prefixing the term "Palayacat" with their company name connoting the term "Palicat or Paliacate cloth" to establish the authenticity of their product in the Southeast Asian market. Until the early nineties, the export of handloom lungis was considered lucrative due to a fairly stable demand for lungis in Malaysia, Singapore, Sri Lanka and Indonesia markets and a well-established channel of distribution developed over a long period of time encompassing several generations. The affordable labor and easy adaptability of the handloom lungi production to the buyers' requirements, sustained the trade throughout the twentieth century. The stable foreign exchange rate along with 20% incentive which was offered by the Government of India till 1992 ensured very good returns to the exporters. Apart from the incentive, there was also a Duty Drawback of 4 % extended towards the export of handloom

17 Dhamija, The Geography of Indian Textiles, 7.
18 Ramaswamy, Textile and Weavers, 41.
19 Sinnappah Arasaratnam, "Merchants, Companies and Commerce on the Coromandel Coast 1650-1740" (1986), 6.
21 Mary Georgia, "Society and Economy of the French Colonies with Special Reference to Pondicherry in the Seventeenth and Eighteenth Centuries (A.D. 1674 - 1754)" (1996), 8.
products. As reported by certain third generation buying agents, there was a steady demand for checked cotton *lungis* in Malaysia and Indonesia from the beginning of twentieth century as most of the middle aged men wore checked cotton *lungi* on a day to day basis, while the younger generation wore *lungi* at the place of worship and at home. It was considered a very profitable business as there was a possibility of credit purchase and a consistent supply from long term reliable sources from India.

The handloom weaving in Cuddalore district has been carried out by more than fifty thousand families belonging to the weaving communities of *Sengunthar Kaikkolar* who are originally from Tamil Nadu and *Devanga, Saliya and Senigar* who migrated here possibly several hundreds of years ago from adjacent states of southern India. Being the hereditary craft, weaving was a preferred way of life here as it offered the possibility of working in one's house at one's own pace with the added facility of carrying out the work at any time while attending to the rain fed agriculture only for a few months in a year. The handloom weaving entails multiple pre-loom and post loom processes. Every single family member including the older generation of both the genders actively contributed within their capacity towards the various processes of this labor intensive craft thereby giving a sense of importance and a feeling of worthiness to each individual. At the macro level, the division of labor ensured not only the sustenance of the craft but also harmony in the society at large. In 1950, the weavers started forming co-operative societies which eventually enabled them to have better bargaining power and also be the beneficiaries of the government welfare programmes offered after independence of the country. Today, there are about 33 co-operative societies operating from this district and all the weavers belonging to this district have enrolled themselves as members of the societies while they continue to weave for the private agencies as well.

**Contemporary Handloom Cotton Lungi Weaving at Cuddalore:**

Ethnographic field research of the contemporary handloom weaving at various villages in Cuddalore revealed that the weaving tradition here seems to have remained the same since the beginning of twentieth century as reported by Amalsad. Almost after hundred years of time, the only major change noticed is the shift to synthetic dyes as opposed to natural dyes used then.

In the present day, the ecosystem for handloom *lungi* production and export involves three major stake holders, viz., the exporter, the master weaver and the weaver. The exporter generates the orders, arranges for yarns, dyeing of yarns and other pre-loom preparations, informs the design requirements to the master weaver, checks the quality of the final product and takes care of the shipment of goods. The master weaver own a number of looms which he may contract with one or more weavers and act as an intermediary between the individual weaver and the exporter. He coordinates production by supplying raw materials, assigning the designs to the weaver, renting out the looms and collecting the final product. It has been found that all the exporters, master weavers and weavers belong to the weaving communities of Tamil Nadu, viz., *Sengunthar Kaikkolar, Devanga, Saliya and Senigar*. The pre-preparations such as dyeing, preparation of reed and sizing are found to be out sourced from other communities.

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23 Ramaswamy, *Textile and Weavers*, 41.
Handloom Weaving Process:

Weaving is carried out in the weavers' house or in loom sheds constructed by the master weavers. The mill spun grey yarns in hank form are obtained from traders by the exporter. The counts of yarns generally used are 60s X 40s. Other popular counts are 60s X60s and 80s X 80s. Hank yarn dyeing is a predominant practice here. After scouring to remove the natural dirt, the yarns are dyed with Vat or Naphthol dyes. It is carried out in and around weaving villages by local dyeing experts. The traditional colors are red, blue, green, purple, maroon, etc. Yarns are normally dyed in darker shades to counteract the white especially in checked pattern.

The first preparatory process involves bobbin winding which involves converting the dyed yarn hanks into linear form in charkha which prepares the fixed yarn lengths for weaving (Fig: 3a). Eight lungis make one warp which measures 16m in length, 1.25m in width and weighs 2 kg. On an average, 20 minutes are required to wind a hank of yarn on to a bobbin. Typically 8 bobbins are required for one warp which fetches INR.39 to the winder, normally a woman from the weaver's household. The next step involves making the warp in ball form usually carried out by women, using a horizontal warping wheel (Fig: 3b). It basically prepares the complete length and the width of a warp with the lease. Four warps are normally prepared at a time which involves 32 bobbins. On an average, it takes about 2 hours to complete the process and the worker earns INR 176.

After the warping process, the ball warp is stretched to undergo sizing which is unique to handloom weaving. The sizing paste composed of rice starch and coconut oil is spread out on the stretched yarn with the help of special brushes made out of indigenous root fibers. Apart from protecting the warp against the stress it undergoes in the loom, the sizing applied on single warp at Cuddalore imparts a special handle to the fabric. It is normally carried out in open yards to accommodate the length of the warp sheet (Fig: 3c). It requires half an hour for four to six skilled people to complete the sizing of a single warp and the proceeds of INR 110 shared among themselves. The warp is wound in a ball form again once the sizing paste dries up.

Next step in the process is attaching the new warp to the old warp yarn preserved for continuing the new fabric (Fig: 4a). According to the design to be woven in the cloth, different colored warp yarns are issued to the weavers. The heald and reed set-up is taken outside the loom. Normally country cotton healds are used. The reed is composed of culms of Jowar plant and has a count of 80 dents. Design specifications are given by the exporters / master weavers to the weaver in terms of number of stripes (“Pattai” in Tamil meaning 'stripe') for the entire width of the lungi. The minimum number of stripes in the warp way is 5 and it may go up to 25 with
individual checkered pattern measuring 2 sq.in /5cm within the total width of 1.25m / 50” of the lungi. The weaver/ women at home piece up the new warp to the existing old ones which takes about 6 hours and they get paid INR 72.

After attaching the new warp with the old one, the entire set along with the harnesses and reed is brought out to the street. The ball warp is opened again and straightened into a sheet form. It is wound on to the warp beam and set in the loom. Yarn for weft is wound from the hank onto a bobbin and later onto a pirn using a charka. The pirn is later inserted into a shuttle for filling. Ten hanks of 40s count are required to weave one warp.

Weaving is carried out in a fly shuttle pit loom with 2 harnesses (Fig:4b). It is placed on the ground with its two peddles placed in a dug pit. The weaver sits half inside the pit and operates the two pedals to move the two harnesses up and down to form the shed through which the shuttle moves sideways to interlace the filling into the warp. The weaving of lungi involves simple plain weave and its derivatives. It takes about 3 hours to weave a meter of fabric and fetches an amount of around INR 150 per day. For weaving of one warp, the labor charges are shared between the weaver (78%), master weaver (13%), piecing of new warp to the old warp (6%) and pirn winder (3%). They claim this division of labor charges has remained the same for several generations.

Each lungi measures 2 m in length and 1.25 m in width. There is a bar like dividing portion (9”/23 cm) woven exactly in the centre called as “Kambam” which is normally woven with a combination of black & white or red and white (Fig: 5a & b). It is considered as an important feature equivalent to head of a lungi and called as “Kapala” in Southeast Asian countries. The two major classifications of checked pattern are "Half Color" which has any one color combined with white and "Full Color" which has a combination of 2 colors. In half colored version, the number of stripes in the warp way is always an odd number with the color white being used next to both selvedges which is reported to be a very sought after pattern in Malaysia (Fig:5a).

The other patterns that predominate are weft stripes locally known as Pidari, Warp ikats known as Katari which means 'to tie" (Fig: 5b) and a special checked pattern known as Payadi which means "mat". The distinct feature of Payadi checks is that it looks like a mat due to the 2X2 hopsack weave which imparts a heavy texture and has double ends on equal proportion of white and a darker shade of another color (Fig:5c). According to the exporters, Payadi lungi is popular in Indonesian market.
Though written records mention that lungi /long cloth was shipped from 1610 onwards from here to Southeast Asia, there is no real way of knowing what they had looked like at that time. Looking through the swatches in the form of pattern strips of 2" length from the entire width of the lungi preserved by some of the export houses from 1930 or so, claimed to be a several decades old, reveals that the predominant colors were blue, red and white and the traditional patterns included plains, stripes, checks and plaids which appeared to be very similar to the present day.

**Changes during the Last Two Decades:**

The handloom industry here experienced transformative events within the last decade of the twentieth century and the first decade of twenty first century. From mid-nineties, the biggest threat faced by the trade was competition from power looms. In India, Lungi was one of the products to be produced only by handloom sector as made mandatory by the Handloom Reservation of Articles for Production Act in 1985. It is a small, but important, protection for handloom weavers. However, as it requires expertise and experience to find out the difference between handloom and power loom fabrics, there were many instances of encroachment on the handloom sector. The power loom churned out more yardages of fabric at comparatively lower prices which captured a huge market share of handloom lungis. Although, initially, the power loom lungis existed with certain design limitation such as absence of Kambam / the centre dividing bar, it was rectified within a matter time for the stringent export markets. The Asian financial crisis of 1997-99 and the tsunami which struck at Indonesia and Cuddalore in December 2004 are among the other events that have left their indelible marks in this sector. The Asia currency crisis led to a substantial slowdown in the exports while the natural calamity claimed to have wiped away the trade links preserved for centuries. The trade was further exacerbated by the changing market dynamics overseas in the last decades of the twentieth century. Today, the handloom cotton lungis imported from India cater to a niche market for the customers belonging to the age group of 50 years and above. Although, handloom lungis are priced higher than those of power loom, a very small proportion from this age group prefer the former due to its better wearing quality and longer life. However, the majority cannot make out difference between the two and there is adulteration of handloom products through the use of power loom ones. The market for today's younger generation is lost as they prefer wearing western wear at home. In addition, Malaysia and Indonesia have started setting up their own power loom production units using synthetics fibers due to which exports of handloom lungis

25 Sinnappah, Merchants, Companies and Commerce on the Coromandel Coast, 9.
26 Reservation of Articles for Production Act, 1985 handlooms.nic.in/writereaddata/UploadFile/Act%201985.pdf.
from India suffered a setback. According to the exporters at Cuddalore, export of lungis from this region is just 10% of what it used to be before 2 decades. Within this miniscule percentage, 80 to 85 % is being catered by the power loom cotton lungis. Handloom lungi production and export is not considered as a cost effective venture anymore.

Accordingly, the number of handlooms here has dropped from 12,000 to a mere 2,000 in the past two decades. The current generation's declining interest in weaving coupled with the poor income it generates, has led to the number of active weaving families drop from around 50,000 to a little more than 1000 at present. The average age of a weaver today is 45 to 50 and it is still considered as a community specific activity of Sengunthar Kaikkolar, Devanga, Saliya and Senigar. A welcome trend to be noted is more women are taking up weaving as their part time profession to render additional income to the family. However, the heredity craft has not been passed on to their younger generation as the wages of weavers did not keep up with the inflation. During the course of time, most of them could get their younger generations educated who are well placed in the software industry. Even though the families are better placed economically, those who have looms in their houses continue to weave. As agriculture is not their other occupation these days, the less fortunate ones are engaged in assisting the professional chefs during weddings and other social gatherings. They seem to help in cutting vegetables, cooking, cleaning and serving of food that does not require any special expertise that fetches them good food and INR.300/day. It is said they earn more than they do from weaving.

Serving as light at the end of the tunnel, Kavita Parmar, an Indian designer based at Madrid, worked with lungi weavers of Cuddalore in 2010, while venturing in to sustainable fashion startup called IOU Project, a men’s and women’s label (IOWEYOU) which operates through e-commerce platform. The products have been developed using handloom checked Madras fabrics from the lungi weavers of Cuddalore and styled by heritage artisanal producers from Europe who turned this heritage fabric into beautiful contemporary apparels. According to Kavita, “there is billions of dollars’ worth of Madras checks sold on the planet, but most of the so called Madras doesn't come from Madras; So, to reindicate their authentic provenance we decided to work with the real Madras weavers from Cuddalore and it seemed unfair that the weavers would not get credit”. Aided with the traceability tool online, with the click of the button the consumers trace the identity of about 243 handloom weavers from Cuddalore who manufactured the particular product. There reported to be a greater demand worldwide and the clients are happy with the fabric quality. The IOU Project has been written about in more than 500,000 blogs worldwide, they have received numerous awards and a lot of industry recognition which clearly indicates that this is an idea which is accepted by the contemporary society.

In conclusion, this humble utilitarian handloom fabric with a rich legacy, is struggling to coexist with its mechanized counterpart during the past two decades due to various circumstantial eventualities elucidated. In the present period of time, enervated by the cookie-cutter products, the socially conscious consumers demand greater transparency with respect to provenance and how products are manufactured. They are more likely to choose products of lasting value with an authentic story. The best way forward to address this market demand is to create a new fashion vocabulary by harnessing the heritage techniques which have proved to be time-tested tools. Hope this movement channelizes this legendary fabric which is equipped with its eco-

27http://iouproject.com/
friendly footprints, low capital investment, flexible production, adaptable design variations and a rich heritage skills unavailable elsewhere in the world, to reinvent itself and to find its deserving place in the global market.

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