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DESIGNING A STATABLE SAFARI WEAR COLLECTION FOR YOUNG FEMALE TOURISTS IN SRI LANKA

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Abstract*—Sri Lanka is globally recognized for its wildlife, creating an increasing opportunity to engage young female tourists through fashion that respects both cultural and environmental aspects. As a result, a safari apparel line has been developed, drawing inspiration from the Sri Lankan leopard. This study examines the overlap of fashion and the safari tourism sector in Sri Lanka, concentrating on designing comfortable and modest travel garments for young women aged 25–30 from abroad who visit Sri Lanka as a safari location. The main goal of this project is to create a functional and visually appealing collection of safari clothing suitable for the spring and summer months in Sri Lanka while addressing the needs of sustainable applications for fabric material modification through setting biodegradable *aurwedic* fabric setting. A customer survey with 105 international female participants, including both past and potential visitors to Sri Lanka, revealed a demand for lack of a local safari apparel brand. These insights were instrumental in identifying the target demographic and guiding the design process. The theme was selected based on Sri Lanka's prominent position as a popular travel destination and current initiatives aimed at revitalizing its tourism sector. By connecting this collection to one of the nation's most significant natural attractions, the safari experience seeks to make a meaningful contribution to both the fashion industry and tourism. The Sri Lankan leopard, a native and endangered species, serves as the central influence, with its textures, rosette patterns, earthy hues, and agility shaping the design's visual and structural features. The collection incorporates breathable, skin-friendly materials like cotton twill to provide comfort in high UV conditions. Ayurvedic textiles are also included to reduce skin irritation and ensure sun protection. Moreover, methods such as screen printing, braiding with reeds, and separable garment components are utilized. Beyond just fashion, this project aims to foster environmentally friendly tourism.

Keywords: Safari wear, Leopard, Ayurvedic textiles, Tourism industry.

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I. INTRODUCTION

Fashion and travel are two dynamic sectors that continuously transform. As widely recognized, Sri Lanka is an internationally celebrated destination for wildlife, which presents a growing opportunity to attract young female travelers through fashion that is both culturally and environmentally conscious. Although Sri Lanka has a well-established wildlife and safari tourism sector, there is a prominent gap in the local market for safari clothing designed according to the functional, climatic, cultural and aesthetic requirements of female tourists that meets both functional and fashionable needs. Despite initial research indicating that most foreign visitors participate in wildlife tourism, they often encounter difficulties in sourcing appropriate clothing that meets their demands for modesty, comfort, and durability for outdoor safari experiences. Furthermore, eco-friendly design approaches are absent from Sri Lankan market. This project, general objective is to create a functional and aesthetically appropriate safari wear collection for young foreign ladies visiting Sri Lanka. Additionally, it serves to honor and reflect Sri Lanka's natural heritage and biodiversity, particularly drawing inspiration from the Sri Lankan Leopard (*Panthera pardus kotiya*) as the central visual and conceptual focus, translate characteristics into contemporary safari wear designs and to explore sustainable approaches to safari wear design using Sri Lankan natural and cultural resorces. There is limited research exploring integration of Sri Lankan inspired design elements, natural ayurvedic fabrics, culturally representative

techniques, and eco-friendly values rendered this project both timeless and significant within the ever-evolving landscape of safari apparel and tourism.

II. AIM AND METHODOLOGY

This project follows a mixed-methods research approach combination of both qualitative and quantitative elements to understand consumer needs and guide towards the positive process. Here the quantitative data were gathered by an online survey or a Google form questionnaire. The sample group included 105 international female participants, which under the age group of 25–30 from the UK, USA, Canada and Rumania. These are either previously visited Sri Lanka or addicted to safari tourism. When handling the questionnaire, it focused on the lifestyle, behavior, and the preferences of the participants carefully. Not only that it focused on safari tourism trends, climatic considerations, animal symbolism, fashion history, as well as practical design experiments with in Sri Lanka. These experiments involved fabric testing (Ayurvedic Fabric), print development (Screen Printing), braiding technique (Reeds leaves braiding) toile creation, and prototype sampling plus eco-friendly accessories (coconut-based, wooden, gem accessories) to provide good comfort ventilation and aesthetics value for the final collection.

A total of 85% of survey respondents expressed approval for the Safari wear collection, highlighting its modest style, comfort, and durability for outdoor safari adventures with an eco-friendly focus. This strong approval rating emphasized the collection's promising potential for market success and established a solid groundwork for future development and marketing strategies. Sri Lanka, alongside a competitive analysis of brands. By analyzing data obtained from both online and in-person surveys, insights into trends, customer feelings, and significant factors such as design attractiveness, fabric quality, color choices, and eco-friendly practices were uncovered. This involves gathering data on market size, major competitors, distribution methods, and new trends on the horizon. The research aims to pinpoint gaps in product offerings, as well as areas where traditional Sri Lankan craftsmanship and cultural elements are not adequately represented.

III.MATERIAL MODIFICATION

Two main materials of fabric used for this collection.one is cotton twill and the other one is PVC coated fabrics. Cotton twill was selected as the primary fabric for the safari wear collection due to its comfort, durability, breathability, moisture absorption, and practicality. Its diagonal weave structure provides good strength and resistance to abrasion, making it suitable for outdoor activities and prolonged use. The natural cotton fibre absorbs perspiration and allows air circulation, supporting comfort in warm environments. Its stable woven structure also makes it suitable for herbal treatments and natural textile finishes. Furthermore, the natural character of cotton complements the collection's nature-inspired, sustainable, and traditional Ayurvedic concept. PVC coated fabric was selected as the secondary material, particularly for the hooded overcoat and protective garment sections, due to its water resistance, durability, and abrasion resistance. Its structured surface provides protection from rain and wet conditions while adding a functional and contemporary appearance. When combined with breathable cotton twill, PVC-coated fabric helps create a balance between comfort and environmental protection, with each material being used according to the functional requirements of different garment areas. Table 1 shows the applied natural herbals to develop Ayurvedic fabric for the collection and its potentiality and practical usage for safari wear collection.

Table 1: Natural herbless that used to develop Ayurvedic fabric

Type of herb	Botanical name	Characteristics	Potential relevance to fabric
Turmeric	Curcuma longa	Antioxidant,antimicrobial,skin supporting properties	Contribute to natural color and bioactive compounds
Neem	Azadirachta indica	Cleansing.antimicrobial,skin purifying properties	For hygiene and odour control
Sandalwood	Santalum album	Cooling,calming,soothing,aromatic properties	Comfort and cooling development,increase natural fragrance
Aloe vera	Aloe barbadensis miller	Cooling,soothing,moisturizing,skin comfort	Provide a soft soothing effect

The application of natural herbs in the development of safari wear provides an opportunity to combine

traditional Ayurvedic knowledge with contemporary sustainable textile practices. Herbal treatments can add functional and sensory qualities to fabrics while reducing reliance on conventional chemical finishes. Turmeric (Curcuma longa), with its antioxidant and antimicrobial characteristics, can contribute natural coloration and potentially support hygienic textile applications. Neem (Azadirachta indica) is traditionally recognized for its antimicrobial and cleansing properties and may be relevant to safari garments where odour and hygiene management are important during outdoor use. Sandalwood (Santalum album), traditionally valued for its cooling, calming, soothing, and aromatic qualities, can enhance the sensory comfort and natural fragrance of garments. Aloe vera (Aloe barbadensis Miller) is associated with cooling, soothing, and moisturizing properties and may contribute to a softer and more comfortable fabric experience. Overall, incorporating these herbs supports nature-based textile development, responsible resource use, local knowledge preservation, and sustainable living practices. Their application can strengthen the ecological identity of safari wear while creating greater value through locally inspired, multifunctional, and culturally relevant textile products.

IV. RESULT AND DISCUSSION

Esthetic features of the fashion collection inspired with endemic and endangered Sri Lankan leopard (Figure 1: (a)), inspired by its solitary habits, camouflage, and versatility. The collection incorporates the leopard's unique fur pattern, muscular skin, and earthy colour tones into fabric prints and garment silhouettes.



(a) (b)

(c)

Figure 1: Concept, design & product development steps: (a) Inspiration: “Sri Lankan Leopard”, (b) concept & design development pages, (c) Handmade eco-friendly accessories (coconut-based, wooden, natural stone adornments, reed accessories).

The Google survey included 105 foreign female participants, with most of them belonging to the 25–30 age group (Figure 2: (a)), who had previously visited Sri Lanka or were interested in visiting Sri Lanka revealed that 64.8% have been on safari at least 1-2 times in their life, and over 96.2% (Figure 2: (b)) prefer jungle safari locations in Sri Lanka. Earthy tone fabrics were preferred for safari outfits (Figure 2: (c)). Lightweight, breathable fabrics such as cotton and linen were the most preferred, with over 75% of participants favouring clothing silhouettes as trousers and jackets for safari travel (Figure 2: (d)) to ensure free body movement and a sense of body protection. The survey also emphasizes Sri Lanka’s strong appeal as a safari destination.



(a) (b)

(c) (d)

Figure 2: results of customer survey

A collection of six safari outfits was developed considering practical travelling requirements in Sri Lanka, incorporating eco-friendly natural materials Final range of six outfits was included with cargo pants, cotton utility jackets, leopard-printed safari shirts, wide-leg shorts, wrap skirts, crop tops, raincoats, and belted pleated dresses. Materials like cotton twill, PVC, and artificial leather were chosen for comfort, durability, sustainability, and skin protection. Sustainable practices were reflected in the accessories and trims. (Figure 1 (b)).

A. Techniques used to develop the collection with sustainable practices

The collection integrates innovative and traditional textile techniques to enhance both the aesthetic and sustainable qualities of safari wear. Screen printing is employed to create customized leopard rosette-inspired patterns, reducing the need for mass-produced printed fabrics and enabling controlled application of colour and design.



(a) (b)

(c) (d)

Figure 3: Value added areas to fashion collection (a) Ayurvedic fabric dyeing process, (b) screen printing, (c)Reeds braiding practices, (d) Reed braided designs.

This technique supports the development of distinctive surface patterns while allowing printing to be applied only where required, potentially minimizing unnecessary material and dye consumption. The use of nature-inspired motifs also strengthens the visual relationship between the garments and the safari environment. Traditional reed-leaf braiding is incorporated into selected fashion accessories, providing an alternative to synthetic and non-biodegradable materials commonly used in contemporary accessories. The use of indigenous reed leaves encourages the utilization of locally available natural resources while supporting Sri Lankan artisanal knowledge and traditional craft practices. Integrating these techniques into contemporary safari wear can contribute to sustaining local craftsmanship and creating additional value for traditional materials and skills that are increasingly declining.

Another significant sustainable approach is the application of Ayurvedic fabric dyeing. Cotton twill fabrics are treated using herbal and Ayurvedic-based dyeing processes, providing an environmentally conscious alternative to conventional synthetic dyeing methods. In addition to contributing natural colour characteristics, the herbal treatment is intended to provide skin-friendly properties and potential UV protection, which are particularly relevant to garments designed for outdoor safari environments. This approach enhances the functional value of the fabric while strengthening the connection between Sri Lankan indigenous knowledge and contemporary fashion design.

Sustainability is further enhanced through modular garment construction, incorporating detachable and separable components such as zip-off sleeves and detachable trouser sections. These features allow garments to be adapted according to changing weather conditions, activity requirements and modesty preferences. Consequently, a single garment can serve multiple purposes and be worn in different configurations, extending its functional lifespan and reducing the need to purchase multiple garments. Figure 2 illustrates the two principal traditional and sustainable techniques employed in developing the collection: Ayurvedic fabric dyeing and reed braiding for fashion accessories. Together, these techniques demonstrate how traditional knowledge, locally available materials, functional design and adaptable construction can be integrated to develop a more sustainable and context-responsive safari wear collection.

B. Toile Development and Final looks of the fashion collection

Final fashion range was developed baes on the concepts and design developments and selected six designs front and back views of the fashion illustration shows in figure 4. Details of the six design outfits show in figure 5, discussed below.

Outfit a: Long sleeve earth toned cotton twill shirt with leopard-inspired prints, and functional pockets gather at the waist with a mini scort. The design emphasizes comfort, mobility, and protection for outdoor activities.

Outfit b: A leopard-print utility coat with contrasting brown artificial leather pockets and mid-length wide trouser. This construction provides practicality and ease of movement, while the cropped trousers and adjustable short sleeves support comfort in warm weather.

Outfit c: A layered safari ensemble consisting of a leopard-inspired adjustable long sleeve top, dark brown trousers, and boots. The outfit combines traditional safari aesthetics utility trousers.

Outfit d: A casual and feminine safari outfit featuring a mustard-coloured dress with a flared leopard-print skirt part. The lightweight silhouette provides freedom

of movement while maintaining the safari-inspired appearance.

Outfit e: A functional safari ensemble combining a leopard-patterned top with coco-toned overcoat with utility trousers and multiple pockets. The design emphasizes functionality, storage, versatility, and practical outdoor use while on safari.

Outfit f: A long-patterned raincoat worn over a mustard-coloured inner jumpsuit. The layered design provides additional protection and demonstrates versatility while maintaining the collection's earthy safari aesthetic.



(a)



(b)

Figure 4: Fashion illustrations for final six designs in safari wear collection: (a) front view, (b) back view.

In this stage, the toile development was crucial for evaluating the silhouettes and practical features of each garment prior to reaching the final design. Comprehensive technical drawings were created to illustrate the journey from concept and inspiration to the completed collection to start the final production. Patterns were created using CAD design software and modified multiple times to guarantee the desired fit while ensuring both functionality and aesthetic appeal (considering walking, sitting, ventilation, and appropriate coverage for cultural sensitivity, among others. Consequently, each outfit was treated as a feasibility study, utilizing muslin for testing shape and volume before being produced in the final fabric (Cotton Twill) with the addition of dyes, prints, and trims.

Figure 5 shows the live modeling photographs of final six designs. As the safari wear collection, that photographs ensure the design harmonization and natural blend with safari environment in Sri Lanka and practical abilities to perform with good mobility. Ayurvedic dying and print applications, biodegradable cotton material usage enhance the comfort of the collection.



(a) (b) (c)



(d) (e) (f)

Figure 5- Live modeling for the final six designs outfits.

CONCLUSION AND RECOMMENDATIONS

This project significantly contributes to the Sri Lankan fashion industry by introducing a niche safari wear collection that integrates ecological principles, cultural identity, and sustainable living practices. The collection encourages responsible consumption through the use of sustainable materials, traditional craft techniques, adaptable garment construction, and nature-inspired design approaches. By incorporating locally available resources and indigenous craftsmanship, it promotes the preservation of cultural knowledge while creating opportunities for local artisans and traditional industries. The collection also supports eco-friendly tourism by encouraging consumers and tourists to select clothing that reflects

environmental awareness and respect for Sri Lanka's biodiversity and wildlife. Multifunctional and adaptable garments can reduce overconsumption by enabling users to obtain several functions from fewer garments, thereby supporting longer product use and reducing textile waste. The project also demonstrates the potential for sustainable fashion to create economic value for garment producers, tourism stakeholders, and craft communities. With an 85% customer approval rate, future improvements should focus on sustainable material alternatives, colour diversity, customization, responsible marketing, customer feedback, and continued research and development.

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Lightweight, light-coloured uniforms were worn by European soldiers serving in warm climates from the 19th century and, little altered, throughout (Safari jacket, n.d.)

Safari clothes for women are a bit of a mystery for any first-time traveler to Africa. Don't worry, as it's not difficult to find the perfect women's safari outfit. We suggest a few versatile pieces for a timeless look that will keep you comfortable (The Best Safari Clothes for Women (Outfit Ideas), n.d.)

Packing for an African safari prioritizes comfort, climate-appropriate layering, sun and insect protection, quietness, and practical fabrics. Below are clear, field-tested recommendations for clothing by item, plus situational notes. (what are the ideal clothes for african safari, n.d.)

The Sri Lankan leopard is still found in all habitats throughout the island in both protected and unprotected areas.[7] These habitat types can be broadly categorised into (Sri Lankan leopard, n.d.)