



**ACHARYA'S NRV SCHOOL OF ARCHITECTURE**  
**SOLADEVANAHALLI, BENGALURU -560107**

**“TEXTILE PARK IN VIRUDHUNAGAR”**  
**ARCHITECTURE DESIGN PROJECT (THESIS) – 2023-24**

**Submitted in partial fulfillment of the Requirements for the**  
**“Bachelor of Architecture” Degree Course**

Submitted by : SHOBIKA C  
USN : 1AA19AT055  
Guide : Ar. MANU M

A project report submitted to  
**VISVESHVARAYA TECHNOLOGICAL UNIVERSITY**  
**“Jnana Sangama”, Machhe, Belgaum – 590018**

ಪೊಟ್ಟಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ - ೫೯೦೦೧೮



## **DECLARATION**

This thesis title “TEXTILE PARK IN VIRUDHUNAGAR”, submitted in partial fulfillment of the requirement for the award of the under graduate of Bachelor of architecture is my original work to the best of my knowledge.

The sources for the various information and the data used have been duly acknowledged.

The work has not been submitted or provided to any other institution/ organization for any diploma/degree or any other purpose.

I take full responsibility for the content in this report and in the event of any conflict or dispute if any, hereby indemnify Acharya’s NRV School of Architecture and Visveshwaraya Technological University, Belagavi, and its official representatives against any damages that any raise thereof.

**SHOBICA C**

**1AA19AT055**

## **ACKNOWLEDGEMENT**

I would like to express my sincere gratitude to all those who have contributed to the successful completion of my architecture thesis,

“TEXTILE PARK IN VIRUDHUNAGAR”. This journey has been challenging, yet incredibly rewarding, and I couldn't have done it without the support and assistance of many individuals and institutions. I am deeply thankful to my thesis advisor, Ar. Manu, for their guidance, support, and constructive feedback throughout the entire research and design process.

I extend my thanks to my friends and family for their unwavering support, understanding and encouragement during this onerous journey.

Thank you all for the efforts that have brought this project to fruition.

## ABSTRACT

This architectural thesis focuses on the creation of a conglomerate space aimed at enhancing the export and financial status of the state, with a special emphasis on promoting the textile green industry. The primary objective is to propose a dedicated space for the development of the cotton textile industry, emphasizing the study of apparel-related spaces and norms. The design aims to provide a comfortable and sustainable environment for workers, incorporating open and green spaces while maximizing natural daylight and ventilation. Additionally, the integration of renewable energy sources is considered for long-term sustainability. The scope of the project encompasses a distinguished area dedicated to the export of manufactured textile products, fostering employment prospects with on-site accommodation facilities and attracting Foreign Direct Investment (FDI). However, certain limitations are acknowledged, such as the exclusion of materials beyond cotton in the manufacturing process, eliminating the production and growth of cotton, and focusing solely on the final stage of the textile process without including wet processes. The justification for this endeavor lies in aligning with the "Make in India" development initiative, providing a conducive space for aspiring entrepreneurs to thrive and grow their ventures. The abundant availability of raw materials, processed to fabrics and dyed cotton, allows for exporting all textile products under one roof. The anticipated outcome is an upward trajectory in the financial standing of both the state and the country, contributing to sustainable economic development.

## Contents

1. AIM: .....	8
2. OBJECTIVE: .....	8
3. SCOPE.....	8
4. LIMITATION .....	8
5. JUSTIFICATION.....	8
6.1 WHY TEXTILE PARK? .....	10
6.2 EXPORTS OF TEXTILE PRODUCTS FROM INDIA .....	10
6.3 EXPORTS TO OTHER COUNTRIES FROM INDIA.....	10
7. GOVERNMENT SCHEME: .....	11
8. HISTORY OF TEXTILE INVENTION .....	12
9. HISTORY OF TEXTILE INDUSTRY IN INDIA .....	13
10. CASE STUDY .....	14
10.1 AKSARA APPARELS: .....	14
10.2 BESOIN TRENDZ: .....	19
11. LITERATURE STUDY.....	25
11.1 CARCEMAL: .....	25
11.2 DESINO ECO MANUFACTORY .....	30
12. COMPARATIVE ANALYSIS: .....	35
13. SITE ANALYSIS .....	38
13.1 SITE JUSTIFICATION.....	38
13.2 BYLAWS AND PLANNING PARAMETERS FOR SITE.....	46
14. CONCEPT: .....	47
15. AREA STATEMENT: .....	47
16. BIBLIOGRAPHY.....	51
17. PLAGERISM REPORT: .....	52

Figure 1 : Exports from India.....	10
Figure 2 : Exports to other countries from India.....	11
Figure 4 : Manufacturing area of Aksara apparels.....	14
Figure 3 : Office of Aksara Apparels.....	14
Figure 8 : Drinking water.....	15
Figure 9 : Staircase.....	15
Figure 7 : Goods Lift.....	15
Figure 10 : Loading area.....	15
Figure 6 : Solar Panel.....	15
Figure 5 : Office space in Ground floor.....	15
Figure 11 : Office plan of Aksara Apparels.....	15
Figure 12 : First floor plan of Aksara Apparels.....	16
Figure 13 : Ground floor plan of Aksara Apparels.....	16
Figure 18 : Metal Detector.....	17
Figure 14 : Checking section.....	17
Figure 15 : Fabric folding, Cutting.....	17
Figure 16 : Received fabrics.....	17
Figure 17 : Second floor plan of Aksara Apparels.....	17
Figure 19 : Sample room.....	18
Figure 21 : Storage rack.....	18
Figure 20 : Stitching section.....	18
Figure 23 : Location Map.....	19
Figure 24 : Besoin Trendz Office.....	19
Figure 22 : Besoin Trendz Tex.....	19
Figure 25 : Checking equipment.....	20
Figure 26 : Toilets.....	20
Figure 27 : RO Water.....	20
Figure 32 : Weighing machine.....	20
Figure 31 : Fabric folding.....	20
Figure 29 : Goods lift.....	20
Figure 30 : Fabric trolley.....	20
Figure 28 : Loading goods.....	20
Figure 33 : Ground floor plan of Besoin Trendz.....	20
Figure 34 : First floor plan of Besoin Trendz.....	21
Figure 35 : Second floor plan of Besoin Trendz.....	21
Figure 37 : Fabric cutting.....	22
Figure 36 : Fabric storage.....	22
Figure 39 : Cut fabric storage.....	22
Figure 38 : Stitching section.....	22
Figure 40 : Material storage.....	22
Figure 41 : Checking section.....	22
Figure 43 : Ironing section.....	23
Figure 42 : Material storage.....	23
Figure 46 : Storage area.....	23
Figure 45 : Packed products.....	23
Figure 44 : Packing section.....	23
Figure 47 : Smoke detector.....	24
Figure 48 : Fire alarm.....	24
Figure 49 : Fire extinguisher.....	24
Figure 50 : Transportation Vehicle.....	24
Figure 51 : Carcemal factory.....	25
Figure 52 : Master Plan of Carcemal.....	25
Figure 53 : Ground floor plan of Carcemal.....	26
Figure 54 : First floor plan of Carcemal.....	26
Figure 55 : Sections of Carcemal.....	27

Figure 56 : Ramp .....	27
Figure 57 : Design room .....	27
Figure 59 : Cutting section.....	28
Figure 58 : Storage.....	28
Figure 61 : Checking, Ironing section.....	28
Figure 60 : Packing storage.....	28
Figure 62 : Master Plan of Desino .....	30
Figure 63 : Views of Desino factory .....	31
Figure 64 : Ground floor plan of Desino.....	31
Figure 65 : First floor plan of Desino .....	32
Figure 66 : Design room .....	32
Figure 67 : Display area.....	32
Figure 68 : Sectional views.....	33
Figure 70 : Site elevation .....	33
Figure 71 : Front elevation.....	33
Figure 72 : Side elevation .....	33
Figure 75 : Section AA' .....	33
Figure 69 : Staff room.....	33
Figure 73 : Rear elevation.....	33
Figure 74 : Section BB'.....	33
Figure 77 : Climbers facade.....	33
Figure 76 : Roof garden .....	33
Figure 80 : India.....	38
Figure 79 : Tamil Nadu.....	38
Figure 78 : Virudhunagar.....	38
Figure 81: Proposed site.....	38
Figure 82 : Climate analysis.....	39
Figure 83 : Neighbourhood map .....	39
Figure 84 : Azadirachta indica ( Neem ).....	40
Figure 85 : Mimusops elengi ( Magizhalam ).....	40
Figure 86 : Vachellia nilotica ( Karuvelam ).....	40
Figure 87 : Marking for the elimination for extension of the road.....	40
Figure 88 : Road extension .....	40
Figure 89 : Site.....	41
Figure 94 : Section AA' .....	41
Figure 95 : Section BB'.....	41
Figure 91 : View 1 towards site .....	42
Figure 90 : View 2 towards site .....	42
Figure 92 : View 4 towards site .....	42
Figure 93 : View 3 towards site .....	42
Figure 96 : Religious building .....	44
Figure 97 : Residence .....	44
Figure 98 : Railway station.....	44
Figure 99 : Government office.....	44
Figure 100 : Closed manufacturing unit.....	44
Figure 102 : Block .....	47
Figure 101 : Open space in between for ventilation and sunlight .....	47
Figure 103 : Double façade.....	47