ARCHITECTURE
THESIS PROJECTS
PEC BATCH 2018

VOLUME 2

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FOUNDER PRINCIPAL

Late Er. Lekh Bahadur Gurung was an ideal guru, mentor and a great personality. He was a great visionary and a source of inspiration to the engineering society. He was a man of fertile imagination and with untiring energy. He established Pokhara Engineering College (PEC) at the time when there were very few private engineering colleges in the Kathmandu valley and none was there out of valley. The dark phase of the time was; a high percentage of aspiring students had to drop the study due to unavailability of colleges in their places. Considering the truth, Situation decided to establish a college in Pokhara and worked relentlessly with a sacred aim to make PEC a hub for engineering study to the students unable to go to Kathmandu. Present position of the institution proves his dream come true. Today majority of students from many districts prefer PEC for studying. His sudden dermise in 2020 A.D. was a great shock to PEC family. Until his last breath he was apprehensive to holistic development of the institution. Working on his unfulfilled mission will be a true tribute to him.

Late Er. Lekh Bahadur Gurung

Message from Director

Mr. Amber Gurung
Director

Pokhara Engineering College (PEC) is a pioneer college in technical education located at western part of Nepal, the scenic City- Pokhara established in 1999. PEC has achieved a milestone by providing a Technical education more than two decade. Pokhara Engineering College (PEC) is dedicated in achieving the greatest levels of quality, innovation, and visibility in engineering and research and influencing the technology feature.

It's the pride of Pokhara Engineering College to publish Technical magazines. I express my deepest gratitude towards our students and faculties and research department and other member of this college. We guide and support our students in creative thinking, applying knowledge, installing professional ethics, and raising awareness of social responsibilities. It make a great impact to the students by encouraging and incorporating research work into teaching-learning process. It strives to mark a every footstep taken by our faculties and students. The publication of Techno-magazine showcasing the achievements of students and faculties will surely be an inspiration to our current and prospective students as well as our staffs.

Once again, congratulations on this remarkable achievement. I have no doubt that you will go on to accomplish great things, and I am excited to witness your future successes. Always remember that Pokhara Engineering College is here to support you in your continued pursuit of excellence.

Message from Principal

Er. Som Gurung
Principal

First of all, I would like to congratulate 2018-Batch Architect Students for successfully completing final year thesis. It is obviously one of the significant milestones in their academic career. I am delighted to the Architecture Department for the initiative of publishing Thesis Magazine. Particularly, this magazine is not just a collection of Thesis Works but also a source of innovative and creative ideas for the sustainable and resilient architectural design and infrastructural development in the country. It will be a valuable references for the upcoming students as well as professional architect and designers. Finally, I would like to express my sincere thanks to the editorial team, department faculties and students for making this Thesis Magazine possible. Anticipating continuation of such remarkable endeavor.

Message from Vice Principal

It gives me a great sense of joy to see this magazine publishing every year. The wide spectrum of articles in different sections gives me a sense of pride that our students possess creative potential and original thinking in ample measures. Each article is entertaining, interesting and absorbing.

This magazine is extra special for me because, it is entirely the efforts of our students, and they are not experts but are rather at a learning stage. The best part is that they have huge thoughts in their minds and a wandering mind as well, which if properly channelized can lead to classic creations.

Commendable job has also been done by the RMC, Respective Department and Editorial Board in planning for and producing the Magazine. My congratulations to the team who took the responsibility for the arduous task most effectively. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students but also develop a sense belonging to the institution as well.

Er. Yam Bahadur Thapa
Vice Principal

Message from RMC Co-Ordinator

The Research Management Cell of Pokhara Engineering College is delighted to announce the upcoming publication of the Architecture Thesis Magazine. We extend our heartfelt gratitude to the Department of Architecture and the students of the second batch for their support in making this magazine possible.

We want to assure all our students that the RMC is committed to promoting teamwork, boosting morale, and exploring the immense potential within the field of Architecture.

We believe that this magazine will serve as an inspiration for our junior students, motivating them to strive for excellence in their academic performance and to dedicate themselves to their research endeavors.

Thank you for your continued support, and we look forward to demonstrate the remarkable work of our students in the field of Architecture

Er. Krishna Ghimire
Co-Ordinator
Research Management Cell

Message from HOD

On behalf of the Department of Architecture, our dedicated faculty, and our entire staff, I want to express our heartfelt gratitude to all the students who have invested their tireless efforts to reach this significant milestone and showcase their remarkable work.

Since the establishment of Pokhara Engineering College, Architecture batch 2018 is the second batch to graduate from this college in 2024. I believe documentation and publication of thesis work done by them as a magazine will be an important asset for the college and perspective students. Also, it serves as an initiative to integrate the collective achievements of our department and our exceptional students. Both our campus and our department take immense pride in the accomplishments of our students, and we pledge to provide continuous and unwavering support not only now but also in the future.

Together, we are shaping a brighter future for our country and creating a better place for all. Once again, congratulations and best wishes to all our achievers.

Ar. Samikshya Kandel
HOD

Message from Thesis Co-ordinator

It is my pleasure to present the second volume of the Thesis Magazine, which showcases the exemplary work of the second batch of Bachelor of Architecture students. I extend my heartfelt congratulations to all the students for their dedication and scholarly achievements.

I express my sincere gratitude to the thesis supervisors for their invaluable guidance, the department and college administration for their steadfast support, and the external jurors for their expertise and constructive feedback. Your contributions have been instrumental in shaping this accomplishment.

I wish all the students continued success in their future endeavors and professional pursuits.

Ar. Luna Thapa
Thesis Co-ordinator

Message from Editorial Board

Welcome to the second volume of the Pokhara Engineering College architecture thesis magazine. This publication highlights the hard work and dedication of the 2018 batch students, showcasing their diverse perspectives and innovative thinking. Congratulations to all contributors and heartfelt thanks to the faculty and staff for their support.

As you read through, may you find inspiration, new ideas, and an appreciation for the potential impact of academic research.

Ar. Pragati Baniya
Editor

TABLE OF CONTENT

Students Name- Aakanksha Parajuli

Project Name- Coffee Crafting Centre

Supervised by- Ar. Rajani Shrestha

Abstract

This research, "Coffee Crafting Centre" presents comprehensive design of the journey from bean to cup, showcasing intersection of manufacturing, training and café culture. The primary objective include analyzing the current state of the industry, investigating challenges, and proposing a design with research facilities and immersive experiences. The study investigates on historical background, evolution, cultivation of coffee analyzing benefits, types and strategies for establishing an effective and sustainable coffee crafting centre. This research is conducted through literature review, case studies, and interviews with local cultivators.

Project Location- Pokhara-21, Chhorepatan

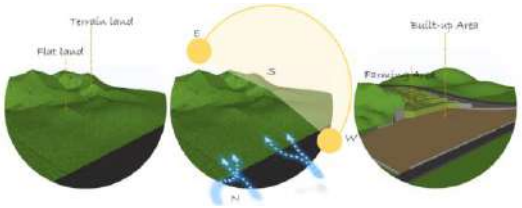
Chhorepatan is one of the most visited hotspots of tourism with numerous small farms and mills which serves as a appropriate place for the center with research as well as edutainment activities. The 15 ropani area, located at above 600m altitude and orientated towards north-east site is accessible through Siddhartha Highway, approx. 2.1 km from Gupteshwor Mahadev Cave. Also, it has close proximity (60.5 km) to another district Syangja which is known as one of the high cultivator of coffee in western region.

Site Scenario

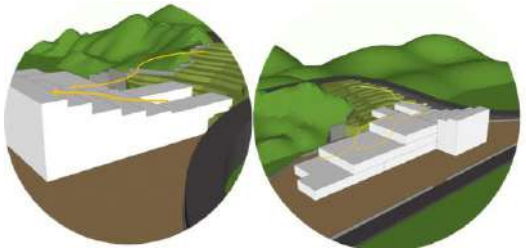
Site Surroundings

Architectural Design Concept

The site's orientation along the NW axis and its varied topography, which includes both flat and hilly terrain, influence the concept of the center. Coffee plantations are situated on the hilly areas, while production facilities and supporting spaces are placed on the flatter lands. The building's roof design mirrors the natural terrain, integrating the structure with the landscape. A cut-and-fill process levels the building and its roof, aligning them with the site's topography. The horizontal layout optimizes sun and wind patterns, enhancing natural ventilation by allowing wind from the north to flow through the interior spaces. The site programs, including production, socialization, and edutainment activities, are arranged based on functional relationships. Production areas, which require more space and generate higher noise and pollution, incorporate courtyards and roof gardens to mitigate these impacts.



Site's sun and wind paths



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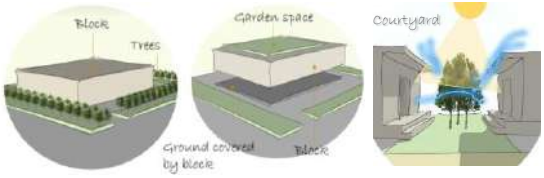


Program based approaches for concealing effects of production

Design Process

The block placement is strategically determined by site context, functionality, usage, and programmatic connectivity. Prioritizing community and interaction, the café, museum, and library are positioned at the forefront as key social spaces. The northwest primary entrance features three access points to ensure efficient user flow. Pedestrian Entry 1 leads directly to the café, museum, library, and administrative areas, while training facilities are accessed via a double-height walkway plaza. The production block is served by Entry 2, designated for service loading and parking. Two courtyards, surrounded by administrative and training spaces, incorporate seating, greenery, and water features. Roof gardens, accessible by internal and external stairs, offer panoramic views and spaces integrated with green and water elements, including small coffee plants. The coffee farming area is accessible through the courtyard and exterior stairs, allowing users to explore coffee plants and farming techniques.

Conclusion

This thesis project presents a thoughtful integration of architectural design and immersing coffee culture of Nepal to create a dynamic learning environment for different field users and coffee enthusiasts. The interconnectivity and interrelationship between programmatic elements provide spaces for learning, exploration, and socialization, blending theory with practice. The design is significantly influenced by the site, incorporating the continuity of the terrain, green spaces, and the interplay of light and shadow. The use of local materials gives the façade a warm, inviting appearance, allowing the building to blend with its natural surroundings.

Therefore, this project showcases the bean to cup journey from harvesting to roasting to cupping crafting it in a way that it offer users a comprehensive experience, engaging not only visually but also through the senses of smell and taste, allowing them to thoroughly learn and appreciate the entire process in each of the proposed spaces.

3D VIEWS

Student Name- Aakriti kumari Sharma

Project Name- IT Centre

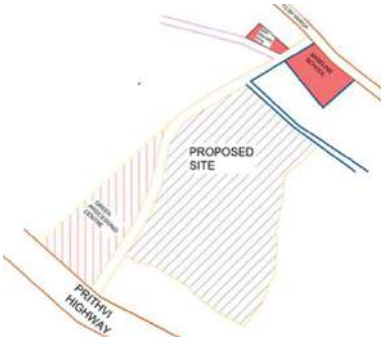
Supervised by- Ar. Ananta Gautam

Abstract

The IT Centre project is designed to support the growth of the information technology industry by centralizing IT activities and promoting collaboration. The IT Centre aims to blend human-centric design with flexibility, supporting economic growth, innovation, and community integration. The office environments play in shaping individuals' daily lives and their sense of belonging. The design of office spaces extends beyond mere functionality; it encompasses emotional and psychological dimensions that influence well-being and productivity.The thesis also explores the role of architecture in creating the spaces that further helps in office working environments.

Project Location- Pokhara-14 ,Chauthe

Area: 28Ropani
North-west orientation
Flat land
Humid sub-tropical climate



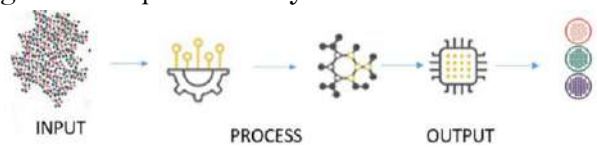
Site justification

The proposed site is located near major infrastructure like the Prithvi Highway, which suggests good connectivity. Proximity to the highway can facilitate easy access for employees, clients, and logistics.

Architectural Design Concept

The concept emphasizes the seamless integration of functionality (function) and form in design, resulting in spaces that not only serve their intended purpose efficiently but also exhibit a harmonious and visually appealing appearance.

Approach1 :The three key points of input, process, and output represent the fundamental stages of computational system.



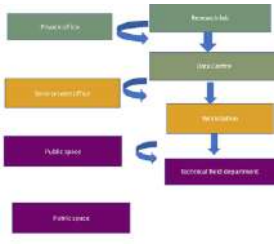
Input (Innovation Zone): In the innovation zone, the concept of "input" can be represented by the influx of ideas.

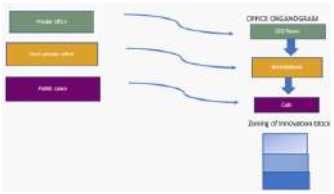
Process(Collaboration Zone):The processes can be the dynamic engagements between the employees.

Output(Technology zone):Technology is often integrated into the output zone to facilitate the creation, sharing.

Approach 2: Vertical zoning

Private zone: Research Lab
Data Centre
Semi-Private: IT management team
Conference room
Public: Technical field department





Design Process

The spatial organization of various entry points and building components, demonstrating a practical application of zoning concepts. The site is thoughtfully divided into three distinct zones: the Innovation Zone (Input), the Collaboration Zone (Process), and the Technology Zone (Output). Each zone represents a crucial stage in the workflow and is strategically located in different corners of the site to maximize access to the surrounding landscape and healing environments. The building entrance and courtyard are centrally located, serving as focal points for accessibility and social interaction. The basement area likely serves utility functions, optimizing the use of vertical space. By clearly delineating these zones, the design promotes functional efficiency, safety, and an enhanced user experience, aligning with zoning principles.

Conclusion

The IT Centre represents a significant advancement in information technology by serving as a central hub for innovation and collaboration. Its design, grounded in human-centric and biophilic principles, integrates natural elements into the workspace, fostering well-being, creativity, and productivity. The adaptable and sustainable design ensures the Centre remains relevant in a rapidly evolving field, while also stimulating economic development through job creation and investment. By setting a new standard for IT facilities, the Centre not only advances the technology sector but also enhances the architectural and urban landscape offering a model for future developments.

3D VIEWS

Student Name- Amrita Poudel

Project Name- आश्रय : Creating Shelter for the Elderly

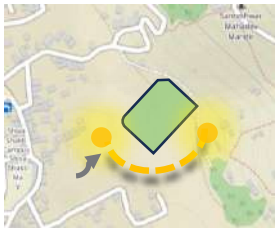
Supervised by- Ar. Roshni Subedi

Abstract

The development of old age homes addresses the growing need for facilities tailored to the unique needs of elderly individuals. Effective design focuses on inclusivity and comfort, featuring barrier-free access, intuitive layouts, and elements like natural lighting and ventilation. The location should integrate with its surroundings, ensuring proximity to medical and community services, while also fostering connections with nature through green spaces and gardens. Additionally, engaging with the local community and creating spaces for family and social interactions enhance the residents' well-being and sense of belonging.

Project Location- Pokhara-11, Fulbari

The site in Fulbari, Pokhara, is ideal for an old age home, offering a peaceful suburban environment surrounded by residential buildings. Its proximity to hospitals ensures quick medical care, while nearby temples and parks provide a calming atmosphere. The green surroundings and quiet location, away from busy roads, create a serene setting for relaxation and reflection, fostering a strong connection with both nature and the local community for elderly residents.

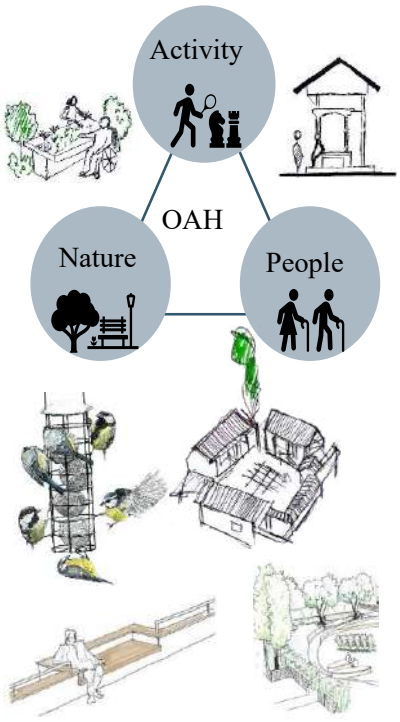


Site Scenario

Site Surroundings

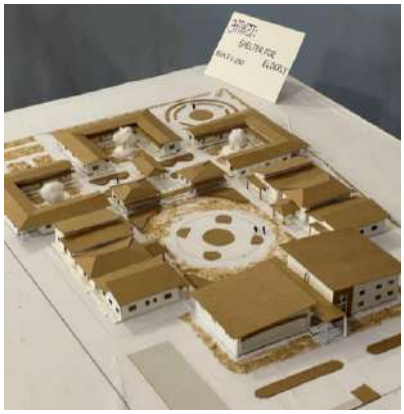
Architectural Design Concept

The design concept for old age homes emphasizes the critical role of interconnectivity between nature, people, and activities to create a nurturing and engaging environment. The "Nature Oasis" approach transforms the living space into a tranquil sanctuary, where sensory gardens, water features, and sustainable practices are interwoven to foster physical and mental well-being. Transition spaces, such as hallways and lobbies, are thoughtfully designed to ensure safety and comfort, with natural light and seating areas that not only facilitate navigation but also encourage social interaction, reinforcing the sense of community. Courtyard planning further enhances interconnectivity by providing serene, accessible outdoor spaces that serve as communal gathering areas, linking residents with nature and each other. This interconnected design fosters a vibrant, cohesive living environment where nature, people, and activities are seamlessly integrated, significantly enhancing the overall quality of life for the elderly.



Design Process

The planning of built and open spaces is guided by site zoning, user needs, and site access, ensuring a balance between functionality and connectivity with nature. The masterplan emphasizes the flow of spaces, leading to open courtyards that serve as breathable areas for the buildings. Zoning prioritizes socialization by aligning space usage with the flow of people, while the placement of buildings maximizes solar light. The site was divided along major and minor axes, creating a functional layout with a central gathering area. The design focuses on interrelating activities, residents, and nature, with the admin and multipurpose blocks near the entrance, and residential areas oriented around a central courtyard. Considerations of solar paths and wind direction further enhance sustainability, fostering a homely environment integrated with the landscape.



Conclusion

The process of designing and implementing an old age home offers valuable insights into the needs and preferences of elderly populations. It highlights the importance of creating environments that are adaptable to changing needs, and it underscores the role of design in fostering well-being and community. By incorporating feedback from residents and staff, architects and planners can continuously improve the functionality and comfort of these facilities. This project serves as a model for future developments, demonstrating how thoughtful design can address the complex needs of aging populations and contribute to a more inclusive and supportive society.

Students Name- Aradhya Pratap Adhikari

Project Name- Public Library
Supervised by- Ar. Kedar Chhetri

Public libraries traditionally offer free access to a wealth of knowledge through books, articles, and digital resources. However, in many places, including Nepal, these libraries often consist of outdated materials with limited facilities. To address this, there is a pressing need to reimagine public libraries as vibrant cultural hubs that serve as social equalizers and community nodes. This project proposes transforming public libraries into dynamic spaces that foster cultural exchange, social interaction, and learning opportunities. By integrating communal areas, performance centers, galleries, and maker's studios, these libraries aim to revitalize urban settings and bridge societal divides.

Project Location- Ranipauwa , Pokhara

Currently an unused land, site can be accessed from 3 sides with 25 feet 20 feet road towards east and west side and a 15 feet road on the northern side

Site Scenario

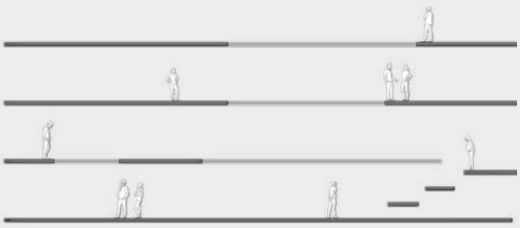
Site Location

Architectural Design Concept

On observing public library as a whole, information sharing and collaboration are the major common factors. Similar idea of information sharing and collaboration can also be seen in "Ant Colony".

Despite of having poor hearing and vison Ants are remarkable examples of social insects that exhibit sophisticated methods of information sharing and collaboration. Their ways of effective communication can be applied in an abstract way as a guiding concept for design of Public Library

Connectivity of different levels



Visual connectivity through voids and atrium

Design Process

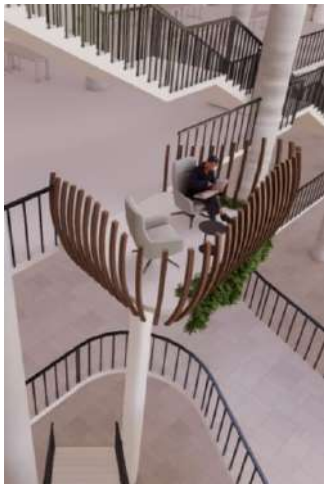
Form is developed as per the concept and functional requirements. By extruding and subtracting the mass various spaces and vantage points are obtained in the site.

Exterior Views

Master Plan

Conclusion

The design of a public library transcends its role as a repository of books, serving as a vital community hub for education, social interaction, and cultural enrichment. This thesis has demonstrated how thoughtful architectural design, rooted in principles of accessibility, inclusivity, and sustainability can create a space that meets the evolving needs of its users.



3D VIEWS

Student Name- Barsha K.C.

Project Name- Social Development Centre For The Slums Of Pokhara

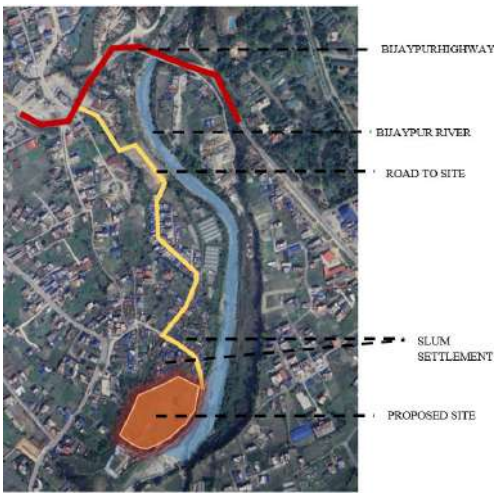
Supervised by- Ar. Samikshya Kandel

Abstract

This architectural thesis proposes a Social Development Centre for slum communities in Pokhara, Nepal, addressing their needs through a comprehensive research methodology. It includes a literature review on urban poverty, community development, and participatory design, and analyzes international and local case studies of successful community-based initiatives. Additionally, a questionnaire survey gathers insights from local residents about their living conditions and aspirations. The thesis synthesizes these findings into a design framework that emphasizes flexibility, community participation, and sustainability, advocating for a people-centered architectural approach that fosters social inclusion and grassroots empowerment in transforming the built environment of Pokhara's slums.

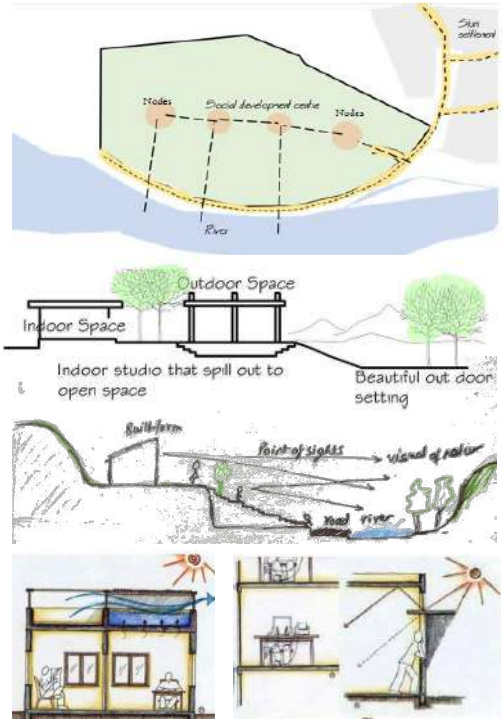
Project Location- Bijaypur, Pokhara

The selection of Bijaypur, Pokhara, as the site for a Social Development Centre is strategic, aligning with the project's scope by being home to a slum area of around 90 households. The site's direct accessibility to the main highway and slum settlement ensures easy access for residents and users. Additionally, the availability of land allows for the creation of a centre to cater the community's needs. The site's proximity to industrial zones offers economic empowerment opportunities for slum dwellers through skill development, and vocational training.



Architectural Design Concept

The architectural concept for the Social Development Centre in Pokhara focuses in creating an "Oasis of Connectivity" , where active streets and interconnected pathways reflect the organic, community-centered nature of the slum environment. These pathways naturally extend towards a central hub, incorporating the riverfront as a focal point for social interaction and connection with nature. The site is divided into two zones—riverfront development and built spaces—arranged in a linear pattern to activate social spaces between buildings. The design addresses flood risks through raised platforms and varying site levels, enhancing vistas and creating a dynamic riverfront. The design also emphasizes strong indoor-outdoor connections, using open and semi-open spaces ensuring comfortable and vibrant environments for social gatherings and workspaces.



Design Process

The site is strategically oriented toward the eastern side, facing the Bijaypur River, to leverage scenic views, natural light, and cooling breezes. The riverfront serves as a focal point, incorporating promenades, seating areas, and landscaped spaces that seamlessly connect the built environment with nature. Public spaces like parks, pathways, a market area, a playing area, and an open-air theatre encourage community activities by the river. A northern entrance caters to both pedestrian and vehicular traffic, leading to facilities like a community toilet, store, and the administration block. The site's design features interconnected blocks (cafeteria, library, training) linked by nodes that serve as gathering spaces with seating and landscaping. Pathways are pedestrian-friendly, with shaded walkways, benches, and lighting, while building orientations and materials are chosen to maximize natural light and ventilation, enhancing energy efficiency and user comfort.

Conclusion

The proposed Social Development Centre in Pokhara aims to address the challenges faced by marginalized communities by creating an "Oasis of Interconnectivity" that blends open and closed spaces to foster economic, social, and environmental development.

Located near slums and along a riverfront, the design transforms the natural landscape into a vibrant social hub that encourages community interaction. The centre features training blocks for skill development, interconnected spaces like a cafeteria and library for continuous learning, and uses local, low-cost materials to ensure affordability and sustainability.

This project emphasizes the importance of inclusive, accessible spaces that uplift underprivileged communities, offering insights into socially responsive architecture.

Student Name- Bismat Malla

Project Name- Pokhara Film Academy

Supervised by- Ar. Ananta Gautam

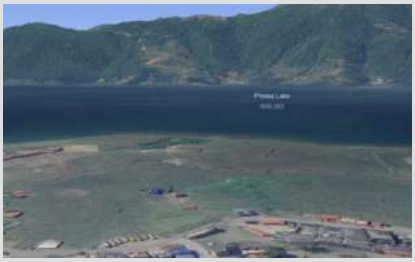
Abstract

The project explores on the Pokhara Film Academy, which aims to transform the campus infrastructure in Nepal's scenic Pokhara region to better support cinematic education. Through a detailed analysis of the existing campus layout and aesthetics, the study identifies areas for improvement and proposes architectural changes to promote creativity, collaboration, and hands-on learning. The design introduces flexible studio spaces, advanced technology, communal areas, and sustainable features. The project aims to align with the academy's values of excellence and inclusivity, providing a comprehensive architectural plan that enhances the learning experience and nurtures future cinematic talents.

Project Location- Pokhara 18, Sedi

The site is located in Pokhara-18, Sedi, situated near the picturesque Phewa Lake, the site enjoys a humid subtropical climate with mild winters and hot summers. Its north-east orientation maximizes sunlight exposure, and the serene surroundings offer a tranquil setting ideal for film education. The location's cultural significance and vibrant environment provide a dynamic atmosphere, promoting collaboration and engagement with the local community. The site's prime location, flat topography, and proximity to key amenities make it a promising hub for nurturing future cinematic talent in Nepal.

Site Scenario

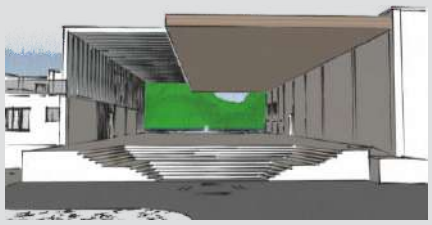


View of lake from site

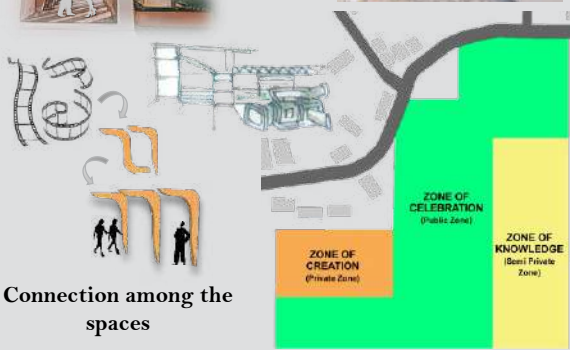
Wind and sun path diagram

Architectural Design Concept

The design concept for the Pokhara Film Academy mirrors the cinematic journey, guiding users from learning to production and ultimately to screening, much like a film guides its viewers through a story. Inspired by the art of filmmaking, where framing is essential for storytelling, the design incorporates different shot compositions to engage and immerse users. A key element of this concept is the framing of the serene lake view within a moving picture display, starting from the entry pavilion and culminating in an open celebration zone, seamlessly blending the natural landscape with the cinematic experience. The concept also includes zoning, dividing the space into areas of knowledge, creation, and celebration, with framing techniques shaping the overall design and creating a cinematic composition.



Role of leading line



Connection among the spaces

Design Process

The site is divided into three zones, Zone of Knowledge (educational spaces), Zone of Creation (production and creative spaces), and Zone of Celebration (public and social spaces)—based on user type, frequency, and interaction duration, ensuring organized functions. Planning is proposed strongly through central axis running vertically through the layout, starting from the main entrance and continuing down through the fountain area and into the open green spaces and sports courts at the bottom. This central axis creates a sense of order and directs the viewer's eye through the space, similar to how a leading line in photography would guide the viewer's attention to the main subject.

Master Plan

Conclusion

This thesis project presents a thoughtful integration of architectural design and cinematic artistry to create a dynamic learning environment for film students. The design philosophy emphasizes the seamless blend of theory and practice, aiming to inspire creativity, adaptability, and collaboration among students. The architectural design is heavily influenced by cinematic composition principles, such as framing, leading lines, and the interplay of light and shadow, to evoke emotional responses similar to those experienced in films.

By zoning the space into areas of knowledge, creation, and celebration, the design creates a vibrant and engaging environment that supports both learning and public interaction. Ultimately, this project aspires to harness the emotional power of architecture, crafting spaces that not only facilitate learning but also inspire and resonate with the human spirit.

3D Views

Students Name- Kiran Karki

Project Name- Football Academy
Supervised by- Ar. Ananta Gautam

Abstract

The architectural thesis "Football Academy" presents a comprehensive design for an integrated football academy and training centre in a suburban area. Football has the potential to drive national prosperity and economic growth, particularly in Nepal. However, despite the country's participation in international sports events, the lack of adequate infrastructure limits the development of football.

This thesis proposes the planning and design of a professional football academy in Nepal, aimed at providing top-tier training facilities for grassroots players and future stars, addressing the current infrastructural deficiencies and supporting the growth of football in the country.

Project Location- Bijayapur , Pokhara

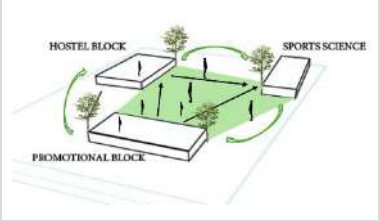
The primary access to the site is provided by a straight 8-meter-wide road connecting it to the main road from the south. Additionally, there is a secondary road on the west side of the site, approximately 4 meters wide, offering another access point. Moreover, the site benefits from multiple access points from the Prithivi Highway, enhancing safety considerations in the design process.

Site Scenario

Surrounding Area

Architectural Design Concept

Total football, originally popularized by Dutch teams like Ajax and the Netherlands national team in the 1970s, is a tactical theory where players are not constrained to specific roles or positions on the field. This fluidity allows any outfield player to occupy any position as needed, creating a highly dynamic and adaptable style of play. The only constant is the goalkeeper, who remains in their designated position. The system relies heavily on players' versatility, intelligence, and teamwork to maintain balance and structure, even as players interchange positions.



Development of concept

Concept in masterplan

Design Process

The public block, accessed from the west, offers parking in the northeast and facilities such as stands, changing rooms, a cafeteria, and a public plaza for visitors to relax before the game. The football pitch, situated between the public block to the west and the admin block to the east, is equipped with floodlights, scoreboards, and sprinklers, and is meticulously maintained. The admin block, a semi-public area with separate southwest parking, includes VIP spectator areas and administrative offices. In Pokhara, the indoor football pitch ensures uninterrupted training for academy players despite heavy rainfall, providing a year-round environment for skill development. Adjacent to this facility, the hostel block offers a common kitchen and dining area, fostering a sense of community and providing a comfortable, home-like environment for the players.

Exterior Views

Master Plan

Conclusion

This architectural thesis examines the essential requirements for football academies and training centers in Nepal. The project involves designing spaces where players and trainers can lead healthy, fulfilling lives while having access to top-tier training facilities and equipment. The design includes dedicated living areas, transparent scouting spaces with direct views of the field, and informally arranged spectator zones. Additionally, outdoor recreational areas are thoughtfully integrated to support the overall well-being and performance of the players. By addressing these needs, the project aims to foster individual player development and contribute to the advancement of football in the country.

3D VIEWS

Students Name- Pallavee Kiran Bhattarai

Project Name- The Final Journey

Revolutionizing Hindu crematorium for enhanced spiritual farewell

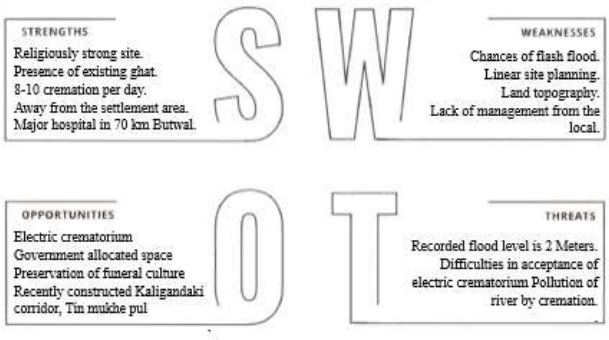
Supervised by- Ar. Rajani Shrestha

Abstract

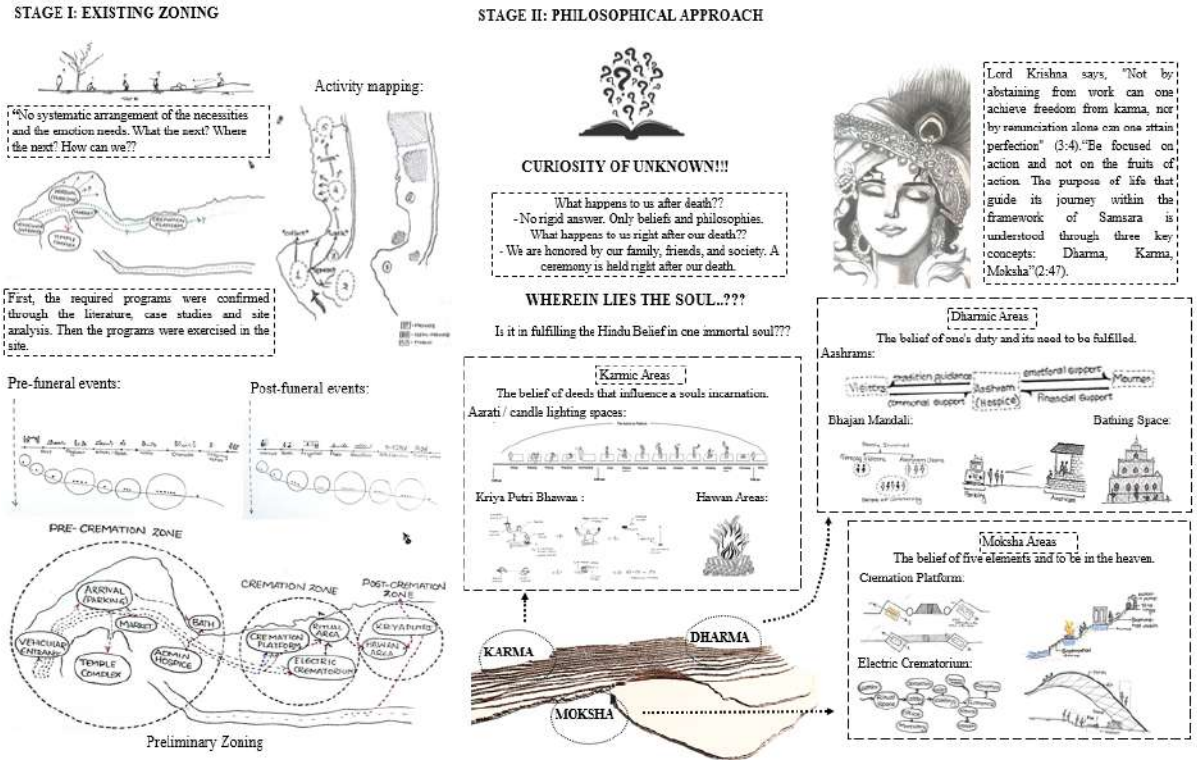
Architecture has always served humanity, even in ancient Nepali society, where thoughtful designs catered to all aspects of life, including rituals like cremation. However, modern society falls short, with simplistic ghaats lacking cultural significance. Rituals have lost their essence, reduced to mere actions. A well-designed environment can revive culture and reconnect individuals with nature during turbulent times. Ultimately, this thesis aims to explore how architecture can address the emotional, cultural, spiritual, and environmental aspects of death and grief.

Project Location- Ridi in Nepali

Ruru Kshetra, otherwise known as Ridi in Nepali, is an iconic religious and cultural destination located at the convergence of both the Kaligandaki River and Ridi Khola. It is situated on a tri-junction between Gulmi District, Palpa District and Syangja District; furthermore it also forms part of Nepal's Char Dhams.



Design Development



STAGE III: EMOTIONAL APPROACH

'Architecture is the thoughtful making of space' Louis Kahn.

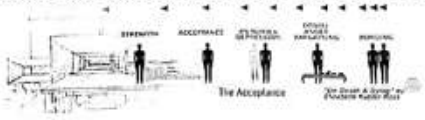
1. DENIAL

The first reaction to learning about the terminal illness, loss, or death of a cherished loved one is to deny the reality of the situation. .

Death and subsequent mourning involves a great deal of emotional turbulence for the survivors. So, the next challenge is the tackle the emotional needs through architecture.

2. ANGER

The intense emotion is deflected from our vulnerable core, redirected and expressed instead as anger. . .



3. BARGAINING

Secretly, we may make a deal with God or our higher power in an attempt to postpone the inevitable, and the accompanying pain. . If only we had……..

4. DEPRESSION

Sadness and regret predominate depression. We worry about the costs. Space for lost is provided where people spent their own personal time.

5. ACCEPTANCE

Resisting it only will prolong the natural process of healing.

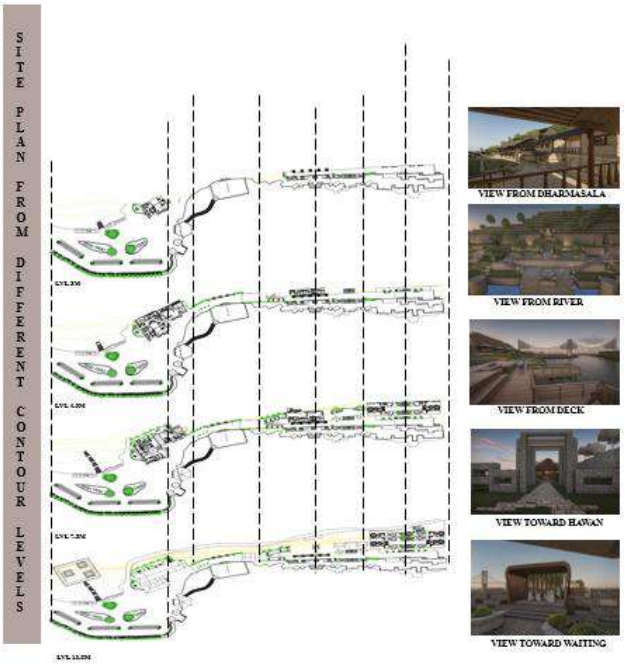
B E L I E F . . .

. . . H O P E

F A R E W E L L . . .

Conclusion

This thesis examines how architecture influences our understanding and experience of death and grief, particularly focusing on Hindu crematoriums. By using light, space, and materials thoughtfully, architects can create spaces that bring solace and closure to those mourning the loss of loved ones. Incorporating cultural and religious elements into the design offers comfort and familiarity to the bereaved. Additionally, sustainable features like electric cremation and eco-friendly river canal design can lessen the environmental impact of these buildings while still honoring their significance. Ultimately, this thesis aims to explore how architecture can address the emotional, cultural, spiritual, and environmental aspects of death and grief.



Students Name- Pawan Ale

Project Name- Parirakshan – A Disaster Resilient Center
Supervised by- Ar. Luna Thapa

Abstract

In the context of a thesis project, A Disaster Resilient Center is to develop a resilient architecture through the creation of a Disaster Resilience Centre. This center will function as a central hub for coordinating rapid responses and providing comprehensive support services for primary disasters, including fires, earthquakes, landslides, floods, sinkholes, and avalanches. The project will adopt a community-centric approach to empower local residents and visitors while enhancing shared public spaces. Additionally, it aims to bolster regional resilience and mitigate future disaster impacts through the implementation of a visitor center and a preparedness center.

Project Location- Chauthe , Pokhara

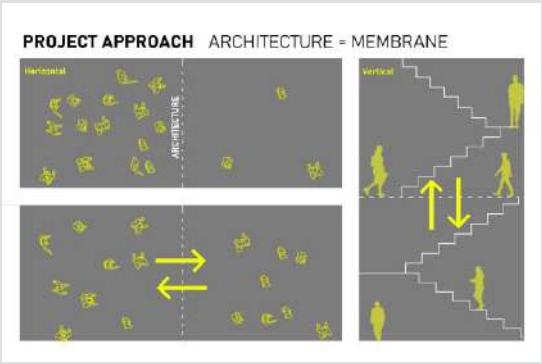
Location: Public Land inside Pokhara City. Its Latitude and Longitude is 28°11'51"N 84°01'14"E. On the South side of Kaski Modernized Academy, near the linear settlements of Highway. The Site is in Flat terrain which makes the land ideal for this project. The area of the site is around 65033 sqm (127.8 Ropani). Residential Area Nearby Surrounded from Every Direction. Industrial Area on West Side

Site Scenario **Surrounding Area**

Architectural Design Concept

In biology, osmosis is the movement of water molecules from a solution with a high concentration of water molecules to a solution with a lower concentration of water molecules, through a cell's partially permeable membrane.
Here The Membrane is Architecture.

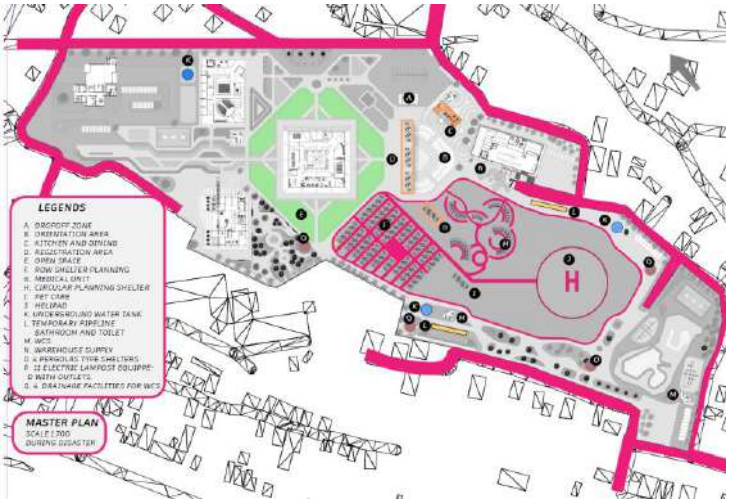
It Acts as Centralized Resource Hub, Knowledge Exchange and Collaboration, Capacity Building, Community Engagement, Cultural Preservation



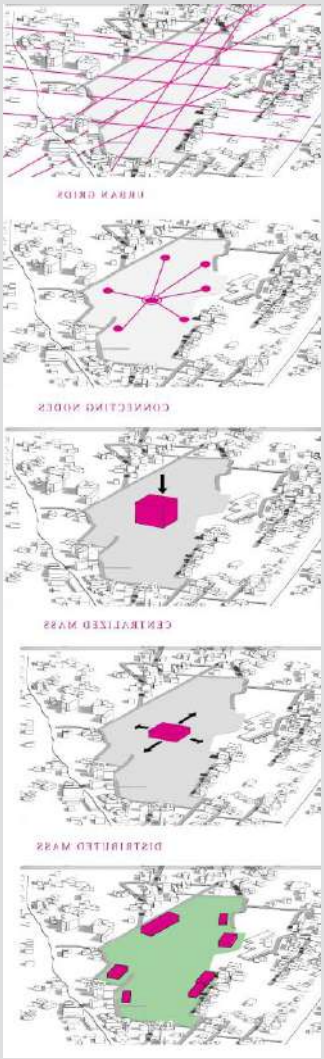
Development of concept **Masterplan**

Design Process

The Space for Project is Fragmented and divided into grid Ares for proper Functional Zoning. The Grid Lines are parallel to urban grids. The Zones and Nodes are Separated in various directions for efficient Performance of various blocks. Central mass are fragmented into various Blocks.



Master Plan During Emergency



3D VIEWS

Conclusion

Natural disasters have long challenged Nepal, intensifying in recent decades and impacting socio-economic stability and cultural heritage. This thesis advocates for "PARIRAKSHAN," a Disaster Resilience Centre in Gandaki, designed to enhance community resilience and disaster preparedness. Serving as a collaborative hub for government, NGOs, and local communities, the center will include essential facilities such as a disaster preparedness center, fire station, medical department, and more. By integrating interdisciplinary insights and practical interventions, the center aims to foster sustainable development and improve Nepal's readiness for future disasters.

Student's Name- Prabhat kumar Jha

Project Name- Area Police Station Embracing Towards "Climatic Responsiveness And Human – Friendliness".

Supervised by- Ar. Luna Thapa

Abstract

As the world grapples with the dual challenges of climate change and evolving community needs, the design of public infrastructure, including police stations, requires a paradigm shift. This Thesis explores the integration of climate-responsive and human-friendly design principles in area police stations, particularly in rural settings. The research investigates how climate-responsive features, such as the use of renewable energy, sustainable materials, and water conservation systems, human-friendly aspects of design, inclusiveness, and welcoming environments can be incorporated into police station design to reduce environmental impact and enhance resilience.

Project Location-Siraha, Nepal

The site is located at Bariyarpatti rural municipality in Siraha district. The surrounding area of the site is featured with moderately dense residential and commercial infrastructure, agricultural land ,located near to the E-W highway. The area is also facilitated with the busy mini market ,hospital ,school .Climate is hotter in summer and colder in winter.

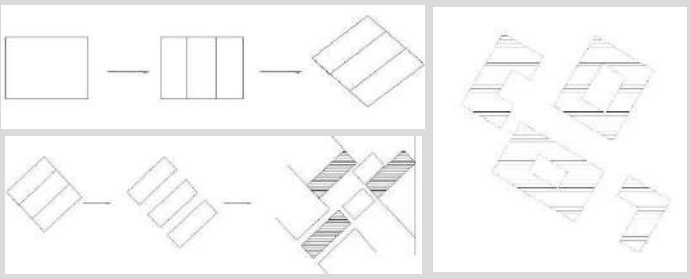
Site Scenario

Minimarket

E-W Highway

Design Concept and Philosophy

The initial design approach is to avoid the harsh sunlight from entering to the building and provide a comfortable living and working areas for users. The main three blocks administration, barrack and cell facilities are placed in such a way that the sunlight from south is avoided. The building is kept facing the prevailing wind flow direction to maximize the natural ventilation. Designing a climate responsive and human friendly police station has been a major design philosophy in my thesis. The design embraces the site orientation ,proper shading ,courtyard planning for effective light and ventilation, adopting the vernacular construction technology and the materials like brick , roofing tile(khapada) ,brick jallis ,cavity walls ,sustainable drainage system to create a harmony with surrounding thus to meet the requirement of well facilitated public ,semi public and private spaces.



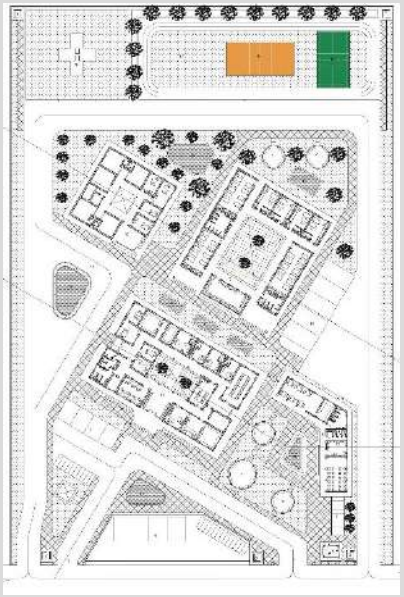
Design Development

Bird's eye view of Police station

Design Process

Zoning of the site is done by identifying the different functions and separating into different zones like private, semi-private and public. The public spaces are kept in the front near to the main entrances considering easy access and flow of public. The private and semi-private spaces like cells, barracks are kept away from the public areas. The admin area being the centre of operation is kept in the centre of main diagonal axis around which other blocks and outdoor spaces are carved out. All the buildings except the public block are designed around the central courtyard for light ,ventilation and space for greenery within the building. Each block is provided with a water collection area. Covered walkway connects the all four blocks. The backyard of site is designed for open activities and helipad. The area is guarded by the security post on the boundary.

Exterior Views



Master Plan

Conclusion

Thus the architectural thesis explores the solution for dual challenges of climate change and evolving community needs for the design of police stations. By integrating the climate responsive methods like adopting vernacular materials and technology ,effective courtyard system , spatial planning of private and public spaces and sustainable design philosophy ,the project embraces towards climate responsiveness. Simultaneously, it also explores the human-friendly aspects of design, including the creation of accessible, inclusive, and welcoming environments that foster positive interactions between police officers and community members.

3D VIEWS

Students Name- Prakriti Sapkota

Project Name- Fashion Hub

Supervised by- Ar. Samikshya Kandel

Abstract

This research, "Fashion Hub," presents a comprehensive design that integrates education, creativity, and business within the fashion industry, showcasing the intersection of learning, creation, and commerce. The primary objectives include analyzing the current state of the fashion industry in Nepal, identifying challenges, and proposing a centralized space that encompasses both academic and professional aspects of fashion. The study explores the historical background, evolution of fashion, and the significance of a hub in fostering local talent, analyzing the needs, trends, and strategies for establishing an effective and sustainable Fashion Hub. The research is based on a combination of literature reviews, case studies, and interviews with local fashion experts and enthusiasts.

Project Location- Pokhara-06, Lakeside

Lakeside, Pokhara, is a popular destination where tourists and locals connect with the lakefront and surrounding attractions. The 26-ropani site, oriented north-south and situated 4.4 km from central Pokhara, boasts a prime location near Fewa Lake and easy access through Baidam Highway. Its strong connectivity to major attractions like Phewa Lake, Annapurna Cable Car, and Paragliding zones makes it an ideal spot for a fashion hub and entertainment center.

Site Scenario

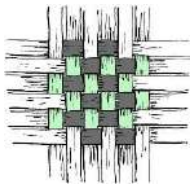
Site Surroundings

Road Access

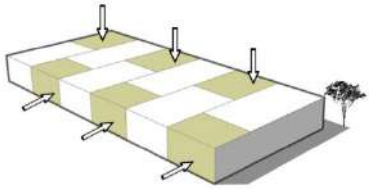
Architectural Design Concept

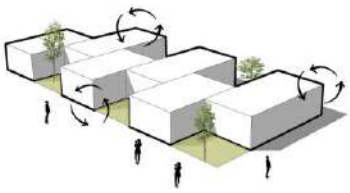
The concept of "Woven Together" emphasizes the seamless fusion of traditional craftsmanship with modern fashion innovation, symbolizing the planning of the overall blocks in transverse and longitudinal directions to create a thread-like pattern with a dynamic interplay of mass and void. Just as threads woven together strengthen and enhance fabric, the fashion community is enriched and empowered through the connections and collaborations between designers, artisans, retailers, and consumers.

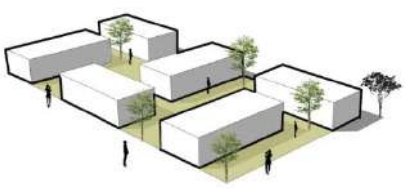
Weaving



Weaved Together







The interconnected spaces, like woven fabric, balance density and openness, using mass and void to define areas. The block arrangement creates buffer zones and pockets for collaboration, with dense areas for core functions and open spaces for communal interaction

Design Process

The design features interconnected spaces that foster learning and creativity. Visitors enter from the South, with separate parking and a pedestrian path leading to lively retail blocks and a café. Pocket spaces for recreation are integrated throughout, reflecting the weaving pattern concept. Centrally located, the auditorium, exhibition hall, and multipurpose area host large events, while the museum displays fashion from various cultures. A strategically positioned cafeteria caters to both the academic community and event attendees, offering a space for refreshments and socializing with stunning views of Phewa Lake from an elevated seating area. Additionally, a separate café within the academic block provides a more private space away from public areas.

The academic and admin blocks are near the secondary entrance, providing privacy and easy access for students and staff. A central runway connects all blocks, ensuring smooth flow and maintaining each area's unique identity and function

Master plan

Exterior view

Conclusion

This thesis project presents a thoughtful integration of architectural design and the rich tradition of fashion in Nepal, creating a platform for designers and artisans to showcase their work to a broader audience. The Fashion Hub is more than just a building; it is a nurturing environment where learning, creativity, and commerce coexist, aiming to transform the local fashion industry. By reducing the need for aspiring designers to seek opportunities abroad, this hub will help retain and cultivate local talent. The strategically designed spaces, including outdoor recreational areas, enhance the overall creative experience, providing both relaxation and inspiration. This project envisions the Fashion Hub as a dynamic center for fashion in Nepal, fostering collaboration and innovation while celebrating the beauty of traditional craftsmanship and modern fashion.

3D Views

Boutique Interior

Students Name- Prashansa Bam

Project Name- Event Centre (Designing flexible spaces for events)

Supervised by- Ar. Pragati Baniya

Abstract

This research, "Event centre" presents them as versatile venues that cater to cultural, formal, and informal events, designed to engage the public through well-thought-out features like a central plaza, pocket spaces, and a children's playground. These centers typically include facilities such as banquet halls, multipurpose halls, amphitheaters, and auditoriums, all aimed at providing comfort, safety, and a unique experience. Additionally, they offer ample parking and utility spaces, fostering cultural appreciation, active participation, and a deeper connection to the community.

Project Location- Tikapur, kailali

Tikapur is one of the most visited spots of tourism. The site is on the way to tikapur park which serves as a appropriate place for event center with the flow of public and near residential area less far from core of the city. The latitude: 28°31'30" North and longitude: 81°07'15" East. The area is 28 ropani (14516.7349 sq.m) with flat landThe sun travels east to west direction and the wind predominantly flows from east to west, affecting temperature distribution across the region.

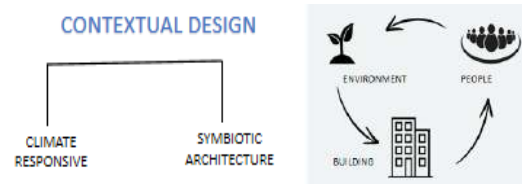
Site Scenario

Site Surroundings

Architectural Design Concept

The event center's design is rooted in contextual architecture, blending climate-responsive and symbiotic principles to create a functional and harmonious space. Welcoming shapes and thoughtfully designed indoor-outdoor areas foster social interaction and a seamless flow between activities. The use of timber in doors, windows, and roofs, alongside terracotta tiles, reflects environmental adaptation and historical conservation, resonating with Terai architecture.

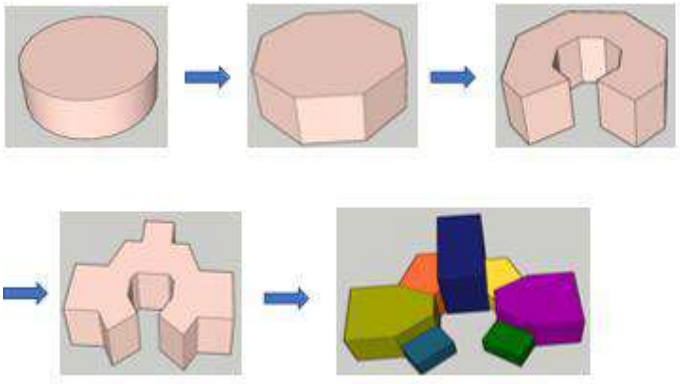
Brick walls with mud textures enhance this local connection, while a central courtyard with a fountain serves as the building's calming focal point. Jali panels promote natural air circulation, and neem and mango trees contribute to environmental sustainability, reinforcing the bond between nature, people, and architecture. This "form follows function" approach ensures every design element serves a purpose while maintaining aesthetic and contextual integrity.



Design Process

The architectural design process begins with establishing a central hub as the focal point, guiding the formation of an octagonal shape that naturally creates a central courtyard and distinct communal spaces. This courtyard, featuring a fountain, enhances natural lighting and promotes a sense of openness while the centrally located atrium ensures efficient wind flow. Spaces are organized by program, function, and circulation, with an emphasis on climate mitigation through water bodies and green spaces that cool the hot Terai climate. The design prioritizes sensory experiences with the sound of water and the beauty of local flora, while flexible outdoor spaces accommodate a variety of events. Local materials like timber, terracotta tiles, and mud-textured bricks connect the design to the Terai region, and jali panels ensure natural air circulation, creating a harmonious and sustainable environment.

FORM DEVELOPMENT



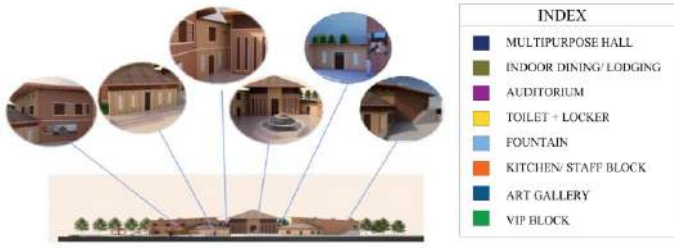


Fig: Site elevations

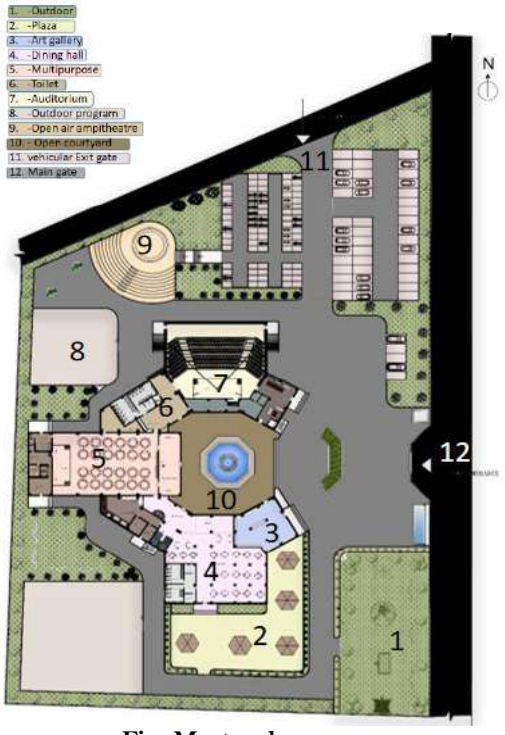


Fig: Masterplan

Conclusion

This thesis project integrates contextual architectural design with the vibrant Terai cultural essence to create a versatile event center that fosters social interaction, community engagement, and a strong connection with nature. The central courtyard, with its calming fountain and green spaces, serves as the building's heart, enhancing the visitor experience. Local materials like timber, terracotta tiles, and mud-textured bricks ensure the center blends with its natural surroundings, while jali panels and strategic space layout promote natural ventilation and comfort. The design's flexibility accommodates a wide range of events, making the center a dynamic and culturally meaningful community space.

3D VIEWS

Students Name- Prasiddhi Subedi

Project Name- Recreational and Fitness Center

Supervised by- Ar. Nirupa Gurung

Abstract

This research, "Recreational and Fitness Center," presents a comprehensive approach to creating vibrant recreational spaces in urban environments, exploring the urgent need for multi-functional centers that cater to diverse leisure activities. It addresses the challenges posed by rapid urbanization and limited public spaces, with objectives that include analyzing current facilities, identifying gaps, and proposing a design that integrates fitness, social interaction, and relaxation. The study delves into the historical evolution of recreation, its psychological and physical benefits, and strategic design principles, utilizing literature reviews, case studies, and interviews with recreational and fitness center visitors.

Project Location- Pokhara-17, Birauta

Birauta, a vibrant and scenic location ideal for a Recreational and Fitness Center, offering a peaceful environment with stunning north-facing mountain views. The 24,072 sq.m. area is easily accessible via well-connected roads and public transportation, just 1.5 km from Birauta Chowk. Its proximity to landmarks like the Ganesha Banquet Hall, Shangri-La Montessori School, Pokhara Housing, and Fishtail Academy School further enhances its appeal, making it a prime spot for both locals and tourists.

Site Scenario

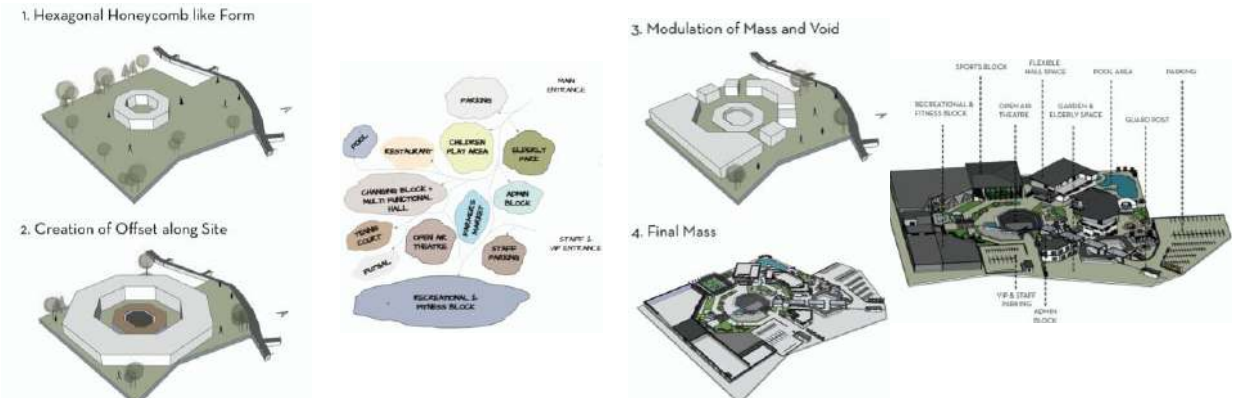
Site Surroundings

Architectural Design Concept

"Dynamism"

The design concept focuses on creating a dynamic environment with open floor plans, flexible spaces, and varying ceiling heights, enhanced by reflective and translucent materials that play with light and shadow. A hexagonal honeycomb structure symbolizes dynamism and unity, with form development involving strategic site offsetting and modulation of mass and void. Addressing social disintegration, lack of public spaces, and health concerns, the design includes well-being activities, nature-immersive areas, high-energy zones, calming interiors with accurate color psychology, greenery, and dedicated children's play areas, resulting in a functional and visually appealing space.

Form Development and Zoning



Design Process

The conceptual design features a dynamic hexagonal honeycomb structure, symbolizing movement and unity. Key blocks are strategically placed: the Admin Block on the east, Restaurant Block on the north, Changing and Multifunctional Hall Block on the west, and Recreational and Fitness Block on the south, which includes a wall and rock climbing feature. An organic-shaped swimming pool is conveniently located near the Changing Block. The northern side hosts a children's play area and an elderly park with spaces for light exercise and yoga, while a small farmers' market and food court sit adjacent to the Restaurant Block. At the center, an open amphitheater and a semi-covered futsal ground with spectator seating, along with an open tennis court, offer ample recreational opportunities. The landscape includes dynamic pergolas, seating areas, and water elements to enhance both the aesthetics and functionality of the space.

10.Restaurant Block

8. Admin Block

17. Recreational and Fitness Block

12. Changing and Multipurpose Block

Conclusion

This thesis project presents a well-integrated architectural design that transforms the site into a vibrant Recreational and Fitness Center, fostering wellness and social interaction. The design thoughtfully interconnects diverse programmatic elements, including fitness facilities, relaxation areas, and social spaces, all within a dynamic hexagonal honeycomb structure that symbolizes movement and unity. The site's natural features, such as stunning mountain views and ample sunlight, are incorporated into the design, enhancing the overall user experience. Local landmarks and infrastructure are seamlessly integrated, creating a space that serves both locals and tourists. The use of dynamic forms, organic landscaping, and strategic material choices not only ensures the building blends harmoniously with its environment but also provides a lively and engaging atmosphere. This project showcases a holistic approach to recreational space design, offering users a comprehensive experience that promotes physical activity, relaxation, and community engagement.

3D VIEWS

Student Name- Prem Prasad Sharma

Project Name- Innovative Agriculture Centre

Supervised by- Ar. Roshni Subedi

Abstract

Agriculture, crucial for human development, has increasingly disconnected from people due to shifts in resources, technology, climate, and population demands. Despite advancements, traditional agricultural practices have remained largely unchanged, leading to problems in food production and consumption. To tackle these problems and improve food security, the Innovative Agriculture Centre project aims to establish a high-tech urban farm and research unit. This initiative will offer education on modern agricultural technologies and provide fresh produce, integrating agriculture with modern architecture to reconnect urban populations with sustainable farming.

Project Location- Dibyashwori Bhaktapur

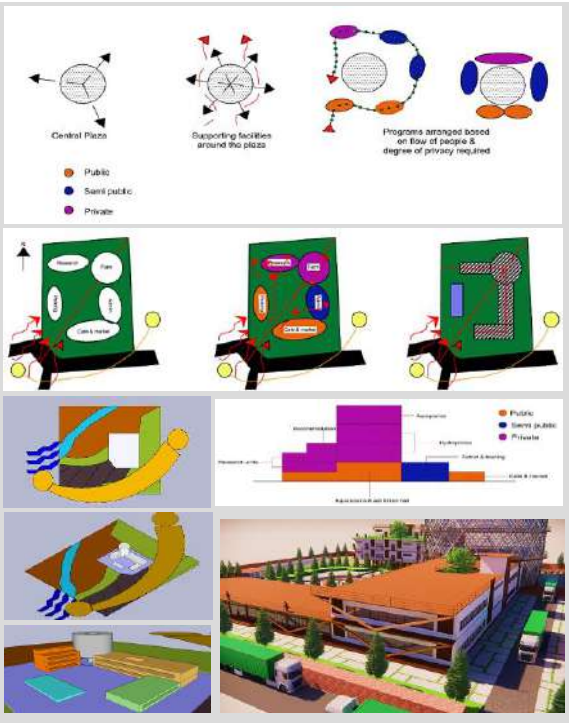
The site at Dibyashwori, Bhaktapur is currently used as an agricultural farm. Historically, it has been dedicated to agriculture and is surrounded by a mix of residential and commercial establishments within a half-mile, facilitating local sale of farm products. The soil fertility varies from low to high, making it suitable for horticulture, though the use of chemical fertilizers and pesticides has led to soil quality degradation, making it drier and harder. There is no regular interaction with extension services by the farmers.

Surroundings context and traffic

Site Scenario

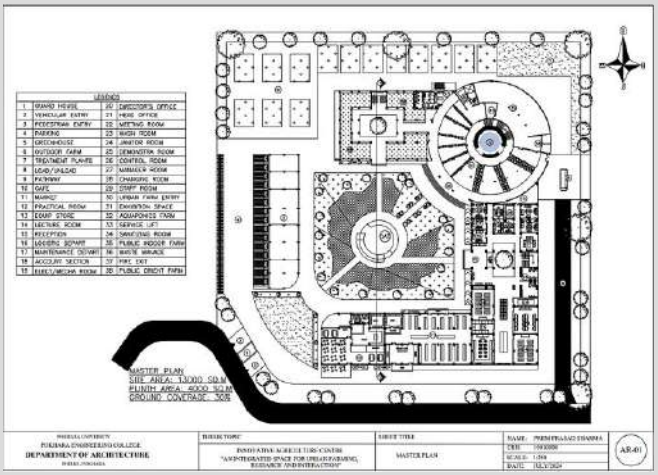
Architectural Design Concept

The design concept for the Innovative Agriculture Centre Symbiosis, involving mutually beneficial relationships, is applied in architecture to enhance sustainability and address food insecurity. Buildings can incorporate green roofs, renewable energy sources, and eco-friendly materials to form self-sustaining ecosystems.. This innovative approach combines agriculture with architecture through vertical farming and circular designs, utilizing sustainable materials like CLT panels to minimize carbon footprints. The urban farm's design features a central plaza for interaction, strategic layout for optimal sunlight and ventilation, and spaces for fish farming, hydroponics, and aeroponics, balancing privacy and communal needs while maximizing environmental efficiency.



Design Process

The planning places pedestrian and vehicular entrances at the southwest diagonal corner, with a service entry at the southeast corner; a guard house serves both, and the plaza features outdoor seating linked to a café and market. The central plaza connects administrative, research, and farming units, with the farming block and greenhouse's ground floor dedicated to visitor engagement. The site includes semi-public, private research, and specialized function areas, with a central circular block for hydroponics and mushroom farming, and a roof garden on the admin unit's second floor. The design emphasizes natural connections through indoor-outdoor visual links.



Master Plan

Conclusion

This thesis project focuses on designing an urban farm with essential facilities like research labs to provide a sustainable method for growing organic crops. It aims to minimize environmental impact by drawing on previous studies and site analyses.

The vertical farm and research unit are designed to be visually appealing and beneficial for the local community, addressing challenges such as population growth, climate change, and rising food costs. By bringing farming closer to urban areas, the project offers a more efficient, cost-effective solution for food security.

In summary, this project demonstrates how intelligent design and a commitment to sustainability can produce spaces that serve both the environment and the community. As global challenges persist, initiatives like this will be increasingly crucial for securing our food supply and advancing eco-friendly practices.

3D Views

Students Name- Priya Pokhrel

Project Name- Tranquility Centre

Supervised by- Ar. Nirupa Gurung

Abstract

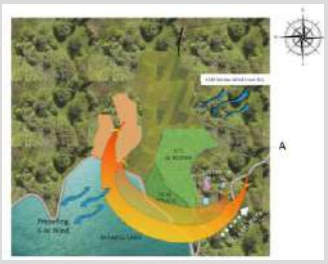
A Tranquility Center is a place focused on enhancing health and well-being, offering therapeutic activities like yoga, meditation, and sound therapy. These centers are crucial in today's fast-paced world, providing stress relief and fostering inner peace. They also build community support, creating connections among patrons. However, challenges like financial constraints and accessibility remain. Tranquility Centers are vital for promoting mental health and resilience, offering essential solace in a chaotic world.

Project Location- Pokhara-27, Dipang Lakeshore

The Tranquility Centre, located on the banks of Dipang Lake in Lekhnath, Kaski, Nepal, aims to boost foreign tourism and regional development. Positioned in Ward No. 27 of Pokhara Metropolitan City, it offers free meditation, yoga, and sound healing services, promoting well-being. The Centre seeks to integrate local culture and philosophy, providing spaces for interaction and meditation while creating economic opportunities for the local community. The serene lakeshore setting offers an ideal escape for relaxation, stress relief, and holistic healing, fostering a deeper connection with nature.

Site Scenario

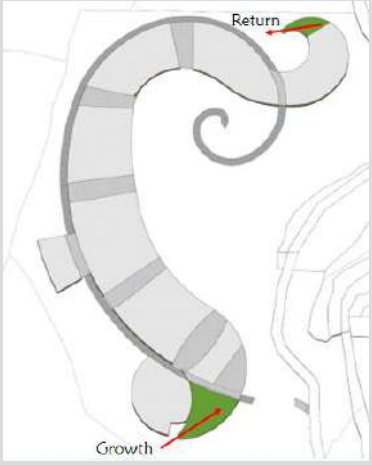
View of lake from site



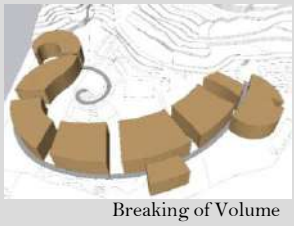
Wind and sun path diagram

Architectural Design Concept

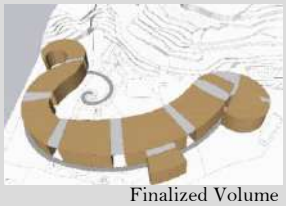
The concept merges the golden ratio and spiral volute in architectural design to symbolize the evolution of consciousness. The golden ratio represents a harmonious journey through life, leading to the Shunya space, or Nirvana cave, where consciousness achieves ultimate enlightenment. The spiral volute begins at a central point, symbolizing the birth of consciousness, expands to represent growth, and ultimately returns to nature, completing the life cycle. The design uses this spiral layout, golden ratio proportions, natural materials, and evolving elements to create a profound representation of the human journey.



Volume



Breaking of Volume



Finalized Volume

Development of Building Form

Design Process

The Tranquility Center integrates the golden ratio as the central pathway leading to the Shunya space, or Nirvana cave, where participants observe noble silence. On either side, spiral volutes are embodied by buildings that emerge from the ground on a sloping surface, symbolizing birth, and descend back into the ground, representing death. The rest of the volutes include various buildings of the center, organized into public, semi-public, and private spaces. Public spaces feature an administration block, treatment block, kitchen/dining area, Japanese tea garden, and service block. Semi-public spaces include a yoga hall, library, meditation hall, and sound therapy hall. Private spaces consist of dormitories for male and female residents, combined residency, and staff residences.

Master Plan

Site Plan

Conclusion

This architectural thesis presents the Tranquility Center at Dipang Lake as a response to the need for holistic well-being and community support in a fast-paced world. By integrating the golden ratio and spiral volute into its design, the Center symbolizes the journey of consciousness from birth to enlightenment and return to nature. It offers a serene environment for meditation, yoga, and sound therapy, addressing the growing demand for mental health and stress relief. Located strategically to enhance local tourism and regional development, the Center merges local culture with holistic healing practices. Despite facing challenges like financial constraints and accessibility, the Tranquility Center stands as a vital sanctuary for fostering inner peace and resilience.

3D Views

Students Name- Sabina Bhandari

Project Name- Drugs Rehabilitation Center

Supervised by- Ar. Pragati Baniya

Abstract

The rising prevalence of substance abuse disorders has posed a significant challenge to public health systems worldwide, demanding comprehensive solutions for effective rehabilitation. This thesis explores the critical role of architectural design in facilitating the recovery process within drug rehabilitation centers. The research focuses on creating an integrated facility that not only addresses the physical aspects of rehabilitation but also considers the psychological and social needs of individuals undergoing treatment..

Project Location- Pokhara-17, Birauta

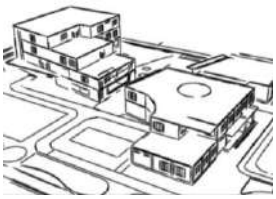
The proposed site is located in Pokhara Metropolitan City. The site is topographically flat and currently occupied as an agricultural land. Pokhara has witnessed a steady rise in the number of drug users in the past years, comprising mostly unemployed youths as well as college and school students. The view is one, it can be the best beautiful natural hilly landscape. It is 1km away from Birauta highway, hospital ,police stationcan found within short distance.

Site Scenario

Site Surroundings

Architectural Design Concept

The Sense of Coherence (SOC) is a transformative concept in architectural design, especially for women's drug rehabilitation centers. Rooted in the salutogenic model, SOC emphasizes optimism, control, and resilience. It is built on three core components: comprehensibility, manageability, and meaningfulness.In design, comprehensibility is achieved through clear, logical layouts that reduce confusion, while manageability empowers users by providing adaptable spaces that foster a sense of control. Meaningfulness ensures the environment resonates with users, creating a nurturing and empowering space.When applying SOC locally, cultural sensitivity and community integration are crucial, incorporating local materials and fostering community connections. The center must also be resilient and adaptable to evolving therapeutic needs.Incorporating SOC into the design of a rehabilitation center not only creates a functional space but also deeply supports the healing process, empowering women on their journey to recovery and contributing to their overall well-being and empowerment within the community.



Design Process

With focus on patient privacy and functionality. The layout features distinct public, semi-public, and private zones, with the administration and OPD rooms at the front, alongside a multipurpose hall near the parking area. Separate entrances for vehicles and pedestrians enhance safety. The service entrance is strategically routed to lead directly to the dormitory block, while another entrance provides access to the administration and visitors' block. Medical and OPD services are housed within the administration block, ensuring easy access for both patients and staff. The dormitory block, situated behind the administration, includes recreational areas, dining, therapy rooms, and bedrooms. These blocks are connected by a communal space featuring therapeutic gardens and recreational areas, creating a supportive and healing environment.

Master Plan

Conclusion

In summary, designing a women's drug rehabilitation center in Nepal requires a deep understanding of the cultural, social, and economic realities faced by women in the country. By integrating a sense of coherence (SOC) into the design, along with a focus on cultural sensitivity,socioeconomic inclusivity, and community engagement, the center can become a beacon of hope and healing. It can offer women not just a path to recovery, but also the tools and support needed to rebuild their lives and contribute positively to their communities. Through thoughtful, empathetic, and culturally attuned design, such a center can play a transformative role in addressing the complex issue of addiction among women in Nepal, ultimately helping them to reclaim their lives and achieve sustainable recovery.

3D VIEWS

Students Name- Shain Ghimire

Project Name- Yawanta:A Vedic Gurukul

Supervised by- Ar. Roshani Subedi

Abstract

This thesis project explores the establishment of a Vedic Gurukul, focusing on its principles, curriculum, and potential benefits for learners. Rooted in ancient traditions, the Vedic Gurukul system offers holistic education that nurtures physical, mental, and spiritual development. The project compares modern educational approaches with the Gurukul system, highlighting its unique features and advantages, such as fostering critical thinking, character development, cultural preservation, and overall well-being. Additionally, it addresses practical considerations like infrastructure, faculty training, curriculum design, and regulatory aspects for implementing a Vedic Gurukul in the contemporary context, aiming to revive ancient educational philosophies for future generations.

Project Location- Pokhara, Lamachaur

The selected site for establishing a Vedic Gurukul is located in Lamachaur, Pokhara Metropolitan City, Kaski. Spanning an area of 92 ropani (34,360.9462 sqm), the site presents a terrain topography, with a strategic location approximately 1 km from Lamachaur Chowk, offering both accessibility and seclusion—ideal for a learning environment that emphasizes spiritual and holistic education.

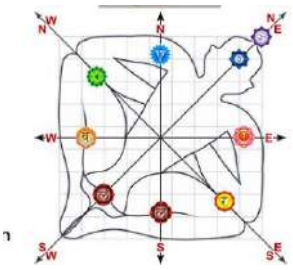
Site Scenario

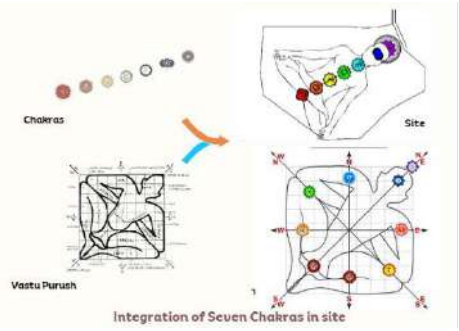
Site Surroundings

Architectural Design Concept

Integrating the concept of chakras within the framework of Vastu Kala, an ancient science of architecture, involves aligning both the energy centers and spatial design principles to create a harmonious and balanced environment. Vastu Kala emphasizes the flow of energy through a space, similar to how chakras regulate energy flow within the human body. Here's how the placement of chakras can be aligned on a site according to Vastu principles.

The design of a Vedic Gurukul that integrates the concept of chakras with zoning principles divides the site into three main parts: the activity zone, the spatial zone, and the building zone. Each of these zones corresponds to specific functions and characteristics, aligning with the chakras' symbolic and functional aspects. By carefully placing blocks within these zones, the Gurukul achieves a balanced, harmonious environment conducive to holistic education and spiritual growth.





Integration of Seven Chakras in site

Design Process

Conclusion

The Vedic Gurukul system, exemplified by Nepal's Yawanta Gurukul, is a traditional educational model that emphasizes holistic development, spiritual growth, and cultural preservation. Rooted in Vedic wisdom, it integrates moral values, discipline, and a deep connection with nature, addressing aspects often overlooked in modern education. Despite modernization challenges, Yawanta Gurukul remains relevant by focusing on character, wisdom, and cultural roots. The thesis underscores the system's enduring value and suggests that adapting to contemporary needs while maintaining its core principles can enrich education, creating a balanced and humane framework that harmonizes traditional and modern approaches

3D VIEWS

Student Name-Sharan Bhattarai
Project Name- E-sports Arena
Supervised by-Ar. Kedar Chhetri

Abstract

This research is done for the completion of a bachelor's degree on Architecture Engineering. The topic I have chosen for my thesis is "E-sports Arena".. The E-sports arena is a project that aims to improve the infrastructure of e-sports arena in Nepal. This thesis presents a detailed analysis of the current scenario of Nepal e-sports arena and how it needs to be fixed. The analysis begins with the existing arena layout, functionality, and aesthetics through surveys, interviews, and case studies. The project is to understand its strength, weakness, and potential for improvement.

Ultimately, the thesis aims to provide a comprehensive architectural plan that aligns with the arena's values of excellence and inclusivity. By integrating educational principles with architectural design, the project seeks to enhance the learning experience and nurture future of talents in Nepal and beyond. The research is conducted through a comprehensive literature review, case studies, and interview with current e-sports player and event organizer.

Project Location-,ArchalBot, Pokhara-2

Area:12765sq.m
North-east Orientation
Flat Land
Humid Sub-Tropical Climate

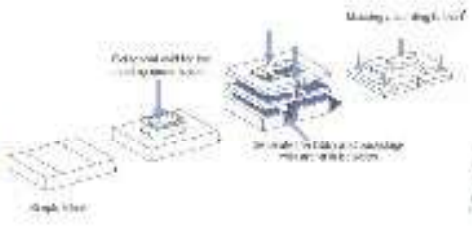
Site View

Site Access

Architectural Design Concept

The spatial layout of arena spaces can be designed considering the function of the users whether it is players, spectators or organizer so the spaces is divided into three parts:

Vertical Zoning



DESIGN EXPLORATION

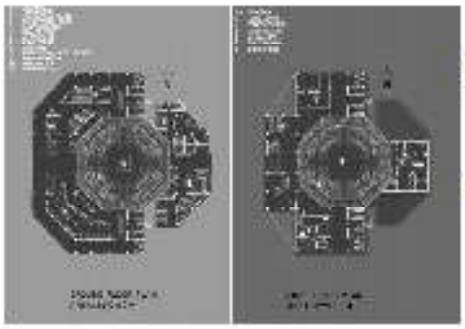
Design Process

Different access for the different purpose, the main Southside access for the audience so the gateway is large to control traffic and west side access for the players, VIP ,admin and service. Buffer zone created along all side by help of landscaping. The plaza space is the transition space between built space and landscaping. Space is divided into three parts: The lobby, The Arena and Backstage. The Public spaces like market and arcade is at the front for the easy access for the visitors, whereas the space for players and VIP is at the back for the privacy and accessibility.

Masterplan

The sitting arrangement for the audience is done in arena sitting layout where audience can side the arena from all side with height field of view. The players arena where player play is in square form so all the game ranging from 2 layers 64 players can be played within that space.

The mezzanine space in lobby and double height effect in arena give make the void space in the building which helps in lighting and ventilation. The present of maximum width corridor and many staircase helps in inner vertical and horizontal circulation easy and comfortable.



Floor Plan

Elevation

Site Section

In summary, the Esports arena is poised to become a vibrant and inclusive landmark in Pokhara, With careful planning, innovative design, and a commitment to excellence, the gaming arena will become a flagship destination for gaming enthusiasts and a beacon of gaming culture.

The ground floor is designed such that it looks grand for the spectators from the entry points with the arches maintained at 2m distance.It's mainly designed for the players so that it looks likes a game building with the use of pointed lines, flat surfaces.

Students Name - Sharmila K.C
Project Name - Agro market hub : Revitalization of agricultural management committee , pokhara
Supervised by - Ar. Pragati Baniya

Abstract

The architectural thesis, "Agro Market Hub: Revitalization of the Agricultural Market Committee, Pokhara," presents a comprehensive design solution for an existing agricultural market in Pokhara's core area. The research addresses critical issues such as land wastage, the scattered nature of various markets (wholesale, retail, non-veg, farmers), and the lack of interactive spaces and essential facilities. By proposing the consolidation of these markets into a single, strategically designed hub, the thesis aims to create vibrant spaces that foster social activities and interactions. The study responds to the increasing consumer demand for healthy agro products due to urbanization and supports the revitalization of the market in line with the Agro Business Act 2017 by the Pokhara Metropolitan City (PMC).

Project Location- Pokhara 9, Prithivichowk

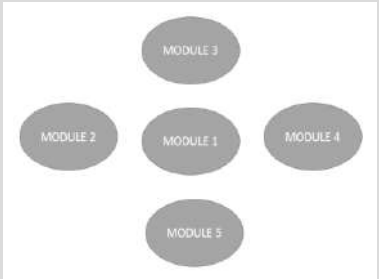
The site is located in the heart of Pokhara, at Prithvi Chowk, a central area of the city. It is well-connected, with major roads and the main highway for loading and unloading nearby. This location is important because it is the only wholesale market in Pokhara, making it a key spot for trade.

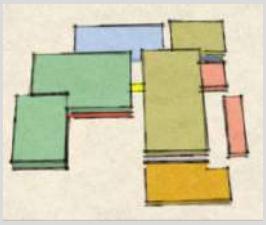
Architectural Design Concept

"Transforming Pokhara's historic market into a vibrant, multifunctional hub that fuses modern design with urban connectivity "

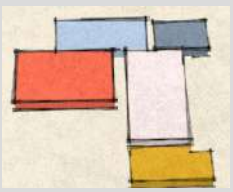
The major objective of this redevelopment project is to resolve the problems related to urban context and the design. There are total 5 no's of modules, where the module means each block or layers as a set of individual unit that is combined to form a whole market.

1. Centrally locating the market hall facing towards the major access road and easily accessible and visible from the all side.

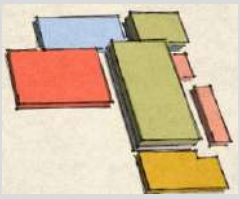




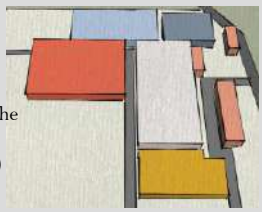
5.SOCIAL LAYER: Adding the interactive layer (restaurants, kids play zone, eateries, cafe etc.) towards the main facing direction where public flow is high.



2.ECONOMIC LAYER: Spliting the market hall by function .
CULTURAL LAYER: farmers market where the local people gathers and buy or sell their products .



3.LOGISTICS LAYER: Including the second most important part of the market: storage (auction or holding) and waste storage areas where the vehicular flow is high.



4.GOVERNANCE LAYER: Adding the service blocks (admin, transitory space and storage) as the next layer to the market hall.

Design Process

The markets are placed in the core area of the site and near to the entrances and the exits, whereas store and the administration block are kept at the first floor of market block . The entrance at the east is used as main entrance, and the back entrance at north and in south is proposed for secondary entrance . The parking for both types of vehicles are also segregated, so that the traffic don't collide .The main market building, i.e, the wholesale market shows the hierarchy, as is located at the center, whereas the other blocks surround it . Some green spaces are popped up around the pathways, and streets, which can be provided as resting spaces.

Exterior Views

Master Plan

Conclusion

In conclusion, the architectural thesis on the "Agro Market Hub: Revitalization of the Agricultural Market Committee, Pokhara" successfully addresses the pressing challenges faced by the existing agricultural market in Pokhara's core area. By identifying key issues such as land wastage, scattered market distribution, and the lack of interactive spaces, the research provides practical and innovative solutions through the consolidation of markets into a single, well-designed hub. This approach not only optimizes land use but also fosters community engagement by creating vibrant spaces for social interaction. As urbanization continues to drive the demand for healthy agro products, this revitalization project aligns with the objectives of the Agro Business Act 2017, contributing to a more sustainable and efficient market infrastructure in Pokhara.

3D VIEWS

Students Name- Shreya Bijukchhe
Project Name- Childcare Support Center - "आवास"
Supervised by- Ar. Luna Thapa

Abstract

The purpose of this study was to evaluate the effectiveness and impact of childcare support centers, specifically day care centers, on child development and parental employment outcomes. The primary objective was to assess how access to quality day care services influences children's cognitive and social skills as well as parents' ability to maintain stable employment. The study concludes that childcare support centers play a crucial role in fostering child development and supporting parental employment. The study employed a mixed-methods approach, combining quantitative data from standardized developmental assessments and employment records with qualitative data from parent and caregiver interviews.

Project Location- Prasyang- 5, Pokhara

The proposed site is situated in Parsyang, Pokhara which lies just 0.73km away from the Pokhara Baglung highway. Parsyang Dharapani Marga is a notable street located in Pokhara, Nepal. Situated within the city core, this thoroughfare serves as a vital artery connecting various neighborhoods and districts in Pokhara. Dharapani Marga, sometimes simply referred to as Dharapani Road, runs through Parsyang, a picturesque village renowned for its stunning natural beauty and tranquil atmosphere.

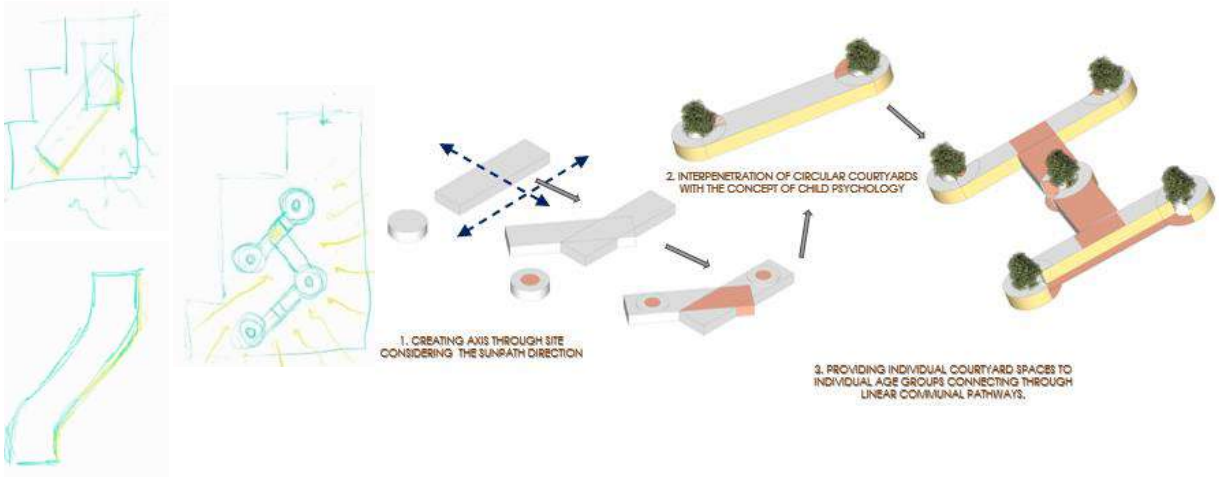
Wind and sun path diagram

Site Scenario

Site Surroundings

Architectural Design Concept

For the initial approach, I decided to go with the axis of facing towards south which was also a plus point in which the site's longer side follows the south facing with 45degree angular axis. The conceptual zoning starts from the site itself. The figure shows the building orientation according to the site context and the axis of sun direction. the project encompasses the building form as circular spaces connected with linear forms. But most importantly the design strategies that consider the child psychology and their perspective towards the shapes of building or any object.

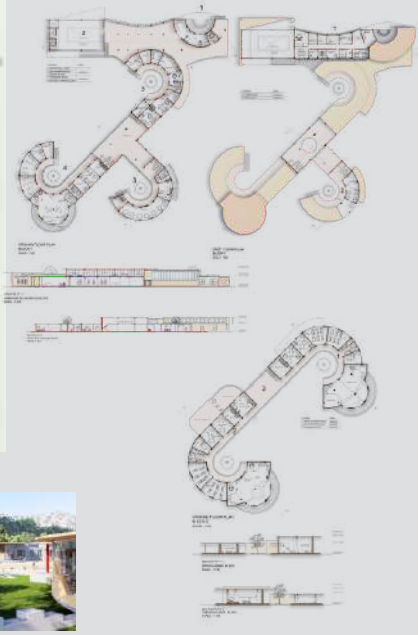


Design Process

The masterplan describes the placement of spaces and why they are placed in the area. Firstly, the entrances on two sides lead to the parking area and admin or entrance area. The entrance aera leads to the reception area waiting area. The layout is designed to connect four age-specific blocks, prioritizing infants by placing their block at the front for easy access near the reception area. The toddler block is adjacent to the infant block and linked to a communal space. Preschoolers and school-aged children have separate blocks tailored to their developmental needs. A central dining and kitchen block serves all age groups, with children's spaces on the ground floor and areas for staff and parents on the first floor. The admin block is on the first floor of block-1, connected vertically to the reception, while the parents' visitor block is on the first floor of the dining block.

Site Plan

Master Plan



Conclusion

This thesis project sums up the need for and importance of childcare support centre that present a thoughtful integration of architecture and children and their needs. The main aim for this project was to uplift the women especially working mothers of our generation and to motivate them for working without any hurdles and to help develop the children of theirs in a homely environment that they might lack in their own house.

The project not only focuses on the architecture side but also the social side of the people to contribute them in a different yet simple way that makes positive impacts in the society.

3D Views

Students Name- Suashree Thapa

Project Name- School of Architecture

Supervised by- Ar. Kedar Chhetri

Abstract

The thesis " School of Architecture at Pokhara, Nepal aims to explore innovative approaches in Nepalese architectural education, addressing the critical need to foster creativity in aspiring Architects. This research endeavors to propose a new architectural school framework of Pokhara Engineering College in a new place with architectural design of school which is a part of Pokhara university situated at Pokhara that prioritizes the development of creative spaces ,fostering an environment that stimulates inspiration, experimentation and exceptional design thinking.

Project Location- Dharapani, Parsyang Pokhara

Dharapani, located in Pokhara, Kaski District within Gandaki Province, is a natural beauty that serves as a gateway to nature, mountains, lake the tourism capital city of Nepal. The site surroundings are characterized by lush greenery, forest and a subtropical climate, making it an ideal setting for a student center that seeks to study in the lap of nature. The 49 ropani site, is located 2.9 km from zero k.m near to Pokhara – Baglung highway.

Site Scenario

Architectural Design Concept

A circular architecture school is designed with a central atrium that serves as a collaborative hub, surrounded by radial layers of classrooms, studios, and communal spaces. This layout promotes connectivity and unity, reflecting the school's focus on holistic education.

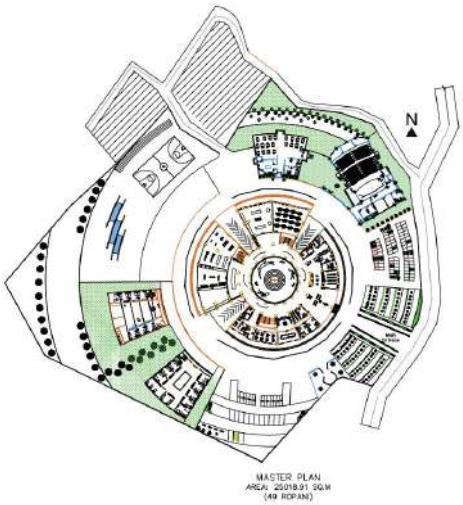
Center Design: The center's design concept aims to capture the essence of the students to be focused and for the feel of unity. The central building, welcoming the students, visitors and parents. It is an interactive space where student can experience learning environment and communal gatherings.

Live Learning: Featuring a blend of Newari, Neoclassic and modern facades, each representing a different era and style. This design educates students about the rich history of Nepali architecture while emphasizing the importance of preserving cultural originality. By integrating these diverse styles, the school becomes a living lesson in architectural heritage, inspiring students to value and protect their roots.

Design Process

The design of this architecture school is organized into zones: public, semi-private, and private areas. The academic and administration blocks are centered around a central gathering space that connects the key areas of the site. Surrounding this central block are important facilities like the auditorium, cafeteria, and dormitory. Parking is carefully divided into sections for two-wheelers, four-wheelers, staff, and those with disabilities.

An open-air theatre is located at the center of the building, providing natural light and air circulation while also serving as a communal space for students to gather and learn. Studios for art, model making, and labs are placed on the ground floor for easy access to materials and students. Guard posts are positioned at entrances for security, and open spaces and gathering areas provide outdoor spaces for activities and events.



Conclusion

The project 'School of Architecture' is introduced for the impact of inner-enclosed by building and outer-open to air learning and developing the thinking ability and vision for innovation.

The School of Architecture is dedicated to nurturing students' fundamental skills and critical thinking, essential for fostering design creativity and leadership. The curriculum is designed not only to prepare students as architects but also to equip them for future changes in the profession. This design supports the school's teaching by creating diverse learning environments—individual, immersive, and simulation-based—that inspire creativity. The design process, guided by a thorough review of literature and case studies, aims to enhance interaction between students and teachers while creating adaptable learning spaces. The focus is on reimagining the design studio as a space for both individual and collective creativity,

3D VIEWS

Students Name- Til Kumari Chaudhary

Project Name- Tharu Cultural Center

Supervised by- Ar. Nirupa Gurung

Abstract

The Tharu Cultural Centre at Manari is a proposed project, aimed at preserving and promoting the rich cultural heritage of the Tharu, an indigenous tribe of the Terai region. The project's major attractions include the use of traditional Tharu architecture, employing vernacular materials and construction techniques unique to the Tharu ethnic group. The design not only aims to celebrate and preserve Tharu culture but also to promote tourism in the region, especially given its proximity to Triveni Dhaam, a popular pilgrimage site. The research underpinning this project involves a deep dive into Tharu architecture, culture, settlement patterns, and construction technologies.

Project Location- Manari, Sarawal-2, Nawalparasi

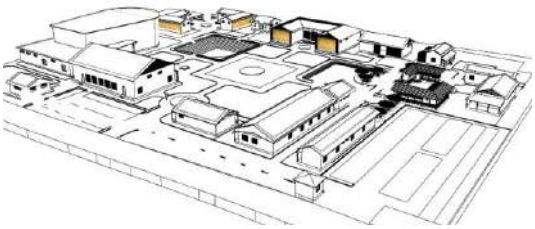
Manari, located in the Nawalparasi West District within Lumbini Province, is a vibrant village that serves as a gateway to understand the rich cultural heritage of the Tharu community, one of Nepal's indigenous groups. The village's surroundings are characterized by lush greenery, flat plains, and a subtropical climate, making it an ideal setting for a cultural center that seeks to preserve and promote Tharu traditions. The 26 ropani site, is located 5 km east from the district headquarters and 5 km south from the east west highway Mahendra Rajmarg.

Site Scenario **Site Surroundings**

Architectural Design Concept

The Tharu Cultural Center is designed as a replica to showcase the traditional settlement pattern and architectural style of the Tharu community, an indigenous group primarily residing in the Terai region of Nepal. The center's design concept aims to capture the essence of the Tharu people and their evolving settlement patterns.

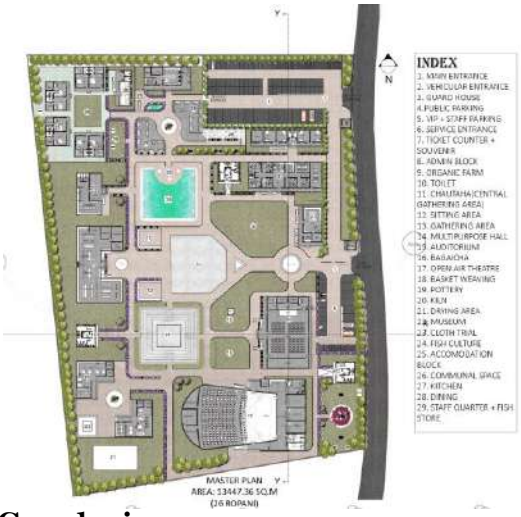
Heart of the Community: The central plaza, welcoming the guest, symbolizes the heart of Tharu life. It is an interactive space where visitors can experience traditional Tharu occasions and communal gatherings.



Traditional Tharu Village Concept: The Tharu Cultural Center replicates the layout and architecture of a traditional Tharu village, reflecting the community's initial settlements near rivers. The village layout is designed to showcase the organic growth pattern, with houses clustered together and arranged in a linear fashion.

Design Process

The block placement is done as per the user groups i.e public, semi-private and private . The area area separated as zones as per the programmes formulated and accessibility of user groups. The Tharu Cultural Center is centered around a Central Gathering Space that connects key areas across the site. Public and VIP+ Staff Parking are strategically placed near the main entrance. The Museum, Workshop, and Open Air Theatre are located on the left side, while Fish Culture and Organic Farm areas are positioned centrally. Accommodations and Communal Zones are clustered in the top left, with the Cafeteria nearby. The Multipurpose Hall and Auditorium are situated towards the bottom, connected to the central space. Near the main entrance, the Souvenir/Ticket Area leads visitors into the site, with the Admin Block and Staff Quarters positioned near public parking. Guard Posts ensure security at the entrances, while Open Space and Gathering Areas provide outdoor spaces for activities and events.



Conclusion

The project 'Tharu cultural centre' is formulated to explore tharu culture, tradition, art and handicrafts. Also, it acts as a recreational space for the visitors and tourist. Hence most targeted group are those Tharu groups who were unknown about their own culture as well as International and domestic tourist. Nepalese people are also unknown about the architecture of other new places. Thus, this project is proposed with the aim of promoting the culture and community development also vernacular architecture of Manari, Nawalparasi i.e. Tharu Architecture.

This project includes the various spaces required to explore tharu culture such as; tharu gallery to preserve their materials and culture, Workshop and souvenir shops to explore their art, Tharu architectural characteristics in built form, different tharu elements i.e bamboo, slope roof, thatch, wooden baskets, parewa ghar, etc. to give the essence of tharu village Thus, with all this approach this project is good for exploring the tharu culture and art.

3D VIEWS

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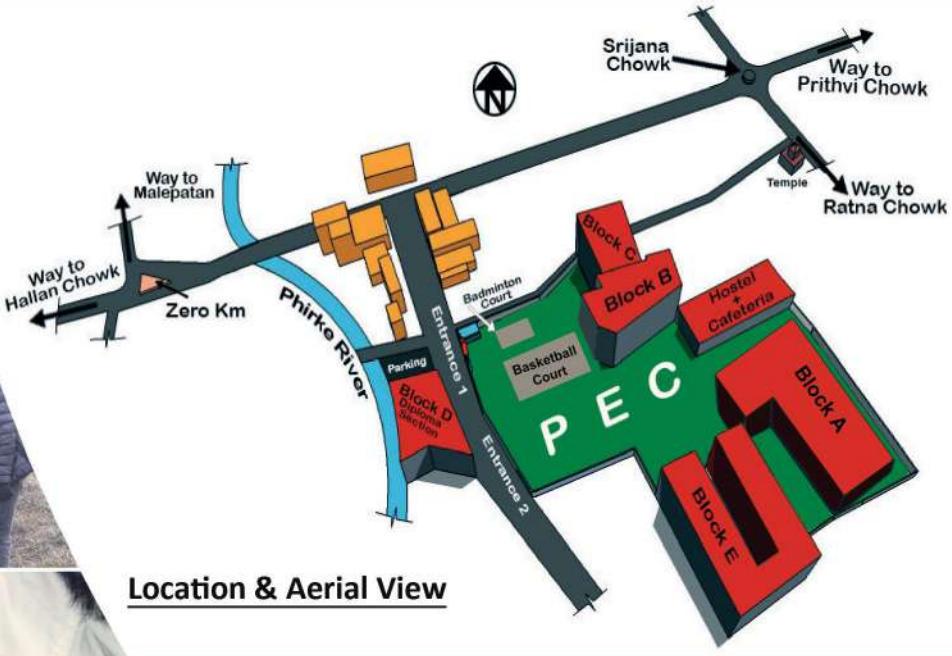
Location

With its central location between Srijana Chowk and Zero K.M. . PEC is highly endowed with easy access to all the public utility services.



Location & Aerial View

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