# TRIBHUVAN UNIVERSITY
# INSTITUTE OF SCIENCE AND TECHNOLOGY

## E-COMMERCE PROJECT REPORT
## ON
## "Spices Hub"

### Submitted to:
**Department of BIT**

**Patan Multiple Campus,**

**Patandhoka, Lalitpur**

*In partial fulfilment of the requirement for the Bachelors in Information Technology*

### Submitted By:
**Suprabha Aryal(604/078)**

**BIT 7th Semester**

**Under the Supervision of**

**Sachita Nand Mishra**

**2082**

**TRIBHUVAN UNIVERSITY**

**INSTITUTE OF SCIENCE AND TECHNOLOGY**

**Patan Multiple Campus**

**Patandhoka, Lalitpur**

**Bachelor in Information Technology (BIT)**

# SUPERVISOR'S RECOMMENDATION

I hereby recommend that this project prepared under my supervision by **Suprabha Aryal** entitled **"Spices hub"** in partial fulfillment of BIT403 E-Commerce requirement for the Bachelor in Information Technology program is recommended for the final evaluation.

……….……………….

Mr. Sachita Nand Mishra

Project Superviser

BIT Department

Patan Multiple Campus

**TRIBHUVAN UNIVERSITY**

**INSTITUTE OF SCIENCE AND TECHNOLOGY**

**Patan Multiple Campus**

**Patandhoka, Lalitpur**

# LETTER OF APPROVAL

This is certified that this project prepared by **Suprabha Aryal** entitled "**Spices hub"** in the partial fulfillment of requirement for the degree of Bachelor in Information Technology has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

| | |
|---|---|
| SIGNATURE of Supervisor<br><br>Mr. Sachita Nand Mishra | SIGNATURE OF Coordinator<br><br>Mr. Jyoti Prakash Chaudhary |
| SIGNATURE of Internal Examiner | SIGNATURE of External Examiner |

# ABSTRACT

Spices hub is an online spice store developed using WordPress, designed to bring authentic flavors from around the world to customers' kitchens with ease and convenience. The platform offers a wide range of high-quality spices, herbs, and blends, carefully curated to meet the needs of both home cooks and professional chefs. With a user-friendly interface, secure payment options, and an efficient product catalog system, the website provides a seamless shopping experience. Built on WordPress, Spices hub leverages customizable features, responsive design, and integrated e-commerce functionality to ensure accessibility across devices. The project aims to connect traditional culinary heritage with modern digital commerce, allowing customers to explore and purchase premium spices from the comfort of their homes.

**Keywords:** WordPress WooCommerce, Premium spices and herbs, traditional culinary.

# ACKNOWLEDGEMENT

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# ABBREVIATIONS

| TERM | FULL FORM |
|------|-----------|
| SDLC | Software Development Life Cycle |
| CMS | Content Management System |
| HTML | Hypertext Markup language |
| CSS | Cascading Style Sheets |
| APIs | Application programming Interface |

# CHAPTER 1: INTRODUCTION

## 1.1 Introduction

Spices hub is an online platform dedicated to bringing the finest spices, herbs, and seasonings from across the globe directly to your kitchen. With the vision of connecting culinary traditions from the East and West, the website offers a wide selection of high-quality spices that add flavor, aroma, and authenticity to every dish. Whether you are a home cook experimenting with new recipes or a professional chef in need of premium ingredients, Spices hub provides a trusted destination where quality and convenience meet.

Built on WordPress with integrated e-commerce features, the website ensures a smooth and user-friendly shopping experience. Customers can easily browse through categories, explore detailed product descriptions, and make secure purchases with just a few clicks. The responsive design allows accessibility across all devices, ensuring that spice lovers can shop anytime, anywhere. By combining traditional culinary heritage with the modern benefits of digital commerce, Spices hub is committed to making global flavors more accessible to everyone.

More than just an online spice shop, Spices hub represents a journey of taste and culture. Each product is carefully sourced and curated to ensure freshness, authenticity, and sustainability. The platform not only helps people discover and purchase spices but also encourages them to explore the richness of world cuisines. With Spices hub, every meal becomes an opportunity to celebrate culture, tradition, and the art of cooking.

## 1.2 Problem Statement

In today's fast-paced world, consumers often struggle to find authentic, high-quality spices that preserve both freshness and flavor. Local markets may have limited variety, while existing online platforms often lack proper quality assurance, clear product information, or affordable pricing. Additionally, customers seeking global spice blends face challenges in accessibility, as many specialty spices are either unavailable in their region or come with high shipping costs and delays.

For small-scale spice producers, reaching a wider audience is equally difficult due to limited digital presence and lack of efficient e-commerce solutions. This gap between consumer demand for authentic spices and the limited availability of a reliable, accessible, and userfriendly online platform creates the need for a dedicated solution.

Spices hub addresses this problem by providing a WordPress-based e-commerce website that connects customers with a diverse range of premium spices sourced from trusted suppliers, ensuring quality, convenience, and global accessibility.

## 1.3 Objectives

The main objectives of Spices hub store are as follows:

- To provide an easy-to-use online platform for purchasing authentic and high-quality spices.
- To connect spice producers with consumers by ensuring trusted sourcing and convenient delivery.

## 1.4 Scope and Limitations

### 1.4.1 Scope:

The Spices hub project aims to create a reliable online platform where customers can conveniently purchase authentic spices from around the world.

- Offers a wide range of authentic spices, herbs, and blends through an online platform.
- Built on WordPress with e-commerce integration for smooth shopping and secure payment.

### 1.4.2 Limitations:

- Dependent on internet connectivity for access and transactions.
- Delivery times may vary based on location and shipping services.
- Limited to the available stock and suppliers' capacity.

## 1.5 Methodology

The development of **Spices hub**, an online spice store built on WordPress, can be effectively analyzed and implemented using the **Agile methodology**. Agile emphasizes iterative development, customer collaboration, and flexibility, which makes it suitable for ecommerce projects where user needs, design, and features may evolve over time.



**Figure 1: Agile Methodology**

## 1.6 Report Organization

The material presented in the project is organized into five chapters:

**Chapter 1: Introduction:**

This chapter deals with the introduction of the system with its objectives and limitation along with the reason why system is made.

**Chapter 2: Background Study and Literature Review:**

This chapter describes the fundamental theories and concepts as well as information about existing system, journals and papers.

**Chapter 3: System Analysis and Design:**

This chapter focuses on the different requirement of the system, which describes about the functional, non-functional and feasibility analysis.

**Chapter 4: Implementation and Testing:**

This chapter provides an account on implementation and testing, tools used for preparation of the project. Test cases for unit testing as well as integration testing are done. Implementation details of modules are traced.

**Chapter 5: Conclusion and Recommendation:**

This chapter consists brief summaries of outcome of the project, conclusion, reviews as well as future recommendations, improvements that can be done on upcoming days and feedback systems, stability of the project.

# CHAPTER 2: BACKGROUND STUDY AND LITERATURE REVIEW

## 2.1 Background Study

Nepal is a country rich in agricultural diversity, where spices play an important role in daily cooking as well as cultural and traditional practices. From turmeric, ginger, and garlic to cardamom, timur (Sichuan pepper), and chili, spices are deeply integrated into Nepali cuisine and lifestyle. Despite the abundance of locally grown spices, customers often face challenges in accessing high-quality, fresh, and authentic products due to limited distribution channels, lack of branding, and inconsistent market standards.

E-commerce in the spice sector of Nepal is still in its early stages. Some general online stores and food delivery platforms list spices as part of their product range, but there are very few dedicated online platforms that specialize exclusively in spices. The lack of digital presence for most local spice producers means that customers seeking authentic Nepali spices or global spice blends often have limited trusted options online. This creates an opportunity for specialized platforms like Spices hub to modernize the spice distribution system by combining traditional production with digital sales channels.

## 2.2 Literature Review

Online shopping in Nepal has gradually expanded over the past decade, with grocery and spice retail emerging as potential growth sectors. K.C. and Timalsina (2016) conducted a study on **consumer attitudes towards online grocery shopping in Kathmandu Valley**, highlighting that convenience, time-saving, and variety were key motivators, although concerns about trust and product quality still limited adoption. This early research established the foundation for understanding online consumer behavior in Nepal's food sector.

The rise of e-commerce grocery platforms like **MetroTarkari**, launched in 2013, further demonstrated feasibility in the Nepali context. As documented by Lex (2013) and later by K.C. (2018), MetroTarkari served as one of Nepal's first agro-based e-commerce portals, proving that consumers were open to purchasing perishable goods online, though challenges in logistics, awareness, and digital literacy remained.

The **International Finance Corporation (IFC, 2025)** reported that digital financial services in Nepal have significantly grown, with mobile wallets and online payments supporting ecommerce adoption. Similarly, Bhujel (2024) emphasized how **fintech availability enhances customer trust and convenience** in online grocery and spice shopping, bridging a major gap identified in earlier studies.

On the supply side, Nepal is a global leader in **large cardamom production**, yet the value chain suffers from inefficiencies. Kattel, Bhusal, and Dhakal (2020) examined the trade and governance of large cardamom in the eastern Himalayan region, identifying weaknesses in processing, quality assurance, and branding. This gap presents an opportunity for online spice platforms to standardize and promote authentic Nepali spices globally.

Internationally, case studies such as **BigBasket in India** provide relevant insights for Nepal's spice e-commerce. MoEngage (n.d.) and Digital Scholar (2024) document how BigBasket leverages digital marketing, customer engagement, and reliable delivery systems to strengthen customer loyalty. These strategies suggest that specialized spice platforms in Nepal should emphasize customer experience, personalization, and trust-building.
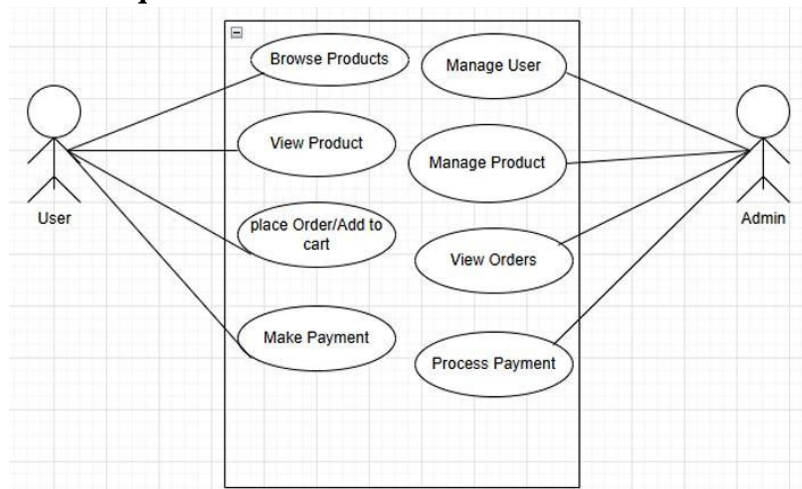
# CHAPTER 3: SYSTEM ANALYSIS AND DESIGN

## 3.1 System Analysis

This system is designed with the series of processes starting with feasibility study, requirement analysis, design, coding, testing and maintenance. During feasibility study, study is done about the possible issue and risk which can arise in the future. In requirement analysis, all the functional and non-functional requirements are analyzed and system is developed according to the requirement then designing of the system is carried out. After the design process, coding is started then after integrating the system there is testing of system. If the testing is positive then system is implemented otherwise some maintenance is done and system come in operation.

### 3.1.1 Requirement Analysis

The requirements are to be collected before starting project's development. To design and develop system, functional as well as non-functional requirement of the system has been studied.

### 3.1.1.1 Functional Requirement:



**Figure 2: Use case Diagram**

1.  System should allow Customer to order Product.
2.  System should allow admin to add, update and delete Product Details.
3.  System should allow to view product details.
4.  Customer should be able to make payment through the website.
5.  Customer order details report should be generated.

### 3.1.1.2. Non-functional Requirement:

- **Usability:** The platform should have a user-friendly and intuitive interface, making it easy for both consumers and farmers to navigate and use.

- **User-Friendly:** The system must handle a large number of concurrent users without significant slowdowns. Thus, it is user-friendly.

- **Maintainability:** It is developed using maintainable wordpress structure, making it easier to update and enhance in the future.
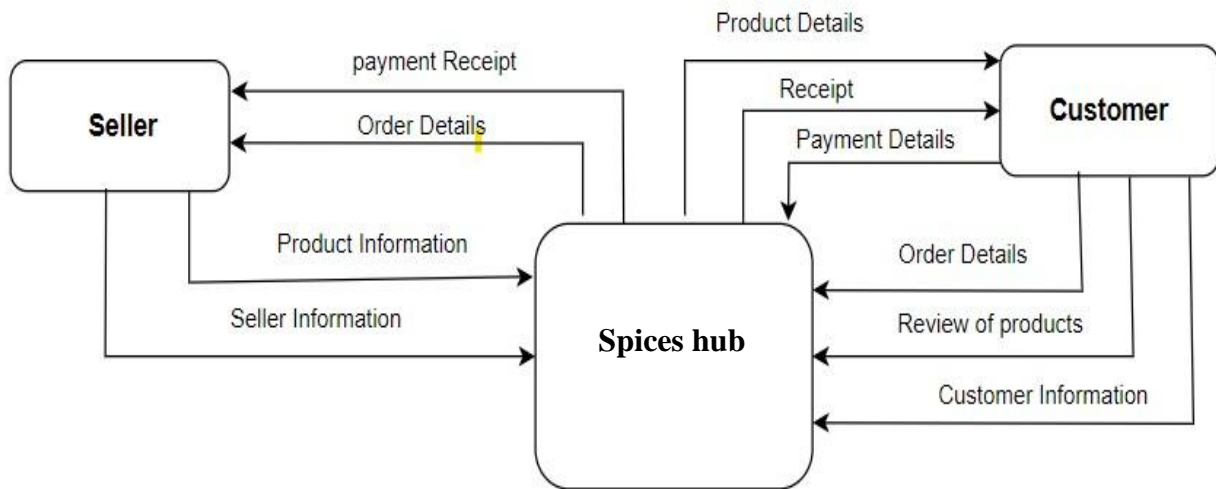
### 3.1.2 Feasibility Analysis

We conducted a feasibility study to assess the viability and practicality of implementing the Spices hub project. The study covers technical feasibility, operational feasibility, and economic feasibility.

**Table 1: Feasibility Analysis**

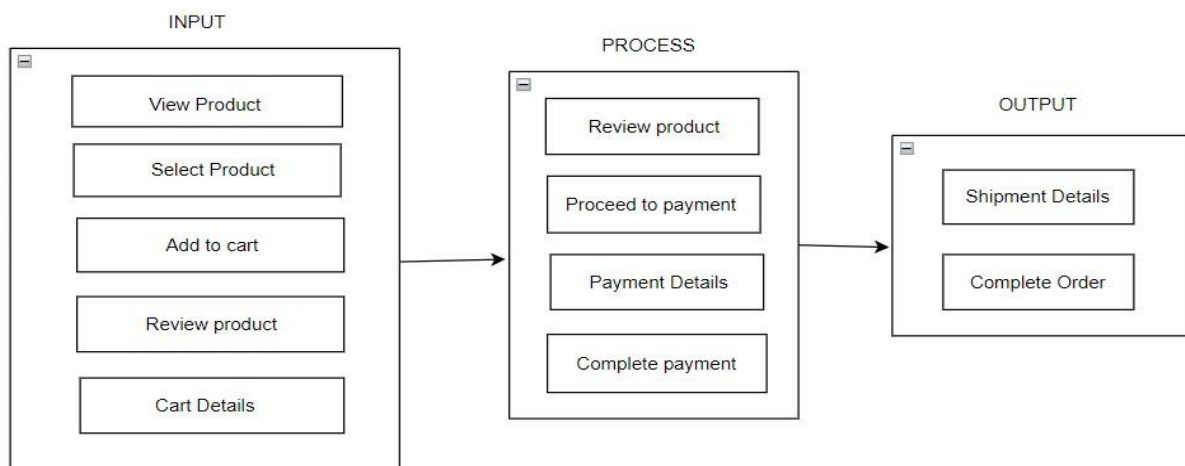| Name | Description | Remarks |
|------|-------------|---------|
| **Technical Feasibility** | It is developed under Windows 11 Operating System Using wordpress | Therefore, considering the requirement of the system is easily accessible the system is technologically feasible. |
| **Operational Feasibility** | The system is designed under Content Management System. | As it is user-friendly designed, the system is operationally feasible. |
| **Economic Feasibility** | The system is built using free software technologies and there is no any recurring cost just internet connection is needed. | Since open source technologies are used and there is no extra cost needed, the system is economically feasible. |

### 3.1.3 Process Modeling (DFD)



**Figure 2: Context Diagram**

## 3.2 System Design
### 3.2.1 System Architecture

A system architecture diagram, sometimes referred to as a block diagram, is a representation of system in which the main components or functions are shown as block joined by lines that indicates the connections between the blocks. A straight forward visual depiction of the complex system's operations is provided by the block diagrams below. The blocks, sometimes known as black boxes stands for sequential mathematical or logical operations. Below is underlying architecture of the system that will be created, which is illustrated with a simple picture that tells the story of the system overview.



**Figure 3: System Architecture**

**3.2.2 Interface Design (UI Interface/ Interface Structure Diagrams)**

This software will launch with a welcome splash screen as its user interface. User will be taken to the appropriate dashboard. The data and information they have access to can be readily managed and manipulated by them thanks to the dashboard's architecture. Additionally, based on the action they take, they will receive interface interfaces appropriately. To improve user experience, tooltips are positioned in unclear components. The interface is setup such that the user may readily access actions through the menu bar, given that the customer has to access to the bare minimum of actions. Appendices following contains UI (screenshot) sample images.



**Figure 4: UI Interface**

# CHAPTER 4: IMPLEMENTATION AND TESTING

## 4.1. IMPLEMENTATION

### 4.1.1. Tools Used

**Content Management System**

A **Content Management System (CMS)** is a software application that allows users to create, manage, and publish digital content without requiring advanced programming knowledge. It provides an easy-to-use interface where administrators can add, edit, and organize content such as text, images, videos, and product listings. A CMS also manages user roles, enabling multiple users (e.g., admins, editors, customers) to interact with the system securely.

In the case of **Spices hub**, WordPress is used as the CMS. It offers a wide range of customizable themes and plugins, including **WooCommerce**, which adds e-commerce functionality. With WordPress, the platform can efficiently handle product catalogs, customer data, orders, payments, and SEO features. The main benefits of using a CMS include **ease of use, scalability, cost-effectiveness, and flexibility**, making it an ideal choice for developing an online spice store.

### 4.1.2 Modules and Plugins Used

**WooCommerce:**

The primary plugin for e-commerce functionality. It allows product management, shopping cart, checkout, payment integration, and order tracking. Essential for managing spices as products with categories, prices, and inventory.

**Payment Gateway plugin:**

**eSewa** is one of Nepal's most widely used digital payment platforms, offering secure and convenient online transactions. It allows users to pay for products and services using their eSewa wallet, linked bank accounts, or mobile banking. For an e-commerce website like **Spices hub**, integrating eSewa provides Nepali customers with a familiar and trusted payment option, enhancing trust and improving conversion rates.

## 4.2 Testing

Unit and integration testing is done in each module. In unit testing small testable parts of the applications are tested individually and independently. The team members themselves did unit testing and the test was used for database test, records of each table, basic function test.

In integration testing, each module is combined and tested as a group. This test verified that the system maintained data integrity and can operate in coordination with other systems in the same environment. The team members themselves carried out the test.

### 4.2.1 Test cases for Unit Testing:

**a. Test case for Add to cart**

### Table 2: Test Case for Add to cart

| S.N | Test Case | Expected Result | Remarks |
|---|---|---|---|
| 1 | Enter the number of products to the cart equal to 0 | System should display message the value must be greater than 0. | Pass |
| 2 | Enter the number of products greater than 0. | System should add the number of product entered into the cart. | Pass |

**b. Test Case for Checkout**

### Table 3: Test Case for Checkout

| S.N | Test Case | Description | Expected Result | Remarks |
|---|---|---|---|---|
| 1. | Enter Billing First and Last Name | Enter the name of the Customer | System should enter the name of the customer | Pass |
| 2. | Select the Country/Region | Select the respective country or region | System should select the respective country | Pass |
| 3. | Enter the Address | Enter the address of the customer | System should enter the customer address | Pass |
| 4. | Search Products | Enter Product name | System should display the searched product | Pass |
| 5. | Enter Phone Number | Enter the 10 number length phone number | System should enter the phone number | Pass |
| 6. | Enter the Email Address | Enter the proper format email address | System should enter the email address | Pass |

# CHAPTER 5: CONCLUSION AND FUTURE RECOMMENDATION

## 5.1 Conclusion

The development of **Spices hub** as an online spice store demonstrates how digital solutions can transform traditional businesses in Nepal. By leveraging **WordPress** and **WooCommerce**, the platform provides a user-friendly, secure, and scalable system for customers to explore and purchase high-quality spices. Integrating payment gateways like **eSewa** and **Khalti** ensures convenient and reliable transactions, while modules for product management, SEO, and analytics enhance both operational efficiency and customer experience.

The project highlights the importance of structured **system architecture**, effective use of a **CMS**, and iterative development through **Agile methodology**, enabling continuous improvement and responsiveness to user needs. Overall, Spices hub bridges the gap between spice producers and consumers, promotes local and global culinary diversity, and sets a foundation for future expansion in Nepal's growing e-commerce market.

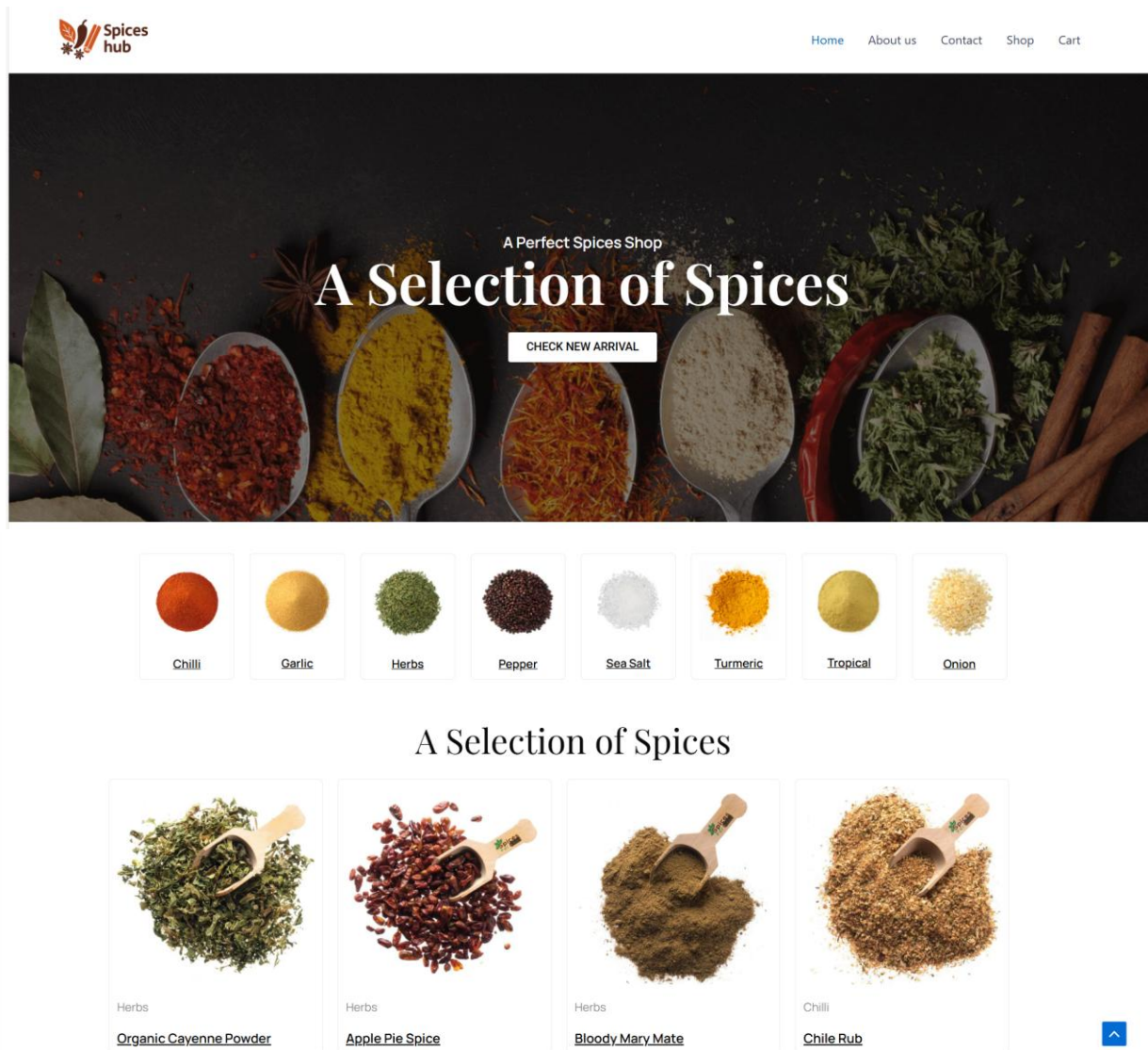## 5.2 Future Recommendations

While East to West Spices has been successfully developed as a Spices marketplace, several future recommendations can further enhance its functionality and user experience:

- **Mobile Application Development:** Developing a dedicated mobile app will make shopping more convenient for customers, offering faster access, push notifications for offers, and a smoother browsing experience.
- **Subscription Services:** Introducing monthly spice subscription boxes or curated packages can help retain customers and provide a steady revenue stream, while allowing them to explore new spices regularly.
- **Multi-Language Support:** Adding Nepali and other regional language options will make the platform more accessible to a wider audience across Nepal, improving usability for non-English speakers.

# REFERENCES

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# APPENDICES



# Homepage

## About Us – Spices Hub

Welcome to **Spices Hub**, your one-stop destination for the world's finest flavors. We believe that every spice tells a story—of culture, tradition, and the joy of good food. Our mission is simple: to bring you the authentic taste of spices sourced from every corner of the globe, right to your kitchen. At Spices Hub, we've traveled through bustling markets, remote villages, and age-old spice farms to handpick the very best. From the fiery heat of cayenne and the earthy richness of cinnamon to exotic blends like Madras curry and Italian herb mixes, our collection celebrates the diversity of taste and tradition.

We are more than just an e-commerce site—we're a community of flavor lovers. Whether you're a home cook experimenting with new recipes or a seasoned chef seeking authenticity, our spices are carefully curated to inspire your cooking journey. What makes us special is not just the spices we sell, but the warmth we bring with them. Each jar is a promise of purity, freshness, and a pinch of love. We believe good food connects people, and spices are the soul of every dish. Whether you're a home cook experimenting with new recipes, a professional chef seeking authenticity, or a food lover chasing flavors from faraway lands, we are here to be your trusted spice companion.

So, step into Spices Hub, explore our wide range, and let the world's flavors fill your kitchen with stories worth savoring. Because here, it's not just about selling spices—it's about sharing happiness, one sprinkle at a time.

# About us

## Have questions? Fill out the form below 👇

**Name** *

First                                   Last

**Email** *

**Comment or Message**

Submit

# Contact

## Shop

Showing all 8 results

Default sorting

Herbs
**Apple Pie Spice**
☆☆☆☆☆
**Rs 400.00**

[Add to cart]

Sale!

Herbs
**Bloody Mary Mate**
☆☆☆☆☆
~~Rs 450.00~~ **Rs 400.00**

[Add to cart]

Chilli
**Chile Rub**
☆☆☆☆☆
**Rs 450.00**

[Add to cart]

Sale!

Chilli
**Cinnamon Powder**
☆☆☆☆☆
~~Rs 299.00~~ **Rs 199.00**

[Add to cart]

Sale!

Garlic
**Granulated Garlic**
☆☆☆☆☆
~~Rs 850.00~~ **Rs 750.00**

[Add to cart]

Herbs
**Italian Herb Blend**
☆☆☆☆☆
**Rs 550.00**

[Add to cart]

Sale!

Chilli
**Madras Curry Powder**
☆☆☆☆☆
~~Rs 799.00~~ **Rs 600.00**

[Add to cart]

Sale!

Herbs
**Organic Cayenne Powder**
☆☆☆☆☆
~~Rs 699.00~~ **Rs 559.00**

[Add to cart]

**Shop page**

Home    About us    Contact    Shop    Cart

## Cart

| PRODUCT | TOTAL |
|---------|-------|
| **Italian Herb Blend**<br>₨ 550.00<br>Italian herb blend is a fragrant mix of dried Mediterranean herbs, perfect for flavoring pasta… | ₨ 550.00 |

−   1   +

Remove item

**CART TOTALS**

Add coupons                                    ⌄

Free shipping                              **FREE**

**Estimated total**                    **₨ 550.00**

**Proceed to Checkout**

Spices
hub

"Spices Hub – Bringing authentic spices from around the world to your kitchen. Taste the tradition, savor the flavor."

# Cart Page

**Checkout page**



**E-Sewa Interface**