Uttarakhand is a farmer friendly state. The produce that grows is very rich in nutrients and has high medicinal value. Talking about the current situation of farmers, middlemen extract a major share of farmers revenue as commission. Farmers also lack techniques like branding, packaging and marketing of their products.

Installation

Farmers Mart is a web-app that can easily be used on various platforms like a mobile phone or a laptop.

Our proposed solution

*Techniques of value addition*

1. Agricultural Produce:

* Best farmer and crop recommendation system is based on two self-designed algorithms – Farmer Score and Crop Score
* Crop Price Prediction is done on a daily basis
* Farm growth report which helps farmers analyze their yield
* SMS is sent to users regarding nearby weekly markets

1. Marketing Avenues:
   * Credit and Voucher system
   * Farm growth report which helps farmers analyze their yield
   * Discounts for farmers on essentials like fertilizers are provided
   * For customers with specific requirements, we have post-it and get-it system
2. Farmer Branding:
   * Crop score is use to inform the customer regarding the quality of crop
   * Farmer score is the overall score, which helps increase his sales
3. Packaging:
   * We will be using bio-degradable products like Corrugated boxes, Jute bags, etc.
   * We will also be printing the farmer score and location on the packaging to add a personal touch to it and thus connecting the customers directly to the farmers.
   * Packaging is entrusted to SHGs. This perfectly aligns with our vision of empowering India through its building blocks - The farmers, The consumer, (SHGs)
4. Logistics:
   * Transportation of products to the hubs is also done by SHGs
   * Real time location tracking, temperature data is recorded for quality assurance
   * The data is immutable (tamper proof)

*Extra Features*

1. An alternative to stubble burning is provided in our system by selling it to companies like Kriya Labs which uses it for arts and craft or for animal feed.
2. For any kind of query, we provide a chatbot system that will assist the user at all times.
3. We are also providing a facility wherein farmers having farming knowledge but not the required land can rent and use it on the basis of a lease agreement and vice - versa. This also helps during pandemics like COVID-19.
4. A payment gateway by using a third-party integration

*Collaborations*

1. Research labs (1. Sri Siddarameshwara Ayurvedic Medical College, Hospital and Research centre, Karnataka 2. Aradhana Ayurveda Wellness and Research Centre, Telangana)

Some of the plants grown in Uttarakhand are rare and have high medicinal values. We have provided a platform where Ayurvedic Research labs can buy these plants from the farmers.

1. Packaging (Care Pack Private Limited)

This company currently supplies corrugated boxes to various vegetable growers and for horticulture and are ready to collaborate with us for the same.

1. Stubble (Kriya Labs)

Founded in 2017, it aims to eradicate the infamous paddy straw burning in India by adding value to the agricultural residue and making it an asset for the farmers by creating a market for it

*Technology Stack*

1. Front – end:

Bootstrap, Jinja Templates, JavaScript

1. Back – end:

Blockchain (Ethereum), Flask, Python

1. Data - Base:

Firebase, Blockchain

1. Technology 5.0:

Data Science, Blockchain, Chatbot, SMS, Artificial Intelligence, Deep Learning (Memory Based Algorithm)