

Farming is a source of nourishment and financial income for many Kenyans in Nakuru, Kenya. Farmers in rural Kenya, as well as in urban Kenya, grow crops as a food source, and depend on selling these crops for their livelihood. A case study in rural and peri-urban areas in Kenya found that distance from farms to markets were associated with lower market participation. Increased sales were found to coincide with better prices and market information, making market information delivery systems essential for improving market participation.

Our project aims to create a delivery system implemented through mobile services to offer crop pricing information that would help farmers make more informed decisions, reduce uncertainties about expected profits, and ultimately help them easily access market information. We hope for our application to bridge the gap between rural farmers and markets and provide farmers in Kenya with easy, free access to information.

This information can be hard to obtain, be it from distance to markets, lack of relationship, or difference in language. Our app aims to address some of these issues and give more negotiating power to farmers. Some apps with similar concepts have been started in other developing countries, but the data is not up to date or the service is not free. We aim to be the first in Kenya to create a comprehensive, free crop pricing app. We aim to provide them with simple and clear information about their crops, and to provide that all in one place with many features such as price, location, type, and data searching features.

As of this point, we have made considerable progress in working towards reaching our goal. To give a brief overview of the steps we have taken, we have found a database to get all our crop pricing information from, collected the data, and created an application to present the data in a clean, user-friendly manner. As we have worked through our project, human centered design has continuously been an important aspect of our project. We have kept our project open-sourced and designed for zero-cost deployment. This increases the accessibility of our project by making it available to anyone and free to use. Our current deployed progress can be found at the following link: <https://croppricing.oa.r.appspot.com/>.

As we worked on our progress, our team made sure to maintain a comprehensive set of documentation for current and future contributors to ensure they have access to a consistent and complete knowledge-base and understanding of some of the design considerations we made. Our public documentation can be found at the following link: <https://humanitechvip.github.io/CPDocs/>.

Our current goals include implementing more front end feature design features using Bootstrap so that the human centered design portion of our project is more human centered design focused. For example, we're currently working on implementing a search bar feature so that farmers can use more filters to find specific crops that they want to sell. Furthermore, we also used Figma to work on different web pages that we want to incorporate. Examples of such pages include more information on crops to make the website a more useful resource to its users. Furthermore, our team is currently working on finding more databases to source our information from, as the data base that we were previously using shut down. This process has included several obstacles as well, since our team has found multiple resources and now has to parse through this data to remove any duplicates or conflicting information.

The team has also previously established contact with farmers in Kenya. This was an important part of our process, as we were able to gauge the impact it would have on them as well as the feasibility of this application. As we have now updated our website to make it more functional and user friendly, we hope to re-establish connections with Kenyan farmers to assess

how useful these changes in our app have been and also consider new improvements that might need to be implemented in the future.