

What is your idea?

The agriculture value chain in Nepal is informal and disaggregated, impeding the flow of information and resources. Development agencies have focused on increasing agricultural productivity. However, if farmers don't have a market for their products they will not be able to translate yields to improved livelihoods. Initiatives have been undertaken to increase access to market prices, helping farmers be informed in negotiations with buyers, but farmers still rely heavily on farm gate sales, a series of middlemen, and have very little bargaining power. Farmers also face challenges finding services such as farm laborers and transportation to markets, impeding farmers ability to harvest and transport products to/from the market on time. Buyers face similar market barriers, relying on their personal contacts to find products, constraining their operations to specific areas.

VOTO Mobile and CIMMYT propose to design and implement a crowdsourced IVR (Interactive Voice Response) marketing service, increasing linkages between individuals in the value chain, no matter their literacy level and language. Farmers can report their harvest/needed services through their phone, no matter how basic. The farmer posts are populated into a web or app based map that buyers can use to locate product and underemployed can use to find work. If a person is interested in a post s(he) selects the post, automating an SMS to be sent to the farmer with contact information. The goal of the IVR market service is to help aggregate and formalize the value chain by (1) increasing farmers marketability and bargaining power, (2) ensuring farmers can find timely services, and (3) helping buyers locate available product.

Farmers will be able to take a more active role in marketing their product by posting their harvest information (crop & amount) via IVR or SMS on a toll-free number. When a buyer shows interest in the post, the farmer will receive an SMS with the buyer's contact information. The farmer then has the power on whether to contact the potential buyer and negotiate terms. A follow up IVR call will be sent to the farmer to identify if the product was sold. If the product was sold, the farmer will be given the option to report the price and rate the transaction. The post will be updated accordingly including the price. Farmers in the surrounding area with live posts for the same crop will be sent an automated alert informing them of the transaction price, increasing their knowledge of market prices almost in real-time. The rating on the transaction will reflect on the buyer's profile and be included in the contact information sent to the farmer. This holds buyers to be accountable and gives farmers some knowledge of the trustworthiness of the buyer.

Farmers will also be able to request services using the same mechanism. The farmer will post the type of service required (laborer, transportation) and details (type of labor, distance, etc). The post will be populated onto the map. Underemployed and service providers will be able to look at the map, filtering to "requested services", and find jobs in their area. By clicking on the post, their contact information will be sent to the farmer. An automated IVR call will be sent to both parties to rate the experience. Individual's average ratings will be visible on the service, holding both parties accountable.

Buyers can utilize the web or app based map to find desired products, expanding outside their normal reach. Buyers can identify “hotspots” where large amounts of product are available, reducing the risk of traveling longer distances. This is especially helpful if the buyer’s normal area of operation had a bad production year due to drought, pests, etc. Buyers can also see prices as transactions occur in the area, helping them make informed decisions. Buyers will receive a follow-up call to rate the transaction. The rating will reflect on the farmer's posts, allowing buyers to know if the farmer is correctly representing the harvest.

Hypothesis: The marketing system will increase farmers marketability and access to services while expanding buyer’s area of operations.

How will you pilot it?

The 12 month pilot will focus on wheat and rice in the Terai, Nepal’s agricultural belt, and be implemented in the following phases:

1. Research & Design (6 months, \$70,000)- VOTO will work with CIMMYT field officers to conduct IVR surveys, field interviews, and focus groups to identify market information sources, barriers, and needs of stakeholders. The data will be used to design an engaging IVR market system that meets the information needs of stakeholders. VOTO Technical Team will build the tech to power the system including the customized map. Content for the automated messages will be created, translated, and recorded in agreed upon priority languages. The main cost for this phase is the man hours needed to create the technology. Additional costs include airtime for the IVR survey, field visits for the interviews and focus groups, and translation & recording of content.
2. Pilot Live (6 months, \$30,000)- CIMMYT will advertise the marketing number on existing marketing platforms (radio, print, etc). Sensitization focus groups will be conducted with farmer groups and buyers, ensuring value chain actors are engaging in the system. A workshop on how to utilize the system will be held for government officials and development agencies to increase awareness and get buy in from other actors. VOTO will continually monitor passive data from the platform (the number of calls, successful posts, automated messages, etc) to improve the system and content. In addition, VOTO will conduct monthly feedback surveys of users and make necessary changes. Costs incurred in this phase include sensitization workshops, platform management, and airtime.

Once the 12 month pilot is concluded, VOTO and CIMMYT will use the lessons learned and feedback from stakeholders to scale the market system and move to a sustainable model. To scale the system the focus area will be expanded to include the hills and mountain agro-ecological zones of Nepal as well as additional target crops (maize, vegetables, lentils, etc). To make the system sustainable VOTO will explore an MNO partnership to continue the toll-free phone line. A subscription model will be explored for value chain actors to continue to interact through the platform.