Krishi Star Apple Project Himachal Pradesh 18 November 2019

# A Journey through the Valley of Dreams



# **A Brief History**

Since the first apple orchard was established in Kullu Valley, Himachal Pradesh by A.A. Lee English in 1870, the desire for the 'forbidden fruit' has spread rapidly throughout India. In a time period of around 150 years the apple volume has grown to some 2.3 Million Metric Tons, that's about enough apples to fill 16,974 Boeing 747 jets. Even with this level of domestic production India still imports more than 24 times what it produces, the majority (48%) coming from the USA and then China (20%). Most of the orchards in Himachal Pradesh focus on the Red Delicious variety and are around 35 to 40 years old and nearly 90% of all apples grown here are consumed fresh.

"The journey of the apple starts 8000 ft above sea level where air is thin and water comes from nearby melting snowcaps."



#### Krishi Star Role

The first step in any Krishi Star engagement is to carry out an 'on the ground' analysis of the growing area where we are looking to procure from. An experienced team consisting of the Project Lead, Manager Rural Linkages, Product Expert and Marketing Manager visits the region and hold meetings with key stakeholders to understand what is currently happening. We call this step 'Demand Driven Research' and in this particular engagement we met with every level, from the Associate Director at the Regional Horticulture and Training Station in Shimla, to the apple packers in Shiladesh. During these engagements we gather relevant information around the specifics of the apple varieties that we were looking to procure and begin to think about some of the unique aspects that can go together to form a brand.

### The steps taken

Once a suitable farmer has been identified, a visit is arranged to inspect his crop. During the visit, the team look at the growing practices, varieties, packing capabilities, volumes available and of course pricing. We call this step in the process 'Capability Mapping' and we also loop in other key stakeholders such as transport companies, storage facilities and pack-houses.

Next comes the 'Impact Model Assessment' step, where we run through the economics and identify how we could pass some benefits back to the farmer. This aspect is critical to our engagement and forms part of the Krishi Star mission to help improve farmer incomes. In the current engagement we were able to pass an extra 100 Rs per box purchased back to the farmer as a premium.







"At every step of the journey the apples are handled with the upmost care and tests are conducted to ensure the perfect fruit every time"



We are always on the lookout for new technologies and how to incorporate these into our proposals and this project was no exception. When an opportunity to trial a new form of Modified Atmosphere Packaging (MAP) arose we decided to run an experiment using a biodegradable plastic micro perforated bag to extend the shelf life of the apples. 1200 bags were used to wrap just under 17 MT of apples that were to be cold pressed for juicing purposes. Another 'Supply Chain Innovation' was the decision to use refrigerated vehicles to deliver the consignment to the final destination in Bangalore. This was the first time a refrigerated vehicle had landed in Rohru and it created quite a bit of interest from the locals. Using 'reefers' as they are called, ensures that the apples reaches in prime condition and is worthy of the premium label that Krishi Star prides itself on.

Near Farm Gate quality control was achieved though partnering with an existing Controlled Atmosphere facility in Rohru and this allowed us to accurately monitor the quality of apples leaving the region to ensure that they met the exacting standards of our customers. The pressure, colour, size and damaged apples were all individually checked for every farmer that we bought from and a temporary cold storage unit was enlisted in Rohru.

# Marketing

A set of Marketing Collaterals were developed alongside the Capability Mapping and these were taken out on visits to discuss with potential buyers. They highlight possible packaging options for extending shelf life and assisting with the key marketing messages as well as telling the story of the unique qualities of the apples in this region. "The Valley of Dreams" brand then gets born and is used as a vehicle to communicate key marketing messages on different products such as apple juice and snacking apples. Retail wobblers were made and static Websites developed, accessed through the scanning of QR codes to further promote all collaborators involved in the project.

Scan here for more details of marketing initiative:

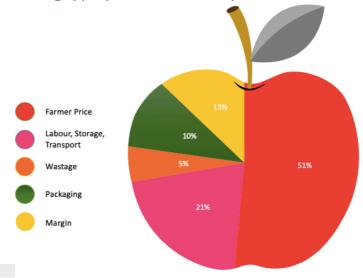


#### **Cost Breakdown**

The diagram below shows the typical costs associated with the procurement of a Red Delicious snacking apple.

# APPLE COST BREAKDOWN





### What next?

The next step of this initiative is to look at the potential for increasing the volumes for the apple season beginning July 2020. Through securing buying commitments from new and existing buyers Krishi Star will look to significantly increase the purchase volumes for next year and incorporate some new technologies for even better quality control and source traceability.

"At their final destination apples are inspected and repacked into MAP. They undergo regular testing to ensure quality is maintained"







