
Hariyali Kisaan Bazaar and Future Perspective – A Case Study

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Abstract

The 'Hariyali Kisaan Bazaar' seeks to empower the farmer by providing all solutions under one roof. 'A Mall for Farmers' that ensures last mile delivery of relevant and current farm technology, the entire range of agri and non agri products, farm fuels, output buy back of farmers' products etc. leading to increase in productivity and profitability. Centres are IT enabled capturing critical data relevant to farmers, providing inputs about market prices, including access to weather forecast and latest technical knowledge. Hariyali is assisting in Providing Urban Amenities to Rural Areas (PURA), Aggregation of Farm Produce and the use of IT. Such efforts are further strengthened at the national & international levels by banks, IFFCO, IT industries, nutrient experts for hybrid, farming first, WQM run by ACIAR & DWR, CSISA run by IRRI & CYMMIT, IFAD, ASDD, EADN & CSFD programs. The case study highlights Hariyali as an innovative business model which can be a catalyst for the social change and inclusive growth as well as additional efforts which can be supported with Public – Private Partnership. Consecutively, it would enhance unique rural capability to address fragmentation in agriculture, improve income levels, living standards of the farming community, while being a commercially sustainable business in national growth.

Keywords: *Public – Private Partnership, Rural Retailing, Fragmentation, Farming First*

Introduction

The agricultural sector is recognized as strategically important part of the economy because of the number of people that need to be fed including the percentage of population involved in agriculture. Hariyali Kisaan Bazaar (HKB) is the innovative effort empowering farmers and meeting the needs of rural households by providing access to agricultural products, services and retail purchases. DCM Shriram Consolidated Ltd (DSCL) having experience of 30 years had launched Hariyali Kisaan Bazaar (HKB) with five centres in 2002. HKB is aimed exclusively at rural India and the company is having sales from its 307 Hariyali stores. Mr. Ajay Shriram, Chairman & Senior Managing Director, said "Hariyali Kisaan Bazaar, the rural retail initiative of the Rs. 3,540 crores' have primary

business interest in agri-sector, sugar, agri-inputs & retail, energy intensive businesses, chemicals and plastics" (PR, 2011). These centres have warehouse for agriculture or farm produce, an agri-advisory centre equipped with qualified agronomists, a pharmacy with required medicines and a vet centre with qualified vet doctors. Each centre is set up over two to three acres of land and provides need-based infrastructure. The centres have impacts on the life

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of about 15,000 farmers. All big and small farmers have access to exclusive agricultural malls. 'In a move towards integrated rural development initiative, this model of HKB, envisages the issues faced by Indian farmers in the production processes, namely, unreliable and spurious sources of inputs, small land holdings, low mechanization, repetitive cropping practices, expensive credit, poor market linkage and unorganized trading.

Development of Rural Business in India with DSCL

DSCL's farm solutions business is engaged in providing comprehensive solutions to the farmer. The business range comprises of fertilizers, crop care chemicals, seeds and customized agronomy advisory service through a distribution network over 1500 wholesalers and over 20,000 retailers. HKB is entailing a far reaching positive impact in bringing a qualitative change and revolutionizing the farming sector. It portrays an example of how well corporate can contribute to the development of agriculture by building sustainable business. DSCL is the first company to implement growth through HKB. It works closely with Gates Foundation and was covered in a case study of Harvard School. Hariyali business has revenue lines coming from retail business such as lifestyle, household, food & grocery, agri input, agri businesses- seeds, milk and cattle feed, financial services, commodity trading etc.

Steps are taken to realize values in all its business operations through

- developing "Shriram" as a strong brand equity
- supplying agri-inputs, education, training and community development programs for improving performance and productivity
- expanding operations in the most agriculture dominated parts of India
- providing quality infrastructure supported with 20 regional marketing offices, 150 senior marketing professionals and 20 top agronomists (HKB 2011).

Four Pronged Goals for Growth

With the help of the products and services offered by the stores, farmers are able to improve the quality of

their crops and access a network of helpful resources in an environment that was once considered completely tangential to the benefits of agricultural research and technology reaped in other parts of the world. Such commercially-sustainable business can be the tool for brining prosperity in rural areas. It is committed to treat the farmer with dignity and maintain the highest standards of transparency and integrity in their dealings. HKB has following goals to achieve :

- (a) Providing right inputs in the right quality on the right time
- (b) Last mile delivery of latest and relevant agricultural Technology
- (c) Low cost and fair financing
- (d) Direct market linkages for farmers' products and their consumer products

Centres, Products and Functioning

Hariyali complexes have warehouses for agri-inputs and farm produce. HKB's is a profit business and provide targeted services to farmers in remote regions, a pioneering project to contribute to rural and agricultural development and food security. Hariyali outlets are information technology-enabled and display current as well as expected futures prices of agricultural products. Farmers are advised on post-harvest operations like grading of farm produced to sell at the higher prices in the market. Many centres have ATMs, agricultural insurance, direct marketing, veterinary services, petrol and diesel dispensing stations attached to them. The experience gathered through the Hariyali has faded several myths concerning farmers' behaviour that they are not out to buy cheaper stuff; now they want assured quality and the right quantity and willing to pay for it. The system is organised in Three Tier Systems such as ,Farm Advisory and Produce Linkage, Rural Retailing as well as Post Harvest Operations

Empowering Farmers with HKB

HKB is an example of how well the corporate can contribute to the development of agriculture by building sustainable business models. Centres do not stock only DSCL products but provide farmers the choice from the entire range of good quality products. Prices are clearly displayed to ensure complete

transparency in business dealing. The salesmen are agricultural graduates, capable of giving relevant and problem-solving advice to the farmers. Each complex has an attached farmers' training centre, where they are taught ways of maximising their returns from agriculture. The farm advisor-cum-salesmen dressed in yellow T shirts stand out in the complexes for all time assistance. They have been given mobile phones so that they are accessible to help farmers' technical queries. It strives to develop a long lasting relationship with their farmers by maintaining computerised records for each one of them (KCS, 2011).

An Understanding Approach

Understanding the need of farmers is key to Hariyali's success. Staff at HKB understands that purchase of new equipment can be a large financial commitment therefore at HKB, farmers may even start on rentals before making a major purchase. A recent development has been to increase farmers' confidence through teaching them English and IT skills. The farmers have responded well to these new opportunities and report positively on the relationship with Hariyali staff. "We have almost family like relations with Hariyali staff and they treat us with respect and dignity" says one farmer.

The key constraints addressed by Hariyali Bazaars are:

- (a) Bridging the last mile: It is important to bridge the gap by bring latest technology and equipment to the real users for betterment and to provide 24x7 support and hand holding, to improve the quality of agriculture in the area.
- (b) Quality Agro-Inputs: HKB provides a complete range of good quality, multi-brand agro-inputs like fertilizers, seeds, pesticides, farms implements and tools, veterinary products, animals feed, irrigation items and other key inputs like diesel and petrol at fair prices.
- (c) Financial Services: The company provides access to retail banking and farm credit through simplified and transparent processes including other financial services like insurance.
- (d) Farm Output Services: It also provides buy back opportunity, access to new markets and output related services.

- (e) Other products and Services: FMCG, Consumer Goods Durables & Apparels etc are supplied by the Company.

Hariyali Kisaan Bazaar and its Partners

Information Technology has been critical backbone to the chain of centers which is being used to provide online support through latest technology to connect with mandi (market) process, preparing fair and transparent billing as well as in maintaining extensive farmer databases with micro information to provide customized service to the farmers. The company plans to scale up to 500 stores in next few years, thereby covering cultivatable land of over 50 million acres and touching the lives of over 20 million farmers (KCS 2011 & PR 2011).

Average sales at an HKB store have gone up to Rs. 7 lacs a day during the harvest season, while it is around a tenth of that during the lean season. That means the turnover of a single HKB store is over Rs. 11.4 crores, annually, while the investment cost varies between Rs. 2 to 3 crores. The growing popularity of HKB stores has also promoted banks and insurance companies to look at possible tie-ups to tap the rural customer. ICICI Lombard and HDFC Bank have already tied up with HKB for their products. The scope of the Hariyali model is now proposed to be enlarged to provide warehousing facilities for enabling farmers to defer the sale of their produce to get better returns. Five warehouses with an area of around one lac square feet are currently under construction in various northern states. These are likely to become operational in the next couple of months. The receipts of these warehouses for stored products will allow farmers to get bank loans against them (PR, 2011).

Shriram Krishi Vikas Kendras: Additional efforts of DSCL include online agronomy services to farmers through 109 centres – SKVKs – established across the country that operates with the objective to increase farmer's profitability. A team of 172 agricultural graduates recruited from local institutions and universities and 25 development officers work along with farmers to assist them in their endeavours (SCH, 2009). To ensure that agronomists provide unconditional advice, they have not been assigned any sales responsibilities. SKVKs help upgrade farming method; provide assistance to the farming and rural

community as well as health care support for animal husbandry. Such initiatives have made it one of the most reliable and trusted partners of the Indian agro-community.

Hariyali Kisaan Bazaar added with InfoTech system: The rural consumers are served with software solution providers, SAP and Polaris to create an unique IT platform in the retail outlets of Hariyali. IT being critical in providing online support on latest technical advancements, weather forecasts, mandi prices, fair & transparent billing to farmers, it also helps in maintaining extensive farmer databases with detailed information about the field to provide customized service to the farmer.

Farmers' Response: The ground-level agri-support is already yielding results on these issues such as the farmer's fields, the adoption rate of high yielding seeds, right doses of fertilization, productivity of cattle-feed, moisture conservation measures, new crops/ related occupations or the adoption of new technologies like zero tillage. The farmers in

catchment of Hariyali centres are already way ahead of the national averages in more than one ways.

At Ladwa training centre 124 farmers interact enthusiastically with the trainer, asking questions and giving their views. When asked what they appreciate about the particular services provided, they respond, "Here we buy everything we need for the farm under one roof and if we need assistance, the Hariyali people come and help us in the field." The store at Ladwa, near Karnal, is not unique but one of over 307 stores spread across nine states. HKB represents a retail revolution in rural India. By understanding and supplying farming families with all their agricultural and household needs, the Hariyali centres aim to engender trust and provide their customers with quality products and long-term advice hence farmers treat themselves as partners of HKB and work/support for its success. Details gathered relating to farmers land size and income groups is tabulated below in the Table. It clearly indicates that smallholders are more in numbers making Hariyali efforts more successful.

Table

#	Farmers Holds	Income Group	Dependents between 2 to 5	Dependents above 5	Total Numbers
1.	1 to 10 Acres	1 – 3 lacs per year	2-5	—	2,378
2.	1 to 10 Acres	1 – 3 lacs per year	—	6-10	1,543
3.	11-15 Acres	3 – 5 lacs per year	2-5	—	842
4.	11-15 Acres	3 – 5 lacs per year	—	6-10	312
5.	16-20 Acres	5 – 10 lacs per year	2-5	—	237
6.	16-20 Acres	5 – 10 lacs per year	—	6-10	109

Source: As provided by Hariyali Centre at Ladwa, Karnal, Haryana

Even though HKB is growing with speed, there are other players in this field as follows:

- (a) Godrej Agrovet Ltd. a part of the Godrej Group with an annual turnover of Rs. 10.2 billion is into a diversified agro business – animal feed, integrated poultry business, agro-chemical, oil, palm plantation and processing.
- (b) Godrej Aadhar is the retail outlet of Godrej Agrovet Ltd. with a vision to be a compete solution provider to the farmers' rendering farm advisory services. Presently, there are 25 Aadhaar outlets across the country with each outlet servicing around 20 villages in its

radius. It has a team of qualified agronomists who interact with farmers on a daily basis and travel to the villages in the interior to educate them on farm practices. (RGH, 2007).

- (c) Tata Agrico has populated the shelves of all 25 Aadhar outlets across the country, with products like Powarh, Sickle etc. which are saleable to the farmer community. The main objective of this business venture is to enable its products to reach the farmers in the rural interiors of the country at the right price.

Tata Kisaan Sansar is equipped with administrative office, a training hall, a crop clinic, a soil testing laboratory, a research and development farm, a storage godown and an exhibition hall all under one roof.

Hariyali Kishan Bazar towards Achieving Inclusive Growth :

Several measures have been taken to maintain, upgrade and sustain the skills, support and viability of the agro business in order to achieve inclusive growth.

1. Bridging the last-mile gap: Hariyali is providing farmers with:

- Advisory Services:
 - (i) Qualified agronomists providing customized advisory services at the centre (in-farm and in-store)
 - (ii) Training farmers to use latest technologies
 - (iii) Providing field demos
 - (iv) Giving information through seminars, leaflets and mobile messages.
- Support of financial services – like insurance, crop finance etc.
- Direct access to household products / markets
- Good quality household & consumer goods

2. Better Productivity: The study across the lands of Haryana, where farmers grow wheat, sugarcane and rice, has revealed that these regions contributed heavily to the Green Revolution but yields have since stagnated and farmers now struggle to make a profit. Their children, they report, are not interested in agriculture. 3,400 or more farmers that interacted with the Hariyali centre at Ladwa are having land on an average between 2-4 hectares but many of them have smaller pieces of land too. Labour shortage is another serious constraint for farmers in this region. To increase profitability, Hariyali advisors have helped the farmers to introduce new cultivation practices, such as recommending intercropping sugarcane with onion, adopting zero tillage in wheat, or using raised beds for growing mustard. Farmers are also encouraged to diversify into new crops like sunflower, which can be grown after potato in the late winter/spring season, as well as establishing of new

machinery, for example a paddy planter which can help resolve labour problems with transplanting rice (KCS, 2011).

3. Training the Farmers: HKB business is based on best practices, formalising and improving business operations thereby simplifying, standardizing and rationalizing business processes in the head office and across all retail stores. These solutions have helped farmers by providing online information about weather forecasts and market prices along with fair and transparent billing. The system maintains extensive farmer database with micro information about the farmers' fields to provide personalized service to them. To provide technology services and improve planning process, farmers are being trained to use the PoS terminals installed at various outlets. The new plans are to extend the solution at the back end to the Hariyali centres running across the country so that better reporting and analysis can be done.

4. Investing in Rural Infrastructure: Each centre provides need-based infrastructure to the farmers that includes facilities like warehouse for agri-inputs or farm produce, an agri-advisory centre equipped with qualified agronomists, a veterinary centre with qualified vet doctors & medicines, an information centre with IT linkage to a team of scientists' and availability of fuel. Addition of bank branches & ATMs to these centres will help in achieving the governments' objective of taking credits to the micro level.

5. Improved Productivity & Profitability: HKB provides 24*7 technology support through a team of dedicated agronomist's and ensures the last mile delivery of agri advice to the farmers to ensure adoption of appropriate modern agri-practices. The prime focus is to shift farmers from subsistence to technology led commercial farming.

6. Use of IT to access the varied information: Extensive farmer database is required to provide the following services:

- (a) Latest technological advancements
- (b) Weather forecasts
- (c) Wholesale Market (mandi) prices
- (d) Fair & transparent billing

7. Sustainable Model for Public-Private Partnership: Hariyali initiatives are being aimed at enhancing the agricultural income of the farmer, commercial viability of the business model to ensure sustainability. Collaboration of government efforts with the private sector would put development on a self-sustaining path.

PROSPECTIVE TRENDS AND HARIYALI

Hariyali's Enhanced Efforts

(a) Hariyali started India's first rural loyalty program on 20 Jul 2011: HKB has launched 'Hariyali First' - a program on point based for different categories. The benefit of these points is over and above the other offers that might be running at the outlet. It is first ever card-based loyalty program of rural India, which strives to enrich value proposition and add value to the modern shopping experience of the customer by allowing earning and redemption of points on merchandise categories like food & groceries, household and life style products as well as products required for agricultural needs are also covered under this program. Customers will be benefitted during the days of high inflation by shopping quality products at competitive prices and accumulating additional savings.

(b) Hariyali with other supported programs: The "Hariyali Kisaan Bazaar" is an unique micro level effort aimed at initiating a qualitative improvement in agricultural sector. The Hariyali centres act as the direct bridge between the farmers and the scientists providing point to point ground level supports to improve farm productivity and profitability. It is also a delivery partner in several projects like the "Cereal Systems Initiative for South Asia (CSISA)" run by IIRRI & CYMMIT and the project for "Wheat Quality Improvement" run by ACIAR and DWR, Karnal (KCS, 2011).

Other Networks Supports For farmers : IFFCO Kisan Sanchar Limited

(a) Internet based initiatives for connectivity: The 'ICT Initiatives for Farmers and Cooperatives', popularly called 'IFFCO's Agri-portal', is an extended vision of e-revolution to farmers and cooperatives started by IFFCO since 2000. The endeavour is to

empower farmers and cooperatives with the latest information and communication technology. Sixteen states are covered with substantial content in local languages and audio summaries. About 1000 localized touch screen kiosks or 'Cyber Dhabas' are put into service in addition to web based access by farmers in rural areas. The response of farmers is poor, despite being user friendly, as they are still uncomfortable in using computers. Other problems like power, connectivity, and maintenance in remote areas are also encircling it; in addition to lack of incentives on the part farmers (IFF, 2011).

(b) Better Communitisation for Knowledge Empowerment: The increased affordability and penetration of mobile phones in rural areas of India is providing a useful opportunity to directly provide information to the farmers. IFFCO has promoted a joint venture company by the name IFFCO Kisan Sanchar Ltd. (IKSL). 'Green SIM Card' launched by IKSL is like any other SIM, is to empower people living in rural India by providing the information and services on real time basis through affordable mobile communication and improving farmers' decision making abilities. 5 free voice messages every day are added advantage of Green SIM Card comprising of "Proactive" and "Reactive" are two types of messages. Proactive messages are on crop calendars, cropping pattern, agro-ecological situation, weather forecasts, Mandi rates etc. Reactive messages are on the helpline queries, alerts, warnings, and government announcements etc. IKSL is operating in 19 states of the country. Based on agro-climatic conditions these are divided into 63 zones. There are 19 senior managers supported by 69 experts (IFF, 2011) to cater to the requirements of the farmers.

Hybrid and Nutrient Experts

A challenge faced by the local working agencies is the complex factors influencing nutrient requirements. 'Nutrient Expert for Hybrid' is a computer-based decision support tool developed to assist local experts by quickly formulating fertilizer guidelines for tropical hybrid based on the basis of site-specific nutrient management (SSNM). The development of recommendation facilitates in the form of a Quick Guide for each region enabling local experts to run multiple scenarios. It also identifies the most common

characteristics or factors affecting fertilizer applications in the region (NEH, 2010). It includes:

- Developing the optimal planting density for any location
- Evaluating the current running nutrient management practices
- Determining the meaningful 'yield goal based' on attainable yield basis
- Estimating fertilizer NPK rates required for the selected yield goal
- Translating fertilizer NPK applications into fertilizer resources
- Developing strategy for fertilizers (right rate, source, location, time) applications
- Comparing the expected & actual benefit of current and improved practices for betterment.

Science and Technology Transfer Strengthened

According to the evaluation report of the International Fund for Agricultural Development (IFAD) on IFDC's West Africa project, "Combating Soil Fertility Decline," 'the single most significant factor that has an influence on agricultural sustainability in the region is the accessibility to fertilizer'. The report further asserted that farmers would use fertilizers if these were affordable and readily available. Those who have been trained in advanced technologies would continue to use fertilizer for better cultivation (IFAD, 2011).

Extending Agro-Dealers Networks (EADN)

EADN plays a major role in linking smaller land hold farmers to different markets. The IFAD-funded EADN project focuses on and seeks to improve agro-dealer access to modern production technologies. The yield-enhancing inputs such as fertilizers, improved seed and crop protection products to support smaller land hold farmers to increase their productivity. The key elements of the EADN activities are innovation and knowledge transfer. The EADN approaches to increase the number of markets served by agro-dealers, increasing the level of participation by the dealers. It also improves their technical expertise so they can be of greater service to farmer and those customers (IFAD, 2011).

Public & Private Partnership

Public-private partnerships are vital in identifying and addressing such gaps in innovations as well as disseminating effective agricultural tools and technologies to farmers. Government leaders need to recognise how interconnected agriculture and biodiversity protection can be addressed through public and private partnership. Today farmers are the true stewards of our global ecosystem. The twin challenges of conserving ecosystems while ensuring future food security means that the role of the farmer is more crucial than ever. Luc Maene, Director General of the International Fertilizer Industry Association (IFA) said 'Farmers around the world are facing competing pressures to grow more food while preserving the world's biodiversity. To succeed, agriculture and biodiversity conservation efforts must walk hand in hand' (FFR, 2011). These efforts can be further strengthened with public and private partnership.

Conclusion:

According to the United Nations' Food and Agriculture Organisation, with 3 billion more mouths to be feed by 2050, (IFAD, 2011), food production must increase by 70 per cent despite threats of climate change and limited availability of natural resources. "Agri-food production relies on biodiversity and farming can weaken it. Increasing food production will mean finding ways of expanding agriculture without upsetting our planet's biological interdependence", said Kevin Parris, OECD Agriculture & Trade Directorate, Paris. Hariyali, an agricultural extension programme of DSCL, a well-known Indian conglomerate producing fertiliser, seed and sugar needs to be supported with other progressive trends to enhance the productivity and profitability. Farmers play a crucial or rather the primary role in food production for a nation. With the development of more centres like HKB, they will be getting an opportunity to learn about the latest technologies and its usefulness. Therefore, the present study underscores Hariyali as a novel business model which can eventually help improve the farm produce both qualitatively and quantitatively. With the added advantage of IT and research, the field experts can help farmers in choosing the right time for cultivation, choice, source

and strategy for better fertilizer use, inform about the weather forecasts without compromising time and income. Other corporate houses, NGOs, private & public bodies must join such efforts in safeguarding interests of farmers and consequently enhancing the production. It would also contribute to a sustainable agriculture without posing any kind of threat to biodiversity. This also would usher in inclusive growth through modernisation of the agricultural community.

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