

Business Model Canvass via Sustainable food value chain practices creates the scope of Business Opportunity.

Mandavi Sahu

Ph.D. research Scholar, Department of Food Business Management and Entrepreneurship Development (National Institute of Food Technology Entrepreneurship and Management),

Dr. Sapna Arora

Assistant Professor, Department of Food Business Management and Entrepreneurship Development (National Institute of Food Technology Entrepreneurship and Management),

Abstract

Sustainable food value chains coordinate with their key partners, such as farmers, processors, and distributors, to develop an efficient food supply chain and value addition process. The Canvass business model in food processing firms is ready to create an effective design of firms' operation structure and opportunities. The Sustainable food value chain follows the market-driven approach that accommodates the environmental parameters and applies the Canvass Business model in business firms to develop the value addition process of generating quality products and improving the pulse processing mechanism. The current research adopted the explorative method to create the sustainable food value chain framework model that performs multiple functions of value-added activity and develops strategic planning for decision making. The research gives brief knowledge regarding sustainable food value chain and Canvass Business model in food processing firms that to create a value proposition and effective designing of firms to achieve the long-term goals and objectives. The study describes the advantage and disadvantages of a sustainable food value chain and follows a canvass business model in food processing firms to optimize sustainable agriculture practices and develop strategic planning with their crucial partner and stakeholders for enhancement of the customer relation, value proposition, and support financial assistance to firms that help to analyze the business performance.

Keywords: Canvass business model, sustainable value chain.

Uniqueness: The research briefly discussed the canvass business model in a food processing firm.

Originality/value This study is based on qualitative data to understand the implication of business model canvass in food processing firms.

1. Introduction

The sustainable food value chain comprises stakeholders such as farmers, processors, distributors, and other intermediaries for developing value addition activities in each stage. The sustainable food value chain optimizes the agriculture system and extends firms' life, providing future goals and missions. The sustainable food value chain is distinguished from the conventional food supply chain. To generate economic efficiency in productions and distributions and adopt the sustainability dimension to develop food processing effectively (Irked,2011). SFVC is focused on a triple bottom line approach of people, profit, and planet (Irked,2011), which performs a vital role in value creation during processing and each stage of the food chain. The FAO (Food Agriculture Organization) evolved the SFVC framework structure consisting of actors and developed their key partners to perform several activities related to farming processing, packaging and marketing, and sales and agriculture that serve the final consumer (FAO, 2014). The SFVC concept integrates the meta innovation and is implemented with the market-driven systematic approach to provide quality processed food and develop an efficient food supply chain network. The significant advantages achieved through SFVC is getting

value-added food product in the form of processed food, e.g., flour, biscuits, noodles, pasta, etc. which enhances quality up-gradation, controls environmental pollution, consumes less energy, and reduces the emission of GHG gases, which directly minimize losses & wastages of food across the food value chains and developing the food processing firms to maintain the balance between the demand and supply of processed food concerning cost, time, place and other value-added activities. SFVC actors developed collaborative efforts to achieve sustainable competitive strategies supporting management solutions. The (FAO, 2014) sets the proposed guidelines to analyze the food value chain mechanism with sustainability indicators to generate designs, plans, and actions to improve the food value chain across food processing firms. The current research has categorized the study into different sections, 1. The first section analyzes the concept of a sustainable food value chain and its importance in the Food processing industries. 2. The second section evolved the sustainable food value chain framework model, which enables the environmental parameters, 3. The third section discussed the canvass business model, which consists of nine build blocks of all stakeholders, fundamental proposition, essential values, and critical resources to establish coordination among each block and assign responsibilities, roles, and functions. The research focused on the implication of SFVC with canvass business Models in food processing industries for developing the best value proposition, generating efficiency of firms, and analyzing the Michael Porter Food value chain model.

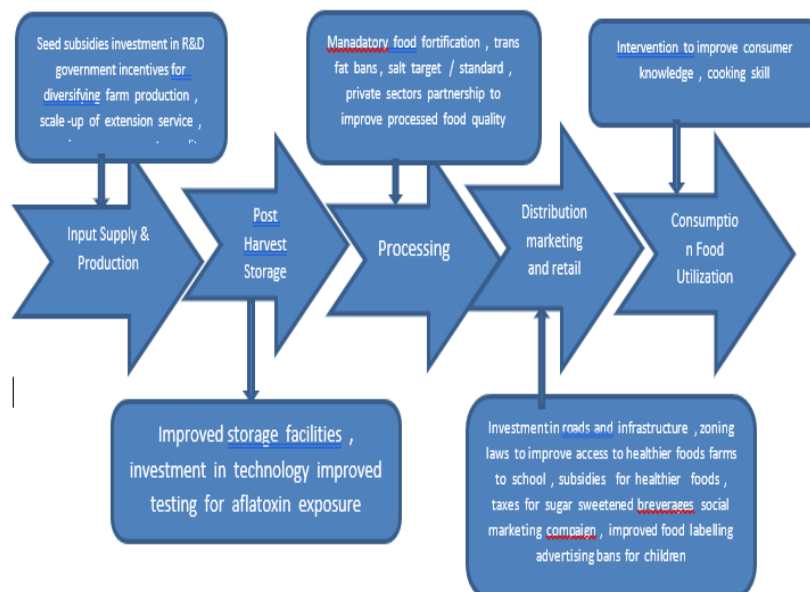
1. Section - Sustainable food value chain concept and importance in Food processing industries

(FAO, 2014), SFVC is described as a value-driven approach that develops the successive coordination in the stakeholder of the value-adding process, which produces the particular raw gains/ crops, which transformed them into processed food, and sold to retailer buying consumers for and get disposed of after use. The SFVC is profitable, benefits association reduces the depletion of natural resources, and develops different statical techniques to analyze the performance of activities of food value chain actors. The Canvass Business model developed the effective designing structure of the firm to generate value creation of sustainable processed food, which improved the performance of the food value chain, has increased the quality up-gradation, governance structure, and environmental safety [Negi, S. 2013]. To develop the coordination with the Canvass Business model for value proposition. The characteristic of SFVC is a market-driven approach that collaborates different activities to produce processed food as per the expected market demand to deliver processed food and services effectively and efficiently. The SFVC process allows firms to adopt sustainability parameters, fill the future market demand, and establish the links between production, processing, and marketing activities. The SFVC consists of a long chain of actors that includes farmers, processors, aggregators and distributors, and other resource blocks that perform the value-added activity function. The significant advantages of SFVC are (a) to establish the communication and coordination among several actors and their intermediaries, (b) to analyze those actors and their functions, and (c) and consolidates the value chain analyses such as SWOT or Blue Ocean analysis for measuring the performance the food value chain, (Monastyrnay et al., 2017). The SFVC, defined by Michael Porter in the year 1980, to develop the value addition process, which helped to develop a sustainable food value chain, allowed the internal process and external business activities to perform the value-added product as per expected potential market demand, that helps to perform primary activities which

transformation of raw food material into processed food with the help of technology. The primary activities started from raw input as natural grains/crops, which transformed into processed food with a value-added food product to generate the food labeling, marketing and retailing, etc. The secondary activities performed grinding and processed food to generate the food labeling, marketing, and developed retailing to support secondary activities. It also added the function of infrastructure, technology, and financial service, which increases the quality up-gradation and enhances the food value chain. The SFVC generates opportunities through the shared value concept, which increases the profitability and financial assistance in both economic and nutritional benefits and performs assessment through potential indicators of the food value chain, which is based on agriculture and develops the nutrition-food value chain analysis. The secondary activities of food value chains are infrastructure, management, human resource management, technology that promotes procurement, and value addition activities to support the nutrition food value chain. It has aimed to support the secondary activities to upgrade the food value chain and provide a sustainable environment that could accommodate the availability, affordability, and acceptability of nutritious foods value chain. The SFVC adopted the risk mitigation strategy to reduce supply chain management risk. To the sustainable food value chain, the framework developed the proper channel of SCM performance, which is required to achieve a sustainable food production and agriculture system (Stefan et al., 2008).

1.a. Section - Importance of Sustainable Food Value Chain

The SFVC generates the advantages of providing a sustainable agriculture system, quality processed food, and sustainable food processing, which involves growing, processing, and selling the food to perform several functions are (1) related to performing the function of trading of food commodities, (2) and allowed the processors, to



performed the function of primary and secondary value-added activity, supplied to manufacture for processing of food products, e.g., the flours, bread (3) and allowed the distributors, to

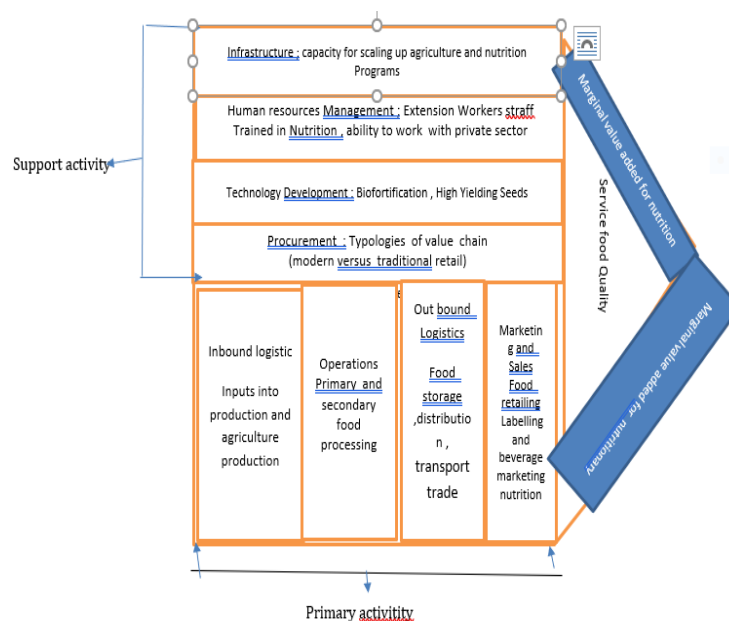
perform the function of distribution, sales which directly related to wholesalers and retailers, that to market and sell food; (4) and in the final stage the consumers shop, the purchase, and consume food, and followed the governments, non-governmental organizations (NGOs), to regulators and monitor the entire food value chain. The SFVC directly impacts on reducing poverty, hunger, and malnutrition and provides the surplus of food grain, which improves the food processing firms, develops the food quality, and made inculcation of value-added activity to generate quality food grain, preserving the natural resources, controlling the environmental pollution, and financial gains. SFVC increases the efficiency of food processing and quality up-gradation, reducing food prices and increasing food availability. The SFVC increases the significance of value addition of the food chain, which improves the productivity of agriculture farming and food processing industries.

Figure 1.1- The figure shows the nutrition food value chain, encompassed by several factors such as Input Supply & production related to primary activities which perform multiple functions such as providing seeds, R&D Government incentives, and performed the Post-Harvest Storage function, and also Improving the storage facilities which directly performed the Processing function as food fortification, Distribution marketing, and retail performed the investment road and infrastructure. Moreover, Consumption of food Utilization performs the role of intervention to improve consumer knowledge.

Source; Chapter 1.3 | Managing Value Chains for Improved Nutrition year 2016.

Figure 1.2- The given figure illustrates the Michael Porter food value chain model to describe the value chain activities and internal business chain. The nutrition food value chain framework identifies the primary and support activities.

Figure: A nutrition-focused Food value chain Framework.



Source; Adapted from Porter and Miller,1985. Chapter 1.3 | Managing Value Chains for Improved Nutrition

1. b. Section-Literature Review

The literature review discusses the sustainable food value chain and its performance indicator. It discusses the Canvass Business model, LCA (Life cycle assessment) techniques, and Michael porter's value chain addition model for improving sustainable food value chain performance. (Ikered, 2011), the SFVC generates collaboration, develops alliances with farmers, processors, and distributors, and participates in food production and distribution. (Abdoun et al., 2018). The Canvass business model for developing the value proposition measures the food value chain's performance to generate business opportunities or develop a broader scope of business. (Zhong et al., 2017). Moreover, the sustainable food value chain framework structure, which defines the individual value chain activities, was classified according to research. (Monasteryrnaya. et al. 2017),

Furthermore, generate collective efforts to develop sustainable strategies and business model techniques to define the role and responsibilities in the form of templates, which made co-correlation with actors.[Harry et al., 2011], a Sustainable food value chain accepts the bottom lines of economic, environmental, and social factors for making a sustainable firm, generating the expected returns as a form of financial gain, and developing information technology to support sustainability in food supply chains, (Seuring et al., 2008). The Sustainable food value chain framework consists of several distribution networks related to the stakeholder and their essential partner. That established effective coordination and developed the supply chain risk management techniques [(Sellahewa et al., 2012) and other Life cycle assessment techniques are applied to evaluate the performance of supply chain and food processing firms, the different statistical methods to correlate the different aspects of sustainability and evolved in decision making,(Abdoun et al., 2018) sustainable food supply chains developed the logistic and technological innovation for food scientists and introduced the integrative approach to a sustainable food system to feed a growing population. The sustainable food system concentrates on production, agriculture on nutrition (Agata et al.,2019). Generated prevalence of diet-related diseases made the imbalance of the ecosystem change the existing dietary pattern, making the old market more sustainable (Elvira,2016). The Sustainable food value chain framework applies the value chain activities to develop a wide range of value chain practices (Lucas Bagna,2016). Which depends on natural resources, sustainability interactions, and evolved value chain innovation for process development (Srivardhani k. Jha,2014). The food value chain consists of a large chain of production processes and performed SFVC analysis to develop the different activities.

Research gap; SFVC develops sustainability measures that the support canvass business model can easily measure to create opportunities and strategic planning for firms. The implementation of SFVC generates a food system and maintains the balance between ecosystems, so every firm should adopt sustainability measures. The research evolved the sustainable food value chain framework structure to define the relation between every activity of the food value chain. The canvass business model techniques performed in the assessment are developing a value proposition and defining a strategic plan and opportunity, which developed the mapping between sustainable food value chain.

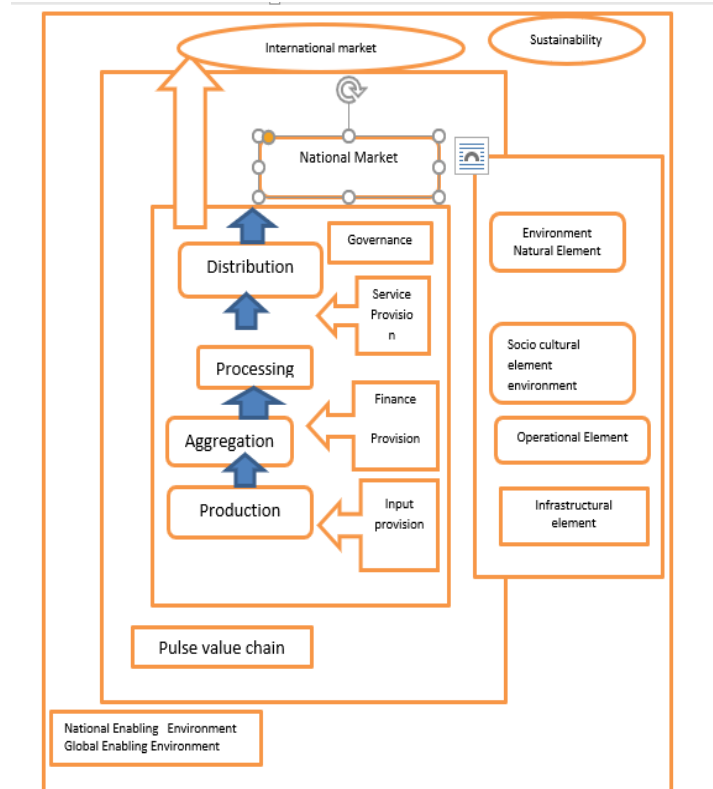
Research objectives

1. To analyze the sustainable food value chain in the food processing industries and the Canvass Business Model concept.

II. Section: Sustainable food value chain framework

(FAO.2014), SFVC framework model has generated the core competencies in every environmental factor that consider the economic, social, and natural environments which directly impact the firms' performance and economy of the country.. also generate social behavior towards the firm's performance, which developed the sustainable agriculture system. The SFVC framework structure comprises value chain activities involving producing, aggregating, processing, and distributing food products directly entered into the natural market. The International market adopts sustainability, including the natural environment, socio-cultural, operational, and infrastructural elements, producing products adopted at the upstream level, adding value-added products to these products, etc. The SFVC actors performed the four significant functions: farming, fishing, forest harvesting and agroforestry, aggregation, processing, distribution, etc. In the aggregation stages of SFVC, a small volume of food products is collected from farmers, local Mundi, etc., to store the small volumes of food products collected from widely dispersed smallholder producers. The SFVC actors are developing balance in the ecosystem to develop the wider operating environment and **governance** structure. The SFVC developed the horizontal linkages among the several actors to develop the particular chain (Monastyrnaya, 2017). A sustainable food value chain framework consists of a structure that sets actors to develop the collaborative effort to achieve common sustainable strategies and develop the business model which supports management solutions to generate cooperation between actors and stakeholders, which are comprised of three steps (1) SFVC adopted the sustainability paradigm, (2) which involved the value addition practices, aimed to deliver sustainable value food value chain, also assigned the responsibilities among indifferent actors, (3) to formulate the sustainable value proposition. The SFVC framework allowed the facilitation and development of the network and the exchange of ideas among the policymakers who set the project-designed partitioners field. The Sustainable Food Value Chain framework is based on two concepts that are sustainability and value chains which can be interpreted by different sustainability concepts that could facilitate and develop practical knowledge exchange and made implementation. A sustainable Food value chain framework allows participation in the supply chain to develop the coordination with production and value-adding activities to make processed food products. For example, the sustainable food value chain generates cooperatives and develops vertical linkages to provide information related to food processing. The sustainable food value chain actors operate in different environmental paradigms, which directly impacts the performance of various actors.

Figure 1.3 -The given figure illustrates the framework structure of FAO's sustainable food value chain.



Source: FAO Framework model of sustainable food value chain year, (2014)

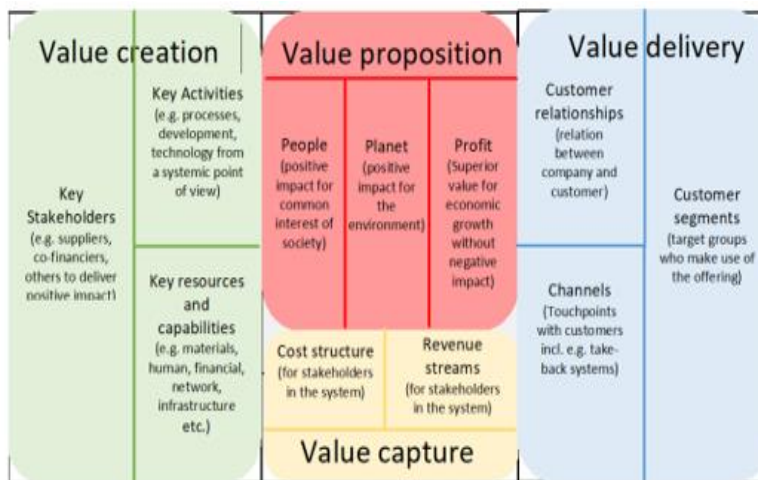
The SFVC consists of different factors which play a vital role in developing value chain activities and allowing the flow of food grain from one end to others by establishing the coordination between actors among producer, aggregator, processor, and distributor and adopting the top-down approach, which enabled in a natural environment with sustainability parameter. The SFVC framework structure generates expertise in every functional area of the firm. Also, it implements the value chain process to improve the process of delivering s quality processed food and generate efficiency and effectiveness in the value chain.

III. Section: Canvass Business Model

The Canvass Business model(BMC) was evolved d by Osterwalder and Pigneur in 2010. The canvass business model developed the effective design of business firms and adopted the graphical representation. The Canvass business modelconsists of nine different building blocks considered the different actors, which encompass the above aspect such as (1) creating the business infrastructure, which consists of key partners with key activities, and key resources, developing the cost structure, and (2) for all market segments of customers (customer relationships, channels, customer segments, and revenue streams, (3) also developed the value proposition, which developed the outline structure of firms, which composed of all actors, (Ali et al., 2013) are referred as communicating business strategy. Alexander Osterwalder evolved the Canvass Business model technique in the year (2005), which is applied to measure and control the performance of each key actor and is classified into the nine build blocks which assign different roles and functions. Teece (2010) The canvass business model applied for value addition, strategic planning, and measuring the performance of sustainable food value chain. Furthermore, it developed the market segment to formulate the value proposition to create business opportunities for all customers to generate profit.

The concept of sustainability in business management is developed in the sustainable canvas business models, which focused on customer value proposition (Bokken et al., 2013) and developed the new vision, which incorporates the sustainability dimension to understanding the conceptual transformation to create competitive advantages of enterprise structures (Masan ell et al., 2010). The major objectives of the sustainable canvas business model are (a) to establish the communication and coordination among several actors and to develop the partners of SFVC, (b) the second objectives achieve the performance of the business model, and (c) to generate the results as value chain analyses. The different key resource partners in each block were assigned the role and responsibilities of each block. They performed different functions that allow stakeholders to be informed through the Canvas Business model. The template in the canvas business model has introduced sustainable practices which support the management solutions to generate sustainable food value chains. The different templates in BMC consist of different functional areas, adopted by the simple graphical representation of sustainability in food value chains to improve communication [Monastyrnaya, 2010]²⁷ of Triple Bottom Line (Elkington, 1999)²⁸, which implies the sustainable value proposition to extend the potential customers. To generate sustainable food systems, the sustainable canvas business model can be incorporated with all stakeholders to present the three pillars of sustainability, business, society, and nature.

Figure 1.4 illustrates the collaboration of sustainability measures with Business Model Canvas. The model adopted from [Bokken et al. 2018] adapted from Osterwalder and Pigneur [Osterwalder et al 2010].



Source; Integrating Intellectual Property and Sustainable Business Models: The SBM-IP Canvas, (2020)

The Sustainable Canvas business model has developed the advancement of the value proposition, which focuses on sustainability parameters and develops the triple bottom line of people, profit, and the planet [Stubbs, 2008]. [Elkington, 1997] developed the sustainable business model to generate the value-added activity in the form of (1) developing the value proposition and adopted (2) developing the value creation and delivery process. A sustainable canvas business model can be applied in firms to perform multiple activities related to different functional areas of value addition, processing, and aggregation are the customer's

product-offering. [Bocken, 2016], The Sustainable canvassBusinessModel developed the conventional business model, which consists of a value proposition to develop the broader focus on stakeholders in value creation and a focus on the growth of strategy to maximize the overall stakeholders.

Conclusion:

The SFVC controls the consumption of natural resources, reduces environmental pollution, and directly impacts the food production capacity of firms. Implementing the canvass Business model has developed the value proposition with nine build blocks to perform the function with their fundamental value proposition. It includes the vital sources, the critical revenue, key stakeholder, key partners, cost structure, customer relations, customer segment, etc., to increase the value creation activity of the food value chain, which increases the quality, packaging, and labeling of food ingredients, etc. The research outcomes are profitable with sustainability measures in small-medium enterprises, agriculture farmers, and food processing industries. The Canvass business model will generate innovative strategies to overcome agriculture-related issues, increase the efficiency of value addition of the food chain, and develop the market-driven approach to cover the broad area of the food sector, including all food grains. The SFVC is a paradigm tool applied in food processing industries to make safe, nutritious, and healthy food. Food value addition is the cost-benefit analysis of each activity concerning cost, time, and place performed to develop the food value chain from developing the grass -root of farming level to final consumption. The different techniques used for measuring the performance of the sustainable business canvass model are to establish the coordination among the actors and their domains to deliver the sustainable value proposition.

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