# Customer Response Analysis in Tomato and Onion Value Addition: A Case Khairpur Mir's Sindh-Pakistan

# Author's Details:

<sup>(1)</sup>**Dr.Faiz Muhammad Shaikh-**Associate Professor, SZABAC-Dokri

Email:faizs045@gmail.com <sup>(2)</sup>**Dr.Sagheer Shaikh-**Professor, Institute of Food Technology, SAU-Tando jam <sup>(3)</sup>**Tim Sun-**Research fellow at University of Queensland, Brisbane, Australia <sup>(4)</sup>**Dr.Asia Punhwar**-Assistant Professor, Institute of Food Technology-SAU-Tando jam

# Abstract

Value addition in agriculture predominantly offers a means to increase, rejuvenate and stabilize farm income. The study carries out in Kumb District Khairpur Mirs. Survey was conducted using a questionnaire, where 40 household heads and 300 customers were sampled and interviewed, the main Objectives of study was to Specifically, this study focused on the impact of training provided to farmers on their perceived knowledge, acquisition of skills and adoption level of value added practices. Customer response analysis of tomato and onion Value Addition in kumb Khairpur Mirs Sindh. A structural questionnaire was developed for the reliability and validity of data. Farmers were given training at WADO office kumb for how to make value addition tomato powder, tomato jam, onion pickle, onion chilli mixed pickle, onion powder, onion flakes, it was revealed that tomato powder, tomato jam, onion pickle, onion chilli mixed pickle, onion powder, onion flakes value added products training was given to the 40 farmers female/male at WADO office on 12-01-2019. We have arranged one display shop at Kumb to analyse the response of the people of Khairpur Mirs. It was revealed that 98% of the customers were satisfied our new value added products of Potato and they purchased Rs.5300 in short span of time. findings of the study conclude: (i) education level of participants, post-harvest knowledge and attitude towards value addition are contributing factors for improving the positive impact of training, (iii) more feasible strategies (e.g. increasing training duration) are required for improving participant's skills and (iv) several interventions (e.g. generating new market) CAPI, ACIARs and other partners are playing important role to improve the livelihood of the rural farmers The study recommends the policy should emphasize: increasing agricultural and post-harvest knowledge content in formal education, developing and manifesting a positive attitude and improving skills of potential producers, as well as improving producer's access to resources. The finding of this research reveals that Tomato and onion value addition generate more valuable income for the vegetable growers in Kumb Khairpur Mirs they can earn 170,000 to 200,000/acre depends on their land.

Key words: Value addition, Tomato, Onion, Khairpur Mirs, Sindh-Pakistan

# Introduction:

Tomato (*Lycopersicon esculentum* Mill.) is one of the most important vegetables worldwide. As it is a relatively short duration crop and gives a high yield, it is economically attractive and the area under cultivation is increasing. Tomato belongs to the *Salicaceae* family. Tomatoes contribute to a healthy, well-balanced diet. They are rich in minerals, vitamins, essential amino acids, sugars and dietary fiber. Tomato contains vitamin B and C, iron and phosphorus. Tomato fruits are consumed fresh in salads or cooked in sauces, soup and meat or fish dishes. They can be processed into purées, juices and ketchup. Canned and dried tomatoes are economically important processed products. Yellow tomatoes have higher vitamin A content than red tomatoes, but red tomatoes contain lycopene, an anti-oxidant that may contribute to protection against carcinogenic substances.

The trends of tomato prices vary from every month so no fix prices every month different prices of Tomato same case with onions. In April prices dramatically as low as Rs.5 rupees. In this situation we will used Tomato and onion for value additions in different parts of Sindh. The esteem chain philosophy is a custom created from two strains of writing: the business writing on technique and association of Porter (1990Porter, M. (1990). The upper hand of nations. New York, NY: Free Press. Crossruff, [Google Scholar]) and the writing of worldwide ware chains advanced by Gereffi (1994, 1999Gereffi, G. (1994). The association of purchaser driven worldwide item chains: How US retailers shape abroad generation systems.

In G. Gereffi & M.Korzeniewicz (Eds.), Commodity chains and worldwide capitalism (pp. 95–) and created in various investigations in the late 1990s. Agrarian esteem chains interface urban utilization with rustic generation. Evolving request, as an outcome of urbanization, rise of current utilization designs, or new patterns in global exchange, impacts on country regions along esteem ties and overflow to showcasing and generation frameworks (Höffler and Maingi, 2005Höffler, H., & Maingi, G. (2005). Promotion of private area improvement in horticulture (PSDA). Nairobi: GTZ - German Technical Cooperation. [Google Scholar]). Esteem chain examination (VCA) has increased significant significance as of late. Albeit numerous definitions are connected, esteem chains basically speak to undertakings in which diverse makers and advertising organizations work inside their particular organizations to seek after at least one endmarkets. The "esteem chain" is characterized by Kaplinsky as "the full scope of exercises which are required to bring an item or administration from origination, through the middle person periods of creation, conveyance conclusive customers, and last transfer after use" to (Kaplinsky, 2000Kaplinsky, R. (2000). Globalisation and unequalisation: What can be gained from esteem chain investigation? portrays it as the whole scope of exercises attempted to bring an item from the underlying information supply organize, through different periods of handling, to its last market goal, and it incorporates its transfer after use. For example, agro-nourishment esteem chains envelop exercises that happen at the homestead or provincial dimension, including input supply, and proceed through dealing with, handling, stockpiling, bundling, and dissemination. As items move progressively through the different stages, exchanges occur between numerous chain partners, cash changes hands, data is traded, and esteem is logically included. Esteem tie members now and again participate to enhance the general intensity of the last item, however may likewise be totally ignorant of the linkages between their activity and other upstream or downstream members (Karl, Baker, Negassa, and Brent, 2009Karl, M. R., Baker, D., Negassa, A., & Brent, R. R. (2009, August 16–22). Concepts, applications, and augmentations of significant worth fasten investigation to animals frameworks in creating countries. Contributed paper arranged for introduction at the International Association of Agricultural Economists Conference, Beijing. [Google Scholar]). Esteem chains consequently incorporate the majority of the variables of generation including land, work, capital, innovation, and contributions just as every single monetary movement including input supply, generation, change, dealing with, transport, promoting, and dispersion important to make, move, and convey an item to a specific goal. By uncovering qualities and shortcomings, VCA recognizes conceivable restorative measures (United Nations Industrial Development Organization.

The esteem chain approach, by its conceptualization, gives a demonstrative picture of fundamental costs, benefits, and exchange intensity of different yields at a specific point in time (Karl et al., 2009Karl, M. R., Baker, D., Negassa, A., & Brent, R. R. (2009, August 16-22). Concepts, applications, and expansions of significant worth tie examination to domesticated animals frameworks in creating countries. Contributed paper arranged for introduction at the International Association of Agricultural Economists Conference, Beijing. [Google Scholar]). The aggressiveness is estimated against a characterized benchmark at a specific point in time. The outcomes bode well just when characterized inside the particular setting, both as far as reality. The investigation does not catch the varieties existing among individual makers, nearby dealers, and processors who have their very own cost structures that may fluctuate altogether from the assessments utilized for this examination. It is additionally important that it was impractical to get applicable contribution from a wide scope of partners. In that capacity, the outcomes may just be characteristic of real patterns, without the exactness required to characterize explicit cost structures related with larger part of players in the esteem chains. The investigation does not likewise consider occasional varieties in harvest yield, cost, and market openings. All things considered, the consequences of the investigation ought to be translated with alert as they just furnish characteristic exchange offs related with various speculation choices and approach components went for upgrading smallholder agrarian intensity in the three nations.

The particular VCA we have done begins with the info supply level, at that point cultivate generation and gathering. Because of information constraints, we have not considered the handling and appropriation stages. At each stage, the examination depends on big business spending plans for the most run of the mill edit generation models and get together exchanges for every ware up to the point where all out gathered esteem

can most practically be contrasted and an import or fare equality cost as a last proportion of exchange intensity. By recognizing the kinds of costs that represent most of absolute esteem and where these expenses happen, the methodology is intended to enable partners to concentrate on basic territories where consideration is required to in general intensity along the esteem chain.

#### Methodology

Survey was conducted using a questionnaire, where 40 household heads and 300 customers were sampled and interviewed, the main Objectives of study was to Specifically, this study focused on the impact of training provided to farmers on their perceived knowledge, acquisition of skills and adoption level of value added practices.

# Results

Table 1: Demographic profile of the participants in Kumb District Khairpur Mirs Sindh-Pakistan

	1 1	1		
Demographic profile	Male	Female	Percentage	
Gender	280		90	
		20	10	
Education Level				
Primary	260		80	
		20	05	
Seconadary	250		75	
		5		
			2.5	
Graduate	40		20	
		F-2	F 1	
Post Graduate	01	0	0.1	
Family Income	Up to 50,000	<100,000		
	220		60	
		80	40	
Value addition Knowledge	Low	Moderate		
	220		60	
		80	40	

N=300



Demographic Profile of the Participants: More than 90% of the customers were male because Kumb is the small city where women has no access to market. of the participants had formal systems of education up to primary school and had family annual income less than 50,000 an average. Approximately, one-third of the participants had low, medium and high post-harvest knowledge. Two-third of the members (64%) showed they had no augmentation contact and communicated tolerably good to frame of mind towards esteem expansion. Around 80 percent of the members were included as some vegetable producers. The sensibly abnormal state of illiteracy of the members might be on the grounds that they had a place with towns around A greater part (70%) of the members had more esteem expansion learning through this esteem expansion venture.

Table 2: Reliability values of the scales developed for the study

Scales developed	Scale	Scale	Min.	Max. score	Cornbrash's
	items	range	score		alpha
Quality	5	1-5	10	50	0.78
Taste	6	1-5	10	50	0.90
Adoption	20	0-2	0	30	0.70

The most of the participants were knowledgeable on value added to tomato and onion food items and about 80 percent of the participants had knowledge on cost of production involved in value added products Tomato is considered as one the important commercial vegetable crop grown in the study area. Majority of the customers were from kumb and their vicinity. Furthermore, because of members' financial condition; normally, nearby individuals were occupied to satisfy their family unit salary and nourishment independence and they had a little enthusiasm on different issues. Besides, a lion's share of the members had no information about assessment and bundling may be because of fundamentally above reasons. Truth be told, esteem expansion is a cutting edge wonder in the investigation zone that needs additional time, data gathering, perception, experience and practices so as to grasp the issue of significant worth option in agribusiness.

Table; 3 Customer response on Value addition products of Tomato and Onion

Variables	Products	1	2	3	4	5
	tomato jam, onion pickle,	Strongly	Agreed	Neither	Disagree	Strongly
	onion chilli mixed pickle,	Agreed	_		-	Disagree
	onion powder, onion	-				
	flakes, tomato powder.					
Quality		250	70	30	0	
Taste		200	70	20	05	5
Labels & Packages		200	70	20	10	
Taste Difference		250	50	0	0	
Perceive value		200	70	30	0	
Which media channel you prefer		200	70	20	-	10
Electronic		200	70	20	10	
Print		200	70	20	10	
Billboard		200	70	20	10	
Price		200	70	30	0	
Compare to Market Price		250	250	0	10	
How often you used these		200	70	20	10	
Products						
Innovation		200	70	20	10	
Lack of Financial Facility		200	70	20	10	
		200	70	20	10	

Table: 5. Cost Benefit analysis of Tomato, Value added Products

Area Kumb	Gross Income A	Total Expenditure B	A-B=C C= Benefit	Cost benefit Ratio
Per/Acres	Rs.250,000	80,000	250,000-80,000 =170,000	1:312



Table:5. demonstrates that the chose Tomato producers in Kumb territory on income per section of land earned of Rs. 170,000 that acquired by the cultivator of Tomato through esteem expansion of the onion.

# Net returns

Net return is gross benefit remains money working costs and deterioration cost of hardware and types of gear expenses could be gotten by subtracting the gross income from money working costs. Overall gain Averages yield or gross salary in the wake of subtracting all ranch costs.

# **Cost benefit Analysis**

Cost Benefit advantage proportion alludes to net returns when contrasted with the expense of creation. It is determined by isolating net comes back with expense of production. It is money saving advantage proportion is 1:312.

Table: 6. Cost Benefit analysis of Onion, Value added Products

Area Kumb	Gross Income A	Total Expenditure	A-B=C C= Benefit	Cost Benefit Ratio
Per/Acres	Rs.1500,000	50,000	150,000-50,000 =100,000	1:3



Table:6. Demonstrates that the chose onion producers in Kumb region on income per section of land earned of Rs. 100,000 that acquired by the cultivator of onion through esteem expansion of the onion.

#### Net returns

Net return is gross benefit remains money working costs and devaluation cost of hardware and supplies expenses could be gotten by subtracting the gross income from money working costs. Net gain Averages yield or gross salary in the wake of subtracting all ranch costs.

# **Cost Benefit Ratio**

Cost benefit ratio net returns when contrasted with the expense of generation. It is determined by isolating net comes back with expense of production. [sep] In this examination per section of land money saving advantage proportion is 1:3

**Conclusions:** The findings of this research reveals that Tomato and onion value addition generate more valuable income for the vegetable growers in Kumb Khairpur Mirs they can earn 170,000 to 200,000/acre depends on their land. Most of the customers they were so happy after test marketing of different value addition products like tomato jam, onion pickle, onion chilli mixed pickle, onion powder, onion flakes, tomato powder.

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