







Report of Seminar on Improving Tomato Value-chain in Sindh

1st April 2021, Pearl Continental Hotel Karachi, Sindh

Organized by **GRASP** in collaboration with **Research and Development Foundation (RDF)**

Growth for Rural Advancement and Sustainable Progress (GRASP) funded by the European Union and implemented by the International Trade Centre











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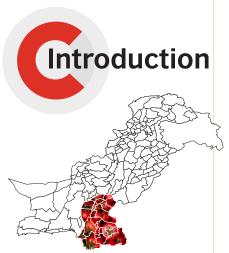
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Improving Tomato Value-chain in Sindh



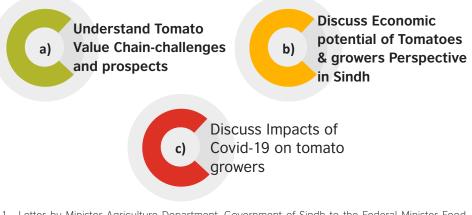
Tomato is one of the country's important crops. Tomato is available throughout the year as it is grown in many parts of the country. In Sindh, it is cultivated over an area of around 27,000 ha with annual production of around 200,000 tons on an average. During the fiscal year 2019-20, tomato was cultivated on an area of 22,542 hectares and produced 164,658 tons. During the current fiscal year, tomato crop cultivation is reported to cover 30,000 hectares¹. Although tomato is available throughout the year, but its peak availability in Thatta, Sujawal and Badin falls in the period January to March/April months. These are the months in which tomato is sold in very cheap rates.

Tomato paste is in great demand locally and also for export purposes. In many parts of the world, it is a major cash and industrial crop, however in Pakistan, particularly in the areas where it is grown, the industrial potential has yet to be capitalized on. There are only two tomato paste units in Sindh with total capacity of 13 tons/hr. In view of high demand for tomato paste and adequate availability of tomato, there is great scope for utilization of this potential for manufacture of tomato paste in the project facilities.

Tomato is an important vegetable crop mainly cultivated in lower districts of Sindh, but its production and profitability is affected by extreme seasonal price volatility and climatic factors. Researchers identified major production including high seed cost, poor seed quality, lack of disease and harsh climate resistant hybrid seed varieties, incidence of severe pest attack due to low quality pesticides, lack of proper training regarding production technologies and labour shortages particularly at the harvesting time. It badly affects farmers and the markets. Therefore, there is a need to look into this issue with a value-chain approach and find out ways to protect growers and marketers' interests.

growers and marketers suffer from production and profit volatility in Sindh.

GRASP, implemented by ITC in collaboration with Research and Development Foundation (RDF) aims to discuss tomato value chain challenges and prospects, surface the perspective of growers and delineate its economic potential in Sindh. This seminar aims to:



1 Letter by Minister Agriculture Department, Government of Sindh to the Federal Minister Food Security Government of Pakistan dated 2021 10:00-10:30 AMRegistration10:30-10:45 AMRecitation by a participant



Welcome & Seminar Objectives by **Mr. Ashfaque Soomro**, Executive Director RDF

Introduction to GRASP and its focus on Tomato Value Chain by **Ms Shabnam Baloch**, Provincial Lead ITC GRASP

10:45: 11:45 AMTechnical Session 1:
Production and Market Dynamics

- Growers Perspective: Production Challenges, input, quality, cast, production, post-harvest management, climate challenges, access to technology by **Mahmood Nawaz Shah**, Vice President Sindh Abadgar Board Vice President & Member Board of Directors of TDAP
- Role of women farmers and growers in the value chain & Issues they face: Dr. Tanvir Fatima, Horticulture Department SAU Tandojam

 11:45 am-12.00 PM
 Tea Break

 12:00-01:00 PM
 Policy Session

- 1. Need for Farmer Led Policy Framework and Conducive Environment by Mr. Ashfaque Soomro, ED RDF
- 2. Introduction of GRASP and its focus on Tomato Value Chain in Sindh –Ms Shabnam Baloch, GRASP-ITC
- 3. Tomato Production & Value Chain Issues, Research avenues and Role of Academia in Tomato production & Value chain improvement by Dr. Fateh Muhamamd Marri, Vice Chancellor, SAU
- 4. Policy Environment for Tomato Production and Value Chain by Dr Abdul Rehim Soomro, Secretary Agriculture Department, GoS

1:00-1:45 pm

Technical Session 2:

Value-Chains and Enterprise Prospects Session Chair: Dr. Naeem ul Zaffar, Chief Economist Sindh

- 1. Enterprise Development prospects in Tomato Value Chain: MD SEDF, Dr. Mehboob ul Haq
- 2. Role of sustainable value chain in economic development of the province: Chief Economist Sindh, Dr. Naeem ul Zaffar
- 3. Access to Finance: Availability and access to agricultural financing, Investment in the sector, ease of doing business by State Bank of Pakistan
- 4. Role of Sindh Small Industries Corporation: MD/Deputy MD SSIC

1:45-2:00pm	Open Discussion /Q-A Moderated by Mohsin Soomro
2:15pm	Conclusion Remarks by Ms Shabnam Provincial Lead GRASP-ITC
2:30 PM	Lunch

Welcome and Program Objectives by Mr. Ashfaque Soomro Executive Director RDF



Mr. Soomro welcomed experts, government officials, representative from UN agencies, academia, civil society, Abadgar Board and farmers on behalf of Research and Development Foundation (RDF) and GRASP International Trade Center team. He shared salient achievements of RDF and UN-ITC in Thatta and Khairpur districts of Sindh under the GRASP's COVID Response Plan. COVID pandemic has affected everyone but the low-income population like farmers are the worst affected, he added. Under the GRASP Project RDF and UN-ITC are together facilitating MSMEs, small farmers, market committees and CBOs/LSO to continue their operations safely amid COVID crisis.

He said that average on every year, tomato was cultivated on an area of 60,000 to 70,000 acers and produced 200000 tons. Approximately investment cost Rs. 85,000 to Rs.125,000/- per acer, but there is price of tomato is only Rs. 03/- per kilo. He further said that despite bumper crops each year, tomato growers of Sindh always suffer of the price volatility. The government should assure Farmer friendly and fair market mechanisms in Sindh to protect tomato growers' interests, Also, he added that there are variety issues in tomatoes productions and infrastructure issues in the tomatoes business. Storage facilities need to be installed in the areas where tomatoes are produced, he emphasized.

Introduction of GRASP and its focus on Tomato Value Chain in Sindh – by Ms Shabnam Baloch, GRASP-ITC Lead in Sindh Province



Ms. Shabnam shared aims, approaches and program targets of GRASP. GRASP is an strategic intervention spaned over a period of around six-years, to reduce poverty in Pakistan by strengthening small-scale agribusinesses in two provinces: Balochistan and Sindh. GRASP is implemented by the International Trade Centre – the joint agency of the United Nations and the World Trade Organization – with active participation from local partners. The project is funded by the delegation of the European Union to Pakistan.

Small and medium-sized enterprises (SMEs) make up the bulk of businesses in Pakistan. To achieve broad, sustainable economic growth, these firms must grow and create jobs for the increasing workforce. Livestock and horticulture – which account for 70% of value-added agriculture – have particularly strong potential for growth, climate adaptation and increased participation of women. Small and medium-sized enterprises in these two sectors, face major challenges. The business environment, value chains, productivity and services, such as access to finance, market information and agricultural extension, need to be improved. Processing goods is difficult due to a lack of technology, skills, financing and relationships with partners along the supply chain. She also discussed regarding the main component of the project:

- Improve the institutional and policy environment for small firms by enhancing conducive policy environment, ease the registration process of firms, more efficient and improving quality infrastructure. GRASP will also improve coordination through value chain roadmaps, business development strategies and new private sector-led alliances
- Support small-scale farmers and producers in a holistic way by promoting climate-smart agriculture, improving dissemination of market information through digital tool and improving access to financing
- Boost the competitiveness of small-scale firms by building inclusive supply chains, providing access to finance, grants and technical assistance, and improving quality. There will be a special focus on improving sustainability by enabling firms to acquire the appropriate technology

She also stated that there is need to make policy framework for perishable Agriculture products, which is a lacking in Sindh. GRASP ITC and Agriculture Department Sindh is working on that framework and IT Based market portal. Industry and Commerce sectors should come forward in establishing tomatoes value chains.

She also discussed that, like every other sector of Pakistan, the fruit and vegetable industry is suffering from the absence of adequate stockpiling, packaging, lack of logistic support and limited fruit and vegetable yield. People do not know modern, advanced technology for advertisement, postharvest operations, and supply chain management. As a result, Pakistan has restricted exportability of its fruit and vegetables and this sector does not expand as steadily as it should. There is a tremendous demand on the international market for Pakistani fruit and vegetables. However, Pakistan exports just 10 to 15 percent of its total fruit production.



Proceedings of Technical Session 1: Production and Market Dynamics

- 1. Mahmood Nawaz Shah, Vice President of Sindh Abadgar Board
- 2. Dr Tanvir Fatima, Sindh Agriculture University Tando Jam
- 3. Dr.Qaiser Bangali, Renewed Economist and Policy Expert

Growers Perspective:

Production Challenges, input, quality, cast, production, postharvest management, climate challenges, access to technology by **Mahmood Nawaz Shah**, Vice President of Sindh Abadgar Board



Mr. Mahmood Nawaz Shah while taking on the occasion said that usually farmers in Sindh cultivate one or two tomato varieties and that can only be grown in specific seasons, while in rest of the regions several varieties of tomatoes are being grown that best fit the season and off-season too. He said that the tomatoes cultivation is more than 150000 acres, as tomato is cultivated thrice a year. On one time, around 50000 acres is cultivated, but the infrastructure and conducive policy environment is lacking that could safeguard the farmers with fair prices. He added that the cost of production for vegetables in Pakistan was higher than the rest of the region hence

imported vegetables being sold at a lower price was unfair for growers. Production of tomato increased in Thatha, Sujawal and Badin over the last three years. However, price remains a problem as traders were the ones who fixed lower rates. He also said lower price was understandable when production was high, but at the end of the season price should go up. It is sold at around Rs200/kg from September to November, but demand of tomato decreases from February to April due to higher productions. Agriculture and pricing is a provincial subject after 18th constitutional amendment, and province can make their own policies to manage the production and market price for the tomatoes. There is no adequate policy for horticulture in Sindh, he pointed out. He informed that there is around 7000 acer land available of Seed Corporation for seed production.



Topic: Role of women farmers and growers in the value chain & Issues they face: by Dr. Tanvir Fatima, Sindh Agriculture University Tando Jam



Dr Tanvir Fatima highlighted the role of women in tomato crop. Women is primarily the one who is involved in picking of the tomato and packing. She said that the Pakistan is the leading producer of a large number of fruits and vegetables, but there is still a gap between farm production and market. This leads to rate volatility. She said that there are issues in tomato storage, post harvesting management, handling hazardous containers, lack of temperature-controlled equipment, inadequate value chain systems to maintain the products and significant factors. There are many challenges and issues to the whole supply chain of fruit and vegetables throughout country. She suggested to build capacity of women in tomato picking and processing.

To identify future problems and provide a way forward, the fruit and vegetable supply chain in Pakistan has to be analyzed. She further added that the women in coastal area are also living with the convential/ traditional practices of agriculture including the sowing, picking, harvesting etc, so, need of the time to improve the modern methods and trained to these women through practically training in the field not through class room type.

Topic: Role of sustainable value chain in economic development of the province: Renewed Economist Sindh, Dr.Qaiser Bangali



Renowned economist **Dr. Qaiser Bangali**, highlighted the need for an integrated cluster-based approach to deal with agriculture production and market issues. Through market integration poverty can be alleviated in rural areas where agri-Hubs can be developed, he added. He shared an example of integrated development model that the Government of Sindh is executing in Choohar Jamali district Sujawal. He was of the opinion the distribution of resources is not equal that leave rural areas undeveloped. When we cross

Ghaghar Phatak Karachi and enter into premises of Thatta district, we feel the difference of development and least development. So it is not only the difference in Kilometers but political priorities too. Distance is not the issue for the market, but the connectivity of farmers to the market. He said though there is Sindh Government's commitment for implementing Sindh Poverty Reduction strategy 2019, but at the same time private sector should also come forward and contribute in the development of markets that are in access to the farmers. He recommended that the UN-ITC should include the sun-flower in value chain items. He appreciated the approach of RDF and ITC to tackling value chain issues specifically in tomatoes.

Policy Environment for Tomato Production and Value Chain by Mr. Subhan Memon, Ex Chief Secretary, Government of Sindh



Mr Subhan Memon said that the vegetable supply chain is slightly different as vegetables are mostly supplied by farmers to themselves. The farmers supply the vegetables every day from major vegetable growing areas to the wholesale markets. The advanced farming of some farm families often provides a small-scale vegetable in other regions. Depending on the size of production, they sold both on the local and wholesale markets. 99% of producers sell their products on the commodities market through Commission agents.

Enterprise Development prospects in Tomato Value Chain By Dr. Mehboob ul Haq, MD Sindh Enterprise Development Fund



Dr. Mahboob UI Haq while talking said there is huge potential of establishing tomatoes industry and the SEDF can support farmers and entrepreneurs in accessing subsidy for establishing enterprises. Wholesale industries are regulated by the Association of Commissioners, including president and secretary-general, who hold offices. In the wholesale markets, there are the Market Committee and Regulations. The products are marketed to local shoppers and the distributors often purchase the items from those markets to bring them down to the region. Sometimes even customers can buy directly from such marketplaces.

Tomato Value Chain System Opportunities and Challenges in Sindh by Prof. Dr. Mohammad Ismaile Kunbhar-Sindh Agriculture University Tando Jaam



Prof. Dr. Mohammad Ismaile Kumbhar highlighted that; the area under tomato in Pakistan in 2017-18 was reported at 144,147 acres and resultant production at 550,979 MT in two seasons (Kharif and Rabi). Area under tomato crop in Sindh in the Rabi season alone was reported at 61,671 acres and production at 182,198 MT which represented 42.7 % and 33 % of the country's area and production, respectively with an average yield of only 2.9 MT per acre. Tomato is a warm season perennial, usually produced as an annual crop. Most cultivated tomatoes require around 75 days from transplanting to first harvest and can be harvested for several weeks before production declines. It is a short duration crop, which helps the growers to get higher return. The continuous demand of tomato throughout the year encourages the farmers to produce in open field as well as in tunnels (known as protected cultivation) during the off-season. Moreover, the processing industry requires tomato as raw material for many products like ketchup, puree, juices, paste and sauces. continuous demand for raw material encourages the farmers to grow tomatoes for the processing industry. Marketing's objective (high customer service and maximum sales) conflict with manufacturing and distribution goals. The result is that there is not a single, integrated plan for the organization. A need for a mechanism through which these different functions can be integrated together. Value chain management and analysis is a strategy through which such integration can be achieved.

Tomato Production & Value Chain Issues, Research avenues and Role of Academia in Tomato production & Value chain improvement by Dr. Fateh Muhamamd Marri, Vice Chancellor, SAU



Dr. Fateh Marri said that maximum investment should be brought in Agriculture sector to fill the market gaps. New seed varieties of tomatoes from Turkey and Italy be piloted here in Sindh to test new and improved seed varieties to maximize yield. He said tomato varieties issues need to be addressed through effective research and to Development. However, there is limited or no funds for research and development provisions in the development program budgets, he opined. Less than one percent budget is kept in development programs for research, that should be increased to 5%, he reiterated. Availability of Technical manpower is also an issue in post harvesting and trading of tomatoes. Without investment in Agriculture sector, we cannot achieve GDP targets. The agriculture sector is a key part of Pakistan's economy. This makes up 21% of its GDP and offers productive jobs for 45% of the country's workers, and 60% of the rural population rely on this industry for their livelihoods. It plays a critical role in maintaining food security, stimulating overall economic growth, poverty reduction and industrialization.

Question and Answer Session/ comment / Participants Feedback









The seminar was opened for question and answers and participants' feedback. Participants discussed following questions and opined that:

- 1. Why not indigenous seed promote with the support of agriculture research institute?
- 2. If the tomato is produced in huge quantity, then why not the Tomato Catchup industries promote?
- 3. The main cause of high expenditure on per acer is we used the pesticide, fertilizer and spry, so, why not we promote the organic methods and reduce the expenditure per acer?
- 4. Why we are focusing the exportation of tomato? there is also huge demand in local market like, restaurants, home based consumption.
- 5. In Panjab the grower used the modern technologies so, the expenditure is half of the sindh's expenditure per acer. (comment)
- 6. There is limited access, sorting and packing problems (comment)
- 7. There was no discussed on organic method (comment)
- 8. There is very limited knowledge on new varieties, so need to disseminate the information regarding new varieties among growers. (comment)

Issues & Recommendations

Major Issues

During the discussion, following major issues were raised by the discussants at the seminar:

- The farmers could not receive an appropriate price due to import of tomatoes from other countries so, imposing restrictions on tomato imports particularly in peak tomato production season to minimize the seasonal price fluctuations.
- Despite bumper tomato production, we cannot produce tomato seed by local growers and using the hybrid seed.
- By products are the alternate source of exports and there are very limited knowledge and awareness regarding the byproduct of tomato.
- Lack of appropriate industries/ factories/ local market system at district level of by products in tomato hub areas (Thatha, Sujawal and Badin) and very limited linkages and coordination between the industries of karachi and growers of Thatha, Sujawal and Badin districts.
- Mostly farmers used local varieties and usually copy to other farmers because they are afraid to take a risk with new varieties, new methods and new spray chemicals. Some is the case with tomato, every farmer grows tomatoes of the same variety. They mature at same time. Its peak season is December to March and as a result market is full with tomatoes and prices come down.
- Lack of availabilities and awareness regarding the diseases and climate resistant varieties of tomato
- Incidence of severe pest attack due to low quality pesticides,
- lack of proper training regarding packing packaging and production technologies,
- Lack/limited of official markets so the mostly business depend up the commission agents.
- Limited/ lack of cold storage and where house capacity at tomato hub areas.
- Federal and Provincial level agriculture related policies are not existing at ground level, need to implement accordingly. After the 18th amendment government of Sindh revisit the policies and provide the farmer friendly policies.
- Lack of knowledge and awareness regarding the diseases and climate resistant varieties of tomato
- Gap between the financial institution and growers for availing the subsidy and financial assistance
- High seed cost per acer
- Poor quality of tomato production (Quality Seed and Good Agriculture Practices)
- There are very limited researches on tomato value addition

- Safe handling of tomato from field to warehouse with costly transportation expenses
- Lack of knowledge of appropriate grading, packing and storage
- Lack of crop Insurance Facilities

Recommendations

Following recommendations are drawn from the speeches, panel discussions and participants feedback, that will help GRASP team, Government line agencies and other stakeholders to take forward:

- To improve the competitiveness in small and medium enterprises
- To increase the storage capacity of Godowns
- To increase the processing capacity at district level
- To produce the utilization of hybrid seed and produce our own through growers
- To improve the variety of seed/ tomato
- To utilize the 7000 acers land of Seed Corporation for local seeds
- To reduce the conventual/ traditional method and improve the modern methods
- To arrange the practically training for women
- To increase the investment in agriculture and get "Return" back according to the Sindh Government Policy
- To increase the shelf life of tomato
- To improve the proper packing and packaging method for tomato marketing
- To control the heavy price fluctuation in the markets.
- To impose the permanent ban on import of Tomato from Iran and others
- To create the lobbing for export
- Introduction and promotion of processing and value addition at small and medium level industries.
- To support and link the SMEs with financial institutions

Report links

https://www.dawn.com/news/1616114/govt-urged-to-set-up-fairmarket-mechanisms-for-tomato-production

https://sindhcourier.com/improving-tomato-market-mechanism-andvalue-chain-in-sindh-discussed/

- https://dailynews.com.pk/experts-and-farmers-demand-to-developtomato-fair-market-mechanisms-and-value-chain-prospectsin-sindh/
- https://92newshd.tv/experts-farmers-call-for-developing-tomato-fairmarket-mechanisms-and-value-chain-prospects-in-sindh
- https://tribune.com.pk/epaper/news/Karachi/2021-04-03YzkzOTliOTd kNjVIYjJIZTE1MjJkMjBIODg2NDFkYmMuanBIZw%3D%3D

Media Coverage

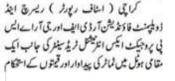
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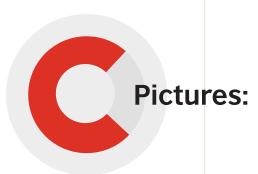




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