International Trade Centre

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Growth for Rural Advancement & Sustainable Progress (GRASP)

Working Paper 1: Gender Analysis of Horticulture and Livestock Value Chains in Sindh and Balochistan

1. Introduction

The Growth for Rural Advancement and Sustainable Progress (GRASP) project is funded by the European Union (EU) and implemented by the International Trade Centre (ITC) in partnership with Food and Agriculture Organization of United Nations (FAO) and Pakistan Poverty Alleviation Fund (PPAF). The objective of the project is poverty reduction and sustainable inclusive growth through development of rural small and medium-sized enterprises (SMEs) in respective selected districts of the provinces of Sindh and Balochistan.

The project aims to enhance the productivity and profitability of SMEs involved in primary production, service provision, and value addition in and around selected clusters of production. The GRASP project will create gender-inclusive employment and income opportunities in rural areas through targeted support to both the public and private sectors.

This project is part of the focal sector "Rural Development" of the European Union Strategy called Multiannual Indicative Program (MIP) for Pakistan: 2014–2020. It will directly contribute to the attainment of the 2030 Agenda for Sustainable Development and Sustainable Development Goals (SDGs), specifically SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth) and SDG 13 (Climate Action).

The GRASP project interventions are located in 22 districts including 10 in Balochistan and 12 in Sindh. For each district, identified products or value chains are targeted to improve the capacity and capability of SMEs. This project prioritizes, strengthening, select value chains in horticulture (onion, tomato, mango, dates, banana, grapes and olives) and livestock (cattle, sheep, goat and poultry).

As part of the project monitoring and evaluation component, a comprehensive baseline study was completed in 2022 to gather primary and secondary data about the operating context and intended project participants. A third-party firm M/S MMP Pakistan (Pvt.) Ltd. was engaged to conduct the baseline study. This paper presents the key findings of this research particularly with respect to surfacing gendered analysis drawn from this extensive data. The study surveyed 1,903 SMEs across 22 districts in the two provinces, Balochistan and Sindh. Apart from SMEs, information was also collected from 97 Agri Business Service Providers (ABSP), 39 Farmer Organizations (FO) and 384 Women Enterprises Groups (WEG). Additionally, to collect qualitative information 84 Focus Group Discussions (FGDs) were conducted with SMEs, ABSPs, FOs and WEGs members and 90 Key Informant Interviews (KIIs) with various types of stakeholders. The baseline was undertaken in the program districts which includes Kech, Kharan, Khuzdar, Lasbela, Musa Khel, Noshki, Panjgur, Pishin, Quetta and Zhob from Balochistan and Hyderabad, Karachi, Khairpur, Mirpurkhas, Sajawal, Mitiari, Sangar, Shaheed Benazir Abad, Tando Allah Yar, Thatta, Tharparkar and Tando Muhammad Khan from Sindh province.

2. Context

Agriculture is the most important economic sector of Pakistan and contributes 21% to GDP. It employs 45% of the country's labour force[1] in 8.3 million privately owned farms / SMEs with an average size of 2.6 hectares (6.4 acres)[2]. The contribution of agriculture to GDP has been gradually declining reflected by a slower growth compared with other sectors. Agriculture grew by 2.77% in 2021 (provisional) over the previous year (base year 2005-06)[3]. Currently, agricultural productivity growth in Pakistan is one of the lowest in the world[4] caused by outdated cultivation technologies and practices, in particular in the provinces Balochistan and Sindh.

Livestock and horticulture, the two sectors that account for 70% of agri value addition, have potential to drive the needed growth and employment creation. These two sectors have strong projected growth in demand, opportunities for climate adaptation, and potential for gender-balanced growth. However, preliminary audits and assessment have identified three major challenges mainly (a) business climate in Pakistan needs to be more facilitative for SMEs, (b) low agricultural productivity and limited value addition by SMEs, and (c) low gender equity.

A vibrant eco-system of Small and Medium Enterprises (SME)[5] is essential to absorb the increasing workforce and develop rural economies to reduce poverty. The business development climate in Pakistan is difficult for any enterprise[6] and particularly for smaller and medium sized ones[7]. Of the rural non-agricultural SMEs, 97% employ 1-5 persons[8]. Around 70% of all non-agricultural SMEs are not registered and operate informally[9].

Although Pakistan only contributes about 0.9% to global carbon emissions, it is the 8th most affected country by climate change[10]. Pakistan witnessed more than 155 extreme weather events from 1999 to 2022. Many areas in Sindh and Balochistan often fluctuate between droughts and flash floods that severely interrupt agriculture value chains' productivity. In 2022, these were the wo provinces of the country that were worst affected by the severe monsoon floods. As per the Post-Disaster Needs Assessment by Planning Commission of Pakistan, an estimated 4,410 million acres of agricultural land has been damaged, and 0.8 million livestock are estimated to have perished across 94 calamity-affected districts of the country. Sindh and Balochistan are the most affected provinces, contributing 72 percent and 21 percent respectively to the total value of damage and losses registered in the sector[11].

Prior to this recent climate-induced humanitarian crises, since the year 2020, the global COVID-19 pandemic also adversely impacted the performance of these value chains in Sindh and Balochistan. A majority of Micro, Small and Medium Enterprises (MSMEs) reported that their businesses, if not severely affected have been partially affected. The key impacts of COVID-19 on these enterprises have been felt of in the form of staff

[1] Pakistan Labour Force Survey 2014-2015. Pakistan Bureau of Statistics, Government of Pakistan.
[2] Agricultural Census 2010. Pakistan Bureau of Statistics, Government of Pakistan.
[3] Pakistan Economic Survey 2021-22. Finance Division, Government of Pakistan.
[4] IFPRI 2016: Pakistan ranked 107 out of 109 countries for TFP agricultural productivity growth and 108 out of 111 for agricultural output growth.
[5] In the context of this document, SME applies to both agricultural and non-agricultural SMEs, unless specifically mentioned otherwise.
[6] In 2015, Pakistan scored 138 out of 189 on the ease of doing business index, World Bank.
[7] SME presentation (2016). Small and Medium Enterprises Development Authority (SMEDA).
[8] Economic Census 2005. Pakistan Bureau of Statistics, Government of Pakistan.
[9] Pakistan Economic Survey 2015-2016. Finance Division, Government of Pakistan.
[10] Global Climate Risk Index 2021. Germanwatch.
[11] Pakistan Floods 2022: Post-Disaster Needs Assessment (October 2022). Ministry of Planning Development & Special Initiatives. The Government of Pakistan, Asian Development Bank, European Union, United Nations Development Programme, World Bank.

lay-offs due to reduction in business activities.

An important angle of analysis in this research was to understand the gendered differentials between access to inputs, information, capacity building opportunities, finance and marketing that determined their participation and benefit from different stages of the value chain. Overall, Pakistan has been ranked as the second-worst country in terms of gender parity, placed 145 out of 146 states in a recent repor[12]. However, in the latest Global Gender Gap Report released by the World Economic Forum. However, the report stated that Pakistan has closed 56.4% of the gender gap in 2022 — the highest overall level of parity the country has posted since the report launched in 2006. Pakistan has made "significant improvement" across three subindexes, with the highest positive variation on economic participation and opportunity. The country ranked 145 on economic participation and opportunity, 143 on health and survival, 135 on educational attainment and 95 on political participation.

Economic participation of women remains strongly influenced by deep rooted systemic impediments to gender equality which continue to prevent them from reaching their full potential. These impediments in both provinces include, patriarchal set up with limited mobility, limited decision-making power, little opportunities for higher education and lack of access to technical modern farming skills. Similarly, women's ownership of agriculture land and property remains low despite progressive legislation introduced in recent years to protect women's inheritance rights in line with the Constitution and Islamic law. Pakistan has introduced several gender-friendly laws in the last two decades, including the Enforcement of Women's Property Rights (Amendment) Bill, 2021 and the Prevention of Anti-Women Practices Act, 2011. According to the Demographic and Health Survey 2017-18, "97% of women [across Pakistan] did not inherit land or a house, while 1% each inherited agricultural land and a house. Less than 1% of women inherited non-agricultural plots or residential plots."[10]

Women also generally enjoy less access to skills training in the field of agriculture to, for instance, enhance quality packaging and marketing of their products orand how to prevent post-harvest losses and reduce input cost. Woman rarely have access to training programs and extension services, as predominantly the extension staff comprised male members which inhibits their participation due to cultural, traditional and mobility constraints. In addition to this, a woman has limited opportunities available since traditionally she has to perform the mandatory household chores. Women's labour is often under reported and under acknowledged in the agriculture sector.

3. Policy framework

At present in both the provinces, there are 39 policies, acts and strategies related to respective value chains either developed and notified or under consideration of their approval / implementation. While SMEs registration policies exist at both the federal and provisional levels, these do not include policies around rural SMEs of livestock and horticulture businesses.

The baseline research conducted for GRASP indicates that the policy formulation process does not adequately benefit from women's voices. The survey highlighted that a very small percentage of Women Enterprise Groups (WEG) i.e. 6% are engaged with private sector policy working groups, groups that are categorized into those providing their recommendations for developing private-sector policies respectively for horticulture and livestock sectors. As noted in the following table, in Sindh, only eight women (3.7%) acknowledged their participation, while in Balochistan, the number of women participating in private sector policy working groups was 15 (9%): The private sector comprises, the fertilizers/pesticides industry,

[12] Global Gender Gap Report 2022. World Economic Forum.
[13] Women's right to inheritance is enshrined in Islam and the law — why do they still have to fight for it? - Pakistan (5 March 2022). Dawn.

sugarcane, rice mills, agricultural equipment/machinery supplier and national and international non-governmental organization working in both the provinces.

Table No. 1: Incidence of women participation, through WEGs, in private sector policy working groups

Response	Sindh		Balochistan		Cumulative	
	No. of WEGs interviewed	age%	No. of WEGs interviewed	age%	No. of WEGs interviewed	age%
Yes	8	3.7	15	9.0	23	6.0
No	210	96.3	151	91.0	361	94.0
Overall	218	100.0	166	100.0	384	100.0

This provincial difference in access to private sector policy corridors is worth noting as it stands apart from the rest of the research findings which generally depict higher women's participation in economic activity in Sindh as compared to Balochistan.

The same research also surfaced that 96.6% of WEGs showed no evidence of participation in public sector policy working groups:

Table No. 2: Evidence of participation of WEGs in public sector policy working group

Response	Sindh		Balochistan		Cumulative	
	No. of WEGs interviewed	age%	No. of WEGs interviewed	age%	No. of WEGs interviewed	age%
Yes	13	6.0	-	-	13	3.4
No	205	94.0	166	100.0	371	96.6
Overall	218	100.0	166	100.0	384	100.0

4. SMEs Registration Status

As noted in the context section of this paper, Pakistan's agriculture sector mainly operates in the informal economy. This research findings are consistent with this well-known fact as it showed that only 6% of the surveyed SMEs (i.e. from a sample size of 1,903 SMEs) are registered with different authorities, while the majority (94%) are operating their businesses without registration. The main reason is that the small farmers and small business holders are unaware of the registration process and its benefits. Within this total reported figure of only 6% SMEs currently registered, there is a considerable gendered difference as men-owned SMEs are twice as likely to be registered as compared to women-owned SMEs, as noted in the following table no 3:

Table No. 3: SME Registration - Gender wise

SME Status	Sindh			Balochistan			Overall		
	Male	Female	Overall	Male	Female	Overall	Male	Female	Overall
	%	%	%	%	%	%	%	%	%
Registered	10.2	5.7	10.0	2.1	-	2.1	6.0	3.5	5.9
Unregistered	89.8	94.3	90.0	97.9	100.0	98.0	94.0	96.5	94.1
Overall	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

This analysis highlights the significant need to support SMEs in general and women-owned SMEs in particular regarding the process of formally registering their businesses.

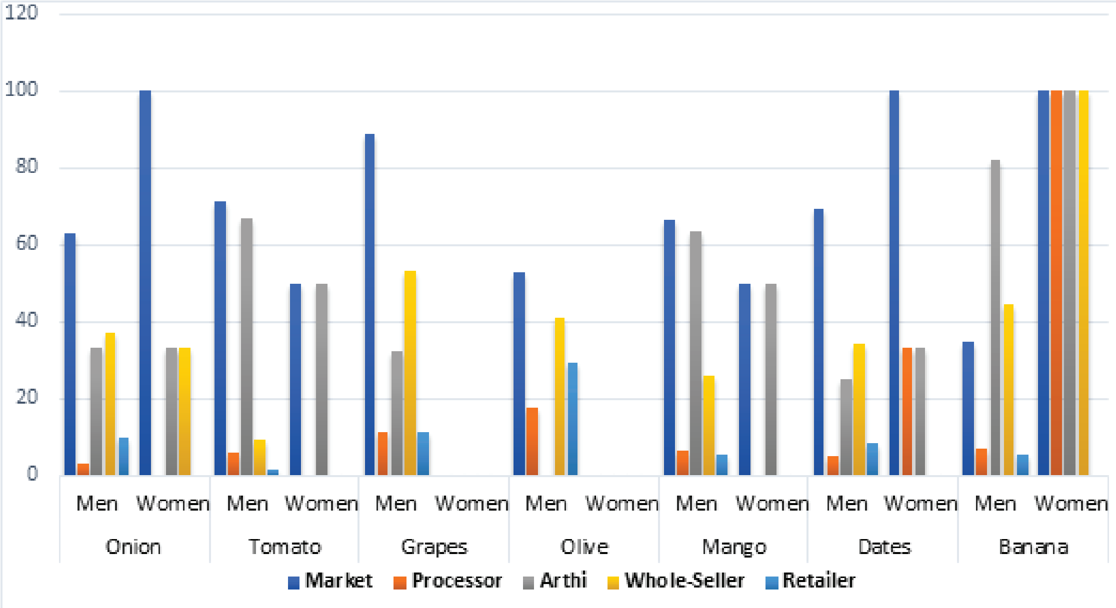
5. Gender Roles in Value Chains

The research provided valuable information regarding the level of participation of women in different stage of the value chain and the challenges they face. Women respondents generally exhibited a low level of awareness of and importantly, access to market opportunities, consumer preferences related quality standards. This inhibits their profit margins. Women are largely dependent on their male counterparts for decision making regarding buying, selling, production, marketing, linkages development and other main economic and financial activities. Due to these factors, men mostly held financial resources and because of this advantageous position took major decisions. Rural women entrepreneurs are also facing difficulties in accessing inputs such as raw material, new products and services and technologies due to cultural constraints especially in Balochistan province.

5.1 Women's Participation in Horticulture Value Chains:

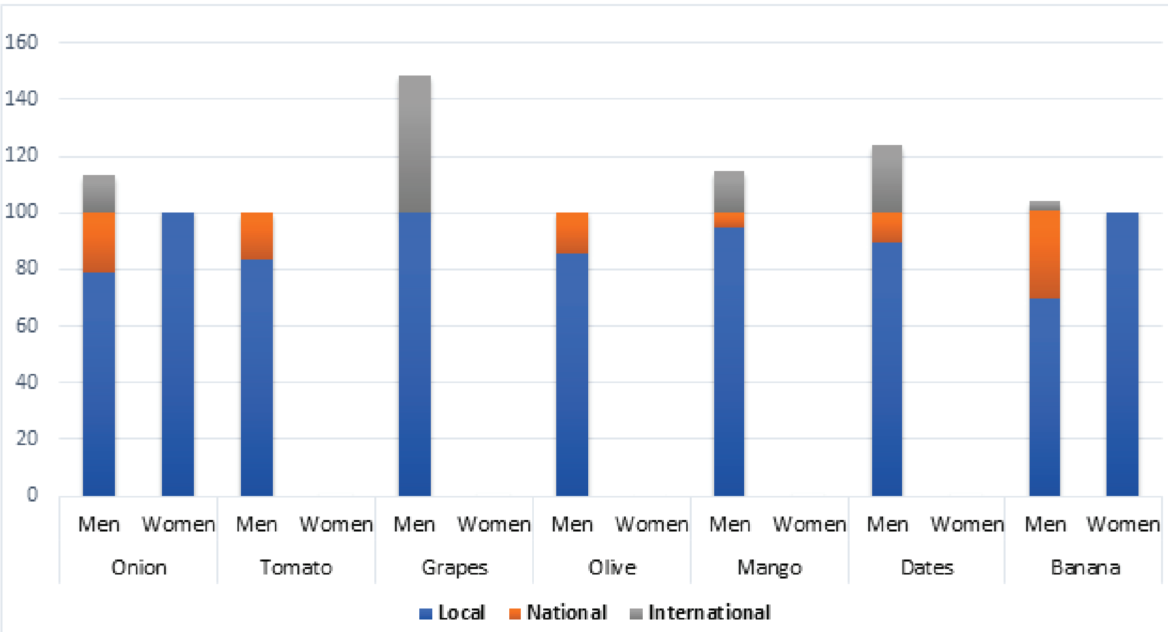
This research highlighted that women tend to be involved in the relatively lower profitability and lower income stages of all the 11 value chains surveyed. The following analysis of different point of sales for the various value chains shows that due to cultural barriers and mobility constraints, only those platforms are accessible and are being utilized by women growers where profit margins are low and economic exploitation is high (such as markets, arthi/middleman or whole seller), whereas men have access to all five platforms resulting in higher profitability prospects. That being said, processors and retailers seem to be inaccessible to both women and men, but barriers are higher for women. The onion, dates and banana value chains are exceptions where women have access to not only markets and arthi, but also processors or whole sellers. Similarly, grapes and olive value chains are highly male dominated where women are not involved in sale of products.

Figure No.1: Shows the Gender-wise break-up of Point of Sale Utilized by Growers



Similarly, men's dominance at local, national and international markets in case of whole-seller market destination is also evident. The research showed that the surveyed whole-seller women have no access to local, national and international markets in any value chain except onion and banana where they've access is limited to local market only:

Figure No.2: Gender-wise Break-up whole-seller Market Destination



5.2 Women's Participation in Livestock Value Chains:

A similar pattern can be observed in the livestock value chain where men enjoy greater access to local market and whole seller as compared to women who mostly sell animal/milk/ wool/ mohair to individuals or Beoparais/middleman where profit margins are relatively low and vulnerability to economic exploitation is higher.

Table No. 4: Point of sale for animal /milk/ wool/ mohair

Multiple responses

Point of sales	Sindh			Balochistan			Overall		
	Male	Female	Overall	Male	Female	Overall	Male	Female	Overall
	%	%	%	%	%	%	%	%	%
Individually	47.5	38.1	46.3	67.2	-	67.2	60.8	38.1	59.7
Boparai	57.5	52.4	56.8	32.4	-	32.4	40.6	52.4	41.2
Whole-seller (national)	7.8	4.8	7.4	15.9	-	15.9	13.2	4.8	12.8
Directly to local market	28.4	4.8	25.3	37.6	-	37.6	34.6	4.8	33.2
Processor	6.4	-	5.6	3.5	-	3.5	4.4	-	4.2
Milk Collector	31.9	9.5	29.0	11.0	-	11.0	17.9	9.5	17.5
Restaurant/Bakery	2.8	-	2.5	4.5	-	4.5	3.9	-	3.8
Exporter	0.7	-	0.6	2.8	-	2.8	2.1	-	2.0

The research also showed that there are stark contextual differences between the two provinces. In Balochistan, involvement of women in all the above-mentioned value chains is noticeably missing at the point of sale as well as access to local, national and international markets. In Balochistan, generally women managing the livestock at home level without any profit.

6. Employment in SMEs

Of 1,903 SMEs, 437 having male/female FTEs provided their response. Of those who provided response, the average number of male FTE in a SME was estimated at six while the female FTE was only one. However, if all 1,903 SMEs are considered the total male FTEs were 3,245 (Sindh: 1,744, Balochistan 1,501) and 366 (Sindh: 170 and Balochistan 196) were female FTEs. As such there were 1.71 male FTE per SME and 0.19 female FTEs per SME.

Table No. 5: Average number of male FTE employees in SME

Number	Sindh			Balochistan			Overall		
	No.	%	Mean	No.	%	Mean	No.	%	Mean
None	71	21.2	-	23	12.4	-	94	18.1	-
One	30	9.0	1	10	5.4	1	40	7.7	1
Two	27	8.1	2	11	6.0	2	38	7.3	2
Three – Five	79	23.6	4	20	10.8	4	99	19.0	4
Six – Ten	88	26.3	8	64	34.6	8	152	29.2	8
Eleven – Twenty	35	10.5	12	51	27.6	13	86	16.5	13
Above 20	5	1.5	43	6	3.2	28	11	2.1	35
Overall	335	100.0	5	185	100.0	8	520	100.0	6

Table No. 6: Average number of female FTE employees in SME

Number	Sindh			Balochistan			Overall		
	No.	%	Mean	No.	%	Mean	No.	%	Mean
None	295	88.1	-	157	84.9	-	452	86.9	-
One	5	1.5	1	-	-	-	5	1.0	1
Two	7	2.1	2	3	1.6	2	10	1.9	2
Three – Five	17	5.1	4	3	1.6	4	20	3.9	4
Six – Ten	10	3.0	7	20	10.8	8	30	5.8	7
Eleven – Twenty	1	0.3	15	2	1.1	12	3	0.6	13
Overall	335	100.0	1	185	100.0	1	520	100.0	1

7. Women in Agri Business Service Providers

An important aspect of enabling women's participation in rural value chains is the extent to which women are included in the agro business service provider (ABSP) role. The study reports that, no women was found engaged at the supply side by ABSPs, whereas, after conducting KII, the agriculture and livestock extension departments have shown the participation of women in SME support, instead they were of the view that they are facing a shortage of female members due increased in female farmers in the area. In particular they are facing difficulty in provisioning of extension services to the women farmers regarding horticulture and livestock. At present, few women workers are available at district level who was delivering their services in kitchen gardening, basic management of livestock and poultry at household level. Their approach to women farmer is very limited because of mobility issues, long distances, scattered number of women farmers at union council level. There is need to develop the cadre of women master trainers certified by department for the provision of extension services to women farmers at local level. This will resolve the mobility and shortage of women staff being currently faced by the concerned departments. As none of the ABSPs surveyed confirmed employment of woman with their entities. The survey further showed that 37 out of 384 WEGs members are working in ABSP as reflected in the following Table:

Table No. 7: Women members working as ABSP in private sector

Province	Sindh		Balochistan		Overall	
Incidence	No.	%	No.	%	No.	%
Yes	23	10.6	14	8.4	37	9.6
No	195	89.5	152	91.6	347	90.4
Overall	218	100.0	166	100.0	384	100.0

Women involvement at supply side was minimal as none of the 47 ABSPs surveyed engaged any female employee. They were only evident in providing some basic services on individual basis. This information was gathered from the surveyed WEGs.

8. Access to Finance

Woman Enterprise Groups (WEGs) indicated that one of the reasons why business support organizations were unable to support women and women groups in improving their enterprises is because of limited access to financial assistance. Overall, only 8.1% WEGs claimed that they had knowledge about MFIs for financing, while access to this information was higher at 11% in Sindh and lower at 4.2% in Balochistan.

From Sindh they confirmed their access to multiple MFIs, whereas in Balochistan women entrepreneurs said that they did not have relevant documents or access to microfinance services from any MFI.

The information collected from WEG from Sindh revealed that only 11% of them were having knowledge of availing finances from FIs. Of these WEG, 75% from Sindh reported their access to NRS. While those who were having knowledge of FIs in Balochistan, 85.7% said that they did not know of accessibility to FIs. KIIs convened elaborated the position in Balochistan by reporting low activity of FIs due to law-and-order situation.

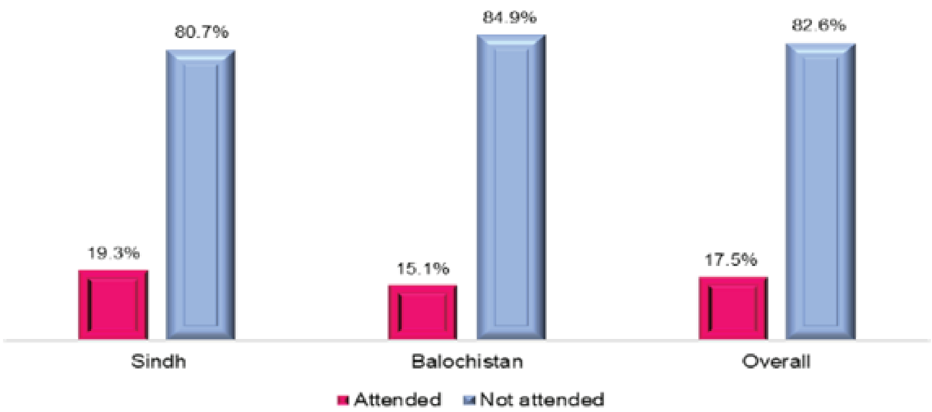
Table No. 8: Knowledge of WEG about FIs for financing

Incidence	Sindh		Balochistan		Overall	
	No.	%	No.	%	No.	%
Yes	24	11.0	7	4.2	31	8.1
No	194	89.0	159	95.8	353	91.9
Overall	218	100.0	166	100.0	384	100.0

9. Access to Information and Training

The research findings show that amongst 384 WEGs, only 17.5% claimed to have attended any training on grading/processing of products as shown in the following chart:

Figure No.3: WEG members attending any training on grading/processing of products in targeted value



<u>Sanitary and Phyto-sanitary (SPS) Compliance and Awareness:</u>
The research findings further shows that more than 87% of the respondents do not have information about food safety and SPS concepts of which women's ratio was higher at 93%. The situation was more challenging in Balochistan as compared to Sindh as shown in the following table:

Table No. 9: Awareness of food safety and SPS concept

Incidence	Sindh			Balochistan			Overall		
	Male	Female	Overall	Male	Female	Overall	Male	Female	Overall
	%	%	%	%	%	%	%	%	%
Yes	17.4	11.4	17.2	7.4	-	7.3	12.2	7.0	12.1
No	82.6	88.6	82.8	92.6	100.0	92.7	87.8	93.0	87.9
Overall	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The research also explored the participants' knowledge about laboratories from where the quality of a product can be certified before marketing. The baseline results showed that 100% women and 96.8 % men did not know about the laboratories from where their products/produce can be verified and certified before going to market to get the optimum price and compete in national and international markets.

Table No. 10: Awareness of any laboratory from where quality of a product can be certified for marketing

Incidence	Sindh			Balochistan			Overall		
	Male	Female	Overall	Male	Female	Overall	Male	Female	Overall
	%	%	%	%	%	%	%	%	%
Yes	2.9	-	2.8	3.5	-	3.4	3.2	-	3.1
No	97.1	100.0	97.2	96.5	100.0	96.6	96.8	100.0	96.9
Overall	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

10. Conclusion:

This study has offered valuable insights and data regarding the varying level of men and women's participation at different stages of the values chains. The study shows varying levels of women and men participation in access to markets, trainings, ABSPs and finance. Compared to men, women are engaged in less profitable access to markets, and lack access to finance, information and training. It has also highlighted important regional difference between the two provinces. Considering this gender analysis, a holistic approach is required by policy makers, government and private sector actors, and development partners to address the multifaceted barriers that limit women's participation to relatively lower profitability stages of the value chains.

GRASP seeks to contribute to addressing some of these key barriers in order to strength climate smart, resilient and gender inclusive value chains. It will focus on implementing three major components: 1) improvement of the regulatory framework for prioritized value chains; 2) increase in productivity, quality and sustainability of selected value chain in horticulture and livestock; and 3) SME commercialization within selected value chains to reform the agriculture market. Across these components, the project specifically focuses on empowering women by bringing them into policy dialogues, creating economic opportunities in farming and processing, with a special focus on women-owned businesses, and building capacity of women's support organizations.