ADVANCING GIRLS' EDUCATION & SKILLS

OPENING DOORS

A LABOR MARKET ASSESSMENT FOR ADVANCING GIRLS' EDUCATION AND SKILLS

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Opening Doors: A Labor Market Assessment for Advancing Girls' Education and Skills

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Study Design and Methodology:	Desk review, key informant consultations, and custom analysis of survey microdata

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ACRONYMS AND ABBREVIATIONS

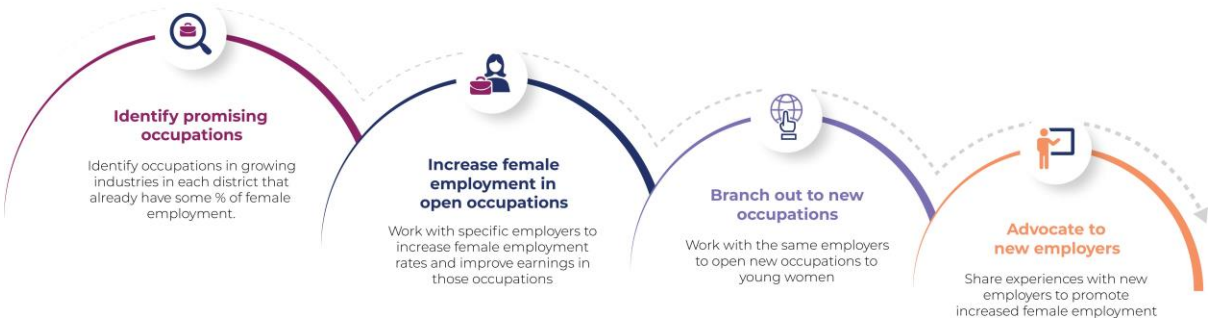
FWBL	First Women Bank Limited
GLLSP	Gwadar Lasbela Livelihoods Support Project
HANDS	Health Access Nurturing Developing Services
ICT	Information and communication technologies
IFAD	International Fund for Agricultural Development
KPK	Khyber Pakhtunkhwa
NAVTTC	National Vocational and Technical Training Commission
n.e.c.	"not elsewhere classified"
NPO	National Productivity Organization
NRSP	National Rural Support Programme
PBS	Pakistan Bureau of Statistics
PSLM	Pakistan Social and Living Standards Measurement
PYWD	Punjab Youth Workforce Development
SRSO	Sindh Rural Support Organization
TEVTA	Technical Education & Vocational Training Authority
TVET	Technical and Vocational Training
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees

EXECUTIVE SUMMARY

The doorway to training and employment for women is open in Pakistan—but just barely. With just 22% of women active in the labor force,[1] Pakistan has one of the lowest rates of female economic participation in the world. The Advancing Girls' Education and Skills (AGES) project, funded by USAID and implemented by World Learning and partners, aims to catalyze change in that trend by helping girls thrive at home, at school, and at work in eight target districts—Lasbela in Balochistan; Karachi, Jacobabad, and Ghotki in Sindh; Muzaffargarh in Punjab; and Peshawar, Buner, and Swat in Khyber Pakhtunkhwa. As part of its activities, Component 2 of the AGES project will train at least 7,000 young women aged 18-25 from these districts in demand-driven trades, and ensure that at least 50% of them are employed in decent working conditions—whether formal employment or small business.

To thrive at work there must be quality work available to young women, family support to engage in that work, and a workplace (in the case of wage-earning work) and regulatory context (in the case of small business) that treats women equitably. With a single project, it is not possible to transform this entire landscape of issues—the AGES project approach to promoting female employment in Pakistan is targeted and strategic. In particular, AGES will work to expand the space for female employment in certain localities, beginning with industries, occupations, and value chain niches that already employ women—albeit often in small numbers when compared to male rates of employment in those fields.

The AGES approach to promoting female employment in Pakistan



The collaborations with employers and value chain actors established through this process are expected to also open certain opportunities to explore female employment in non-traditional occupations for women, and to catalyze specific discussions on how to make these workplaces or value chains more equitable and supportive for female workers. To the extent that these employers serve as a reference point for other employers in their respective localities and districts, these changes also have the potential to begin influencing broader local female employment practices (see Figure 2).

Execution of this strategy begins with identifying the most promising occupations and industries that are open to female employment, show promise for employment growth, and offer possibilities for

[1] PBS, "Labour Force Participation Rates and Unemployment Rates by Age, Sex and Area, 2014-2015" (Pakistan Bureau of Statistics, 2015), http://www.pbs.gov.pk/sites/default/files/Labour%20Force/publications/lfs2014_15/t18-pak.pdf.

improved earnings. For that purpose, this study offers a female-focused labor market assessment of Pakistan's rural and urban context generally, and of the 8 AGES implementation districts—Lasbela, Karachi, Jacobabad, Ghotki, Muzaffargarh, Peshawar, Buner, and Swat. This study's purposes are the following, presented in five chapters:

Chapter I: To analyze female employment trends and obstacles to female employment in Pakistan, drawing on statistics from the Pakistan Bureau of Statistic's Labor Force Survey and recent ethnographic research under the USAID/World Learning Pathways to Success project, as well as other sources.

Chapter II: To explore skills development needs and opportunities for young women in Pakistan, drawing on the National Skills Information System (NSIS), employer skills gaps studies, qualitative research, and the global literature reviews conducted under the USAID YouthPower initiative.

Chapter III: To identify industries and occupations in Pakistan that show promise for employment growth over the next several years, drawing on Pakistan's export trends data, the 20 Emerging Pakistan sectors, and key stakeholder interviews.

Chapter IV: To identify industries and occupations nationally, in rural and urban areas, where there is already some opening for female employment, and evidence of overall growing labor demand and skills gaps, drawing on a custom analysis of the Pakistan Social and Living Standards Measurement (PSLM) survey and NSIS.

Chapter V: To conduct a more detailed analysis of industry-occupation clusters that are already open to women in each of the AGES districts, using PSLM survey data, and create rank-ordered lists of the top priority occupations that promise opportunities for expanded female employment with decent earnings. Further, to identify potential employers, value chain actors, and training providers associated with those occupations.

A concluding chapter summarizes the top eight industry-occupation clusters this study recommends the AGES project focus on for increased female employment and improved earnings. In brief, these are:

1. Pre-primary education, primary education, and education support services, including through higher-level training and innovative business models
2. Textiles and apparel, particularly higher-earning factory employment and linkages with value chain actors in textile handicrafts
3. Livestock and dairy production, building on existing successful work with women in these value chains
4. Domestic housekeeping, cooking, elder care, and personal care, working with initiatives that have shown the potential household worker training that empowers, and employer arrangements that achieve improved working conditions and higher pay
5. Retail sales for both employment and self-employment

6. Cooks, bakers, pastry chefs, waiters, and other food service staff, including in food processing manufacturing, restaurants and hospitality, and via new food freelancing platforms

7. Health associates and paraprofessionals in localities where demand has not yet been met

8. Other industry opportunities: This analysis has provided some evidence that the chemicals, pharmaceuticals, food processing, packaging, and printing industries also offer some potential for female employment, in localities where these employers exist.

While it may seem that many of these areas are already female-focused, in reality this is often not the case. The data shows that, in the majority of the AGES districts, most of these occupations are still male-dominated. Expanding female employment in these occupations and industries therefore promotes gender equity in significant ways—particularly if the project helps to negotiate for better female wages and product prices—while simultaneously avoiding the pitfall of training young women for idiosyncratic trades where they will not eventually be able to obtain work at larger scale. In turn, as more young women are brought into the workforce in these fields, other occupations and industries may gradually become more accessible as well.

Through these efforts, the AGES project aims to open the door wider for female participation in the economy—having a transformative impact on the lives of at least 7,000 young women, and beyond them, promoting work for thriving young women throughout Pakistan.

I. YOUNG WOMEN AND WORK IN PAKISTAN

The law of Pakistan treats men and women equally, understanding that without their equal participation in all spheres of life, the country cannot prosper. Pakistan is one of only two countries in South Asia to have ratified all eight of the International Labor Organization's fundamental conventions—including the 1958 convention on the elimination of discrimination, which reflects the country's intention to pursue "equality of opportunity and treatment in respect of employment and occupation" for both sexes, among other groups.[1]

Yet Pakistani society is still divided regarding the status of women and their proper place in society. Women's labor force participation is increasing, but still the rate is far below that of men and also well below that of other countries with similar income levels.[2] Urban females are the least likely to be employed, while a relatively greater percentage of women are employed in rural areas, primarily in agricultural-related work. Low female rates of participation in the labor market contribute to women's economic and social vulnerability, as well as depriving the country of women's skills and economic contributions.[3]

There are many social and cultural barriers that women continue to face in accessing training, seeking employment, and maintaining their work activities.[4] This chapter explores the contemporary picture of women's work in Pakistan, providing an overview of employment trends and major obstacles to female employment. The chapter also presents the rationale for a female-focused labor market analysis and discusses the methodology employed in the rest of the report.

Female Employment Trends in Pakistan

Pakistan has a very low female labor force participation rate, with only 22.0% of women aged 10 and over working or searching for work, according to Pakistan's most recent Labor Force Survey—28.8% of women in rural areas and just 10.0% of women in urban areas, compared to 69.0% of rural men and 65.7% of urban men.[5] This is one of the lowest rates in the world, far below the world average female labor force participation rate of 51.2%, and even below the South Asia rate of 31.8%.[6]

Of the small percentage of Pakistani women who are active in the labor force, the Pakistan Bureau of Statistic's 2014-2015 Labor Force Survey shows that the vast majority (73.5%) are in the informal sector.[7] The majority of women who are active in the labor force also do not receive any pay in cash

[1] ILO, "Convention C111 - Discrimination (Employment and Occupation) Convention" (ILO, 1958), http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C111.
[2] Farhan Sarwar and Abdus Sattar Abbasi, "An In-Depth Analysis of Women's Labor Force Participation in Pakistan," *Middle-East Journal of Scientific Research*, 2013, 7.
[3] UN Women, "Women's Economic Participation and Empowerment in Pakistan: Status Report 2016" (UN Women Pakistan, 2016), http://asiapacific.unwomen.org/en/digital-library/publications/2016/05/status-report-on-womens-economic-participation-and-empowerment.
[4] Iffat Hussain, "Problems of Working Women in Karachi, Pakistan" (Cambridge Scholars Publishing, 2008). Also see Mohammad Pervez Wasim et al., "Family Types, Authority Structure and Women Workers in Sindh Labor Force: Problems and Prospects," Indus Journal of Management and Social Sciences 2, no. 1 (2008): 20.
[5] PBS, "Labour Force Participation Rates and Unemployment Rates by Age, Sex and Area, 2014-2015."
[6] Sarwar and Abbasi, "An In-Depth Analysis of Women's Labor Force Participation in Pakistan."
[7] PBS, "Labour Force Survey 2014-2015," 2015, 32, http://www.pbs.gov.pk/sites/default/files/Annual%20Report%20of%20LFS%202014-15.pdf.

or in kind, with 54.5% working as contributing family workers.[1] Just 24.9% of working women are employees, 20.4% are own account workers (self-employed), and 0.1% are employers of others.[2]

Most women (72.7%) are employed in the agricultural sector, distantly followed by manufacturing (14.1%) and social and personal services (11.3%). This is a disproportionate pattern compared to men, who are more evenly distributed across Pakistan's major industries with only 33.1% in agriculture. According to UN estimates, the highest percentage share of women working in the agriculture sector was in animal production at 47%, followed by mixed farming at 23% and growing of non-perennial crops at 18%.[3]

Table 1: Male and Female Employment Rates by Major Industry Division[4]

Major Industry Divisions	Employed (%) 2014-2015		
	% of Total	% of Males	% of Females
Agriculture/forestry/hunting & fishing	42.3	33.1	72.7
Manufacturing	15.3	15.7	14.1
Community/social & personal services	13.2	13.7	11.3
Wholesale & retail trade	14.6	18.7	1.4
Construction	7.3	9.5	0.2
Transport/storage & communication	5.4	7.0	0.1
*Others	1.9	2.3	0.2
Total	**100.0**	**100.0**	**100.0**

A similar picture is reflected in women's occupations. Again, the greatest percentage of economically active women hold skilled agricultural-related occupations (61.7%) or unskilled agriculture and other elementary occupations (15.5%), with others working in craft occupations (12.6%). Of note is the very low percentage of the female labor force engaged in low to mid-level wage-earning occupations such as service and sales, technicians, managers, machine operators, and clerical support workers (a total of 3.8% of all employed Pakistani women, as compared to 36.4% of males employed across these categories). While agriculture represents a major sector of exports and economic growth in Pakistan, women's confinement to this work—and often to the lowest-earning occupations within this sector—poses an obstacle to gender equity more generally.

[1] PBS, 30. A "contributing family worker" is defined as "a person who works without pay in cash or in kind on an enterprise operated by a member of his/her household or other related persons" (p. 11).
[2] PBS, 30.
[3] UN Women, "Women's Economic Participation and Empowerment in Pakistan: Status Report 2016.", using statistics from the Labor Force Survey 2013-14.
[4] PBS, "Labour Force Survey 2014-2015," 27.

Table 2: Male and Female Employment Rates by Major Occupational Groups[1]

Employed (%) 2014-15 By Major Occupational Groups			
Major Occupational Groups	**Total**	**% of Males**	**% of Females**
Skilled agricultural, forestry & fishery workers	37.1	29.7	61.7
Elementary occupations	15.8	15.9	15.5
Craft & related trades workers	13.6	13.8	12.6
Professionals[2]	4.7	4.2	6.4
Service and sales workers	15.7	19.8	2.1
Technicians & associate professionals	3.1	3.8	0.9
Managers	2.2	2.8	0.3
Plant/machine operators & assemblers	6.3	8.1	0.3
Clerical support workers	1.5	1.9	0.2
Total	**100.0**	**100.0**	**100.0**

Only in the professional category does women's relative share of employment surpass that of men at 6.4% of employed females as compared to 4.2% of employed males; yet in absolute terms women's participation in professional fields—as with nearly every other occupational group—is still far lower than men due to the overall low female participation rate in the labor force.

Obstacles to Female Employment in Pakistan

Clearly, there are significant challenges affecting women's entry into the labor force, retention, and ability to progress to higher-earning occupations. An intersection of gender discrimination and economic disadvantage has led to many families only investing in basic and primarily low-quality education for girls, one factor shutting off a wide variety of work pathways for many women.[3] Additionally, studying or working away from home is highly discouraged for many young women, with widespread fear of the possibility of sexual harassment as well as the more general possibility of harm to reputations.[4] Further, young women continue to face heavy domestic work burdens on top of their studies or wage-earning work,[5] and female entrepreneurs often face additional gender-specific barriers, including lack of access to collateral and credit.[6]

In Pakistani society, many decisions regarding women's lives are made under the constraints of **social reputation and perceptions** of family, friends, and neighbors. These considerations may affect choice of clothing, movement, socialization opportunities, and life goals including study or work. etc. World Learning's ethnographic research for the USAID-funded project Pathways to Success illuminated how these issues interact, illustrated in the following case study excerpt:

[1] PBS, 28.
[2] According to the Pakistan Standard Classification of Occupations, "professionals" includes physical, mathematical, and engineering science professionals; life science and health professionals, teaching professionals, and others (business, legal, archivists and librarians, social science, writers and creative artists, religious professionals).
http://www.pbs.gov.pk/sites/default/files//pslm/publications/pslm_microdata_2010_11_HIES/occupation%20code.pdf
[3] "Pathways to Success: Vocational Trainee Stories from Karachi, Daharki, and Peshawar" (World Learning, 2018).
[4] UN Women, "Women's Economic Participation and Empowerment in Pakistan: Status Report 2016."
[5] Hussain, "Problems of Working Women in Karachi, Pakistan."
[6] Babak Mahmood, "Gender Specific Barriers to Female Entrepreneurs in Pakistan: A Study in Urban Areas of Pakistan," British Journal of Education, Society & Behavioural Science 2, no. 4 (January 10, 2012): 339–52, https://doi.org/10.9734/BJESBS/2012/2128.

Figure 1: Case Study of Girls and Honor from Pathways to Success (PTS)[1]

We met with Aisha and the other field study participants, Farah, and Saira[2] at the Technical Training College in Daharki, where they completed their training. Her mother had not been keen on Aisha getting an education nor joining PTS. Instead, she wanted to secure a good marriage for her daughter. The family had found her several suitors, but Aisha had not been willing to agree to any of them. In one case, though, it was the boy's family that said no to the *rishta*. This was because Aisha was educated; she had completed high school. They specifically wanted a girl who was less educated than their son. Sick with fear that a marriage like this would come to define her life, Aisha said she had wanted to kill herself, and had even tried to do so. […]

After hearing about PTS, the girls in the community decided to speak with their parents, and tell them about the course offerings, as they had not attended the meeting. Aisha said her mother expressed reluctance: "'you've just finished school, why... would you get involved with this now?" Aisha then told us: "All the girls' parents said no."

Then Rukhsana [a community mobilizer] came to meet her father. She met with all the girls' fathers, and then met Aisha's father again four or five times. Recounting how Rukhsana also changed her mother's mind, Aisha described her words: "we'll teach your girls … your home will become better, your neighbourhood will become better. What's the point of all these girls being educated but continuing to live in a state of illiteracy?" Hearing this, "*Ham bohot shokh pe aagaye* [after this our interest in joining really took hold]," said Aisha. […]

"There was so much illiteracy here, we didn't let our daughters out," Aisha's father lamented. "When Rukhsana came and told us all these great things [about PTS], and took us there [to TTC], we saw the environment, the classes, the teaching—that's when we realized this is really what life is about. There's no life here, what is this life here [in the village]?" He continued: "Before, we believed that a girl's place is at home and their work is to prepare roti, work the farm, and feed the cows—that's it. When I saw TTC [the technical training center], I realized there isn't just one doorway for girls [to the home], that that doorway [education] is also right for girls."

At first, he thought the trainings were "*ghalat kam, bohot ghalat kam* [wrong, terribly wrong]," following the customs, the *rivaj*, of the community, but "now we know they are very useful." Aisha, elaborating, said her father used to think that the *waderas*, powerful landlords, looked at girls with bad intentions, and for that reason, they should be kept at home. Even if he didn't actually feel this way, this is how he had to respond, because "these are our daughters, because our family's honour, and our daughter's honour also...is dear to us and we were afraid about what could happen." While Aisha's father placed blame with the customs of the community for influencing the way he *once* thought, he also defended the community, emphasizing that it had changed, and "*used* to be like this, but not anymore," specifically asking her to make this point clear to us. […}

Honour played a central role in the family's reasoning for attempting to confine Aisha to the home, and prevent her from joining PTS. Moreover, the burden of protecting honour was placed squarely on Aisha. Later on, when we asked her brother about what fears there were

[1] "Pathways to Success: Vocational Trainee Stories from Karachi, Daharki, and Peshawar."
[2] Names have been changed.

about Aisha going out of the home, he explained that it was about what others would think. "They would say 'look his sister is going, she will go and speak to people outside and her mind will be spoiled'...before in our society a wife or a sister did not have this right," he said, adding that "now it has become clear that this is their right".

When we asked her, Aisha too subscribed to these ideas. "We wanted to prevent people from seeing our elders in a bad light because their women work." Women staying at home was the easiest way to safeguard the family's honour. […] While the issue was about familial honour, or her father's reputation, the responsibility always appeared to come back to Aisha. For their part, the entire family including Aisha, indicated that the issue was the mindset in their community, which believed women who left the home were immoral, and they were bound by these beliefs, but were not responsible for them.

World Learning's Pathways to Success research has shown that family, neighbors, and others may exert significant pressure not to leave the home due to deep-set beliefs around morality and respectability. In the end, young women's bodies and behavior often bear the responsibility for maintaining the entire family's honor.

Even if women succeed in gaining approval from their parents or spouse to seek work, they often face **gender bias in hiring**. In various formal and informal ways, men are given advantages over women in the hiring process in Pakistan.[1] Once hired, women continue to face discrimination, including through a documented **wage gap** between men and women.[2]

Barriers to female work can also stem from the **heavy home responsibilities** that women bear. Culturally it continues to be the expectation that women take care of the home, husband, children and often also the husband's parents. These burdens do not diminish when women take on work outside the home, resulting in a heavy combined workload.[3] Additionally, childcare poses a challenge for lower-income working women, as most industrial workplaces do not have nurseries or daycare where mothers can keep their children.[4]

Movement to and from work can also be a problem due to the **lack of safe transport facilities** available for women, or family perceptions that public transport is unsafe or dishonorable. Many women who do secure family approval to leave the home are dependent on male family members for transportation.[5] **Long working hours** also pose a problem for women, related both to transportation issues and to home responsibilities. Factories and many private organizations require late working hours, and women's inability or refusal to work at these hours can be taken as grounds for firing or curtailing opportunities for promotion and advancement.

Pakistani women also face serious issues of **sexual harassment** in public and at the workplace.[6] Although recent legislation has attempted to address these issues, implementation is a challenge.[7]

[1] Ayesha Khan, "Women and Paid Work in Pakistan" (Collective for Social Science Research, March 15, 2007).
[2] International Labour Organization and ILO Country Office for Pakistan, *Decent Work Country Profile Pakistan* (Islamabad: ILO, 2014), 48.
[3] Hussain, "Problems of Working Women in Karachi, Pakistan."
[4] UN Women, "Women's Economic Participation and Empowerment in Pakistan: Status Report 2016."
[5] UN Women.
[6] Razeshta Sethna, Tooba Masood, and Ramsha Jahangir, "Special Report: Sexual Harassment in Workplaces in Pakistan," *Dawn.Com*, April 19, 2018, https://www.dawn.com/news/1395215.
[7] HRW, "World Report 2017: Pakistan" (Human Rights Watch, 2017), https://www.hrw.org/world-report/2017/country-chapters/pakistan.

At its most extreme form, **honor killings** continue to occur as a practice for controlling women's bodies or punishing a family. Despite the introduction of the Anti-Rape Laws Act of 2013 and the Anti-Honour Killings Laws Act of 2014, honor killing continues to be practiced and is often discussed in the media.[1] In recent years, at least 3,973 women were murdered in the name of honor, according to a report by the Aurat Foundation,[2] recognizing that many honor-related crimes go unreported.

Finally, **women in rural areas** face their own particular challenges. They often bear responsibility for the most menial tasks, and receive little training to improve their agricultural or livestock production, nor in how to use it to generate higher-value businesses. Obstacles to rural female entrepreneurs include the lack of land ownership titles for collateral, lack of credit facilities in general, and complex loan procedures.[3]

Overall, women continue to experience serious ongoing constraints to labor market access in Pakistan, despite evolving public opinion and government efforts in many areas. In the 2017 Global Gender Gap report, Pakistan ranked second to last of all countries, followed only by Yemen, with consistently low performance in the sub-scales measuring women's economic participation and opportunity, educational attainment, political empowerment, and health and survival.[4] There is clearly a need for further concerted efforts to address this gap—one of the primary goals of the AGES project.

The AGES Theory of Promoting Female Employment

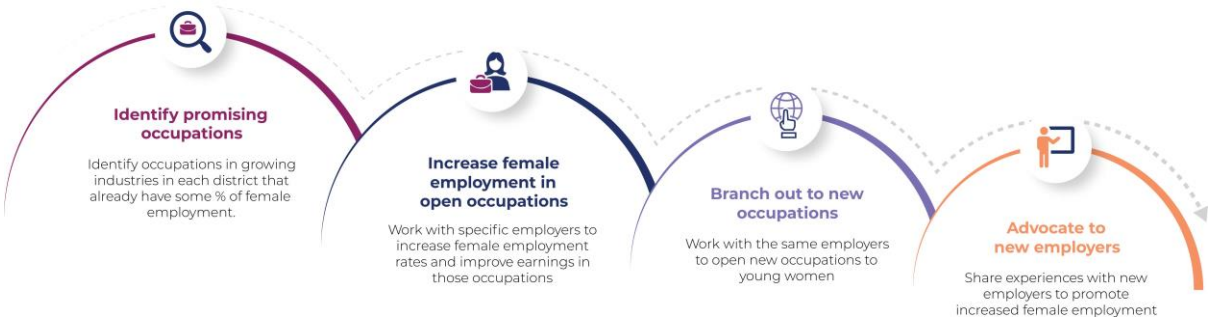
The AGES project approach to promoting female employment in Pakistan is targeted and strategic. The overarching goal of AGES is to promote conditions whereby girls and young women can thrive at home, at school, and at work. To thrive at work there must be quality work available to young women, family and community support to engage in that work, and a workplace (in the case of wage-earning work), and regulatory context (in the case of small business) that treats women equitably.

With a single project, it is not possible to transform this entire landscape of issues. However, AGES seeks to catalyze certain changes at the local level in selected AGES districts, as part of promoting these broader trends. In particular, AGES will work to expand the space for female employment in certain localities, beginning with industries, occupations, and value chain niches that already employ women—albeit often in small numbers when compared to male rates of employment in those fields. The collaborations with employers and value chain actors established through this process are expected to also open certain opportunities to explore female employment in non-traditional occupations for women, and to catalyze specific discussions on how to make these workplaces or value chains more equitable and supportive for female workers. To the extent that these employers serve as a reference point for other employers in their respective localities and districts, these

[1] Meha Pumbay, "Honor Killings in Afghanistan and Pakistan," *The Diplomat*, December 30, 2016, https://thediplomat.com/2016/12/honor-killings-in-afghanistan-and-pakistan/.
[2] Rabeea Hadi and Muhammad Ullah, "Violence against Women in Pakistan: A Qualitative Review of Reported Incidents" (Aurat Foundation, 2014), https://www.af.org.pk/PDF/VAW%20Reports%20AND%20PR/VAW%202014.pdf.
[3] Har Bakhsh Makhijani et al., "Women Entrepreneurship: Problems Faced by Rural Women Entrepreneurs in Sindh Province of Pakistan Har Bakhsh Makhijani, Muhammad Ismail Kumbhar, Shuhab Mughal, Urooj Talpur," *Lifescience Global* 11 (2015), http://www.lifescienceglobal.com/pms/index.php/jbas/article/view/2874.
[4] WEF, "The Global Gender Gap Report" (World Economic Forum, 2017), http://www3.weforum.org/docs/WEF_GGGR_2017.pdf.

changes also have the potential to begin influencing broader local female employment practices (see Figure 2).

Figure 2: The AGES approach to promoting female employment in Pakistan



Execution of this strategy begins with identifying the most promising occupations and industries that are already open to female employment, show promise for employment growth, and offer possibilities for improved earnings. This requires an approach that differs somewhat from traditional labor market assessments. The question here is not simply where demand for workers exists in the Pakistani economy and in particular localities, but where demand for—and social acceptance of—*female* workers exists and can be strategically expanded. This does not mean that AGES will be restricted to promoting gender-stereotypical female trades, but rather that the project will target occupations where a real potential for expanded female employment has been shown because some women are already employed in an industry known to be on a growing trajectory. More metaphorically, AGES is seeking out cracks of light—spaces where decent work for women is already available—in order to open these doors wider and let greater light shine through.

This study therefore offers a female-focused labor market assessment of Pakistan's rural and urban context generally, and of the 8 AGES implementation districts—Lasbela, Karachi, Jacobabad, Ghotki, Muzaffargarh, Peshawar, Buner, and Swat. Its purposes are:

1. To identify industries and occupations where there is already some opening for female employment, and evidence of overall growing labor demand and skills gaps, at the national level for rural and urban contexts, and in each AGES district. Where formal employment is a possibility, this analysis is prioritized for decision-making purposes; where it is not likely to be available, a supplementary small business value chain analysis is required.
2. To provide the initial information necessary to identify specific employers and value chain actor firms to approach within those industries, with need for to fill multiple positions in the identified occupations, with a view of proposing to them demand-driven training arrangements for young women.
3. To facilitate the identification, together with employer partners, of accessible training institutes or in-house training centers where such trainings could be offered.

Based on the identification of promising occupations in each district, the study further provides preliminary guidance regarding employers and value chain actors to approach, and training options that can be pursued.

Study Methodology

There is a plethora of labor market studies and value chain assessments available for Pakistan as a whole, as well as for particular provinces and districts. However, there are few studies that examine comprehensively the situation of women and particular occupations according to earnings and growth potential. This is to a great extent a function of lack of data.

The national Labor Force Survey,[1] for example, only provides employment statistics according to the short list of major occupational and industry classifications, offering categories that are much too broad to allow for analysis of employment opportunities, and providing only a province-level of analysis. The National Skills Information System,[2] furthermore, which has made great strides in analyzing the demand for skills in Pakistan, focuses on the province level for skills gaps rather than offering district-level information, and does not classify the cited skills shortages by industry. Finally, given the very limited labor force participation of women, many of the available labor market assessments and value chain studies depend primarily on male-focused data and select from a very limited range of possibilities for women.

Based on a review of the available data and its reliability, as well as its ability to provide district-level detail, this study employs the following methodology for arriving at recommended trades for training and quality female employment in the AGES districts:

1. **To provide an overview of Pakistan's hard skills and soft skills needs**, as well as the current skill development institutions and programs that set the context for the AGES project, Chapter II uses the available sources of information from the National Skills Information System and related reports.

2. **To gain a national-level perspective on growing industries and occupations,** Chapter III employs three sources of national information on industry growth and sectors of projected expansion in employment:
    a. Data on 5-year export growth trends (2011-2016) for Pakistan from the Observatory of Economic Complexity,[3] which aggregates information on global movements of exports and imports.
    b. The 20 Emerging Pakistan sectors identified by the Government of Pakistan as priority areas for investment and economic growth.[4]
    c. An additional set of 17 promising industry-occupation clusters, including in the services industry, identified through key informant interviews in Islamabad, Karachi, and Lahore, in May 2018.

3. **To identify a list of context-relevant occupations that already demonstrate some openings for female employment**, this study first analyzes industry-occupation employment rates for females at the national level for urban and rural areas (in Chapter IV), and then at the district-level for the 8 AGES districts (in Chapter V), using the microdata from the 2014-15 Pakistan Social and

[1] PBS, "Labour Force Publications," Pakistan Bureau of Statistics, n.d., http://www.pbs.gov.pk/labour-force-publications.
[2] NAVTTC, "National Skills Information System," Skilling Pakistan, n.d., http://skillingpakistan.org/.
[3] "What Does Pakistan Export? 2016," Observatory of Economic Complexity, n.d., https://atlas.media.mit.edu/en/visualize/tree_map/hs92/export/pak/all/show/2016/.
[4] "Emerging Pakistan," Ministry of Commerce, n.d., https://www.emergingpakistan.gov.pk/.

Living Standards Measurement Survey (PSLM)[1] (cross-tabulating the female employment rate in each 4-digit occupation code by the 4-digit industry codes mentioned by respondents) and identifies the top 30 industry-occupations by percentage of female employment, in each context.

The existence of the Pakistan Social and Living Standards Measurement Survey, which among other topics collects individual employment information down to the detailed four-digit classifications for occupations and industries, allows for a more comprehensive analysis of female employment trends and prospects than any other available data source. The 2014-2015 round of the PSLM survey, the most recent available, offers district-level representative samples for the entire country and microdata down to the individual level, allowing for custom analysis. While this data cannot conclusively establish the exact rate of female employment in each specific occupation, due to the small number of employed women in some district samples, it does provide reliable information on occupations and industries that currently have some representation of female workers—revealing specific district profiles and some opportunities that are not often highlighted in discussions of female employment.

4. **To determine the potential for decent earnings in that occupation**, this study calculates the average earnings of women in the given occupation in that district, using PSLM data. To relate those average earnings to earnings standards of the same year,[2] the analysis determines which occupations were above the mandated national minimum monthly wage at the time of Rs. 10,000[3] (score of 3), above the average wage for the Province[4] (score of 2), and above the 2008-2014 national average wage of Rs. 4,000[5] (score of 1). If no female respondents reported their earnings in a given occupation, this study estimates earnings using male data and the gender pay gap of 64% registered at the time (on average, for every Rs 100 earned by working men in Pakistan, women earned Rs 64).[6] In this process, this study also consolidates similar occupations with similar earnings, preferring the earnings rate that is known for females over the rate estimated from male reports.

5. **To determine which occupations are within growing industries**, the district-level analysis draws on industry growth data explored in Chapter III, assigning weighted points out of a total possible of 3, for each industry-occupation cluster mentioned by female respondents in the district.

6. **To determine the likelihood of job openings in each listed industry-occupation**, this study uses province-level data on skills gaps from the National Skills Information System[7] to indicate which of these industry-occupations have a known shortage of supply of trained workers. The study assigns weighted points out of a total possible of 3 based on the size of the skills gap with

[1] "Pakistan Social And Living Standards Measurement Survey (PSLM) 2014-15 Provincial / District," Pakistan Bureau of Statistics, 2015 2014, http://www.pbs.gov.pk/node/1650.
[2] This approach avoids the need to make adjustments for inflation.
[3] International Labour Organization and ILO Country Office for Pakistan, *Decent Work Country Profile Pakistan*, 50. This minimum wage rate has since risen around the country and is set at the Provincial level.
[4] International Labour Organization and ILO Country Office for Pakistan, 56.
[5] International Labour Organization and ILO Country Office for Pakistan, 47.
[6] International Labour Organization and ILO Country Office for Pakistan, 48.
[7] NAVTTC, "National Skills Information System."

related trades aggregated to match the specified industry-occupation cluster as necessary: a score of 3 for a skills gap of 10,000 or more job posts; a score of 2 for 5,000-9,999; a score of 1 for a gap of 1,000 to 4,999; and a score of 0.5 for a skills gap of between 100-999 posts.

The NSIS skills gap data is not without its limitations. Detailed information on the methodology for collecting the skills gap information is not available, and its underlying trade classification system and relation to particular industries is not specified. Nonetheless, this is the premiere source of government information on skills gaps and the most comprehensive available—the present study attempts to mitigate any inevitable shortcomings of the data through the triangulation provided by the other components of this methodology.

7. **To determine whether the AGES project can appropriately equip young women for these occupations**, given limitations on the time available for trainings, this study assigns points for feasible training requirements, as follows:
    a. If an occupation requires 6 months of training or less, the length feasible under AGES, assign 1 point
    b. If an occupation requires 7-18 months of training, assign 0 points. This length of training, required for example, for pre-primary and primary school teachers and midwife associate professionals, may be possible for limited numbers of beneficiaries.
    c. If an occupation requires over 18 months of training, assign -1 point. This negative rating is used to effectively eliminate most of these occupations from the top list of AGES recommended trades, even though these may be promising occupations for young women who are able to devote greater time to education and training.

8. **Based on the preceding steps, this study then establishes a ranked list of priority occupations for each district**, by calculating a composite AGES Employment Potential Score (growth score + skills gap score + earnings score + training requirement score / 10) to arrive at a percentage rating. This study then selects all occupations receiving a score above 30-40%, or approximately 10 occupations for each district.

9. **To determine the predominant gender profile of that occupation in the district**, this study then uses PSLM data to extrapolate approximate total male and female employment numbers in each occupation at the district level. Clearly indicating the gender predominance of that occupation allows the AGES project to make informed choices regarding the potential to either expand employment in traditionally female occupations in a given district, or push against boundaries in male-dominated occupations that currently have only a minority female presence.

10. **To advise on next steps for implementation**, this study finally identifies lists of potential employers in that district, or value chain actors potentially able to purchase products in bulk from women producers, for the prioritized industry-occupations, and suggests training options that may suit these employers. This final stage of the analysis is not conclusive, as final recommendations in this regard will depend on further field research and direct interviews with potential employer partners once project implementation has been authorized.

The outcome of this labor market analysis methodology is a general picture of female employment opportunities at the national level—in rural and urban areas respectively—and top recommended occupations for the AGES project to focus on in each district of implementation. These recommendations, however, are not set in stone. They represent, rather, an initial sorting to aid with practical steps on prioritizing employer and training choices on the ground. Through follow-up meetings with particular actors at the district level—including the Council of Common Interests in each district, chambers of commerce, implementing partners, potential employers and value chain actors, and training providers—these lists may be revised and refined to arrive at a sound strategy for promoting work for thriving young women in Pakistan.

Chapter II lays the groundwork for this analysis by examining three sources of information on growing Pakistani industries, to roughly project occupation clusters that may see near-term employment growth (step 1 listed above). The chapter also discusses hard skills and soft skills training needs to fulfil the demand in those industries. Chapter III ranks a complete list of industry-occupation clusters by national growth potential, following step 2 listed above. Chapter IV then employs steps 3, 4, and 5 to present female employment opportunity rankings for general rural and urban contexts in Pakistan. Chapter V follows that national-level analysis with a closer look at each of the eight AGES implementation districts, following all of the methodological steps listed previously to arrive at district-level priority lists of female employment opportunities. Finally, Chapter VI presents conclusions and recommendations for the AGES project to help move Pakistan towards more and better work for thriving young women.

II. HARD SKILLS, SOFT SKILLS, AND SKILL DEVELOPMENT PROGRAMS

Female labor force participation, employment, and earnings can be enhanced by meeting local and national needs for particular hard skills (technical and vocational trades) and soft skills. This chapter briefly outlines the existing availability of hard skills and soft skills trainings in Pakistan, as well as employer needs in both areas. Special attention is paid to the soft skills—or life skills—needs of young women in the AGES target population.

Hard Skills Development

The National Vocational and Technical Training Commission (NAVTTC) conducted a Skills Trend Analysis[1] in 2017, surveying employers in all districts, and yielding a demand for 33,362 skilled workers nationally. Of these, the largest percentage were in manufacturing (33% of the total), followed by services (27%), construction (16%), maintenance/repair (12%), and power (8%). By province, Punjab had the highest skilled workforce demand with 43% followed by Sindh at 18%; by district, Karachi had the highest demand at 15.4% of the total, followed by Islamabad with 14.3% and Lahore with 10%.

In terms of specific trades, the NAVTTC analysis showed that the greatest demand in Pakistan exists for skilled drivers, mechanics, masons, steel fabricators, carpenters, plumbers, electricians, welders, and machine operators—each of these represents thousands of positions that cannot be filled by the local supply of trained workers alone. Overall, Pakistan's supply of skilled workforce in the different trades fails to meet demand, with a gap of 67%--yet women skilled in trades are particularly under-utilized. Women represent about 30% of the skilled workforce supply (see table below); however, Pakistani employers seek to fill 89% of their posts with men, leaving only 9% of jobs open to both genders and 2% specifically reserved for female employees.[2]

Table 3: Annual supply of trained graduates from technical and vocational institutes, by province and sex[3]

Province	Male	Female
Punjab	176,552	61,779
Sindh	57,883	17,979
Khyber Pakhtunkhwa	34,790	22,809
Balochistan	9,591	6,200
Gilgit Baltistan	3,405	8,730
AJK	6,241	4,405
FATA	3,179	1,299
Islamabad	2,508	2,382
Total	294,149	125,583

[1] NAVTTC, "Skills Trend Analysis: National and International" (NAVTTC and GIZ, 2017), https://www.skillingpakistan.org/files/1/Skills%20Trend%20Analysis.pdf.
[2] NAVTTC, 12.
[3] NAVTTC, "National Skills Information System."

Chapter V, which offers more detailed province and district-level profiles, includes a specific analysis of the **hard skills needs** in each province, based on the National Skills Information System (NSIS). This source identifies hundreds of trades in each province (sampling at the district level was not possible), estimates the supply of trainees against each trade, and calculates the demand of each one. To gather this information, NSIS conducted primary research with a structured questionnaire, reaching out to both public and private organizations, as well as using existing surveys, skills gap assessments, demographic profiles and economic development plans. Based on this research, the NSIS website www.skillingpakistan.org offers an extensive list of trades for each province, in which the current skills training system is not meeting local demand.

Hard skills development in Pakistan is conducted under the auspices of the National Vocational and Technical Training Commission (NAVTTC) and provincial Technical Education and Vocational Training Authorities (TEVTAs). NAVTTC has been engaged in a collaboration with GIZ for several years to revise Pakistan's traditional TVET curricula into a Competency-Based Training approach. Nationally, 88 competency-based curricula are now available in a wide variety of industries, which the provincial TEVTAs may choose to adopt or adapt. The TEVTAs in each province list offerings of two-year and one-year diploma courses, as well as certificate courses and industry demand-driven short courses; Pakistan also has many private TVET institutions that may or may not follow established government curricula.

The below table shows the number of technical and vocational institutes in each province and according to the gender of students they serve. While there is roughly an equal number of vocational institutes for male and female students, technical institutes are not as equally distributed.

Table 4: Number of Technical and Vocational Institutes in Pakistan by Province and Sex[1]

	Technical Institutes			Vocational Institutes		
Province	**Male**	**Female**	**Co-Ed**	**Male**	**Female**	**Co-Ed**
Punjab	257	249	160	420	545	205
Sindh	60	21	115	142	203	79
Khyber Pakhtunkhwa	28	6	2	476	135	39
FATA (now part of KP)	10	0	0	24	42	0
Balochistan	10	2	0	59	63	15
Gilgit Baltistan	5	0	4	26	126	23
AJK	9	0	5	36	67	12
Islamabad	7	8	5	21	69	8
Total	386	286	291	1,204	1,250	381

Furthermore, the technical training available to women is often limited to only a few skill areas, effectively limiting them to a narrow range of occupations.[2] Typical training courses in female-focused vocational institutes include dressmaking and tailoring, fashion design, machine embroidery, and beautician courses, with some institutes also offering computer courses to women.

Some TVET agencies are more attuned to local economic demand than others. The below list from TEVTA Punjab, for example, indicates courses that the TEVTA has identified as in high demand from

[1] NAVTTC.
[2] UN Women, "Women's Economic Participation and Empowerment in Pakistan: Status Report 2016."

industries in the province. Each course is linked to a list of the institutes where students can attend to earn the certificate.[1]

Table 5: Examples of Industry Demand Driven Short Courses from TEVTA Punjab

Auto Electrician	Home Appliance & Repair	Tools & Die Making
Auto Mechanic	House Carpenter	Tractor Mechanic
AutoCAD	Heating, Ventilation, Air Conditioning & Refrigeration	Tractor Operator
Beautician	Industrial Stitching Machine Operator	Tunnel Farming
Chinese Language	Kashigari	UPS Repair
Civil Surveyor	Machine Embroidery	Web Designing
Computer Numerical Control (CNC) Machine Operator	Machinist	Welder
Confectionery Bakery & Sweets	Mobile Repairing	Wireman
Domestic Tailoring	Motor Cycle Mechanic	Microsoft IT Academies
Electrician	Motor Winding	Health Safety & Environment
Electronics Equipment Repair	Plumber	Import Export Documentation
Fabric Printing	Professional Cooking	TEVTA e-Rozgar Program
Fashion Designing	Quantity Surveyor	(Graphics Designing & Technical / Web Designing)
Finishing & Polishing of Furniture	Rice Milling & Processing Plant Operator	English Language & Personality Grooming Course
Generator Repair	Solar (PV) System for Power Generations	
Graphic Designing	Steel Fixer	

In Chapter V, specific information about local training providers is included for each district. In many cases, training institutes are not offering trainings in the specific occupations and industries where the greatest skills demand and growth potential exist—suggesting that AGES may need to work with training providers and employers on demand-driven training courses.

Skills Development Programs in the AGES Districts

Pakistan's national and provincial governments, as well as the international development sector, have realized that the youth bulge that Pakistan is now facing represents an opportunity as well as a challenge. Responding to issues of skills gaps, as well as youth unemployment, a wide variety of skill development programs have been launched in recent years. These include over 30 programs currently operating within the AGES districts and provinces. Overall, **these programs expect to reach nearly 3.8 million youth and adults for skill development** and, in some cases, employment or microfinance linkages. They cover a wide variety of trades in both rural and urban environments, as well as agricultural, industrial, and small business contexts. The below table summarizes the

[1] "Industry Demand-Driven Short Courses," TEVTA Punjab, n.d., http://www.tevta.gop.pk/short_course_inner.php.

programs with available information on their beneficiary target numbers, whether these represent recent achievements or projected outcomes.[1]

Province	Program Name	Beneficiary Targets
Balochistan	Balochistan Entrepreneurship Leadership Training (BELT)	157
	Gwadar Lasbela Livelihoods Support Project (GLLSP)-IFAD	4,884
Sindh	Pakistan Scottish Apprenticeship Programme	100
	Benazir Bhutto Shaheed Youth Development Project	320,000
	Youth Workforce Development Program (Amantech, USAID and UNDP)	17,000
	Youth Skills Training for Employment in Pakistan	50,000
	Skill Trainings for Young Women in Pakistan	380
Sindh/KP	Japan/UNDP Youth Empowerment in Sindh and KP Project	20,000
Punjab	Industrial Training Program	30,000
	Industry-Led Training for Golden Industrial Triangle	20,000
	Punjab Skills Development Programme 2018	11,525
	Skills for Market Linkage	3,440
	Women Focused Employment Driven Training	9,725
	Women Training for Home Based Livestock	1,000
	Employable Skills for Females in Beauty Care	2,750
	Women Focused – SFPGS	2,000
	Skills for Job 2016	50,000
	Big Push for Rural Economy – Livestock Sector	11,000
	Chief Minister (Punjab) Skill Development Programme for Youth	2,000,000
	Punjab Youth Workforce Development (PYWD) Project	10,000
	Youth Leadership and Skills Development Training	512
KP	KP Youth Employment Program	48,000
	IT Skills for Youth Project in KPK	3,544
National	Prime Minister's Youth Skills Development Programme	25,000
	UNHCR skills training for Afghan, Pakistani youth	700
	UNDP's Youth Empowerment Programme and projects	138,700
	Digi Skills Pakistan	1,000,000
Total		**3,780,417**

Annex I provides a cross-referenced list of these programs' presence in each of the AGES districts.

[1] The timeline for achieving these beneficiary numbers is not clearly indicated on all project websites.

Soft Skills Development

To meet labor market demand, young women will also need to develop their **soft skills**—in some settings referred to as life skills or transferable skills. A number of employer skills surveys exist in Pakistan which contain analyses of soft skills needs.[1]

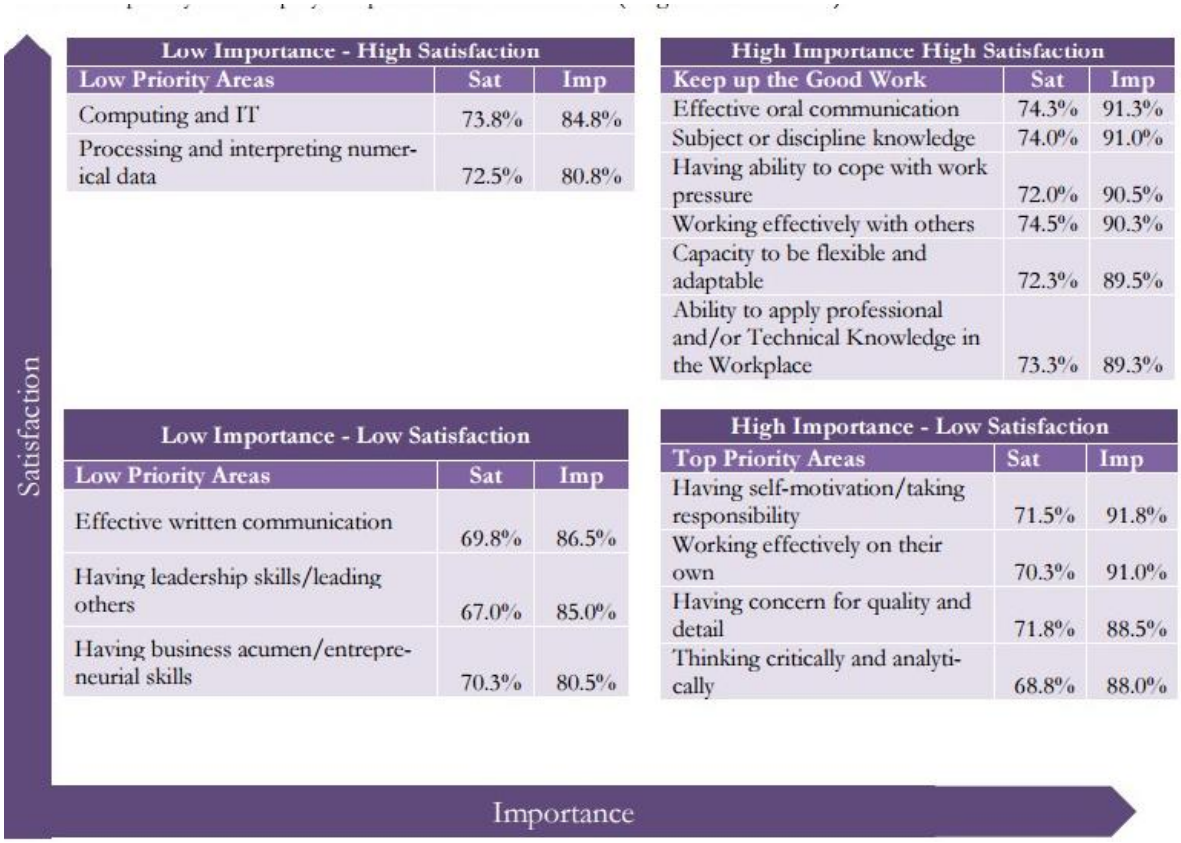
According to a recent survey of 159 Pakistani companies—including those in manufacturing, IT, retail, hospitality, oil & gas, professional services, telecoms, health, education and training, and finance—76.6% of employers are unhappy with the quality of Pakistani graduates.[2] **Top soft skills needs identified by these employers** included verbal communication (identified as lacking in recent graduates by 83.6% of employer respondents), positive attitude (71.9%), teamwork (64.9%), critical thinking (59.1%), self-confidence (59.1%), drive and resilience (57.3%), written communication (57.3%), stress tolerance (47.4%), adaptability (46.2%), time management (45.6%), self-awareness (45.0%), planning and organizing (45.0%), and integrity (43.9%).

In 2016, the Pakistan Higher Education Council also undertook an Employer Perception Survey with a sample of 375 employers from a range of sectors—including agriculture, textiles, food processing, IT, education, energy, NGOs, banking and finance, sports, chemical manufacturing, insurance, automotive, hospitality, and engineering.[3] This study found that **many employers were critical of students' soft skills and preparation for work**, particularly their self-motivation, independence, concern for quality and detail, analytical and critical thinking, written communication, leadership, and entrepreneurial skills. Employers were comparatively more satisfied with students' skills in computing and IT, working with numbers, oral communication, and the ability to work with others, as well as with students' subject knowledge and ability to apply their technical or professional knowledge in the workplace—though room still remains for improvement.

The report's skills gap analysis, comparing employers' satisfaction with certain soft skills compared to the relative importance they attached to those skills, identified **four clear priorities for soft skill-building programs: self-motivation and taking responsibility, working effectively on one's own, concern for quality and detail, and analytical and critical thinking**, as shown in the figure below.

[1] Faisal Mehmood Mirzaa, Atif Ali Jaffrib, and Muhammad Saim Hashmic, "An Assessment of Industrial Employment Skill Gaps Among University Graduates in The Gujrat-Sialkot-Gujranwala Industrial Cluster, Pakistan," *The Pakistan Journal of Social Issues* VIII (2017), http://uog.edu.pk/downloads/journal/PJSI_1-20.pdf.
[2] Shahbaz Moazam, "Academia-Industry Linkages Gap Analysis Survey" (Career Advisory & Assessment Services, n.d.), https://propakistani.pk/wp-content/uploads/2016/08/Survey_Report.pdf.
[3] HEC, "Employers' Perception Survey: Final Report" (Grant Thornton Consulting and the Higher Education Commission, n.d.), http://hec.gov.pk/english/universities/projects/TESP/Documents/Employers%20Perception%20Survey_May%202016.pdf.

Figure 3: Gap analysis of employer expectation and satisfaction / Source: HEC 2016



Low Importance - High Satisfaction		
Low Priority Areas	Sat	Imp
Computing and IT	73.8%	84.8%
Processing and interpreting numerical data	72.5%	80.8%

High Importance High Satisfaction		
Keep up the Good Work	Sat	Imp
Effective oral communication	74.3%	91.3%
Subject or discipline knowledge	74.0%	91.0%
Having ability to cope with work pressure	72.0%	90.5%
Working effectively with others	74.5%	90.3%
Capacity to be flexible and adaptable	72.3%	89.5%
Ability to apply professional and/or Technical Knowledge in the Workplace	73.3%	89.3%

Low Importance - Low Satisfaction		
Low Priority Areas	Sat	Imp
Effective written communication	69.8%	86.5%
Having leadership skills/leading others	67.0%	85.0%
Having business acumen/entrepreneurial skills	70.3%	80.5%

High Importance - Low Satisfaction		
Top Priority Areas	Sat	Imp
Having self-motivation/taking responsibility	71.5%	91.8%
Working effectively on their own	70.3%	91.0%
Having concern for quality and detail	71.8%	88.5%
Thinking critically and analytically	68.8%	88.0%

Recent **global literature reviews on soft skills funded by USAID** have also led to the identification of key skills for positive youth outcomes in workforce development. The top five skills identified in terms of strength of evidence and malleability during the youth years include: self-control, higher-order thinking skills, social skills, positive self-concept, and communication. Other soft skills with significant evidence, although less than the top group, include hardworking and dependability, self-motivation or goal-orientation, teamwork, responsibility, and positive attitude.

	M. Shahbaz, 2016[1]	Higher Education Council, 2016[2]	USAID Key skills for the Workforce, 2015[3]	Overall Top Skills
High importance	• Verbal communication • Positive attitude • Teamwork • Critical thinking • Self-confidence • Drive and resilience • Written communication	• Self-motivation, taking responsibility • Independent work • Concern for quality and detail • Critical thinking and analysis	• Self-control • Higher-order thinking skills • Social Skills (including conflict management) • Positive self-concept • Communication	• Communication (verbal and written) (3) • Critical thinking / higher-order thinking (3) • Self-motivation, drive, resilience, perseverance (3) • Leadership and integrity (3) • Positive self-concept /self-confidence (2) • Social skills and teamwork (2) • Positive attitude (2)

[1] Moazam, "Academia-Industry Linkages Gap Analysis Survey."
[2] HEC, "Employers' Perception Survey: Final Report."
[3] Laura H. Lippman et al., "Workforce Connections Key 'Soft Skills' That Foster Youth Workforce Success: Toward a Consensus across Fields" (USAID, 2015), https://www.childtrends.org/wp-content/uploads/2015/06/2015-24WFCSoftSkills1.pdf.

Moderate importance	• Stress tolerance • Adaptability • Time management • Self-awareness • Planning and organizing • Integrity	• Written communication • Leadership • Entrepreneurial skills	• Hardworking and dependability • Self-motivation/goal-orientation • Teamwork • Responsibility • Positive attitude • Integrity	• Planning, organizing, and time management (1) • Entrepreneurial skills (1) • Hardworking, dependability, responsibility (1) • Adaptability (1) • Self-awareness (1) • Concern for quality and detail (1) • Self-control (1)

Combining the analysis of these different studies highlights the **top importance of communication (verbal and written); higher-order thinking or critical thinking; self-motivation, drive, resilience, and perseverance; leadership and integrity; positive self-concept and self-confidence; social skills and teamwork, including conflict management; and positive attitude**. Other soft skills of moderate importance overall appear to be planning, organizing, and time management; leadership; entrepreneurial skills; hardworking, dependability, and responsibility; adaptability; self-awareness; concern for quality and detail; and self-control.

Skill development projects such as AGES would do well to focus on these soft skills needs, in addition to the technical skills required by the labor market. However, since the vast majority of formal employment in Pakistan is male-dominated, it is likely that the **Pakistan soft skills gap analyses are most reflective of the male employment reality**, not taking into account the many additional or distinctive challenges young women must face in accessing work.

Research on **women's socialization in Pakistan** suggests that women are socialized to be subordinate to men and conform to social norms of a "good woman", corresponding with qualities such as "unselfish, calm, tolerant, empathetic, reliable, able to organize, compromise, coordinate and maintain hospitality within the house and in keeping good relationships."[1] The same study found that women are also expected to hide emotions, compromise on opinions, and sacrifice personal dreams and priorities.

While arguably these can be positive qualities or skills, it is easy to see how over-emphasis of these characteristics can lead to women's subordination, and could hinder the goals of the AGES project as it aims to open up greater space for women's participation in education and the workforce. Therefore, some of the skills highlighted in the preceding list—such as self-control; hardworking, dependability, and responsibility; maintaining a positive attitude in social interactions; and adaptability or compromise—probably do not require additional emphasis in skills training being promoted under AGES.

In their place, certain skills not emphasized in the list above may need to be added. Young women in Pakistan may need additional discussion of self-care and making healthy choices for themselves, in all respects but in particular regarding balancing their heavy burdens at home, school, and work. They may also need particular assistance on understanding and promoting their own rights and the

[1] Tazeen Ali et al., "Gender Roles and Their Influence on Life Prospects for Women in Urban Karachi, Pakistan: A Qualitative Study," *Global Health Action* 4 (2011), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3208374/.

rights of others, and on aspects of communication that relate to effective communication with parents and with the opposite sex.

Based on an analysis of the AGES target population's needs and context, as well as recent research on key soft skills for positive cross-sectoral youth outcomes,[1] the AGES implementation partners have identified a set of 10 Core Life Skills for Thriving Girls, as shown in the following figure:

These ten skills emphasize intrapersonal skills including: positive self-concept, resilience and perseverance, and self-care and making healthy choices. They also emphasize higher-order thinking skills including goal-setting and planning, decision-making, and financial literacy. Finally, they emphasize the social or inter-personal skills of communicating across age and gender, conflict management and resolution, promoting one's rights and the rights of others, and leadership and positive influence—including integrity. These skills will be promoted within AGES programming, through work with schools, accelerated learning programs, technical and vocational trainers, and through public messaging.

[1] S. Gates et al., "Key Soft Skills for Cross-Sectoral Youth Outcomes" (USAID YouthPower, n.d.), https://www.youthpower.org/resources/key-soft-skills-cross-sectoral-youth-outcomes. Also see Catherine A Honeyman, "Soft Skills Development: Guiding Notes for Project and Curriculum Design and Evaluation" (World Learning, 2017), https://www.globalinnovationexchange.org/resources/soft-skills-development-guiding-notes-project-and-curriculum-design-and-evaluation.

This chapter has explored the hard skills and soft skills development initiatives needed to meet the needs of both industry employers and young women themselves. The following chapter now turns to the analysis of industries and occupational clusters that represent opportunities for promoting employment for young women, beginning with a national-level analysis in Chapters III and IV, followed by a district-level analysis in Chapter V.

III. PAKISTAN'S GROWING INDUSTRIES

The work opportunities for young women in Pakistan are clearly shaped not only by the social factors explored in the previous chapters, but also by Pakistan's broader economic and labor market conditions. This chapter focuses on analyzing three sources of information on the country's national economic growth trends to highlight specific promising industries for employment. Together with the following chapter on female employment trends at a national level in rural and urban areas, this national-level analysis sets the context for the detailed district-level employment recommendations presented in later in this report.

Export Growth Trends

Pakistan is a middle-income developing country with significant potential for growth. It has been named one of the Next Eleven – the latest group of countries identified as having the potential of becoming some of the world's largest economies alongside the already-recognized BRICS (Brazil, Russia, India, China, and South Africa).[1] Indeed, the World Bank has predicted an increase in Pakistan's economic growth rate to 5.4%[2] due to greater inflow of foreign investment, namely from the China-Pakistan Economic Corridor infrastructure initiatives, even while its heavy external debt has raised concerns.

Global data on export and import flows and 5-year export growth trends reveals Pakistan's export growth in eight general categories: vegetable products, animal products, foodstuffs, footwear and headwear, wood products, paper goods, chemical products, and mineral products. Additionally, although textiles exports have overall been contracting for Pakistan, this is the dominant sector for Pakistani exports and specific sub-divisions within this sector have been experiencing growth, including: house linens, knit and non-knit men's and women's suits, knit sweaters, knit socks and hosiery, netting, knit men's shirts, knit t-shirts, knit men's and women's coats, knit blankets, knit baby garments).

The below figures illustrate the 5-year (2011-2016) annual growth rate trends for Pakistan's export sectors, as collected by the Observatory of Economic Complexity using the most recent classification codes[3] at the two-digit level and then the more detailed four-digit level. Percentages given in each block on the tree map show the relative proportion of all Pakistan's exported goods falling in that category. The color scale indicates growth trends, with deep brown indicating contraction over the five year period, and green indicating growth. These national trends shape the broad economic growth picture for each district producing these different types of goods.

[1] Sandra Lawson, David Heacock, and Anna Stupnytska, "Beyond the BRICS: A Look at the 'Next 11'" (Goldman Sachs, 2007), https://www.goldmansachs.com/insights/archive/archive-pdfs/brics-book/brics-chap-13.pdf.
[2] "Emerging Pakistan." See https://www.emergingpakistan.gov.pk/pakistan/economy/
[3] The Harmonized System HS6 classifications revised in 2007 (2008-2014)

Figure 4: OEC data on 5-year Pakistani export trends, 2-digit level of classification[1]

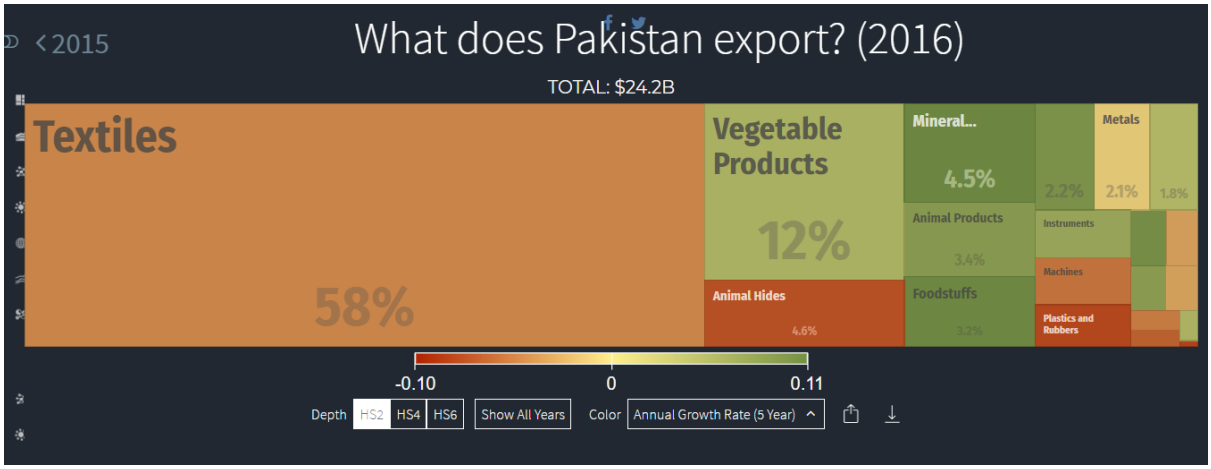
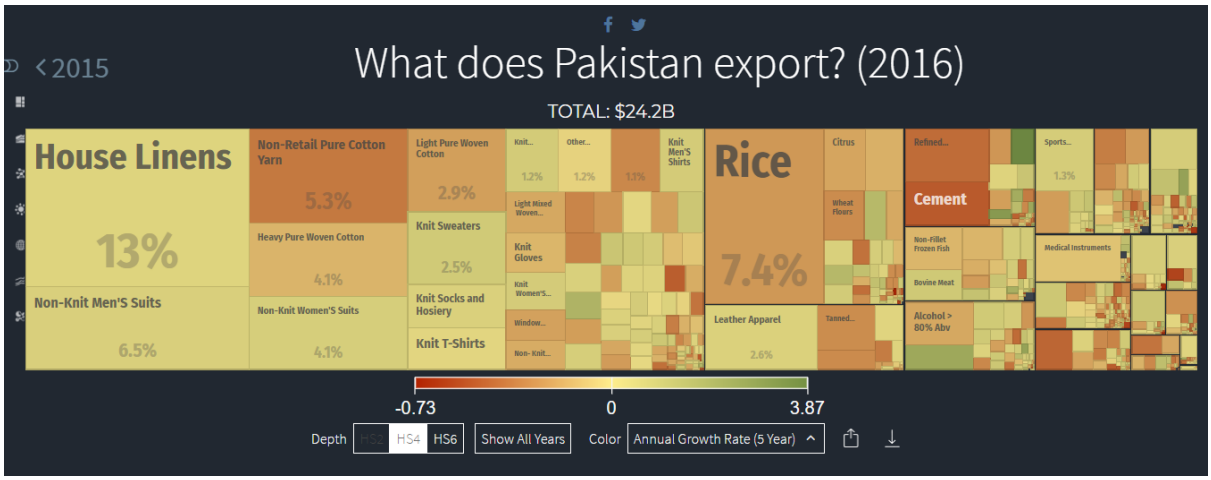


Figure 5: OEC data on 5-year Pakistani export trends, 4-digit level of classification

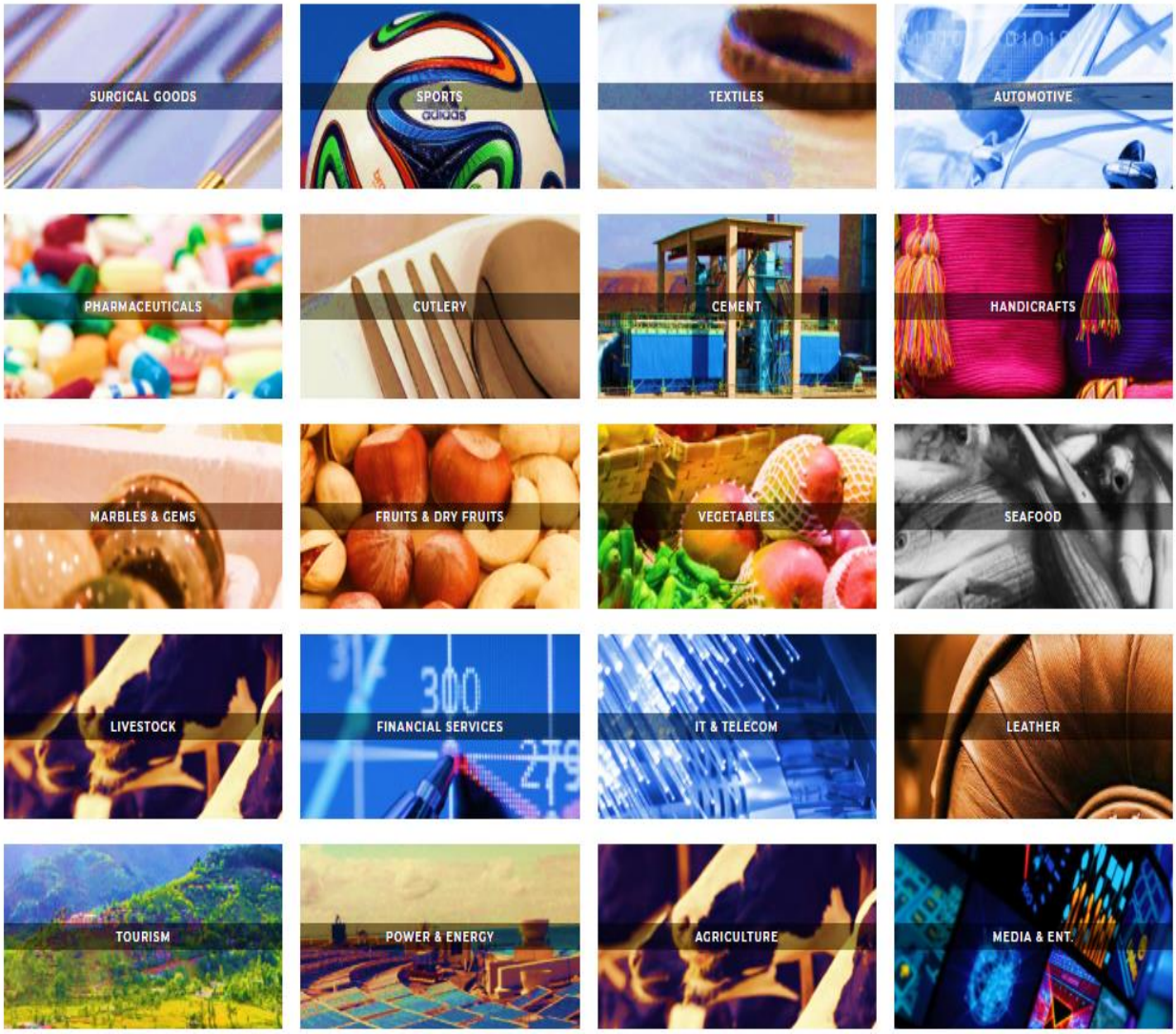


Emerging Pakistan Sectors

While export data trends show Pakistan's revealed comparative advantage globally, government efforts also focus on promoting economic growth in certain priority sectors. In particular, the Ministry of Commerce has launched a digital initiative named Emerging Pakistan[2] to highlight and promote **20 growing sectors of Pakistan's economy**. These sectors pictured below, include: agriculture, fresh fruits and dry fruits, vegetables, seafood, livestock, leather, surgical goods, sports goods, textiles, automotive industry, pharmaceuticals, cutlery, cement, handicrafts, marble and gems, financial services, IT and telecoms, media and entertainment, tourism, and power and energy. Pakistan's 2017-2018 Economic Survey provides current statistics on these sectors.[3] These sectors have received the largest amounts of foreign direct investment, are seen as finance and business opportunities, or (again) reflect export products with known global demand.

[1] "What Does Pakistan Export? 2016."
[2] "Emerging Pakistan."
[3] Finance, "Pakistan Economic Survey 2017-2018" (Ministry of Finance, 2018), http://www.finance.gov.pk/survey_1718.html.

Figure 6: 20 priority sectors identified in the Emerging Pakistan initiative



Many of the Emerging Pakistan industries are present in the AGES implementation and satellite districts, presenting promising opportunities for employment growth in the near future—as the detailed district-level analysis in the following chapter illustrates.

Key Informant Interviews

While the above two sources of industry growth trends provide an overarching picture of the Pakistani national economy, they have the potential to leave out specific industry-occupation clusters, particularly in the services industry or those meeting more immediate demand. For this reason, AGES technical staff conducted an additional series of key informant interviews in Islamabad, Karachi, and Lahore to uncover additional employment growth trends, including meeting with manpower outsourcing agencies, representatives of agricultural boards, a selection of leading employers (in machine parts manufacturing, textiles, agriculture, packaging, and security), the CEO of Rozee.pk, representatives of investment boards, government agencies, and development practitioners. Interviews featured discussions on such topics as the effects of changing technology (such as the increased use of tractors with laser levelers), demand for certain products and services

from the rising middle class, and the potentially far-reaching impact of the CPEC infrastructure investments.

The following table highlights selected employment opportunities identified from those key informant interviews. Opportunities specific to rural, urban, or overseas contexts are indicated accordingly; in addition, if interviewees indicated that an opportunity had some openings for female employment—although in several cases quite limited—this is also indicated.

Table 6: Top employment opportunities in Pakistan highlighted in key informant interviews[1]

Industry Sector and Occupations	Rural	Urban	Overseas	Female	Male
Rural livestock: veterinarian assistants, animal husbandry, dairy	X			X	X
Tractor drivers: with knowledge of laser land leveling and other specialized functions, as well as maintenance.	X				X
Handicrafts: embroidery, sewing piecework, etc (higher level earnings dependent on broker cultivating market linkages)	X	X		X	
Repair and maintenance: appliances, motor and generator repair and maintenance (self-employment)	X	X			X
Education: early childhood, primary, math and science	X	X		X	X
Retail & customer service: clothing, entertainment, fast-moving consumable goods (FMCG) retail, gas stations, etc. (due to CPEC and rising middle class)	X	X		X	X
Tourism & hospitality: cafés, restaurants, waystations, hotels (due to CPEC and rising middle class)	X	X		X	X
Heavy equipment operation: dump truck, crane, bulldozer, forklift, earth moving and filling, asphalt laying (due to CPEC)	X	X	X	X (rare)[2]	X
Construction: masons, scaffolders, riggers, steel fixers, carpenters, building painters, electricians, plumbers (in Pakistan increasing due to CPEC; also for overseas employment)	X	X	X		X
Household workers: driver, cook, cleaner, nanny, gardener	X	X		X	
Beauty: in-home and at salons (linked to growth of middle class)	X	X		X	
Health: medical technician, dialysis technician, ICU, X-ray, female nurses, home nursing/elder care	X	X	X	X	
Food processing: transport, processing, canning, packaging	X	X		X	X
Textiles: Industrial sewing, uniforms, garments, sheets (growing investment in textile factories due to CPEC)		X		X	
Physical education: teachers and personal trainers		X		X	
Security services: guards, female body searchers, etc.		X	X	X	
Freelancing: Business process outsourcing (BPO), digital microwork, task-based work, and driving services		X		X	X

While not a comprehensive list, inclusion of these insights helps to ensure an up-to-date analysis of female employment opportunities in Pakistan, alongside other data sources included in this report.

Industry Employment Growth Potential Scores

The below table summarizes how the findings from these three sources—the OEC export data, the 20 Emerging Pakistan sectors, and the key informant interviews—map onto the major industry

[1] Source: Interviews conducted in May, 2018
[2] ENGRO has piloted female heavy equipment operators, however, this is not widely seen as a trend that will take hold.

sectors and two-digit industry divisions. Overall, **out of 88 possible two-digit industry division codes used in Pakistan's classification system, 32 of these are highlighted** as offering possible opportunities for growth and included in the table below.

Table 7: 32 industry divisions with employment growth potential in Pakistan (out of 88 total)

Industry Section/Sector	Industry Division	Positive Export Growth Trend 2011-2016	Emerging Pakistan Sector	Flagged in Key Informant Interviews	Total # of mentions
Agriculture, forestry, and fishing	01 Crop and animal production, hunting and related service activities	Vegetable products (0.027 growth rate)	Fruits & Dry Fruits; Vegetables; Livestock; Agriculture	Tractor drivers; Livestock	**3**
	03 Fishing and aquaculture		Seafood		1
Mining and quarrying	08 Other mining and quarrying		Marble and Gems		1
Manufacturing	10 Manufacture of food products	Animal products (0.067 growth rate); Foodstuffs (0.10 growth rate)	Fruits & Dry Fruits; Seafood; Livestock	Food processing	3
	13 Manufacture of textiles	Overall contracting, but a very large sector for Pakistan (58% of all exports) and sub-divisions have growth between the 0.01 and 0.15 rate.	Textiles	Textiles; Handicrafts, including embroidery	3
	14 Manufacture of wearing apparel		Textiles, Handicrafts	Textiles; Handicrafts, including embroidery	3
	32 Other manufacturing	Miscellaneous Manufacturing (e.g. sports equipment, pencils and crayons, pens, zippers, light fixtures) (0.083 growth rate); Instruments (0.046 growth rate)	Surgical goods; Sports equipment		2
	15 Manufacture of leather and related products	Footwear and headwear (0.092 growth rate)	Leather		2
	16 Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Wood products (0.025 growth rate)	Handicrafts		2
	17 Manufacture of paper and paper products	Manufacture of paper goods (0.062 growth rate)		Food processing (includes packaging)	2

	20 Manufacture of chemicals and chemical products	Chemical products (0.02 growth rate)	Pharmaceuticals		2
	23 Manufacture of other non-metallic mineral products	Mineral products (0.11 growth rate)	Cement		2
	25 Manufacture of fabricated metal products, except machinery and equipment		Cutlery		1
	29 Manufacture of motor vehicles, trailers and semi-trailers		Automotive		1
Electricity, gas, steam and air conditioning supply	35 Electricity, gas, steam, and air conditioning supply		Power & Energy		1
Construction	41 Construction of buildings			Construction; Heavy equipment operation	1
	42 Civil engineering			Construction; Heavy equipment operation	1
	43 Specialized construction activities			Construction; Heavy equipment operation	1
Wholesale and retail trade; repair of motor vehicles and motorcycles	47 Retail trade, except of motor vehicles and motorcycles			Retail & customer service	1
Accommodation and food service activities	55 Accommodation		Tourism	Tourism & Hospitality	2
	56 Food and beverage service activities			Tourism & Hospitality	1
Information and communication	61 Telecommmunications		IT & Telecom		1
Financial and insurance activities	64 Financial service activities, except insurance and pension funding		Financial services		1

Professional, scientific, and technical activities	74 Other professional, scientific and technical activities			Business process outsourcing, digital microwork, freelancing	1
Administrative and support service activities	79 Travel agency, tour operator, reservation service and related activities		Tourism	Tourism & Hospitality	2
	80 Security and investigation activities			Security services	1
Education	85 Education			Education: early childhood, primary, math and science teachers, physical education teachers	1
Human health and social work activities	86 Human health activities			Health workers	1
Arts, entertainment and recreation	90 Creative, arts and entertainment activities		Media & Entertainment		1
Other service activities	95 Repair of computers and personal and household goods			Repair & maintenance of household goods	1
	96 Other personal service activities			Beauty; Fitness instructors and personal trainers; Drivers and freelance drivers	1
Activities of households as employers; undifferentiated goods and services	97 Activities of households as employers of domestic personnel			Household workers	1

IV. RURAL AND URBAN FEMALE EMPLOYMENT TRENDS

This chapter examines the available information on female employment trends at a national level—examining the aggregate Pakistan Social and Living Standards Measurement Survey (PSLM) data for rural and urban areas. The most recent 2014-2015 PSLM survey sampled 78,635 households nationally, with a district-level representative sampling frame.[1] The PSLM household questionnaire gathered general information on habitation and sanitation conditions, and specific information on every individual within the household, including details on education status, health, employment, assets, and use of public services.

This chapter is particularly concerned with the data PSLM provides on the details of employment for females aged 10 and over, as well as some comparisons with males. This report focuses on the PSLM data because, unlike Pakistan's national Labor Force Survey, PSLM allows for custom analysis by detailed occupational and industry codes and permits examination of the data at the district level rather than just the provincial level. For reference, the below rural and urban summaries include both the weighted 2014-2015 PSLM employment rates by sex, and the larger labor force participation rates found in the 2014-2015 Labor Force Survey—which include both those who were working and those who were searching for work.

The remainder of this report, focusing on detailed occupation-level and earnings analysis, uses unweighted PSLM data.[2] **Statistics presented, therefore, should not be assumed to represent precise national or district-level averages, but rather are included to give a general sense of the trends** (such as higher and lower concentrations in certain occupations or higher and lower average earnings associated with different types of work). Linking the analysis of occupations with female representation to the national economic growth analysis in the previous chapter, it becomes possible to identify the most promising trades for female employment generally in Pakistan's rural and urban contexts. This general analysis, in turn, offers a form of triangulation for the district-level priority lists established in the following chapter.

Rural female employment trends in Pakistan

The PSLM 2014-2015 dataset includes individual-level information from 295,867 respondents living in Pakistan localities classified as rural. Overall, 20.9% of all rural women aged 10 or over—the age range used internationally for labor force statistics—were employed in that year, responding affirmatively that they engaged in some kind of "work for pay, profit, or family gain during the last month". This compares to a rate of 63.9% of all rural males aged 10 or over. When examining just the AGES target age range of 18-25 years, 20.3% of rural females are employed, compared to 72.8% of rural males.

[1] "Pakistan Social And Living Standards Measurement Survey (PSLM) 2014-15 Provincial / District." http://www.pbs.gov.pk/sites/default/files/pslm/publications/PSLM_2014-15_National-Provincial-District_report.pdf

[2] Weights are available in the microdata files for the primary sampling units; however insufficient information is provided by the Pakistan Bureau of Statistics on the methods used for weight calculations, and the relevance of the weighting strategy for the employment and earnings data is unclear; as a result this report uses unweighted data and focuses on broader trends rather than on generating specific reliable statistical averages at the national or district levels.

Table 8: Rural rates of employment, by sex and age group (Source: PSLM 2014-2015)

Age range	% of rural females	% of rural males	% of rural total
Aged 10+, % in the labor force, LFS 2014-15[1]	28.8%	69.0%	49.0%
Aged 10+, % employed, PSLM 2014-15, weighted	20.9%	63.9%	42.3%
Aged 18+, % employed, PSLM 2014-15, weighted	25.0%	82.7%	53.0%
Aged 25+, % employed, PSLM 2014-15, weighted	26.6%	86.8%	55.7%
Aged 18-25,[2] % employed, 2014-15, weighted	20.3%	72.8%	45.7%

The PSLM dataset includes a total sample of 32,072 employed rural women aged 10 or over. Analyzing the information gathered from these respondents, certain employment trends are clear. First, a little over half of all employed rural women (54.3%) reported working every day in the past month with no rest days, similar to the male rate of 54.6%. Another 14.9% worked a standard five-day workweek, while others worked less at 15 days a month (5.1%) or 10 days a month (2.6%).

These rural employed women respondents listed a total of 193 different occupations (using the PSLM's 4-digit level of specification) in 165 different industries. However, just 32 occupations in 28 industries were listed by at least 0.1% of respondents—meaning that at least 1 out of every group of 1,000 rural employed women holds this occupation.

Analyzing the PSLM data on average female earnings in these occupations, and the industry growth scores provided in the previous chapter, it becomes clear that **just 24 of these rural occupations offer potential for expanded and improved female employment**, clustered in 10 general occupation groups: **livestock production, education, health services, miscellaneous manufacturing, retail, farm wage labor, textile manufacturing, construction, handicrafts, and domestic wage labor**. The following table lists these occupations in ranked priority order according to a combination of average earnings and assigned industry growth potential score. Important additional information is provided in the column on "major industries mentioned by respondents", particularly in the cases of handicrafts and miscellaneous manufacturing.

Table 9: 10 priority occupation groups for rural female employment growth

Rank	Occupation group	Specific Occupation	Approx.[3] % of employed rural females	Major industries mentioned by rural female respondents in this occupation	Aprox.[4] average rural female earnings (in 2014 Rs.)	Industry Growth Score
1	Livestock production	"Animal producers not elsewhere classified"	1.3%	Raising of cattle and buffaloes, raising of sheep and goats, mixed farming, growing of cereals, leguminous crops and	12,375	3

[1] PBS, "Labour Force Survey 2014-2015," 23. This table cites the refined (aged 10 and over), unaugmented labor force participation rates, which includes both those employed and those searching for work. Augmented rates are not provided for both males and females and so cannot be referenced here; however, it should be noted that the augmented rates generally raise estimates of female labor force participation by using probing questions to include certain unremunerated activities with economic impact that respondents may otherwise leave out.

[2] Highlighted because this is the AGES target age range for training and employment activities.

[3] These percentages are provided from the unweighted PSLM data, and should only be considered as approximations. Weights are available in the microdata files for the primary sampling units; however insufficient information is provided by the Pakistan Bureau of Statistics on the methods used for weight calculations, and the relevance of the weighting strategy for the employment and earnings data is unclear.

[4] These percentages are provided from the unweighted PSLM data, and should only be considered as approximations. See previous note.

		"Subsistence livestock farmers"	5.4%	oil seeds, support activities for animal production	8,467	3
		"Mixed crop and animal producers"	20.0%		7,675	3
		"Livestock and dairy producers"	22.7%		7,116	3
		"Livestock farm Laborers"	0.8%		7,042	3
2	Education	"Secondary education teachers"	0.7%	General secondary education	17,778	1
		"Primary school teachers"	1.5%	Pre-primary and primary education	13,180	1
		"Teaching professionals not elsewhere classified"	0.2%	Pre-primary and primary education, general secondary education, higher education, educational support activities, activities of religious organizations	10,351	1
3	Health services	"Midwifery professionals"	0.2%	Hospital activities, other human health activities	14,216	1
		"Midwifery associate professionals"	0.2%	Hospital activities, residential nursing care facilities, medical and dental practice activities, defense activities	9,152	1
		"Community health workers"	0.1%	Hospital activities, residential nursing care facilities, other human health activities	10,015	1
4	Miscellaneous Manufacturing	"Manufacturing Laborers not elsewhere classified"	1.0%	Manufacture of cordage, rope, twine and netting (0.6%), manufacture of clay building materials (0.2%); rest divided among the following: manufacture of knitted and crocheted fabrics, manufacture of sports goods, preparation and spinning of textile fibers, manufacture of other non-metallic mineral products, manufacture of grain mill products, manufacture of sugar, manufacture of other food products, manufacture of other porcelain and ceramic products, mining of iron ore, manufacture of pulp, paper, and paperboard, manufacture of paints, varnishes and similar coatings, manufacture of furniture	5,844	2
5	Retail	"Retail and wholesale trade managers"	0.2%	Retail sale in non-specialized stores with food, beverages, or tobacco predominating (0.1%), retail sale of food in specialized stores, retail sale of clothing, footwear and leather articles in specialised stores, retail sale via stalls and	10,931	1

				markets of food, beverages, and tobacco products		
		"Shop keepers"	0.4%	Retail sale in non-specialized stores with food, beverages, or tobacco predominating (0.2%), retail sale in other non-specialised stores	8,423	1
6	Farm wage labor	"Crop farm Laborers"	8.8%	Mixed farming (4.8%), Growing of cereals, leguminous crops and oil seeds, growing of other non-perennial crops, support activities for crop production, post-harvest crop activities, growing of fibre crops, growing of vegetables and melons, roots and tubers	4,311	3
		"Mixed crop and livestock farm Laborers"	0.8%	Mixed farming (0.8%)	3,440	3
7	Textile Manufacturing	"Tailors, dressmakers, furriers and hatters"	2.6%	Manufacture of wearing apparel, except fur (2.0%), manufacture of knitted and crocheted fabrics, other personal service activities n.e.c.	3,315	3
		"Sewing, embroidery and related workers"	5.3%	Manufacture of knitted and crocheted fabrics (3.3%), manufacture of wearing apparel except fur, manufacture of knitted and crocheted apparel, other personal service activities n.e.c., manufacture of other textiles n.e.c.	3,076	3
8	Construction	"Building construction Laborers"	0.2%	Construction of buildings (0.2%)	7,467	1
9	Handicrafts	"Handicraft workers in textile, leather and related materials"	0.6%	Manufacture of cordage, rope, twine, and netting (0.1%), manufacture of sports goods (0.1%), manufacture of other textiles (0.1%), manufacture of carpets and rugs, manufacture of footwear, manufacture of made-up textile articles except apparel, tanning and dressing of leather	2,797	3
		"Handicraft workers not elsewhere classified"	0.3%	Manufacture of wearing apparel, except fur (1.0%), manufacture of other products of wood, manufacture of articles of cork, straw and plaiting materials (0.1%), manufacture of: knitted and crocheted fabrics, cordage, rope, twine and netting, other textiles, carpets and rugs, domestic appliances	3,542	2
		"Handicraft	0.1%	Manufacture of other	2,797	2

		workers in wood, basketry and related materials"		products of wood; manufacture of articles of cork, straw and plaiting materials (0.1%), other manufacturing n.e.c., other specialized construction activities		
10	Domestic wage labor	"Domestic cleaners and helpers"	0.4%	Activities of households as employers of domestic personnel (0.2%), other personal service activities n.e.c. (0.2%)	3,915	1
		"Domestic housekeepers"	0.4%	Activities of households as employers of domestic personnel (0.1%), other personal service activities n.e.c. (0.2%), pre-primary and primary education	2,871	1

This list highlights **particular opportunities for promoting increased and improved female employment in rural areas**. At the top of the list is supporting improved livestock production and connections to the dairy and meat-processing value chains—either helping women expand their own operations, or encouraging increased employment and earnings for female laborers at livestock enterprises. The education and health sectors also both present ongoing opportunities for rural female employment, and training requirements are within reach for the AGES project for pre-primary and primary teachers, after-school tutors, midwife associate professionals, and community health workers. Based on initial labor market assessment findings, the AGES project has already begun exploring the potential for collaborations in the education arena with Beaconhouse, which provides trained teachers to the Sindh and Punjab Education Foundations,[1] and with Children's Global Network (CGN), which provides training to assist childcare providers to start up their own preschools.[2] Community midwife programs and other community health worker programs also represent an opportunity to be explored further.[3]

The variety of industries listed by rural female manufacturing laborers in the PSLM dataset—cordage, rope, twine, and netting, clay building materials, sports goods, preparation and spinning of textile fibers, manufacture of other non-metallic mineral products, manufacture of grain mill products, manufacture of sugar, manufacture of other food products, manufacture of other porcelain and ceramic products, mining of iron ore, manufacture of pulp, paper, and paperboard, manufacture of paints, varnishes and similar coatings, manufacture of furniture—attests to the diversity of such enterprises around the country, as well as the fact that women are involved in many types of local manufacturing—albeit not at rates comparable to men.

While textile manufacturing also appears on this list, as expected for an industry already known for female employment, average wages are notably lower. For the AGES project to work with this industry will require employer agreements to raise wages for new female employees. Various handicrafts industries also present opportunities for female employment, as expected, and

[1] "Teacher Training," Sindh Education Foundation, n.d., https://www.sef.org.pk/teacher-training/.
[2] "Children's Global Network, Pakistan," n.d., http://www.cgnpk.org/.
[3] Zubia Mumtaz, Adrienne Levay, and Afshan Bhatti, "Successful Community Midwives in Pakistan: An Asset-Based Approach," *Plos One*, September 15, 2015.

particular handicrafts are identified in the district-by-district lists provided in the following chapter. Sustainably achieving expanded and improved employment in handicrafts will likely require working with value chain actors that are prepared to open up new markets to their suppliers—including internationally. Indus Heritage Trust, which promotes embroidery and other artisanal work and has created linkages to international e-commerce websites and large-scale retailers, offers one successful example of this model.[1]

Retail is also an important female employment opportunity highlighted in this list, whether as owners or managers. In some districts as well, as highlighted below, the presence of larger shops in town centers allows for employment of female retail sales staff. As a result, the retail sector presents possibilities both for larger-scale female employment and self-employment in most rural districts across Pakistan.

Finally, this list highlights three forms of wage labor where women are already present—farm wage labor, construction, and domestic cleaners, helpers, and housekeepers. While none of these are high-earning occupations, female construction laborers earn the most. The construction industry is generally male-dominated[2] and the PSLM data does not offer insight into specific construction skills practiced by female workers in this sector, but it is worth noting that there is sometimes more initial social acceptance for female construction workers in finishing trades such as decorative mortar and plaster moldings, grouting, tile-laying, painting, and indoor decorating—trades that are higher-skilled and therefore also offer higher earnings potential than some of the male-dominated day laborer trades. Finally, there may also be potential for more highly-trained domestic workers to gain higher-earning employment in the town centers of rural districts, building on the model exemplified by the TAF Foundation Vocational Training Institute, which combines a high-touch approach to recruitment and family engagement, practical training in both hard and soft skills, and a placement process that involves identifying quality household employers and educating them about workers' rights.[3]

It should be noted that **female average earnings for nearly all of these occupations fall under the national minimum wage of the time** (Rs. 10,000 per month in 2014[4]; in 2016 this was raised to 15,000 per month in Sindh[5] and was accompanied by other recent minimum wage increases in Punjab[6] and elsewhere). This is a reflection of the national trend of lower earnings for both rural residents and for females. The ranking provided in the above table takes into consideration both earnings and industry growth potential, because growing industries with demand for labor may offer opportunities for improved earnings. In order to achieve improved earnings, the AGES project will likely need to negotiate directly with potential employers and value chain actors, hopefully beginning to create space for broader increases in female earnings in that local industry.

While there are certain variations in rural female occupations by district—as the subsequent chapter analyses—these trends are largely consistent around the country. This table therefore provides a

[1] "Sustainable Communities," Indus Heritage Trust, n.d., https://www.indusheritagetrust.com/sustainable-communities/.
[2] "Breaking Gender Barriers in Pakistan's Building Industry," *IMC* (blog), October 17, 2017, http://www.imcworldwide.com/news/breaking-gender-barriers-in-pakistans-building-industry/.
[3] From an interview with TAF Foundation in May 2018. Also see: "TAFF-VTI (TAFF- Vocational Training Institute) | An Introduction," TAF Foundation, n.d., https://www.taffoundation.org/education/.
[4] International Labour Organization and ILO Country Office for Pakistan, *Decent Work Country Profile Pakistan*.
[5] https://efp.org.pk/wp-content/uploads/2017/09/Increase-In-The-Minimum-Wages-Notice-2017.pdf
[6] https://pbLabor.gov.in/Content/documents/MinimumWages/Minimum_1_3_2018_WagesEng.pdf

shorthand reference of priority rural occupations that are both open to female employment and offer potential for improved earnings, for exploration under the AGES project. Livestock production and handicrafts production, in particular, require further research on the particular value chain actors present in each district. Retail, in turn, provides an additional likely opportunity for self-employment and small business activity, which can be supported by the entrepreneurial aptitude-based trainings and business development groups envisioned under the AGES project.

Urban female employment trends in Pakistan

The PSLM 2014-2015 dataset also includes individual-level information from 65,648 respondents living in Pakistan localities classified as urban. Overall, just 8.4% of all urban women aged 10 or over—again using the international standard age range for labor force surveys—were employed in that year, responding affirmatively that they engaged in some kind of "work for pay, profit, or family gain during the last month". This compares to a 61.8% rate of employment among all urban males aged 10 or over. When examining just the AGES target age range of 18-25 years, this rate is 10.4% for urban females compared to 60.1% of urban males.

Table 10: Urban rates of employment, by sex and age group (Source: PSLM 2014-2015)

Age range	% of urban females	% of urban males	% of urban total
Aged 10+, % in the labor force, LFS 2014-15[1]	10.0%	65.7%	38.7%
Aged 10+, % employed, PSLM 2014-15, weighted	8.4%	61.8%	35.5%
Aged 18+, % employed, PSLM 2014-15, weighted	10.4%	77.8%	44.6%
Aged 25+, % employed, PSLM 2014-15, weighted	10.4%	85.1%	48.1%
Aged 18-25,[2] % employed, 2014-15, weighted	10.4%	60.1%	35.6%

The PSLM dataset includes a total sample of 2,868 employed urban women aged 10 or over. Analyzing the information gathered from these respondents, certain employment trends are clear. Similar to the rural sample, over half of all employed urban women (56.5%) reported working every day in the past month with no rest days, slightly higher than the male rate of 53.6%. Another 15.7% worked about six days per week, 11.5% worked a standard five-day workweek, while others worked less at 15 days a month (3.9%).

These urban employed women respondents listed a total of 182 different occupations (using the PSLM's 4-digit level of specification) in 156 different industries. Reflecting the greater diversity of work opportunities in urban areas as compared to the previous rural analysis, 69 of these occupations and 50 of these industries were listed by at least 0.15% of respondents. Following analysis of industry growth potential and average female earnings, as well as elimination of certain

[1] PBS, "Labour Force Survey 2014-2015," 23. This table cites the refined (aged 10 and over), unaugmented labor force participation rates, which includes both those employed and those searching for work. Augmented rates are not provided for both males and females and so cannot be referenced here; however, it should be noted that the augmented rates generally raise estimates of female labor force participation by using probing questions to include certain unremunerated activities with economic impact that respondents may otherwise leave out.

[2] Highlighted because this is the AGES target age range for training and employment activities.

fully rural occupations already discussed in the preceding section,[1] 44 of these occupations remain for consideration as areas for likely expanded and improved urban female employment.

This list includes 14 occupations that require a mid- to high-level of formal education, as well as 30 occupations that require less formal education (although they may depend on significant on-the-job skills development). To provide a complete picture of urban female employment opportunities, and in recognition of the fact that the urban female labor force is divided between lower-educated general workers and the quite well-educated, both lists are provided below. Each list is ranked by a combined consideration of industry growth potential, average earnings, and formal education requirements.

Table 11: 30 priority occupations for urban female employment growth: Low formal education requirements

Rank	Occupation	Approx.[2] % of employed urban females	Major industries mentioned by rural female respondents in this occupation	Aprox.[3] average urban female earnings (in 2014 Rs.)	Industry Growth Score
1	"Garment and related pattern-makers and cutters"	0.2%	Preparation and spinning of textile fibers	9,767	3
2	"Beauticians and related workers"	1.4%	Hairdressing and other beauty treatment	8,605	1
3	"Hairdressers"	0.2%	Hairdressing and other beauty treatment	8,600	1
4	"Shop keepers"	1.7%	Retail sale of food in specialized stores, Retail sale in non-specialized stores with food, beverages or tobacco predominating	7,676	1
5	"Shop sales assistants"	0.6%	Retail sale of clothing, footwear and leather articles in specialized stores	7,100	1
6	"Cleaners and helpers in offices, hotels and other establishments"	0.6%	Pre-primary and primary education, general secondary education, higher education, households, hospital activities	7,076	1
7	"Packing, bottling and labelling machine operators"	0.2%	Manufacture of other articles of paper and paperboard	6,500	2
8	"Retail and wholesale trade managers"	0.7%	Retail sale in non-specialized stores with food, beverages or tobacco predominating	6,357	1
9	"Gardeners, horticultural and nursery growers"	0.2%	Growing of other tree and bush fruits and nuts	10,000	1
10	"Building construction Laborers"	0.2%	Construction of buildings	5,958	1
11	"Manufacturing	0.9%	Manufacture of carpets and rugs,	5,941	2

[1] The first-stage list included rural farming and livestock occupations—presumably coming from respondents in peri-urban and semi-rural areas. To avoid duplication with the rural list presented previously, these occupations are eliminated from the urban list.
[2] These percentages are provided from the unweighted PSLM data, and should only be considered as approximations. Weights are available in the microdata files for the primary sampling units; however insufficient information is provided by the Pakistan Bureau of Statistics on the methods used for weight calculations, and the relevance of the weighting strategy for the employment and earnings data is unclear.
[3] These percentages are provided from the unweighted PSLM data, and should only be considered as approximations.

	Laborers not elsewhere classified"		weaving of textiles, manufacture of clay building materials		
12	"Bakers, pastry-cooks and confectionery makers"	0.3%	Manufacture of bakery products	5,920	1
13	"Handicraft workers not elsewhere classified"	1.4%	Manufacture of wearing apparel, except fur apparel	5,648	2
14	"Handicraft workers in wood, basketry and related materials"	0.6%	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	5,455	2
15	"Weaving and knitting machine operators"	0.2%	Weaving of textiles	5,233	3
16	"Sewing machine operators"	0.3%	Manufacture of other textiles n.e.c.	5,213	3
17	"Cooks"	0.2%	Other personal service activities n.e.c; Household employers	5,200	1
18	"Personal care workers in health services not elsewhere classified"	0.2%	Other personal service activities n.e.c	5,000	1
19	"Woodworking-machine tool setters and operators"	0.2%	Other manufacturing	4,920	2
20	"Handicraft workers in textile, leather and related materials"	1.5%	Manufacture of wearing apparel, except fur apparel	4,897	2
21	"Personal services workers not elsewhere classified"	0.7%	Other personal service activities n.e.c	4,487	1
22	"Hand packers"	0.8%	Other food service activities, Manufacture of made-up textile articles, except apparel, manufacture of bakery products, manufacture of footwear, manufacture of sports goods	4,259	3
23	"Jewellery and precious-metal workers"	0.2%	Other personal service activities n.e.c	4,250	2
24	"Domestic housekeepers"	2.2%	Other personal service activities n.e.c	3,698	1
25	"Tailors, dressmakers, furriers and hatters"	12.1%	Manufacture of wearing apparel, except fur apparel	3,571	3
26	"Cleaning and housekeeping supervisors in offices, hotels and other establishments"	0.2%	Other personal service activities n.e.c	3,300	1
27	"Home-based personal care workers"	1.2%	Activities of households as employers of domestic personnel	3,085	1
28	"Domestic cleaners and helpers"	3.9%	Activities of households as employers of domestic personnel	3,049	1
29	"Sewing, embroidery and related workers"	11.3%	Manufacture of knitted and crocheted fabrics	2,686	3
30	"Shoemakers and related workers"	0.2%	Manufacture of footwear	2,500	2

There are some important **observations one can make from this list of urban occupations requiring lower levels of formal education**. Within the textile industry, for example, the highest-earning

occupation for women appears to be that of garment pattern-makers and cutters. A skilled trade, training courses in this work are available in Karachi,[1] or may require the arrangement of demand-driven training for certain enterprises. Other textile trades are paid at lower rates and so, while female employment is clearly available at large scale in these trades, negotiations for better pay will be required and could be jeopardized by industry-wide trends of low remuneration.

Personal care and beauty services are also clearly of relevance in the urban environment, and offer more promising earnings potential than other trades. GharPar represents an interesting new trend in this area, offering potential for more large-scale expansion than single salon establishments. GharPar operates on a freelance model, vetting beauty care workers to provide services in clients' own homes.[2]

Retail trade also stands out at the top of the list for urban women, both for self-employment and as sales assistants within larger retail establishments. Perhaps the best opportunity for larger-scale female employment in this area is to partner with an established clothing retail chain that already has a large female clientele and yet is currently employing a majority male sales staff. Possibilities may include Gul Ahmed, Sana Safinaz, Warda, Khaadi, Saphire, and others.

Cleaning work is also present on this list of top urban female employment occupations. Household workers—including cleaners, cooks, and elder care workers—could benefit from the TAF Foundation model founded in Karachi and mentioned in the section on rural employment.[3] However, it is clear that current female wages are higher for cleaners at formal establishments than within households—and this could become a means for negotiating larger-scale employment contracts, as well as potentially moving women into team management roles.

The list also includes mention of specific types of work within manufacturing industries, including packing, bottling, and labeling machine operators, woodworking machine operators, and hand packers as well as various handicrafts and manufacturing occupations related to the textiles industry. A key stakeholder interview at Packages Limited,[4] for example, showed preference for an increased female workforce in package printing and labeling, while at the same time revealing the challenges of marriage-related female factory employee turnover the company has faced in the past. As AGES explores increased opportunities for female employment in manufacturing beyond just the textiles industry, more detailed problem-solving discussions with employers on this and other related issues may be required.

The above list also indicates that at least some women are already employed as laborers in the construction industry, as was the case with the rural analysis. Finally, there are some less-common occupations that deserve further investigation: such as gardeners, horticultural, and nursery growers; and bakers, pastry-cooks, and confectionary makers working in a manufacturing setting, who are earning more than cooks working in homes. According to key informant interviews, chain

[1] "Pattern Making & Cutting," PHMA Institute of Knitwear Technology Karachi, n.d., http://phmaiktk.edu.pk/index.php/pattern-making-cutting.
[2] "Professional Beauty Services at Home," GharPar, n.d., https://gharpar.co/.
[3] "TAFF-VTI (TAFF- Vocational Training Institute) | An Introduction."
[4] "Packages Limited," Packages Limited, n.d., https://www.packages.com.pk/.

restaurants present in some Pakistani cities, such as KFC, may also offer some opportunity for female employment expansion.

In addition to the previous list of 40 occupations requiring minimal formal education, below is the table of **priority occupations requiring mid-to high-level formal education**, for further consideration of urban female employment options. It is notable that all of these occupations are in industries with lower growth-potential, although they did not receive zero scores (in other words, they appeared in one of the three methods used to determine industry growth potential, but not more than one).

Table 12: 14 priority occupations for urban female employment growth: Mid- to High formal education requirements

Rank	Occupation	Approx.[1] % of employed urban females	Major industries mentioned by rural female respondents in this occupation	Aprox.[2] average urban female earnings (in 2014 Rs.)	Industry Growth Score	Education Required
1	"Data entry clerks"	0.2%	Wireless telecommunications activities	18,750	1	Mid
2	"Nursing associate professionals"	0.2%	Hospital activities	18,643	1	Mid
3	"Primary school teachers"	14.3%	Pre-primary and primary education	14,247	1	Mid
4	"Health professionals not elsewhere classified"	0.3%	Hospital activities	11,550	1	Mid
5	"Traditional and complementary medicine professionals"	0.2%	Hospital activities	10,429	1	Mid
6	"Teaching professionals not elsewhere classified"	1.5%	Other education n.e.c	10,417	1	Mid
7	"Midwifery associate professionals"	0.5%	Hospital activities	9,708	1	Mid
8	"Community health workers"	0.5%	Hospital activities, other human health activities	8,715	1	Mid
9	"Specialist medical practitioners "	0.2%	Hospital activities	72,857	1	High
10	"Generalist medical practitioners "	0.6%	Hospital activities	43,000	1	High
11	"Secondary education teachers"	6.6%	General secondary education	24,224	1	High
12	"Nursing professionals"	1.0%	Hospital activities	18,653	1	High
13	"Midwifery professionals"	0.8%	Other human health activities	11,280	1	High
14	"Other language teachers"	0.2%	Educational support activities	6,333	1	High

Some of these higher-education occupations may also be open to support from the AGES project—particularly those that require just 6-18 months of training for a candidate that has already completed secondary school—including: data entry, pre-primary and primary school teachers, and

[1] These percentages are provided from the unweighted PSLM data, and should only be considered as approximations. Weights are available in the microdata files for the primary sampling units; however insufficient information is provided by the Pakistan Bureau of Statistics on the methods used for weight calculations, and the relevance of the weighting strategy for the employment and earnings data is unclear.

[2] These percentages are provided from the unweighted PSLM data, and should only be considered as approximations. See previous note.

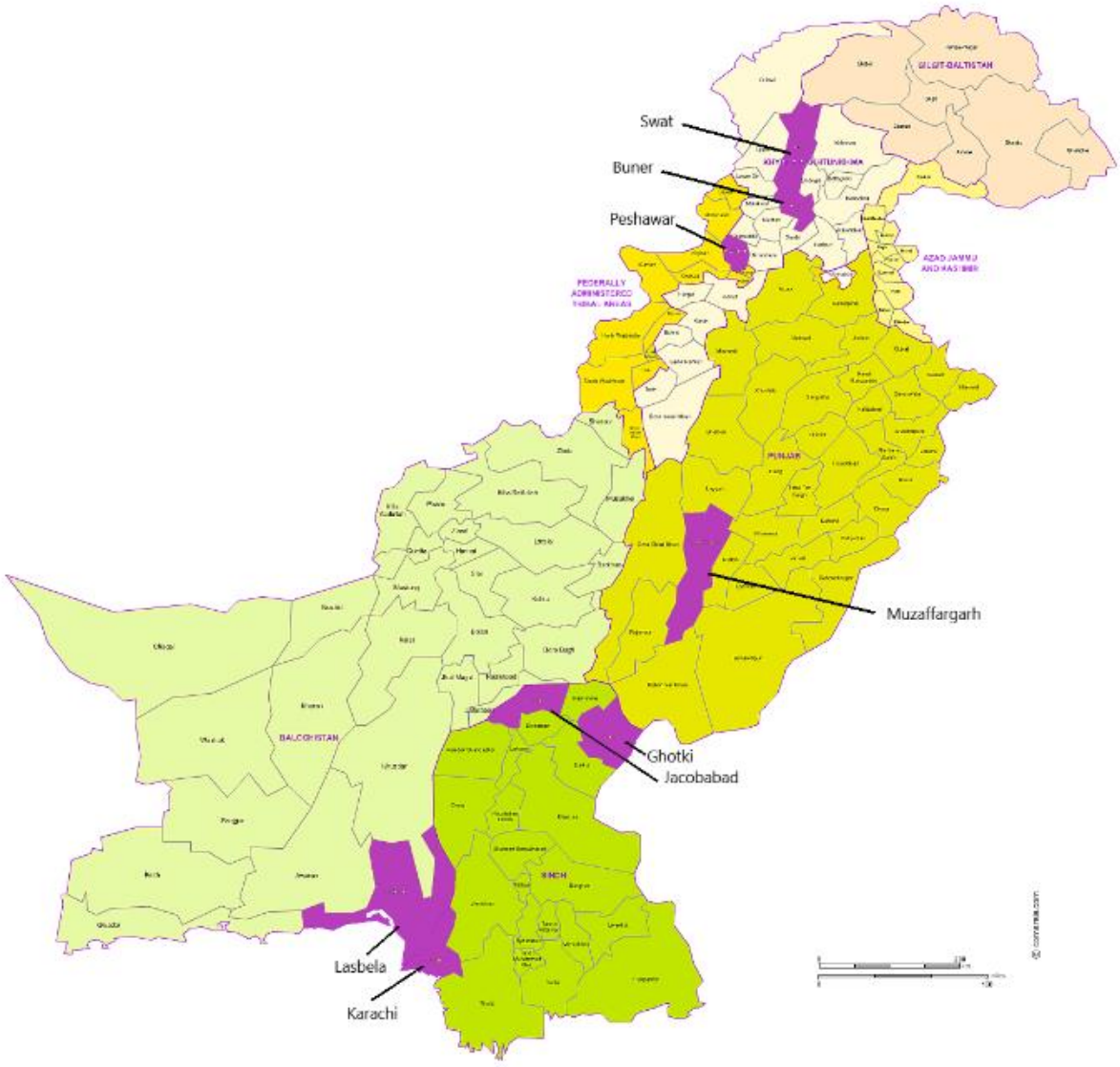
nursing and midwife associate professionals. The opportunities in education and community health have already been discussed in the preceding section on rural employment. Those listing their occupation as “data entry clerks” may be working as freelancers through platforms such as UpWork or Freelancer.com, such as in business process outsourcing for the health industry, or may be working for Pakistani telecommunications companies and call centers. Both options offer possibilities for expanded female employment for the AGES project to explore.

Overall, this analysis of the rural and urban female employment data from the PSLM survey shows that significant opportunities for expanded and improved female employment are present, although they are still quite limited—especially in rural areas. While some of these occupations are already female-dominated, the general rate of female employment is so low that helping more women obtain work in these growing sectors is still an important part of shifting the overall status quo, particularly if those employment arrangements involve negotiations for improved female wages. The following chapter brings greater local contextualization to these employment lists by exploring the PSLM data for each of the eight AGES implementation districts in turn.

V. FEMALE EMPLOYMENT OPPORTUNITIES IN THE AGES DISTRICTS

This chapter provides a more detailed discussion of female employment opportunities in the eight districts that form the focus of the AGES project's implementation efforts (see map below).

Figure 7: Location of the eight AGES implementation districts



The table below provides 2017 census detail on the urban and rural populations of females in each of the AGES implementation districts, as well as the male populations, the total population, the households, and the % of females aged 10 and over who are employed according to the PSLM 2014-15 data.

Table 13: District Population Characteristics, with urban and rural distribution of the female population (Source: 2017 Census and PSLM 2014-2015)[1]

Province	District (AGES districts bold)	Female			Total Male	Total population	House-holds	Approx.[2] % of females employed
		Rural Female	Urban Female	Total Female				
Balochistan	**Lasbela**	141,750	133,235	274,985	299,299	574,292	93,165	1.6%
Sindh	**Karachi**	534,499	7,075,866	7,610,365	8,439,659	16,051,521	2,770,074	5.1%
	Jacobabad	345,486	145,292	490,778	515,480	1,006,297	177,867	25.3%
	Ghotki	602,300	194,751	797,051	849,226	1,646,318	296,670	21.2%
Punjab	**Muzaffargarh**	1,764,477	338,655	2,103,132	2,218,744	4,322,009	667,515	27.2%
Khyber Pakhtunkhwa	**Peshawar**	1,123,915	943,676	2,067,591	2,201,257	4,269,079	909,709	3.4%
	Buner	450,317	0	450,317	446,997	897,319	94,095	0.9%
	Swat	799,140	337,404	1,136,544	1,172,974	2,309,570	274,620	1.2%

The districts selected for direct implementation of the AGES project range from the very sparsely populated and predominantly rural (Ghotki, Buner), to a mixture of countryside and small cities (Jacobabad, Swat, Muzaffargarh), to those evenly split between rural areas and mid-sized cities (Peshawar, Lasbela), and even mega-cities (Karachi). It also shows a wide range in the rate of employment for females aged 10 and over[3]—from the extremely low rural rates of Buner, Swat, and Lasbela (ranging from 0.9% to 1.6% of females employed), to the low urban rates of Peshawar and Karachi (3.4% and 5.1% of females employed, respectively), to the comparatively higher rural rates of Ghotki, Jacobabad, and Muzaffargarh (ranging from 21.2% to 27.2% of females employed).

By analyzing labor market conditions for women in this broad range of districts in different regions of the country, this labor market analysis encompasses a sample that can also give insight into nationwide economic opportunities for young women, allowing AGES to contribute to a national dialogue on this issue. This chapter summarizes the demographics and labor force characteristics of the main eight AGES implementation districts, examines the most promising occupations and industries for expanded female employment with decent earnings, and lists potential strategies for training and employment. The discussion relies primarily on a custom analysis of the microdata from the 2014-2015 PSLM Survey, following the methodology described in Chapter I, as well as the annual Labor Force Survey, the 2017 Census, the National Skills Information System, and other reports.

[1] "Population Census 2017," Pakistan Bureau of Statistics, n.d., http://www.pbscensus.gov.pk/. Further district-level population details are provided at http://www.pakinformation.com/population.html

[2] Based on a custom analysis of the unweighted 2014-2015 PSLM microdata. Data is percentage of all females aged 10 and over who did "any work for pay, profit or family gain during the last month."

[3] While clearly age 10 is too young to be a desirable working age, this is the standard age range used by the Pakistan Bureau of Statistics for the annual Labor Force Survey. The analysis in the preceding chapter shows that female employment rates do not rise dramatically when children aged 10-17 are excluded from the analysis.

Balochistan Province: Lasbela

While Balochistan is the largest province of Pakistan, it is also the most sparsely populated. Agriculture, forestry, hunting, and fishing predominate the economy, although there is also industrial growth at the new Gwadar deep-sea port, and in the city of Hub, in Lasbela district and bordering Karachi.

After agriculture, manufacturing employs the highest percentage of women in Balochistan with significant recent growth. Employment of women in wholesale and retail trade has also experienced a small recent increase, primarily in urban areas. Emerging sectors in Balochistan include minerals, marble and gems, horticulture, fruits and dry fruits, fisheries, livestock, logistics, and handicrafts. The highest skills gaps in Balochistan have been recorded in the mining sector, followed by fishery, manufacturing, and the service sector.[1]

Table 14: Balochistan female employment by industry, in 2013-14 and 2014-15 (Source: PBS Labor Force Survey statistics)[2]

Balochistan - Distribution of Employed Females (10 years and above %)						
Major Industry Division	2013-14			2014-15		
	Total	Rural	Urban	Total	Rural	Urban
	9.29	8.12	1.17	18.03	16.21	1.82
Agriculture, forestry, hunting, and fishing	7.48	7.14	0.34	9.82	9.55	0.27
Manufacturing	0.70	0.57	0.13	6.94	6.09	0.85
Construction	0.09	0.09	(unavailable)	0.08	0.06	0.02
Wholesale & retail trade	0.07	0.03	0.04	0.21	0.08	0.13
Transport/storage & communication	0.03	0.02	0.01	0.01	(unavailable)	0.01
Human Health and Social work activities	0.18	0.06	0.12	0.24	0.14	0.10
Education	0.58	0.17	0.41	0.57	0.25	0.32
Others*	0.16	0.04	0.12	0.16	0.04	0.12
Source: Labor Force Survey 2013-14 & Labor Force Survey 2014-15; Pakistan Bureau of Statistics						

Balochistan has 12 Government Colleges of Technology (GCTs), 7 of these for male students, 3 for female students, and 2 offering co-education. The province has 37 VTIs, 23 of these for male students, 12 for female students, and 2 co-educational. The estimated capacity of all these institutions combined is 3,519 seats, and current enrolment is 2,851 male and 345 female students.[3]

LASBELA DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

According to the 2017 census, the total population of Lasbela District is 0.54 million, more than half of whom (0.3 million) live in rural areas and the rest of (0.28 million) in urban areas.[4] Literacy and education-related statistics are presented in the following table:

[1] Sayed Shah, Mansoor Zaib Khan, and Abdul Hafeez Abbasi, "Skills Gap Analysis - Balochistan" (NAVTTC and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), September 2017), https://www.skillingpakistan.org/files/1/Skill%20Gap%20Analysis%20(Balochistan)-Final.pdf.
[2] PBS, "Labour Force Publications."
[3] NAVTTC, "National Skills Information System."
[4] "Population Census 2017."

Table 15: Lasbela literacy and education statistics[1]

	Lasbela	URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	Primary school completion rate (% of population)	64	35	50	28	8	19	40	18	30
2	Literacy rate-population 10 years and older	73	45	60	38	12	26	50	24	38
3	Adult literacy rate-population 15 years and older	71	40	57	37	9	24	49	20	36
Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013										

The following table provides a summary of manufacturing industries in Lasbela, according to the most recent complete PBS census of manufacturing industries (2005-06).[2] At that time, the greatest sources of manufacturing employment in Lasbela were textiles, chemical products, motor vehicles, and non-metallic mineral products, including marble.

Table 16: Manufacturing industry employment in Lasbela as of 2005-2006 (Source: PBS Census of Manufacturing Industries)[3]

Lasbela Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	169	17,004
Manufacture of textiles	42	4,220
Chemicals & chemicals products	23	3,219
Motor vehicles & trailers, other transport equipment, furniture	14	2,625
Other non-metallic mineral products	7	1,566
Food products & beverages	9	1,288
Basic metals	9	888
Paper & paper products, publishing, printing & reproduction	5	698
Fabricated metal products, machinery & equipment n.e.c.	6	600
Rubber & plastic products	12	558
Recycling	30	520
Coke & petroleum	6	407
Wood & wood products	3	363
Electrical machinery & apparatus n.e.c., radio, tv, & communication equipment	3	52

Due to the very low employment rate for women found in Lasbela district—just 1.6% of females aged 10 and over were employed, compared to 69.3% of males—the PSLM data offers a very small

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial" (Pakistan Bureau of Statistics, 2014 2013), http://www.pbs.gov.pk/content/pakistan-social-and-living-standards-measurement-survey-pslm-2013-14-national-provincial.
[2] Follow-up censuses of manufacturing industries were conducted in 2010-11 and 2015-16 but have not been published due to challenges in obtaining complete data from industries, according to this news report: Ghulam Abbas, "Pakistan Bureau of Statistics Admits Collecting Incomplete, Partial Data," *Pakistan Today: Profit*, March 20, 2018, https://profit.pakistantoday.com.pk/2018/03/20/pakistan-bureau-of-statistics-admits-collecting-incomplete-partial-data/.
[3] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

sample of employed women for analysis.[1] These respondents were employed in 6 different occupations, in the textile industry, primary education, retail, health, and marine and freshwater fisheries. Given the Balochistan provincial data indicating recent modest increases in the presence of women in manufacturing, and the existence of the industrial city Hub within Lasbela, this labor market analysis also included consideration of certain industry-occupation clusters that correspond to the available NSIS skills gap data for Balochistan

Proceeding with the remaining steps of the analytical methodology described in Chapter I results in the following table of 9 prioritized occupations for Lasbela (see below). As this table shows, there is existing evidence of female employment in the textiles and garments industries, freshwater and marine fishing, education, health, and retail. There is also evidence of skills gaps in certain trades that the national analysis suggests may be open to females, even though the PSLM sample was too small to confirm this trend in Lasbela—construction laborers, manufacture of pharmaceuticals, mobile repairing, and housekeeping. Exploration of opportunities for expanding female employment in Lasbela may need to begin first with the industrial city of Hub, potentially helping to create greater social space for female employment in the broader district over time.

In Lasbela, there is just one female training institute listed by NSIS, with no description of its courses. Industry-hosted or otherwise demand-driven training is likely to be necessary across most of these trades.

[1] From an overall sample of 1,233 individuals aged 10 and over surveyed in the district, 565 of them females, just 1.6% of the female population had engaged in any work for pay, profit, or family gain during the previous month (N=9).

Table 17: Potential priority trades for female employment in Lasbela (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Occupations mentioned by female respondents, + others	Industries mentioned by female respondents with that occupation	Male or female predom-inant	Female mean monthly earnings	AGES Employ ability Score	Trades mentioned in NSIS skills gaps data	Potential Employers
1	"Sewing, embroidery and related workers"	Manufacture of wearing apparel, except fur (11.1%); Manufacture of other textiles n.e.c. (22.2%)	Male	4,833	55%	Textile spinning, textile weaving, tailoring and cutting	NSIS lists some 30 textile companies in Lasbela.
2	"Fishery and aquaculture Laborers"; Deep-sea fishery workers	Freshwater aquaculture (11.1%); Marine fishing (11.1%)	Male	10,000	50%		Balochistan Fisheries Department and associated companies
3	"Primary school teachers"	Pre-primary and primary education (22.2%)	Male	12,000	40%		Government
4	"Building construction Laborers": Some occupations may be accessible to females	MALE: Construction of buildings, building completion and finishing,	Male	5,248[1]	40%	Welder, mason, electrician, carpenter	Construction companies not listed by NSIS or the Lasbela chamber of commerce
5	"Health associate professionals not elsewhere classified"	Hospital activities (11.1%)	Male	15,000	30%		Hospitals and community clinics
6	"Retail and wholesale trade managers"	Retail sale of food in specialized stores (11.1%)	Male	8,000	30%		Local shops
7	[Industry] "Manufacture of pharmaceuticals, medicinal chemical and botanical products"	[Skills Gap - No PSLM Data]	Male	7,680[2]	25%	Pharmacists; B Pharmacy	NSIS lists 30 chemical products companies in Lasbela, including the international Procter & Gamble
8	Mobile repairing	[Skills Gap - No PSLM Data]	[Skills Gap - No PSLM Data]	[Skills Gap - No Data]	25%	Mobile repairing	Local clientele
9	Housekeeping	[Skills Gap - No PSLM Data]	[Skills Gap - No PSLM Data]	[Skills Gap - No Data]	25%	House Keeping	Local clientele

[1] Estimated as 64% of average male earnings.
[2] Estimated as 64% of average male earnings.

Sindh Province: Karachi, Jacobabad, and Ghotki

Sindh holds the second largest population – 48 million, or 23%[1] of Pakistan's population. It is third largest in terms of area. Sindh has Pakistan's second largest economy and is home to a large portion of Pakistan's industrial sector as well as containing two of Pakistan's commercial seaports, Port Bin Qasim and the Karachi Port.

In the Sindh Province, agriculture, forestry, hunting, and fishing is the largest sector of female employment, however over the period of analysis 2013-15 its share of employment has slightly decreased (see table below). After the agriculture sector, manufacturing employs the next highest proportion of women; however this rate is low and employment in manufacturing has decreased in rural areas while increasing in urban areas. Notably, female employment in wholesale and retail trade has decreased in urban areas despite the growth of this sector overall.

Table 18: Sindh female employment by industry, in 2013-14 and 2014-15 (Source: PBS Labor Force Survey statistics)[2]

Sindh - Distribution of Employed Females (10 years and above %)						
Major Industry Division	2013-14			2014-15		
	Total	Rural	Urban	Total	Rural	Urban
	14.84	11.82	3.02	13.83	11.16	2.67
Agriculture, forestry, hunting, and fishing	11.03	10.74	0.29	10.48	10.21	0.27
Manufacturing	1.46	0.69	0.77	1.50	0.61	0.89
Construction	0.12	0.05	0.07	0.03	0.01	0.02
Wholesale & retail trade	0.25	0.03	0.22	0.07	0.04	0.03
Transport/storage & communication	0.20	0.20		0.04	0.01	0.03
Human Health and Social work activities	0.29	0.07	0.22	0.30	0.09	0.21
Education	0.84	0.08	0.76	0.82	0.12	0.70
Others	0.65	0.03	0.69	0.59	0.07	0.52
Source: Labor Force Survey 2013-14 & Labor Force Survey 2014-15; Pakistan Bureau of Statistics						

In Sindh province, there are 98 technical institutes, 68 of these are male and 8 are for females, while the other 22 offer co-education. The number of vocational institutes listed by NSIS is much higher at 471—and this list appears to not include all private institutes; out of these 45 are offering services to males and 203 to females while the 233 offer co-education. In Sindh the total capacity of the TEVT institutes is 80,873 while only 66,279 seats have been taken by male (51,958) and females (14,321).

[1] "Population Census 2017."
[2] PBS, "Labour Force Publications."

KARACHI DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

Karachi is located on the coast, the capital of Sindh province and the largest city in Pakistan. According to the 2017 census, the total population of Karachi Division is over 16 million. Karachi city is a division of several districts that include Karachi West, Karachi South, Karachi Central, Karachi East, Malir district, and Korangi district. The AGES project does not differentiate implementation targets for these districts; the city is considered as a whole. Karachi's education-related statistics are summarized in the following table:

Table 19: Karachi literacy and education statistics[1]

Karachi		URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	**Primary school completion rate (% of population)**	80	72	76	49	31	40	79	71	75
2	**Literacy-population 10 years and older**	87	79	83	61	39	50	86	77	82
3	**Adult literacy-population 15 years and older**	87	78	83	61	36	48	86	76	81
Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013										

The following table provides a summary of manufacturing industries in Karachi's districts, according to the most recent complete PBS census of manufacturing industries (2005-06). At that time, the greatest sources of manufacturing employment in Karachi were textiles, chemicals and chemical products, and garments (wearing apparel).

Table 20: Manufacturing industry employment in Karachi districts as of 2005-2006 (Source: PBS Census of Manufacturing Industries)[2]

Karachi (all districts) Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	1,199	198,905
Manufacture of textiles	325	62,741
Chemicals & chemicals products	152	28,774
Wearing apparel	159	25,149
Basic metals	46	20,013
Motor vehicles & trailers	65	9,443
Food products & beverages, tobacco products	139	9,363
Other non-metallic mineral products	28	5,837
Machinery & equipment n.e.c.	34	5,343
Fabricated metal products, other transport equipment, furniture	4	4,616
Coke & petroleum, radio, TV & communication equipment, medical & optical instruments, other transport equipment	6	3,838
Leather products	28	3,752

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial."
[2] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

Electrical machinery & apparatus n.e.c.	14	2,927
Rubber & plastic product	47	2,903
Fabricated metal products	33	2,588
Wearing apparel, paper & paper products, publishing, printing & reproduction	5	1,807
Coke & petroleum	7	1,802
Publishing, printing & reproduction	35	1,784
Furniture	12	1,143
Wood & wood products	14	963
Paper & paper products	14	946
Coke & petroleum, chemicals & chemicals products, rubber & plastic product	4	866
Other transport equipment	3	830
Electrical machinery & apparatus n.e.c., ratio, TV & communication equipment, medical & optical instruments	5	419
Medical & optical instruments	4	366
Leather products, paper & paper products	7	308
Rubber & plastic product, other non-metallic mineral products, basic metals, fabricated metal products	5	210
Electrical machinery & apparatus n.e.c., ratio, TV & communication equipment, other transport equipment	4	174

According to the PSLM 2014-15 data, only 5.1% of Karachi females age 10 and over are employed, compared to 62.7% of males. These respondents were employed in 35 occupations and 27 different industries. More than any other district in this analysis, the Karachi data also reflects a division in educational background, with a significant presence of females in positions requiring a high formal education.

Following the methodology described in Chapter I results in 14 occupations or occupation clusters that receive above a 40% AGES Employability Score. Again, due to the small sample size, some of these may be anomalous occupations that are not truly the most prevalent in the wider population; however, the advantage of this dataset is to confirm the presence of at least some women in each of them. The most promising occupations in terms of industry growth, known skills gaps, and earnings are in the textiles and wearing apparel industries, sales workers and managers employed in retail or by manufacturing companies, handicraft and woodworkers, and domestic cleaners and helpers. Other options include hand packers, printing press technicians, cooks in the food service industry rather than houseworkers, chemical products machine operators, female protective services workers, drivers, and primary school teachers.

The table below also discusses potential employers and training options in these occupations.

Table 21: Priority trades for female employment in Karachi (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Occupations mentioned by female respondents	Industries Mentioned by Female Respondents with that occupation	Male or female dominant	Average Female Earnings	AGES Employment Potential Score	Trades mentioned in NSIS skills gaps data	Employers	Training Facilities
1	"Garment and related pattern-makers and cutters"	Preparation and spinning of textile fibers (3.4%)	Male	13,000	80%	Pattern making; Textile designing; pattern cutting	There are 124 Karachi employers in the Textiles sector listed in the NSIS database.	There are specialized textile training institutes, such as SMA Rizvi Textile Institute which offers short courses in subjects such as textile testing/quality control and weaving loom operator, in addition to Hunar Foundation, AmanTech and many other training institutes. Employers are likely to specify their preferred training providers, or their own in-house training.
2	"Sewing, embroidery and related workers"	Manufacture of wearing apparel except fur (5.1%)	Male	7,500	80%	Machine operator, quality control, dying and bleaching, stitching machine operator		
3	"Tailors, dressmakers, furriers and hatters"	Manufacture of wearing apparel except fur (3.4%); Preparation and spinning of textile fibres (1.7%); Manufacture of other textiles n.e.c. (1.7%); Other personal service activities n.e.c. (1.7%)	Male	6,400	80%	Machine operator, quality control, dying and bleaching, stitching machine operator		
4	"Handicraft workers in wood, basketry and related materials"	Manufacture of made-up textile articles, except apparel (1.7%)	Male	13,714[1]	60%		Requires further value chain research.	Requires further research.
5	"Shop sales assistants"; "Sales and marketing managers"; and Sales workers not elsewhere classified	Retail sale of books, newspapers and stationary in specialized stores (1.7%); Manufacture of basic chemicals (1.7%); Manufacture of pharmaceuticals, medicinal chemical and botanical products (1.7%)	Male	12,000[2]	55%	Customer agent; DAE apparel marketing and merchandizing	Retail sales is a growing sector in Karachi, for a variety of types of stores; it may be most effective to approach women's clothing chain store employers, such as Khaadi. Sales workers may also be employed in manufacturing and in call centers	Retail chain stores may have their own employee training systems. Demand-driven training in retail sales and customer service is also a possibility in this field. Institutes such as the National Institute of Skilled Training (NIST) provide training for call center

[1] Estimated as 64% of the male average wage
[2] This is the average for sales assistants; sales managers earned more.

Rank	Occupations mentioned by female respondents	Industries Mentioned by Female Respondents with that occupation	Male or female dominant	Average Female Earnings	AGES Employment Potential Score	Trades mentioned in NSIS skills gaps data	Employers	Training Facilities
								agents.
6	"Cabinet-makers and related workers"	Sawmilling and planing of wood (3.4%)	Male	8,503[1]	50%	Lathe machine operator; Shuttering carpenter; furniture designer	There are 17 Karachi employers in the Wood & wood products sector in NSIS, primarily in furniture, particle board, and plywood.	AmanTech offers a carpentry course with a focus on the construction sector. Wood manufacturing enterprises may have their own training systems or preferred training centers.
7	"Domestic cleaners and helpers"	General cleaning of buildings (1.7%)	Male	12,000	50%		Potential for improved female employment conditions via TAF Foundation or organizations such as GharPar. In addition to housecleaners, other potential types of employment include home-based beauty care, elder care, and fitness training.	TAF Foundation has developed innovative hands-on training in several of these fields, coupled with direct employer engagement.
8	"Hand packers"	Manufacture of knitted and crocheted fabrics (1.7%)	Female	8,000	50%		There are 124 Karachi employers in the Textiles sector listed in the NSIS database.	See above, rows 1, 2, and 3.
9	"Pre-press technicians"	Publishing of newspapers, journals and periodicals (1.7%)	Male	8,000	50%	Printing machine operator	There are 30 Karachi employers in the Paper and paper products sector listed in NSIS; some of these also work in textiles.	Printing machine operation is taught within these factories themselves or in affiliated training institutes.[2]
10	"Cooks"	Other food service activities (1.7%)	Male	6,000	50%	Cook, Chef, kitchen helper	There are opportunities for female employment in Karachi restaurant chains such as Pizza Hut and KFC.[3] Another possibility is to promote home-	NAVTTC offers competency based training curricula in cook, chef, sous chef, food and beverage captain, and waiter. Other providers

[1] Estimated as 64% of the male average wage
[2] Meeting with Packages Limited, May 23, 2018
[3] Meeting with TAF Foundation on May 20, 2018

Rank	Occupations mentioned by female respondents	Industries Mentioned by Female Respondents with that occupation	Male or female dominant	Average Female Earnings	AGES Employment Potential Score	Trades mentioned in NSIS skills gaps data	Employers	Training Facilities
							based food businesses, such as through Lunch.pk.	include TAF Foundation, URS, Lunch.pk, Hunar Foundation, and GharPar offers additional training to its network.
11	"Chemical products plant and machine operators"	Manufacture of pharmaceuticals, medicinal chemical and botanical products (1.7%)	ANOMALY: Equal in the PSLM dataset	7,500	45%	DAE (Diploma of Associate Engineering) Chemical	There are 30 Karachi employers in the Chemical, petroleum, rubber & plastic goods sector listed in NSIS.	May require demand-driven training or in-house training.
12	Protective services workers (specific occupations replaced with general occupational code)	Public order and safety activities (1.7%)	Male	6,912[1]	40%	Security guard; Health and safety officer	Foley Security, SMS Hardis, Police Guards, Askari. Note that for every 100 male security guards, there are only 3-4 female body searchers, according to industry interviews.[2]	Security guard companies provide their own training courses.
13	"Car, taxi and van drivers"	Urban and suburban passenger land transport (1.7%)	Male	12,000	40%		Potential for female employment via Uber or Careem, or female drivers for schools and companies transporting female employees.	Numerous local driving schools.
14	"Primary school teachers"	Pre-primary and primary education (16.9%)	Female	10,100	40%		Beacon House provides teachers to Sindh Education Foundation; CGN early childhood enterprise training and kits	Beacon House, CGN, or government training providers for early childhood or primary education.

[1] Estimated as 64% of the male average wage
[2] Meeting with Askari on May 17, 2018

JACOBABAD DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

The population of the district Jacobabad is approximately one million, according to the 2017 Census. The majority of this population (0.7 million) resides in rural localities, while the remaining 0.3 million live in urban areas. The following table summarizes the literacy and education related statistics of the district.

Table 22: Jacobabad literacy and education statistics[1]

	Jacobabad	URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	**Primary school completion rate (% of population)**	72	30	53	42	13	29	49	17	34
2	**Literacy-population 10 years and older**	76	45	62	53	11	34	59	19	41
3	**Adult literacy-population 15 years and older**	71	42	57	47	9	29	53	17	36
	Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013									

Jacobabad district is primarily rural and has very little industry except husking and flour mills, and cottage production of raw soap. Jacobabad also produces embroidery handicrafts such as caps, laces, Ghaghara, waist coats and other embroidered garments. These garments are exported both to other provinces of Pakistan and outside the country.[2]

Table 23: Manufacturing industry employment in Jacobabad as of 2005-2006 (Source: PBS Census of Manufacturing Industries) [3]

Jacobabad Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	97	3,412
Food products & beverages	97	3,412

According to the PSLM 2014-15 dataset, 25.3% of Jacobabad females aged 10 and over are employed, compared to 69.0% of males. While this is still a large disparity, this rate of female employment is among the highest of all AGES districts (along with Muzaffargarh and Ghotki). This higher rate allowed for a larger PSLM sample of employed females, and therefore greater confidence regarding female employment trends in specific industries and occupations. In the PSLM dataset, just 11 occupations were mentioned by multiple respondents, and several of these are closely related agricultural and livestock occupations. An additional 15 occupations were mentioned by a single respondent, therefore with a prevalence of just 0.2% of employed females.

After employing the ranking methodology descripted in Chapter I, 9 occupations remain for prioritization under AGES. These include supporting livestock and agricultural production, manufacturing workers including in textiles and wearing apparel, motor vehicle mechanics and

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial."
[2] Ikhtiar Ahmed Khoso, "A Brief Profile of Jacobabad" (Small and Medium Enterprise Development Authority, Larkana, n.d.), http://smeda.org/index.php?option=com_phocadownload&view=category&download=199:jacobabad-profile&id=4:sindh-district-profiles.
[3] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

repairers, food and beverage grades working at grain mills, primary school teachers, and electrical mechanics.

The table below also discusses potential employers and training options in these occupations.

Table 24: Priority trades for female employment in Jacobabad (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Female Occupations in Jacobabad	Industries listed by female respondents	Male or female dominant occupation	Female average monthly Earnings	AGES Employment Potential Score	Trades mentioned in NSIS skills gaps data	Potential Employers	Potential Training
1	"Livestock and dairy producers"; "Mixed crop and animal producers"	Raising of cattle and buffaloes (0.3%); Mixed farming (48.4%)	Male	10,000	70%		Self-employment for local sale (cattle market) or other meat and dairy value chain actors.	Some SRSO trainings in Jacobabad have focused on the dairy value chain
2	"Mixed crop growers" and "Field crop and vegetable growers"	Mixed farming (32.1%); growing of cereals, leguminous crops, and oil seeds (1%); Growing of vegetables and melons, roots, and tubers (0.2%)	Male	8,000[1]	60%		NSIS lists no factories in Jacobabad, but there are potential value chain actors in Larkana flour mills, rice mills, cotton mills, or food processing companies such as for dates, in addition to local grain, fruit, and vegetable markets.[2]	May be best learned through apprenticeship.
3	"Manufacturing Laborers not elsewhere classified"	Other manufacturing n.e.c. (0.2%)	Male	4,748[3]	60%	Unknown industry, but NSIS lists need for: machine operator, general machinist, injection molder etc.	Requires further investigation.	May be best learned through apprenticeship.
4	"Tailors, dressmakers, furriers and hatters"	Manufacture of wearing apparel except fur (3.4%)	Male	2,994	60%	Stitching machine operator; dying and bleaching, Weaving operator; pattern making, textile designing, overlook stitcher, textile spinning (but knitting and garments making appear as skills	Requires further investigation; may be serving local clientele.	Some Jacobabad vocational training centers offer courses in tailoring and dressmaking.

[1] Estimated at 64% of the male average wage.
[2] Khoso, "A Brief Profile of Jacobabad."
[3] Estimated at 64% of the male average wage.

						surpluses)		
5	"Sewing, embroidery and related workers"	Manufacture of knitted and crocheted fabrics (8.4%); manufacture of wearing apparel except fur (0.5%); manufacture of knitted and crocheted apparel (0.2%)	Female	2,171	60%	Stitching machine operator; dying and bleaching, Weaving operator; pattern making, textile designing, overlook stitcher, textile spinning (but knitting and garments making appear as skills surpluses)	May be production of rallis (quilts), ghalichah (cotton carpets), and hand embroidery. Value chain actors in these industries could be investigated; Indus Heritage Trust does not currently source from Jacobabad, however.	May be best learned through apprenticeship.
6	"Motor vehicle mechanics and repairers"	Maintenance and repair of motor vehicles (0.2%)	Male	14,000	50%	(NSIS reports surpluses in auto mechanics)	Serving local clientele	Not offered in Jacobabad vocational training centers listed by NSIS.
7	"Food and beverage tasters and graders"	Manufacture of grain mill products (0.3%)	Male	5,000	50%		Likely operating within Jacobabad grain markets and sorting grain for shipping to industrial flour and rice mills.	May be best learned through apprenticeship.
8	"Primary school teachers" and "Special needs teachers"	Primary school teachers (1.9%); Other education n.e.c. (0.3%)	Male	19,667	40%		Serving local schools. Beacon House provides teachers to Sindh Education Foundation; CGN early childhood enterprise training and kits	Training provided by Beacon House, CGN, or government providers.
9	"Electrical mechanics and fitters"	Repair of electrical equipment (0.2%)	Male	5,000	35%	Mobile repair, motor winding, generator mechanic	Serving local clientele	Electrical courses are listed in Jacobabad's male vocational training facilities.

GHOTKI DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

According to the 2017 Census, the total population of Ghotki District is 1.6 million. 1.2 million live in rural areas, while only 0.4 million are in urban settlements. Literacy and education-related statistics are summarized in the following table:

Table 25: Ghotki literacy and education statistics[1]

	Ghotki	URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	**Primary school completion rate (% of population)**	75	42	59	54	12	34	58	17	39
2	**Literacy-population 10 years and older**	83	50	68	63	15	40	67	22	45
3	**Adult literacy-population 15 years and older**	83	46	65	60	11	37	64	18	42
	Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013									

Agriculture is the backbone of Ghotki's economy and the source of livelihood for the majority. However, unlike many other rural districts it also has an important industrial presence. Ghotki hosts the Oil and Gas Development Corporation (OGDC), Engro Chemicals, and Fauji Fertilizers, along with sugar, rice, and flour mills, ice factories, oil producing factories, stabilizer and UPS factories, handicrafts and other minor forms of production. According to the 2005-06 census of manufacturing industries 2005-06 Ghotki offers employment in chemicals and chemical products and in food products and beverages.

Table 26: Manufacturing industry employment in Ghotki as of 2005-2006 (Source: PBS Census of Manufacturing Industries)[2]

Ghotki Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	41	2,120
Manufacture of textiles, chemicals & chemicals products	18	1,623
Food products & beverages	23	497

According to the PSLM 2014-15 dataset, 21.2% of Ghotki females aged 10 and over are employed, compared to 68.6% of males. Ghotki has the third highest female employment rate among the AGES implementation districts, following Muzaffargarh and Jacobabad. As with the preceding analysis of Jacobabad, this higher rate allows for a more robust sample and greater confidence regarding female employment trends in specific industries and occupations. In the PSLM dataset, multiple Ghotki female respondents mentioned 15 occupations in 14 different industries. An additional 13 occupations were mentioned by a single respondent, indicating a prevalence of just 0.2% of employed females.

Following the methodology described in Chapter I, this study recommends consideration of 10 occupations. Interestingly, despite the presence of fertilizer companies in Ghotki, and Engro's known

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial."
[2] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

efforts to promote female employment in livestock and dairy value chains,[1] the chemicals and fertilizer production industry itself does not appear to have led to significant industrial female employment. instead, the occupation recommendations revealed through the PSLM analysis include occupations in the textiles and wearing apparel industries, waiters and other restaurant staff, livestock and crop producers, and primary school teachers. One PSLM respondent was also a security officer and security guards are mentioned in the NSIS skills gap analysis—while this occupation does not typically promise significant female employment opportunities in rural areas, its relevance for Ghotki may be worth investigating.

The table below also discusses potential employers and training options in these occupations.

[1] "ENGRO Company Case Study" (ENGRO, n.d.), https://www.deginvest.de/DEG-Documents-in-English/About-DEG/What-is-our-impact/Case_Study_Engro_Corperation-Ltd_Web.pdf.

Table 27: Priority trades for female employment in Jacobabad (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Occupations mentioned by female respondents	Industries mentioned by female respondents in these occupations	Male or female predominant	Average female monthly earnings	AGES employment potential score	Trades mentioned in NSIS Skills Gap analysis for Sindh	Potential Employers	Potential Training
1	"Garment and related pattern-makers and cutters"	Manufacture of other textiles n.e.c. (0.2%)	Female	8,000	80%	Stitching machine operator; dying and bleaching, Weaving operator; pattern making, textile designing, overlook stitcher, textile spinning (but knitting and garments making appear as skills surpluses)	Textiles employers in Ghotki include Chand Cotton Ginner and Sindh Cotton Company Daharki.	Vocational training institutions offer dressmaking, embroidery, and machine embroidery, but these may not be equivalent to the factory skills required.
2	"Manufacturing Laborers not elsewhere classified"	Preparation and spinning of textile fibers (0.2%)	Female	6,000	60%			
3	"Tailors, dressmakers, furriers and hatters"	Manufacture of wearing apparel except furn (4.1%); Manufacture of knitted and crocheted fabrics (0.2%); Other personal services (0.2%); Construction of buildings (0.2%; misclassification?)	Male	2,700	60%			
4	"Sewing, embroidery and related workers"	Manufacture of knitted and crocheted fabrics (5.3%); Manufacture of wearing apparel except fur (2.3%)	Female	2,491	60%		Indus Heritage Trust is a value chain actor and willing to work with AGES in Ghotki.	Training available through Indus Heritage Trust collaboration
5	"Police officers" (or other security guard or female body searchers)	Passenger air transport (0.2%)	Male	25,000	60%	Security guard	Relevance of this occupation for women in Ghotki requires further investigation.	If relevant, police or security guard agencies provide their own training.
6	"Retail and wholesale trade managers"	Retail sale of food in specialized stores (0.2%)	Male	13,650	50%		Retail sales positions may be open on a smaller scale, such as at the Lady's Bazar.	Demand-driven training required
7	"Waiters"	Restaurants and mobile food service activities (0.6%)	Male	5,667	50%	Waiter; Kitchen helper, chef, cook	There are a number of hotels and restaurants along the N5 Highway in Ghotki.	Demand-driven training required

Rank	Occupations mentioned by female respondents	Industries mentioned by female respondents in these occupations	Male or female predominant	Average female monthly earnings	AGES employment potential score	Trades mentioned in NSIS Skills Gap analysis for Sindh	Potential Employers	Potential Training
8	"Livestock and dairy producers"	Raising of cattle and buffaloes (0.4%)	Male	7,822[1]	50%		Smaller scale butchers and markets, as well as the livestock complex nearby in Sadiqabad.	Training may be available from agricultural extension agents.[2]
9	"Mixed crop growers"; "Mixed crop and animal producers"	Mixed farming (68.0%)	Male	7,680[3]	50%		Value chain actors may include flour mills such as Jam Flour Mills	
10	"Primary school teachers"	Pre-primary and primary education (0.6%)	Male	10,000	40%		Beacon House provides teachers to Sindh Education Foundation; CGN early childhood enterprise training and kits	Beacon house or CGN.

[1] Estimated at 64% of the male average wage.
[2] http://www.sindhagri.gov.pk/AgricultureExtension.html
[3] Estimated at 64% of the male average wage.

Punjab Province: Muzaffargarh

Punjab is the most populous province of Pakistan with 110 million residents[1] – 53% of the total population of Pakistan. Punjab is also one of South Asia's most urbanized regions with approximately 40% of people living in urban areas.[2] Literacy and education related statistics of the province are provided in the following table:

In the Punjab Province, most employed females work in the agriculture, forestry, hunting, and fishing sector; however over the period of analysis 2013-15 its share of female employment has slightly decreased. Manufacturing employs the next highest percentage of women in Punjab after agriculture, and this employment has recently decreased in rural areas and increased in Urban areas. Employment of women in the education sector has increased over the period of analysis.

Table 28: Punjab female employment by industry, in 2013-14 and 2014-15 (Source: PBS Labor Force Survey statistics)[3]

Punjab - Distribution of Employed Females (10 years and above %)						
Major Industry Division	**2013-14**			**2014-15**		
	Total	**Rural**	**Urban**	**Total**	**Rural**	**Urban**
	28.66	24.55	4.11	28.36	24.33	4.03
Agriculture, forestry, hunting, and fishing	21.02	20.51	0.51	20.71	20.27	0.44
Manufacturing	3.83	2.45	1.38	3.9	2.37	1.53
Construction	0.06	0.04	0.02	0.05	0.04	0.01
Wholesale & retail trade	0.49	0.29	0.2	0.46	0.24	0.22
Transport/storage & communication	0.03	0.01	0.02	0.1	-	-
Human Health and Social work activities	0.39	0.2	0.19	0.3	0.16	0.14
Education	1.52	0.58	0.94	1.72	0.73	0.99
Others*	1.32	0.47	0.85	1.12	0.52	0.7
Source: Labor Force Survey 2013-14 & Labor Force Survey 2014-15; Pakistan Bureau of Statistics						

Punjab has a well-developed training system, with 44 Colleges of Technologies (GCT) and 1,310 vocational institutes. Out of the 44 GCTs, 31 are for males and 6 are for females, while 7 of these offer co-education. From the 1,310 vocational institutes 332 are for males, 200 for females and 778 offer co-education classes. The total capacity of these institutes is 139,210, with a current male enrolment of 70,495 and female enrolment of 30,380.[4]

[1] "Population Census 2017."
[2] "Punjab Growth Strategy 2018: Accelerating Economic Growth and Improving Social Outcomes" (Government of Punjab, 2015), https://www.theigc.org/wp-content/uploads/2015/04/Punjab-Growth-Strategy-2018-Full-report.pdf.
[3] PBS, "Labour Force Publications."
[4] NAVTTC, "National Skills Information System."

MUZAFFARGARH DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

According to the 2017 Census, the total population of Muzaffargarh District is 4.3 million, with a rural population of 3.6 million and an urban population of 0.7. Muzaffargarh is a large district situated between the Chenab River on its east and the Indus River on its west, and was especially hard hit by the 2010 Pakistan floods. Education statistics of the district are provided in the following table:

Table 29: Muzaffargarh literacy and education statistics[1]

	Muzaffargarh	URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	**Primary school completion rate (% of population)**	70	57	63	44	22	33	48	28	38
2	**Literacy-population 10 years and older**	81	63	72	58	31	45	62	36	49
3	**Adult literacy-population 15 years and older**	80	58	69	54	24	39	58	30	44
Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013										

Muzaffargarh is primarily a zone of agricultural production, however it also has some industrial base, including a large presence of textile manufacturing. According to the 2005-2006 census of manufacturing industries, Muzaffargarh's major industrial sectors of employment were the manufacture of textiles, distantly followed by food products and beverages.

Table 30: Manufacturing industry employment in Muzaffargarh districts as of 2005-2006 (Source: PBS Census of Manufacturing Industries)[2]

Muzaffargarh Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	61	20,402
Manufacture of textiles	17	17,367
Food products & beverages	39	2,111
Paper & paper products, coke & petroleum, chemicals & chemicals prodcuts, rubber & plastic products	5	924

Muzaffargarh has a female employment rate of 27.2%, compared to 64.4% of males aged 10 and over—the highest female employment rate of all the AGES implementation districts. The large PSLM sample of employed females allows for robust analysis of female employment trends in different occupations and industries, with respondents listing 50 different occupations in 39 industries. A total of 28 occupations were mentioned by more than one respondent.

Of these, this analysis recommends a focus on 11 top priority occupations. These include cooks, bakers, and pastry chefs; tailors, sewing and embroidery workers, midwifery associate professionals,

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial."
[2] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

shopkeepers and sales assistants, agricultural and livestock producers, handicraft workers, primary school teachers, and domestic cleaners and helpers.

The table below also discusses potential employers and training options in these occupations.

Table 31: Muzaffargarh top occupations for potential to expand female employment (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Occupation named by respondents	Industries named by female respondents with this occupation	Majority Male or Female occupation	AGES Employment Potential Score	Avg. female monthly earnings in Muzaff-argarh	Trade Skills Gaps specified in NSIS for Punjab	Potential Employers	Training available?
1	Cooks	Restaurants and mobile food service activities (0.2%)	Male	70%	6,219.64 [1]	Cook; Bakery & Pastry	Small & medium employers: hotels, lodges, and roadside restaurants [no franchises]	Demand-driven training required
2	Tailors, dressmakers, furriers and hatters	Manufacture of wearing apparel except fur (4.3%); Other personal services (0.5%); Specialized design activities (0.1%)	Female	70%	2,249.12	Garments Designer; Stitcher; Thread Cutter, Silk / Embroidery / Weaving Machine Operator	In the Textile sector, NSIS provides a list of 162 employers in Muzaffargarh, http://skillingpakistan.org/employer/province/8/district/23?page=1	Only domestic tailoring and machine embroidery is available in TTCs/VTIs; training in industrial textile machinery is lacking
3	Sewing, embroidery and related workers	Manufacture of knitted apparel (0.9%); Manufacture of wearing apparel except fur (0.6%); Manufacture of other textiles (0.5%); other personal service activities (2.7%)	Female	70%	2,075.44			
4	Midwifery (associate) professionals	Hospital activities (0.1%): Other human health activities (0.3%)	Female	50%	13,000.00	Nursing, Medical technician	Community midwife clinics, hospitals	School of Nursing and Midwifery Muzafargarh, at the District Hospital
5	Shop keepers	Retail sale in non-specialized stores (0.2%)	Male	50%	9,500.00	Sales & Marketing	Self-employment: local clientele	No – would need course in small business management

[1] No females reported; used 64% of male average, corresponding to national gender pay gap.

Rank	Occupation named by respondents	Industries named by female respondents with this occupation	Majority Male or Female occupation	AGES Employment Potential Score	Avg. female monthly earnings in Muzaff-argarh	Trade Skills Gaps specified in NSIS for Punjab	Potential Employers	Training available?
6	Mixed crop and animal producers	Mixed farming (12.5%); Growing of cereals, leguminous crops, and oil seeds (4.1%)	Male	50%	4,096.00		Self-employment: 27 possible value chain clients can be found here, mostly rice, flour, and sugar mills: http://skillingpakistan.org/employer/province/8/district/23?sector_id=928	Support available through the Agriculture Department of Muzaffargarh extension offices
7	Livestock and dairy producers and farmers	Raising of cattle and buffaloes (21.8%); Raising of sheep and goats (0.4%)	Female	50%	3,917.50	Livestock	Milk or meat processing plants not listed on NSIS—to investigate more locally.	
8	Handicraft workers n.e.c.	Manufacture of carpets and rugs (0.2%); Other manufacturing (0.4%)	Female	45%	4,800.00	Weaving machine operator; Kashigari	Indus Heritage Trust is a value chain client and willing to work with AGES. Also see AHAN or others.	Training available through Indus Heritage Trust collaboration
9	Primary school teachers	Pre-primary and primary education	Female	40%	10,813.33		Beacon House provides teachers to Punjab Education Foundation; CGN early childhood enterprise training and kits	Training provided by Beacon House, CGN, or government providers.
10	Shop sales assistants and sales workers	Retail sale of food in specialized stores (0.1%); Washing and (dry-) cleaning of textile and fur products (0.1%)	Male	40%	4,000.00	Sales & Marketing	Potentially retailers such as Bata and Sabir Super Store; shopping centers such as Noor-e-Hira, Chen One Tower	Demand-driven training required.
11	Domestic cleaners and helpers	Households as employers of domestic personnel (0.1%): Other personal service	Male/Equal	40%	4,000.00	Cleaner; House Keeper	I-SAPS and TAF: Certify women already employed in domestic service;	Could be provided in a model based on TAF Foundation VTI

Rank	Occupation named by respondents	Industries named by female respondents with this occupation	Majority Male or Female occupation	AGES Employment Potential Score	Avg. female monthly earnings in Muzaff-argarh	Trade Skills Gaps specified in NSIS for Punjab	Potential Employers	Training available?
		activities (0.1%)					increase income	

Khyber Pakhtunkhwa Province: Peshawar, Buner, and Swat

Khyber Pakhtunkwa province, now merged with the Federally-Administered Tribal Areas (FATA), is located in northwest of the country and shares its border with Afghanistan. It comprises 13% of the National Economy and 14.7 % of the population of Pakistan. Khyber Pakhtunkwa is the fastest growing economy in Pakistan, with an average growth rate of 5.1%—better than the national average of 4.5% for the period of 2013-14 to 2016-17.[1] Key emerging sectors for Khyber Pakhtunkwa identified in the Emerging Pakistan initiative include mines and minerals, marble and gems, energy and power, oil and gas, hydro power, tourism and hospitality, as well as forest and fisheries,[2] wood fiber pulping,[3] ICT, education, leather, and handicrafts. Additionally, almost 20% of household income in Khyber Pakhtunkwa comes from remittances, with a limited local base for production.[4]

Agriculture employs the highest percentage of women in Khyber Pakhtunkwa, with manufacturing following it at a distant second and increasing from 2013-14 to 2014-15. Employment of women in education sector and in wholesale and retail sale has also increased slightly, albeit from a very low starting point. The following table provides statistics on female employment in KPK.

Table 32: Khyber Pakhtunkwa female employment by industry (Source: PBS Labor Force Surveys)[5]

KPK - Distribution of Employed Females (10 years and above %)						
Major Industry Division	**2013-14**			**2014-15**		
	Total	Rural	Urban	Total	Rural	Urban
	17.99	16.49	1.5	17.88	16.21	1.67
Agriculture, forestry, hunting, and fishing	14	13.78	0.22	13.06	12.92	0.14
Manufacturing	1.61	1.36	0.25	1.91	1.46	0.45
Construction	0.07	0.06	0.1	0.06	0.06	
Wholesale & retail trade	0.02	0.01	0.01	0.19	0.13	0.06
Transport/storage & communication	0.04	0.04	-	-	-	-
Human Health and Social work activities	0.51	0.31	0.2	0.46	0.28	0.18
Education	1.31	0.73	0.58	1.71	1.07	0.64
Others*	0.43	0.2	0.14	0.49	0.29	0.2
Source: Labor Force Survey 2013-14 & Labor Force Survey 2014-15; Pakistan Bureau of Statistics						

Khyber Pakhtunkwa province has 22 GCTs, twenty of these for male students, one for female, and one offering co-education. The number of VTIs in the province is many times higher than the GCTs. There are 630 VTIs in the province, 105 are for male students and 116 for female students, while 409 offer co-education classes. The estimated capacity of all these institutions is 74,817 places.

PESHAWAR DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

[1] Hafiz Pasha, *Growth and Inequality in Pakistan* (FES, 2018).
[2] Nihal Pitigala et al., "USAID/Pakistan Non-Agricultural Value Chain Assessment: Asia and the Middle East Economic Growth Best Practices Project" (USAID, 2013).
[3] "Situation Analysis and Pre-Feasibility Study of Pulping Unit in Swat" (USAID FIRMS Project, 2012).
[4] Pasha, *Growth and Inequality in Pakistan*.
[5] PBS, "Labour Force Publications."

Peshawar is the most populous district of Khyber Pakhtunkhwa. According to the 2017 Census, the total population of the district is 4.3 million, with 2.3 million in rural locales and the remaining 1.97 million as urban residents. The education statistics of Peshawar district are provided in the table below:

Table 33: Peshawar literacy and education statistics[1]

	Peshawar	URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	Primary school completion rate (% of population)	71	46	59	59	24	42	65	36	51
2	Literacy rate-population 10 years and older	80	53	67	66	32	50	74	43	59
3	Adult literacy rate-population 15 years and older	78	47	63	66	27	46	73	38	56
Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013										

The following table provides a summary of manufacturing industries in Peshawar, according to the most recent complete PBS census of manufacturing industries (2005-06). At that time, the greatest sources of manufacturing employment in Peshawar were food products and beverages, chemicals and chemical products, electrical machinery and apparatus, and non-metallic mineral products.

Table 34: Manufacturing industry employment in Peshawar as of 2005-2006 (Source: PBS Census of Manufacturing Industries)[2]

Peshawar Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	245	11,264
Furniture	29	2,215
Food products & beverages	47	2,057
Chemicals & chemicals products	32	1,813
Electrical machinery & apparatus n.e.c., other transport equipment	4	1,547
Other non-metallic mineral products	69	1,406
Rubber & plastic product	13	467
Wearing apparel, leather products, wood & wood products	8	401
Manufacture of textiles	5	381
Machinery & equipment n.e.c.	13	368
Publishing, printing & reproduction, coke & petroleum	5	205
Paper & paper products	9	203
Fabricated metal products	4	108
Basic metals	5	93

Just 3.4% of females aged 10 and over are employed in Peshawar, compared to 55.2% of males, again leading to a small sample of employed females. Employed female PSLM respondents mentioned 16 different occupations, in 8 predominant industries. Following the methodology

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial."
[2] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

described in Chapter 1, only 7 of these received AGES Employment Potential scores of 40% or higher and 11 received scores of 30% or higher while requiring only short- to medium-term training.

Combining two related occupations together, 10 are retained in the list below to increase the choices available for the AGES team to consider, and to mitigate the effects of the limited PSLM sample. However, the most promising occupations include sewing and embroidery—where PSLM respondents reported higher earnings than is usual in Pakistan's textile industry—livestock and dairy production, and several hospital-related occupations that require a certain level of formal education: laboratory technicians, hospital data entry clerks, midwifery associate professionals, and nursing associate professionals. Other options include tailors in the garment industry, domestic workers, primary school teachers, retail/shop-keepers, and manufacturing laborers working on the manufacture of clay building materials.

The table below also discusses potential employers and training options in these occupations.

Table 35: Priority trades for female employment in Peshawar (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Industry to Right; Occupation below	Industries mentioned by female respondents	Male or female predom-inant	Average female monthly earnings	AGES Employment Potential Score	Trades mentioned in NSIS Skills gap data for KP	Potential Employers	Potential Training
1	"Sewing, embroidery and related workers"	Manufacture of other textiles n.e.c. (2.7%)	Male	15,000	65%	Textile weaving, Embroidery, textile spinning	NSIS lists some 30 Peshawar employers in the textiles sector.	Limited training courses exist in tailoring and dressmaking, however employer-driven training may be preferred.
2	"Livestock and dairy producers"	Raising of cattle and buffaloes (10.8%)	Female	8,320[1]	60%		NSIS lists numerous Peshawar employers in the food processing sector; a few work with meat and dairy.	Training may be available via agricultural extension services.
3	"Medical and pathology laboratory technicians"	Hospital activities (2.7%)	Female	16,000	50%	Lab Assistant	Hospitals and private laboratories	There are numerous medical training facilities, including the Khyber Girls Medical College.
4	"Data entry clerks"	Hospital activities (2.7%)	Equal	18,000	45%	Computerized accounting	Hospitals	Numerous Peshawar computer training centers are listed in NSIS data.
5	"Midwifery associate professionals"; "Nursing associate professionals"	Hospital activities (2.7%); Other human health activities (2.7%)	Female	10,000	45%	Health technician, medical technician	Hospitals and clinics	There are numerous medical training facilities, including the Khyber Girls Medical College.
6	"Tailors, dressmakers, furriers and hatters"	Manufacture of wearing apparel, except fur (10.8%)	Male	2,875	45%	Textile weaving, Embroidery, textile spinning	NSIS lists some 30 Peshawar employers in the textiles sector.	Limited training courses exist in tailoring and dressmaking, however employer-driven

[1] Estimated as 64% of average male earnings.

								training may be preferred.
7	"Domestic cleaners and helpers"	Activities of households as employers of domestic personnel (2.7%); Other personal service activities n.e.c. (2.7%)	Equal	4,500	40%	Housekeeper	Private households; improving earnings in this field would require a model such as that used by TAF.	Potential for TAF-modeled training.
8	"Primary school teachers"	Pre-primary and primary education (24.3%)	Male	7,844	30%		Beacon House provides teachers to Punjab Education Foundation; CGN early childhood enterprise training and kits	Training provided by Beacon House or CGN
9	"Shop keepers"	Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles in specialized shops (5.4%)	Male	7,500	30%		Retail store chains, or potential for self-employment	Demand-driven training required
10	"Manufacturing Laborers n.e.c."	Manufacture of clay building materials (2.7%)	Male	5,200	30%		Clay brick making enterprises, such as in Mattani	Demand-driven training or apprenticeship required

BUNER DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

According to the 2017 Census, the total population of Buner District is about 0.9 million all of whom reside in rural areas, as there are no urban settlements in the district. Education-related statistics of the district are provided in the table below:

Table 36: Buner literacy and education statistics[1]

	Buner	URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	**Primary school completion rate (% of population)**	0	0	0	50	17	33	50	17	33
2	**Literacy-population 10 years and older**	0	0	0	65	20	41	65	20	41
3	**Adult literacy-population 15 years and older**	0	0	0	58	18	36	58	18	36
Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013										

Buner has almost no presence of manufacturing industries, according to the most recent complete PBS census of manufacturing industries (2005-06). At that time, the only manufacturing present was with non-metallic mineral products, employing just 551 people.

Table 37: Manufacturing industry employment in Buner as of 2005-2006 (Source: PBS Census of Manufacturing Industries)[2]

Buner Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	35	551
Other non-metallic mineral products	35	551

According to PSLM 2014-2015 data, just 0.9% of females aged 10 and over in Buner are employed, compared to 44.6% of males. Female employment options are extremely limited, with the PSLM sample of employed females reported participation in only 8 occupations, across 6 industries. Combining livestock-related occupations, just 5 of these occupations received above 30% in the AGES Employment Potential Score. Insufficient information is available on potential employers or value chain actors, and training options are minimal, thus they are not included in the below table. Overall, with very limited employment opportunities in Buner, AGES efforts in this district should likely be confined to agricultural and livestock value chains, or to retail-focused self-employment.

Table 38: Priority trades for female employment in Buner (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Industry / Occupation	Industries mentioned by female respondents	Male or female predominant	Average female earnings	AGES Employment Potential Score
1	"Mixed crop growers"	Mixed farming (9.5%)	Male	8,000	60%
2	"Livestock and dairy producers" / Subsistence livestock farmers	Raising of cattle and buffaloes (19.0%); Raising of sheep and goats (9.5%)	Female / Male	5,785	50%

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial."
[2] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

3	"Primary school teachers"	Pre-primary and primary education (19.0%)	Male	14,300	40%
4	"Retail and wholesale trade managers"	Manufacture of structural metal products (4.8%); Retail sale of beverages in specialized stores (4.8%)	Male	6,000	30%
5	"Shop keepers"	Retail sale via stalls and markets of food, beverages, and tobacco products (4.8%)	Male	4,000	30%

SWAT DISTRICT PROFILE AND AGES FEMALE EMPLOYMENT PRIORITIES

According to the 2017 Census, the total population of Swat District Swat is 2.3 million, including 1.6 million in rural areas, and 0.7 million classified as urban. Notably, Swat is the home of Noble Laurate Malala Yousafzai, who has promoted the cause of female right to education. The education-related statistics are provided in the following table, showing the great disparity between males and females in primary school completion and literacy rates.

Table 39: Swat literacy and education statistics[1]

	Swat	URBAN			RURAL			TOTAL		
		M	F	T	M	F	T	M	F	T
1	**Primary school completion rate (% of population)**	61	36	49	58	23	41	59	25	42
2	**Literacy-population 10 years and older**	76	43	60	70	30	50	71	31	51
3	**Adult literacy-population 15 years and older**	73	38	56	70	26	47	71	27	49
Source: Pakistan Social and Living Standards Measurement Survey (PSLM 2012-13 Provincial / District Published in April 2013										

The following table provides a summary of manufacturing industries in Swat, according to the most recent complete PBS census of manufacturing industries (2005-06). At that time, the greatest sources of manufacturing employment in Swat were textiles and chemicals and chemical products including plastics; however, these industries were of limited size, with a combined employment of just 1,032 people.

Table 40: Manufacturing industry employment in Swat as of 2005-2006 (Source: PBS Census of Manufacturing Industries)[2]

Swat Industries by Major Division (PSIC-2007)	No. of reporting establishments	Average daily # persons engaged
TOTAL	60	1,363
Manufacture of textiles	32	714
Chemicals & chemicals products, rubber & plastic product	10	318
Leather products, paper & paper products, coke & petroleum	4	146
Other non-metallic mineral products	10	144
Food products & beverages	4	41

[1] "Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial."
[2] "Census of Manufacturing Industries 2005-2006: District-Wise Report."

The PSLM 2014-2015 dataset shows that just 1.2% of females over aged 10 in Swat are employed, compared to 49.8% of males. The small PSLM sample of employed women mentioned just 8 occupations and 8 industries among them. Similar to Buner, agriculture and livestock take the top two spots on a ranked list of opportunities for expanded and improved female employment. However, Swat may also have more openings for community health professionals and for tailors in the garments industry. Interestingly, there is also some presence of female employment in construction, specifically in the building completion and finishing sub-industry. Due to the unavailability of employer and training information in the National Skills Information System, the below table of recommendations does not include those details.

Table 41: Priority trades for female employment in Swat (Source: PSLM 2014-2015 custom analysis and NSIS)

Rank	Industry / Occupation	Industries mentioned by respondents	Male or Female predominant	Average earnings	AGES Employment Potential Score	Trades mentioned in NSIS Skills gap data for KP
1	"Livestock and dairy producers"	Raising of cattle and buffaloes (13.3%)	Male	8,000	60%	
2	"Mixed crop growers"	Mixed farming (20%)	Male	5,120[1]	60%	
3	"Midwifery professionals"	Hospital activities (6.7%)	Male	8,000	45%	Health technician, medical technician
4	"Tailors, dressmakers, furriers and hatters"	Manufacture of wearing apparel, except fur (13.3%)	Male	1,900	45%	Textile weaving, Embroidery, textile spinning
5	Education: "Secondary education teachers" (assume also primary)	Education (assume both secondary and primary education have some female employment) (26.7%)	Male	25,800 / 13,180[2]	30%	
6	"Shop keepers"	Other retail sale in non-specialized stores (6.7%)	Male	13,814[3]	30%	
7	"Retail and wholesale trade managers"	Retail sale in non-specialized stores with food, beverages or tobacco predominating (6.7%)	Male	8,000	30%	
8	[Construction trades] "Spray painters and varnishers"	Building completion and finishing (6.7%)	Male	5,000	30%	

[1] Estimated as 64% of average male earnings.
[2] PSLM registered a respondent in secondary education; however, there are likely also openings in primary education. This cell shows the respondent's reported income as a secondary education teacher, and the national average monthly earnings for rural primary school teachers registered in PSLM.
[3] Estimated as 64% of average male earnings.

Summary of District Recommendations

This district-by-district analysis of female employment opportunities has largely paralleled the overall rural and urban analysis presented in the preceding chapter, with some new observations. **Certain occupations were given top priority in nearly every AGES district**, particularly: primary school and other teachers, unskilled and semi-skilled workers in the textiles and wearing apparel industries, and livestock and dairy producers. Other occupations with high relevance for about half of the districts included mixed agricultural crop production, shop keepers and retail/wholesale trade managers, midwifery and other health associate professionals, cooks and waiters, and other types of manufacturing laborers in the spinning of textile fibers, carpets and rugs, and clay building materials.

Occupations confined to just two recommended district lists include: garment and pattern-makers and cutters (a more skilled occupation in the apparel industry and in demand in Karachi and Ghotki); protective services workers including female security guards (in Karachi and Ghotki); various types of retail sales workers including managers and assistants (Karachi and Muzaffargarh); handicraft workers in wood and textiles (in Karachi and Muzaffargarh in addition to other locations with embroidery workers); and different types of workers in the pharmaceuticals industry (Lasbela and Karachi).

Finally, there are twelve occupations that were only mentioned in a single district each: cabinet makers and related workers; car, taxi, and van drivers; chemical products plant and machine operators; hand packers; pre-press technicians in the printing and packaging industries; data entry clerks; electrical mechanics and fitters; fishery and aquaculture laborers; food and beverage tasters and graders; medical and pathology laboratory technicians; mobile repairing; and motor vehicle mechanics and repair.

The following table lists the recommended occupations in order from most to least frequent.

Table 42: Summary of district occupation recommendations

Occupations recommended for expanded female employment	Baloch.	Sindh			Punjab	Kkyber Pakhtunkhwa			Total # of Districts
	Lasbela	Karachi	Jacob -abad	Ghotki	Muzaff-argarh	Pesh-awar	Buner	Swat	
Primary school teachers (also pre-primary, secondary education, and special needs teachers)	X	X		X	X	X	X	X	7
Sewing, embroidery and related workers	X	X	X	X	X	X			6
Tailors, dressmakers, furriers and hatters		X	X	X	X	X		X	6
Livestock and dairy producers			X	X	X	X	X	X	6
Domestic cleaners and helpers; Housekeeping	X	X			X	X			4
Mixed crop growers			X	X			X	X	4
Retail and wholesale trade managers	X			X			X	X	4
Shop keepers					X	X	X	X	4
Midwifery (associate) professionals,	X				X	X		X	4

nursing associate professionals, and health associate professionals n.e.c.									
Cooks and Waiters		X		X	X				3
Manufacturing Laborers not elsewhere classified (carpets and rugs, clay building materials, spinning of textile fibers)			X	X		X			3
Garment and related pattern-makers and cutters		X		X					2
Protective services workers (police, security guard, body searchers)		X		X					2
Sales assistants, Sales and marketing managers, and Sales workers not elsewhere classified		X			X				2
Handicraft workers in wood, basketry and related materials; handicraft workers in textiles; also see embroidery		X		X	X				2
Manufacture of pharmaceuticals, medicinal chemical and botanical products [Industry]	X	X							2
Cabinet-makers and related workers		X							1
Car, taxi and van drivers		X							1
Chemical products plant and machine operators		X							1
Hand packers		X							1
Pre-press technicians (printing and packaging industries)		X							1
Data entry clerks						X			1
Electrical mechanics and fitters			X						1
Fishery and aquaculture Laborers	X								1
Food and beverage tasters and graders			X						1
Medical and pathology laboratory technicians						X			1
Mobile repairing	X								1
Motor vehicle mechanics and repairers			X						1

While the primary AGES strategy for female employment should be to seek larger employers and value chain clients who can help guarantee a steady income for large groups of project participants, this will not always be possible. As the list above suggests, in certain contexts it will be important to support self-employment and business development efforts for young women. Annex II to this report provides further information on the types of business support services and small business financing currently available in the AGES districts.

This chapter has applied a systematic labor market analysis methodology to each of the AGES implementation districts. Beginning with the PSLM 2014-15 microdata to determine which occupations and industries already have female workers, in each district, the methodology involved

several steps to score and rank these possibilities according to the likelihood of industry growth, known skills gaps, and average earnings. Finally, the analysis established whether the top-ranked occupations are already male or female-dominated, identified likely large-scale employers or value chain actors able to purchase products in bulk, and discussed potential training options. The following chapter concludes this labor market analysis by discussing the top eight industry-occupation clusters with greatest promise for expanding female employment, as well as other recommendations for the AGES project in promoting work for thriving young women in Pakistan.

VI. TOWARDS WORK FOR THRIVING YOUNG WOMEN

Pakistan's young women have a great deal they could contribute to Pakistan's economy—and recent research, such as the 2017 Pakistan National Human Development Report featuring extensive consultations with youth around the country,[1] shows that they are ready to play a more active role if the right enabling environment is put into place. This report has reviewed the social and economic context currently facing them and proposed concrete context-relevant strategies for opening the door to increased economic engagement for young women.

Pakistani society is still divided regarding **women's place in the workforce**. Only 22.02% of Pakistani women are working or searching for work, according to Pakistan's most recent Labor Force Survey—28.79% of women in rural areas and 10.03% of women in urban areas, compared to 68.99% of rural men and 65.74% of urban men.[2] Chapter I discussed the reasons why women's labor force participation is still well below that of other countries with similar income levels, looking at challenges ranging from women's limited role in decision-making, to early marriage and heavy home responsibilities, to sexual harassment, wage discrimination, and others. Central to this discussion are family and community concerns with honor and respectability, showing that the promotion of female employment can only come about alongside a wider shift in social norms that recognizes, as in one father's words, that "there isn't just one doorway for girls"—leading to the home—but that the doorway to education and to work "is also right for them".[3]

> "THERE ISN'T JUST ONE DOORWAY FOR GIRLS"—LEADING TO THE HOME. THE DOORWAY TO EDUCATION AND TO WORK "IS ALSO RIGHT FOR THEM."
>
> -FATHER OF A PTS TRAINEE

Chapter II focused on the **need for skills development** to enable young women to gain access to employment. Few women currently receive technical or vocational training in Pakistan, compared to men, and that training is in a very limited range of trades. Yet even the limited numbers of trained women are not in demand by employers, who still largely prefer to hire men. In this context, it is clear that young women need not only more market-relevant hard skills training, but also specific training in soft skills—also known as life skills—to build young women's resilience and determination, and equip them to participate more fully in the economy. The chapter concluded with the AGES 10 Core Life Skills for Thriving Girls, a research-based selection of priority skills that includes: intrapersonal skills such as positive self-concept, resilience and perseverance, and self-care; higher-order thinking skills including goal-setting and planning, decision-making, and financial literacy; and finally the social or interpersonal skills of communicating across age and gender,

[1] "Pakistan National Human Development Report: Unleashing the Potential of a Young Pakistan" (UNDP, 2018), http://www.pk.undp.org/content/pakistan/en/home/library/human-development-reports/PKNHDR.html.
[2] PBS, "Labour Force Survey 2014-2015."
[3] "Pathways to Success: Vocational Trainee Stories from Karachi, Daharki, and Peshawar."

conflict management and resolution, promoting one's rights and the rights of others, and leadership to bring a positive influence into others' lives as well.

Chapter III then turned to the demand side of the equation, **Pakistan's labor market**. Examining Pakistan's export growth trends and emerging industries—including agriculture, fresh fruits and dry fruits, vegetables, seafood, livestock, leather, surgical goods, sports goods, textiles, the automotive industry, pharmaceuticals, cutlery, cement, handicrafts, marble and gems, financial services, IT and telecoms, media and entertainment, tourism, and power and energy—shows that there is ample room for women to play increased work roles in growing sectors of Pakistan's economy. An analysis of key informant interviews also highlighted certain opportunities that offer new possibilities for young women, as well as young men, in rural and urban areas.

The AGES project theorizes that **the most strategic and effective way to increase women's economic participation** is to begin with the occupations and industries where there is already some presence of female workers—albeit often in lower numbers than that of men. By increasing women's employment at decent wages in these sectors, it will be possible to explore other domains of female employment with those same employers and with other actors in the same industry, gradually helping to open greater space for women's role in the economy.

Chapter IV initiated the effort to identify the most promising industry-occupation clusters for expanding female employment by examining the available information on female employment trends at a national level—in both rural and urban areas—by analyzing the 2014-15 Pakistan Social and Living Standards Measurement Survey (PSLM) sample of 78,635 households nationally. Relating the occupations where women are present to industry growth data and average earnings, the chapter found **limited opportunities for rural women**, focusing on 10 top possibilities: supporting improved livestock production and connections to the dairy and meat-processing value chains, the education and health sectors, specific locally-relevant forms of manufacturing, textile manufacturing—despite the need to address current low average female wages—handicrafts, retail including shop keeping, and finally three forms of wage labor where women are already present—farm wage labor, construction, and domestic cleaners, helpers, and housekeepers. Across all of these occupations, low wages are a concern that must be addressed at the same time as developing demand-driving training arrangements with employers and value chain actors.

The chapter also found that **urban occupations currently open to women are bifurcated by education level**. The analysis highlighted the possibilities presented by 30 urban occupations that require lower levels of formal education, and 14 occupations requiring moderate to high levels of formal education. The ranking methodology employed helped to sort these opportunities by growth potential and earnings range. Within the textile industry, for example, the highest-earning occupation currently filled by women at some scale appears to be that of garment pattern-makers and cutters. Personal care and beauty services are also clearly of relevance in the urban environment, and appear to offer more promising earnings potential than other trades. Retail sales stands out near the top of the list for urban women, both for self-employment as shop owners and as sales assistants within larger retail establishments. The urban list of occupations also includes cleaning work, specific types of work within manufacturing industries, including packing, bottling, and labeling machine operators, woodworking machine operators, and hand packers as well as various handicrafts and manufacturing occupations related to the textiles industry. Some of the

higher-educated occupations may also be open to support from the AGES project—particularly those that require just 6-18 months of training for a candidate that has already completed secondary school—including: data entry workers, pre-primary and primary school teachers, and nursing and midwife associate professionals.

Finally, Chapter V produced **detailed provincial and district-level profiles**, highlighting demographic features, TVET institutions, top sectors of formal employment, and specific recommended trades for the local labor market in each of the 8 districts of AGES project implementation. An analysis of occupational patterns and trends across these districts leads to the central conclusion of this report: **eight particular industry-occupation clusters** stand out as opportunities to be pursued as the central focus of the AGES project's work to expand female employment.

Top Industry-Occupation Recommendations for the AGES Project

Given that it takes time to investigate and establish relationships within each industry, it is recommended that AGES begin with an overarching strategy across districts to promote expanded and improved female employment in the following eight industry-occupation clusters:

1. **Pre-primary education, primary education, and education support services**: Promote increased female employment and self-employment in education by collaborating with organizations like Beaconhouse for training and employing primary school teachers, and the Children's Global Network, which provides training for starting up preschool enterprises.

2. **Textiles and apparel:** Of high relevance in most districts and already open to female workers, AGES can devote efforts to seeking higher-earning opportunities for female workers in these industries. In addition to higher-level factory employment, such as in garment pattern-making and cutting, partnerships with value chain actors like Indus Heritage Trust can help to provide rural sewing and embroidery workers with international market linkages and higher earnings for their work.

3. **Livestock and dairy production**: Considerable work has already gone into improving female earnings in the meat and dairy value chains in many districts, which AGES can lend increased support to in its rural implementation districts.

4. **Domestic housekeeping, cooking, elder care, and personal care**: Traditionally an area vulnerable to worker exploitation, recent initiatives by I-SAPS, TAF Foundation, GharPar, and others show the potential for household worker training that empowers, and employer arrangements that achieve improved working conditions and higher pay.

5. **Retail sales** offers significant opportunities for female self-employment, particularly in rural areas, and for salaried employment, particularly in urban areas where there are large chain stores with female clientele. Other types of sales and customer service workers and managers are also in demand in a variety of other industries according to this analysis, including chemicals and pharmaceuticals manufacturing.

6. **Cooks, bakers, pastry chefs, waiters, and other food service staff**: While cooks can be employed as domestic workers, Pakistan is also experiencing growth in female employment in standalone and chain restaurants and in the manufacture of bakery products. High-quality training can help

to create demand for skilled female professionals in these fields. Home-prepared meal services like Lunch.pk also offer an opportunity for self-employment in this field.

7. **Health associates and professionals**: There is widespread need for female midwives, nurses, and community health workers, including at the associate or paraprofessional level requiring fewer years of training. While local analysis is required to ensure this is not already a saturated market, these fields continue to be promising for female employment in Pakistan.[1] In addition, initiatives like DoctHers.com provide new models to build upon for remote healthcare consultations.

8. **Other industry opportunities**: This analysis has provided some evidence that the chemicals, pharmaceuticals, food processing, packaging, and printing industries offer some potential for female employment, in localities where these employers exist. These opportunities deserve further exploration, particularly for second-phase efforts that aim to expand into less common areas of female employment.

While it may seem that many of these areas are already female-focused, in reality this is often not the case. The data shows that, in the majority of the AGES districts, most of these occupations are still male-dominated. Expanding female employment in these occupations and industries therefore promotes gender equity in significant ways—particularly if the project helps to negotiate for better female wages and product prices—while simultaneously avoiding the pitfall of training young women for idiosyncratic trades where they will not eventually be able to obtain work at larger scale. Yet at the same time the final point on this list suggests five industries where the data demonstrates the presence of female employment despite the fact that they are not gender conforming fields. These industries remain areas to watch, for opportunities to open the door wider for female participation.

Promising Practices in Female Employment

To promote female employment in Pakistan, the available research reviewed in Chapter I suggests that the AGES project will need to address five key factors: parental attitudes and willingness to speak out against community norms that constrain women, access to educational facilities and places of work, improved treatment of women in the workplace, business start-up support, and reinforcing certain positive broader cultural and social trends already evolving in this direction. The below paragraphs offer certain observations on each of these factors.

Positive parental attitudes towards young women's education and employment, and resilience in the face of some expected community resistance, can be bolstered through the efforts of community mobilizers who model these behaviors. World Learning's past experience with Pathways to Success, as well as insights gained from discussions with organizations and training providers, show that some of the social pressures affecting women's seclusion could be mitigated through one-on-one meetings with families, where parents are provided information or encouraged to visit training sites, so that they can see the benefits first-hand. Exposure to previous graduates who are seen positively as role models, as well as the individual-level changes brought about by the quality of the training program, and the promise of secured employment with decent earnings, can add to the

[1] Mumtaz, Levay, and Bhatti, "Successful Community Midwives in Pakistan: An Asset-Based Approach."

family's level of assurance about the utility of the training. World Learning's research also shows that it is crucial that community mobilizers and educators believe in the capacity of young women to contribute to society and the economy—and that they are trained to recognize and overcome their own implicit biases and stereotypes, factors that have sometimes been overlooked in projects implemented in Pakistan.

Access to training facilities and to places of work is greatly aided by parental support and the advocacy of role models, however there are other practical issues—such as program fees and transportation—that must also be addressed. World Learning's experience and key informant interviews have shown that while these are essential components, they must be approached with care. Stipends for training attendance should be reserved strictly for those who need the support and who demonstrate other proofs of their intention to put the course into practice, to avoid incentivizing participants to attend trainings that do not really interest them, and in areas where they have no intention of seeking employment. Transport also needs to be approached with care. The Pathways To Success research[1] demonstrated how, by providing young women with transportation, projects can inadvertently reinforce gendered positions, where rather than promoting young women's greater independence, the project simply takes on the role of the parent overseeing women's lives.[2] It would be preferable, instead, to work with existing transportation providers to create safer spaces for all women, and work with families to plan how they can teach their daughters to access and finance their own mobility.

Efforts to directly promote **improved treatment of women in the workplace** must proceed with an understanding of the discriminatory practices discussed earlier in this report. Project staff will need to prepare young women to advocate for themselves in terms of workplace rights, pay equity, freedom from harassment and decent working conditions—efforts that will benefit others beyond themselves. Project staff will also need to address these issues with the TVET providers who may often be the first point of contact between trainees and employers. While some negotiating on these issues may happen on behalf of trainees, it is important that the project also enable young women to promote their own rights as protagonists of their own lives.

Efforts to provide young women with **business start-up support** will similarly need to remain aware of the pitfalls of gender stereotyping, in which women are sometimes steered towards lower-skill and lower-earning forms of business. Financing provisions and business development services must be provided on par with the quality offered to young men, whatever the domain of business activity.

Finally, it is clear that the AGES project will need to engage with and take steps to **reinforce the positive broader cultural and social trends** already evolving towards a greater role for women in Pakistan's workforce. Organizations such as the Kashf foundation have used drama series and other public engagement tools to positively influence mindsets around women's economic potential and rights,[3] and there is increasing understanding in some settings that sexual harassment is not the

[1] "Pathways to Success: Vocational Trainee Stories from Karachi, Daharki, and Peshawar."
[2] "Pathways to Success: Vocational Trainee Stories from Karachi, Daharki, and Peshawar."
[3] "Media Campaigns," Kashf Foundation, n.d., http://kashf.org/media-compaign/.

woman's fault[1]—but much more remains to be done in these areas. Engaging with radio, social media, and broader policy and advocacy efforts will be essential to achieving AGES' broader goals.

Following these recommendations should enable the AGES project to have a transformative impact on the lives of at least 7,000 young women—and beyond them, promote work for thriving young women throughout Pakistan.

[1] Faiza Ali and Robin Kramar, "An Exploratory Study of Sexual Harassment in Pakistani Organizations," *Asia Pacific Journal of Management* 32, no. 1 (March 2015), https://www.researchgate.net/publication/271621183_An_exploratory_study_of_sexual_harassment_in_Pakistani_organizations.

REFERENCES

Abbas, Ghulam. "Pakistan Bureau of Statistics Admits Collecting Incomplete, Partial Data." *Pakistan Today: Profit*, March 20, 2018. https://profit.pakistantoday.com.pk/2018/03/20/pakistan-bureau-of-statistics-admits-collecting-incomplete-partial-data/.

Ali, Faiza, and Robin Kramar. "An Exploratory Study of Sexual Harassment in Pakistani Organizations." *Asia Pacific Journal of Management* 32, no. 1 (March 2015). https://www.researchgate.net/publication/271621183_An_exploratory_study_of_sexual_harassment_in_Pakistani_organizations.

Ali, Tazeen, Gunilla Krantz, Raisa Gul, Nargis Asad, Eva Johannson, and Ingrid Mogren. "Gender Roles and Their Influence on Life Prospects for Women in Urban Karachi, Pakistan: A Qualitative Study." *Global Health Action* 4 (2011). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3208374/.

"Breaking Gender Barriers in Pakistan's Building Industry." *IMC* (blog), October 17, 2017. http://www.imcworldwide.com/news/breaking-gender-barriers-in-pakistans-building-industry/.

"Census of Manufacturing Industries 2005-2006: District-Wise Report." Pakistan Bureau of Statistics, 2006. http://www.pbs.gov.pk/sites/default/files/industry_mining_and_energy/publications/CMI_2005-06_district-wise.pdf.

"Children's Global Network, Pakistan," n.d. http://www.cgnpk.org/.

"Emerging Pakistan." Ministry of Commerce, n.d. https://www.emergingpakistan.gov.pk/.

"ENGRO Company Case Study." ENGRO, n.d. https://www.deginvest.de/DEG-Documents-in-English/About-DEG/What-is-our-impact/Case_Study_Engro_Corperation-Ltd_Web.pdf.

Finance. "Pakistan Economic Survey 2017-2018." Ministry of Finance, 2018. http://www.finance.gov.pk/survey_1718.html.

Gates, S., L. Lippman, N. Shadowen, H. Burke, O. Diener, and M. Malkin. "Key Soft Skills for Cross-Sectoral Youth Outcomes." USAID YouthPower, n.d. https://www.youthpower.org/resources/key-soft-skills-cross-sectoral-youth-outcomes.

Hadi, Rabeea, and Muhammad Ullah. "Violence against Women in Pakistan: A Qualitative Review of Reported Incidents." Aurat Foundation, 2014. https://www.af.org.pk/PDF/VAW%20Reports%20AND%20PR/VAW%202014.pdf.

HEC. "Employers' Perception Survey: Final Report." Grant Thornton Consulting and the Higher Education Commission, n.d. http://hec.gov.pk/english/universities/projects/TESP/Documents/Employers%20Perception%20Survey_May%202016.pdf.

Honeyman, Catherine A. "Soft Skills Development: Guiding Notes for Project and Curriculum Design and Evaluation." World Learning, 2017. https://www.globalinnovationexchange.org/resources/soft-skills-development-guiding-notes-project-and-curriculum-design-and-evaluation.

HRW. “World Report 2017: Pakistan.” Human Rights Watch, 2017. https://www.hrw.org/world-report/2017/country-chapters/pakistan.

Hussain, Iffat. “Problems of Working Women in Karachi, Pakistan.” Cambridge Scholars Publishing, 2008.

ILO. “Convention C111 - Discrimination (Employment and Occupation) Convention.” ILO, 1958. http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C111.

“Industry Demand-Driven Short Courses.” TEVTA Punjab, n.d. http://www.tevta.gop.pk/short_course_inner.php.

International Labour Organization, and ILO Country Office for Pakistan. *Decent Work Country Profile Pakistan*. Islamabad: ILO, 2014.

Khan, Ayesha. “Women and Paid Work in Pakistan.” Collective for Social Science Research, March 15, 2007.

Khoso, Ikhtiar Ahmed. “A Brief Profile of Jacobabad.” Small and Medium Enterprise Development Authority, Larkana, n.d. http://smeda.org/index.php?option=com_phocadownload&view=category&download=199:jacobabad-profile&id=4:sindh-district-profiles.

Lawson, Sandra, David Heacock, and Anna Stupnytska. “Beyond the BRICS: A Look at the ‘Next 11.’” Goldman Sachs, 2007. https://www.goldmansachs.com/insights/archive/archive-pdfs/brics-book/brics-chap-13.pdf.

Lippman, Laura H., Renee Ryberg, Rachel Carney, and Kristin A. Moore. “Workforce Connections Key ‘Soft Skills’ That Foster Youth Workforce Success: Toward a Consensus across Fields.” USAID, 2015. https://www.childtrends.org/wp-content/uploads/2015/06/2015-24WFCSoftSkills1.pdf.

Mahmood, Babak. “Gender Specific Barriers to Female Entrepreneurs in Pakistan: A Study in Urban Areas of Pakistan.” *British Journal of Education, Society & Behavioural Science* 2, no. 4 (January 10, 2012): 339–52. https://doi.org/10.9734/BJESBS/2012/2128.

Makhijani, Har Bakhsh, Muhammad Ismail Kumbhar, Shuhab Mughal, and Urooj Talpur. “Women Entrepreneurship: Problems Faced by Rural Women Entrepreneurs in Sindh Province of Pakistan Har Bakhsh Makhijani, Muhammad Ismail Kumbhar, Shuhab Mughal, Urooj Talpur.” *Lifescience Global* 11 (2015). http://www.lifescienceglobal.com/pms/index.php/jbas/article/view/2874.

“Media Campaigns.” Kashf Foundation, n.d. http://kashf.org/media-compaign/.

Mirzaa, Faisal Mehmood, Atif Ali Jaffrib, and Muhammad Saim Hashmic. “An Assessment of Industrial Employment Skill Gaps Among University Graduates in The Gujrat-Sialkot-Gujranwala Industrial Cluster, Pakistan.” *The Pakistan Journal of Social Issues* VIII (2017). http://uog.edu.pk/downloads/journal/PJSI_1-20.pdf.

Moazam, Shahbaz. “Academia-Industry Linkages Gap Analysis Survey.” Career Advisory & Assessment Services, n.d. https://propakistani.pk/wp-content/uploads/2016/08/Survey_Report.pdf.

Mumtaz, Zubia, Adrienne Levay, and Afshan Bhatti. “Successful Community Midwives in Pakistan: An Asset-Based Approach.” *Plos One*, September 15, 2015.

NAVTTC. “National Skills Information System.” Skilling Pakistan, n.d. http://skillingpakistan.org/.

———. “Skills Trend Analysis: National and International.” NAVTTC and GIZ, 2017. https://www.skillingpakistan.org/files/1/Skills%20Trend%20Analysis.pdf.

“Packages Limited.” Packages Limited, n.d. https://www.packages.com.pk/.

“Pakistan National Human Development Report: Unleashing the Potential of a Young Pakistan.” UNDP, 2018. http://www.pk.undp.org/content/pakistan/en/home/library/human-development-reports/PKNHDR.html.

“Pakistan Social and Living Standards Measurement Survey (PSLM) 2013-14 National / Provincial.” Pakistan Bureau of Statistics, 2014 2013. http://www.pbs.gov.pk/content/pakistan-social-and-living-standards-measurement-survey-pslm-2013-14-national-provincial.

“Pakistan Social And Living Standards Measurement Survey (PSLM) 2014-15 Provincial / District.” Pakistan Bureau of Statistics, 2015 2014. http://www.pbs.gov.pk/node/1650.

Pasha, Hafiz. *Growth and Inequality in Pakistan*. FES, 2018.

“Pathways to Success: Vocational Trainee Stories from Karachi, Daharki, and Peshawar.” World Learning, 2018.

“Pattern Making & Cutting.” PHMA Institute of Knitwear Technology Karachi, n.d. http://phmaiktk.edu.pk/index.php/pattern-making-cutting.

PBS. “Labour Force Participation Rates and Unemployment Rates by Age, Sex and Area, 2014-2015.” Pakistan Bureau of Statistics, 2015. http://www.pbs.gov.pk/sites/default/files/Labour%20Force/publications/lfs2014_15/t18-pak.pdf.

———. “Labour Force Publications.” Pakistan Bureau of Statistics, n.d. http://www.pbs.gov.pk/labour-force-publications.

———. “Labour Force Survey 2014-2015,” 2015. http://www.pbs.gov.pk/sites/default/files/Annual%20Report%20of%20LFS%202014-15.pdf.

Pitigala, Nihal, Janice Stallard, Aijaz Ahmad, Gustavo Marquez, Ambreen Gilani, Andrew Batchelor, and Veenita Kaushik. “USAID/Pakistan Non-Agricultural Value Chain Assessment: Asia and the Middle East Economic Growth Best Practices Project.” USAID, 2013.

“Population Census 2017.” Pakistan Bureau of Statistics, n.d. http://www.pbscensus.gov.pk/.

“Professional Beauty Services at Home.” GharPar, n.d. https://gharpar.co/.

Pumbay, Meha. “Honor Killings in Afghanistan and Pakistan.” *The Diplomat*, December 30, 2016. https://thediplomat.com/2016/12/honor-killings-in-afghanistan-and-pakistan/.

"Punjab Growth Strategy 2018: Accelerating Economic Growth and Improving Social Outcomes." Government of Punjab, 2015. https://www.theigc.org/wp-content/uploads/2015/04/Punjab-Growth-Strategy-2018-Full-report.pdf.

Sarwar, Farhan, and Abdus Sattar Abbasi. "An In-Depth Analysis of Women's Labor Force Participation in Pakistan." *Middle-East Journal of Scientific Research*, 2013, 7.

Sethna, Razeshta, Tooba Masood, and Ramsha Jahangir. "Special Report: Sexual Harassment in Workplaces in Pakistan." *Dawn.Com*, April 19, 2018. https://www.dawn.com/news/1395215.

Shah, Sayed, Mansoor Zaib Khan, and Abdul Hafeez Abbasi. "Skills Gap Analysis - Balochistan." NAVTTC and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), September 2017. https://www.skillingpakistan.org/files/1/Skill%20Gap%20Analysis%20(Balochistan)-Final.pdf.

"Situation Analysis and Pre-Feasibility Study of Pulping Unit in Swat." USAID FIRMS Project, 2012.

"Sustainable Communities." Indus Heritage Trust, n.d. https://www.indusheritagetrust.com/sustainable-communities/.

"TAFF-VTI (TAFF- Vocational Training Institute) | An Introduction." TAF Foundation, n.d. https://www.taffoundation.org/education/.

"Teacher Training." Sindh Education Foundation, n.d. https://www.sef.org.pk/teacher-training/.

UN Women. "Women's Economic Participation and Empowerment in Pakistan: Status Report 2016." UN Women Pakistan, 2016. http://asiapacific.unwomen.org/en/digital-library/publications/2016/05/status-report-on-womens-economic-participation-and-empowerment.

Wasim, Mohammad Pervez, Gobind Herani, Wahid Farooqui, and M.A. Qureshi. "Family Types, Authority Structure and Women Workers in Sindh Labor Force: Problems and Prospects." *Indus Journal of Management and Social Sciences* 2, no. 1 (2008): 20.

WEF. "The Global Gender Gap Report." World Economic Forum, 2017. http://www3.weforum.org/docs/WEF_GGGR_2017.pdf.

"What Does Pakistan Export? 2016." Observatory of Economic Complexity, n.d. https://atlas.media.mit.edu/en/visualize/tree_map/hs92/export/pak/all/show/2016/.

ANNEXURE

ANNEX I: EXISTING SKILLS-BUILDING PROGRAMS IN THE AGES DISTRICTS

Over 30 skill development programs are being implemented in the AGES Districts. The overall targets of each of these programs are listed in Chapter II. The table below cross-references these programs according to the AGES districts of implementation, as each program is being implemented in multiple districts.

Province	District	Skills Development Programs
Balochistan	Lasbela	• Prime Minister's Youth Skills Development Programme • Vocational Training and Income-Generation Skills Program • Gwadar Lasbela Livelihoods Support Project (GLLSP)-IFAD • Working Towards A Skilled Pakistan • Youth Empowerment Programme UNDP • Digi Skills Pakistan
Sindh	Karachi	• Sind Skills Development Program • Youth Workforce Development Project (YWFD) Evaluation • Prime Minister's Youth Skills Development Programme • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • The IBA's Skill Development Program • Life Skills Program • Skills for Employability Program • FWBL's women's Economic Empowerment through Capacity Building & Skill Development Training Building & Skill Development Training • Sindh Skills Development Project • Benazir Bhutto Shaheed Youth Development Project • Youth Empowerment Programme • Youth Skills Training for Employment in Pakistan • Hands Gender Development Program • Hunar Foundation Working Towards a Skilled Pakistan • Youth workforce Development Program (Amantech, USAID and UNDP) • Digi Skills Pakistan
	Jacobabad	• Prime Minister's Youth Skills Development Programme • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • Hands Gender Development Program • Sindh Skills Development Project • Benazir Bhutto Shaheed Youth Development Project • Youth Empowerment Programme • Youth Skills Training for Employment in Pakistan • Digi Skills Pakistan
	Ghotki	• Prime Minister's Youth Skills Development Programme • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • Sindh Skills Development Project • Benazir Bhutto Shaheed Youth Development Project • Youth Empowerment Programme • Hands Gender Development Program

		• Digi Skills Pakistan
	Sukkur	• Prime Minister's Youth Skills Development Programme • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • Sindh Skills Development Project • Benazir Bhutto Shaheed Youth Development Project • Youth Empowerment Programme • Youth Skills Training for Employment in Pakistan • Hands Gender Development Program • Digi Skills Pakistan
	Hyderabad	• Prime Minister's Youth Skills Development Programme • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • Sindh Skills Development Project • Benazir Bhutto Shaheed Youth Development Project • Youth Empowerment Programme • Youth Skills Training for Employment in Pakistan • Hands Gender Development Program • Skill Trainings for Young Women in Pakistan • Digi Skills Pakistan
Punjab	Muzaffargarh	• Prime Minister's Youth Skills Development Programme • CM Skill Development Programme for Youth • Punjab Youth Workforce Development (PYWD) Project • Big Push For Rural Economy – Livestock Sector • Youth Leadership and Skills Development Training • USAID-Punjab Youth Workforce Development • Punjab Skills Development Project • Digi Skills Pakistan
	Multan	• CM Skill Development Programme for Youth • Punjab Youth Workforce Development (PYWD) Project • Youth Leadership and Skills Development Training • Prime Minister's Youth Skills Development Programme • USAID-Punjab Youth Workforce Development • Punjab Skills Development Project • Hunar Foundation Working Towards a Skilled Pakistan • Digi Skills Pakistan
	Bahawalpur	• CM Skill Development Programme for Youth • Punjab Youth Workforce Development (PYWD) Project • Big Push For Rural Economy – Livestock Sector • Youth Leadership and Skills Development Training • Prime Minister's Youth Skills Development Programme • USAID-Punjab Youth Workforce Development • Punjab Skills Development Project • Digi Skills Pakistan
	Lahore	• National Training Programs • Prime Minister's Youth Skills Development Programme • Punjab Skills Development Fund • Hashoo Foundation Skills Development Program • Digi Skills Pakistan • Hunar Foundation Working Towards a Skilled Pakistan

KPK	Peshawar	• National Training Programs • KP Youth Employment Program • Prime Minister's Youth Skills Development Programme • Freelancing Training Program for Khyber Pakhtunkhwa • KPK and USAID launch IT Skills for Youth Project • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • UNHCR skills training for Afghan, Pakistani youth • Youth Empowerment Programme • IRC and PEDO Skills Development Program • KP Youth Employment Program • Skill Enhancement Program for Minorities Funded by AUQAF • Digi Skills Pakistan
	Buner	• KP Youth Employment Program • Prime Minister's Youth Skills Development Programme • Freelancing Training Program for Khyber Pakhtunkhwa • KPK and USAID launch IT Skills for Youth Project • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • UNHCR skills training for Afghan, Pakistani youth • Youth Empowerment Programme • KP Youth Employment Program • Digi Skills Pakistan
	Swat	• KP Youth Employment Program • Prime Minister's Youth Skills Development Programme • Freelancing Training Program for Khyber Pakhtunkhwa • KPK and USAID launch IT Skills for Youth Project • Japan/UNDP Youth Empowerment in Sindh and Khyber Pakhtunkhwa Project • Youth Empowerment Programme • KP Youth Employment Program • Digi Skills Pakistan

ANNEX II: SMALL BUSINESS SUPPORT FOR WOMEN

While emerging industries and the need for skilled workers forms one part of the context for women's work in Pakistan, it is equally important to consider business opportunities. This annex briefly outlines the ecosystem for business start-up financing, incubation, and support for business growth. By taking advantage of the available assistance from microfinance institutions, start-up incubators, and business development services, more Pakistani women can become generators of economic value and employment, for themselves and others.

Micro and Small Business Financing Institutions

The purpose of microfinance institutions is to provide financing services to small and medium sized entities and to under-privileged individuals in order to alleviate poverty from society, including providing loans to individuals to start or grow their business activities, or loans for education and other social purposes, and other services like savings accounts, insurance, leasing, and money transfer. In Pakistan, there are four types of microfinance institutions (MFIs):

1. Non-Government Organizations (NGOs) offering loans as part of their programming
2. Specialized NGOs focusing on microfinance
3. Rural Support Programs (RSPs) running microfinance operations as part of multi-dimensional rural development and poverty alleviation programs
4. Commercial Financial Institutions (CFIs)

The majority of these MFIs offer loans under $200 with repayment plans that begin immediately or soon after the loan is finalized.[1] A few institutions also offer financial products that follow Islamic financing principles. Finally, the government also sponsors youth microfinance, such as through the Prime Minister's Youth Programme and its Youth Business Loans and Interest Free Loans Scheme Qarz-e-Hasana (see below).

Figure 8: Prime Minister's Interest Free Loans Scheme for Youth

[1] http://inm.org.bd/wp-content/uploads/2015/09/Pakistan.pdf

Aside from the Prime Minister's Youth Programme loans, other microfinance institutions have not typically provided loans specifically to the youth age range. However, loan eligibility formally begins at age 18 and thus is officially open to youth applicants.

Some MFIs do specialize in financing for women. Most MFIs offer loan products that are more accessible to those with little collateral—often an issue affecting youth—with strong reliance on group guarantees.[1] For example, the RSPs work through community organizations to provide loans to groups who offer a co-guarantee, or to an individual who has a guarantee from a few other individuals from the same community. Akhuwat Islamic Microfinance Bank also offers interest-free loans, often gathering people in religious places to teach them about the availability of this financing and how to use it, using the influence of the religious setting to promote faithful return of loans.

The below table shows different prominent microfinance institutions and their presence in the selected AGES implementation and satellite districts.

Table 43: Microfinance institutions working in the selected AGES districts

Province	District	Institutions working in District	Clients
Balochistan	Lasbela	Akhuwat	(to be verified)
		BRAC – Pakistan	Female only
Sindh	Karachi	Naymet Trust	Both
		Akhuwat	Both
		Orangi Pilot Project (OPP)	Both
		First Women Bank Ltd.	Female only
		ORIX Leasing Pakistan Ltd. (OLP)	(to be verified)
		First Micro Finance Bank (FMFB) Ltd.	Both
		JWS Pakistan	Both
		Shadab Rural Development Organization	(to be verified)
		U Microfinance Bank Limited	Female only
		Advans Pakistan Microfinance Bank	Both
		FINCA Microfinance Bank	Both
		Khushhali Microfinance Bank	Both
		Mobilink Microfinance Bank	(to be verified)
		NRSP Microfinance Bank Ltd	(to be verified)
		Sindh Microfinance Bank (SMFB)	Female only
		Apna Microfinance Bank Ltd. (formerly NMFB	(to be verified)
		Pak-Oman Microfinance Bank Ltd. (POMFB)	(to be verified)
		Sindh Microfinance Bank	Female
		Tameer Microfinance Bank Ltd. (TMFB)	Both
	Ghotki	Sindh Rural Support Organization (SRSO)	Female only
		First Micro Finance Bank (FMFB) Ltd.	Both
		FINCA Microfinance Bank	Both
		Khushhali Microfinance Bank	Both
	Jacobabad	Sindh Rural Support Organization (SRSO)	Female only
		First Micro Finance Bank (FMFB) Ltd.	Both

[1] http://inm.org.bd/wp-content/uploads/2015/09/Pakistan.pdf

		Al-Mehran Rural Development Organization	Both
Punjab	Muzaffargarh	Akhuwat	Both
		Farmers Friend Organization	Both
		Mojaz Support Program	Both
		Rural Community Development Society	Both
		Rural Community Development Programme	(to be verified)
		First Micro Finance Bank (FMFB) Ltd.	Both
		U Microfinance Bank Limited	Female only
		AGAHE Pakistan	Female only
		FINCA Microfinance Bank	Both
		Khushhali Microfinance Bank	Both
		Mobilink Microfinance Bank	(to be verified)
		NRSP Microfinance Bank Ltd	(to be verified)
Khyber Pakhtunkhwa	Peshawar	Naymet Trust	(to be verified)
		Akhuwat	Both
		First Women Bank Ltd.	Female only
		Kashf foundation	Female
		SRSC (Sarhad Rural Support Corporation)	Both
		ORIX Leasing Pakistan Ltd. (OLP)	(to be verified)
		FINCA Microfinance Bank	Both
		Khushhali Microfinance Bank	Both
		Mobilink Microfinance Bank	(to be verified)
		NRSP Microfinance Bank Ltd	(to be verified)
	Buner	Support With Working Solutions (SWWS)	Both
		Khushhali Microfinance Bank	Both
	Swat	Akhuwat	Both
		Asasah	Female
		SRSC (Sarhad Rural Support Corporation)	Both
		Support With Working Solutions (SWWS)	Both

Young women may also choose to create their own microfinancing structures through community-level groups called committees (or "kameeti"), which are a form of tontine or group savings with rotating payouts. Savings and Internal Loan Communities, where group members pool their savings and invest in each other's businesses, are less common but could also be encouraged among youth.

Business Development Services

Obtaining capital to start or grow a business is often not sufficient—business owners also need to develop the necessary knowledge and skills. Business Development Services (BDS) are traditionally defined as the wide array of operational and strategic services such as "training, consultancy and advisory services, marketing assistance, information, technology development and transfer, and business linkage promotion".[1] The BDS Primer of the International Labor Organization (ILO)[1] distinguishes between seven categories of Business Development Services, namely:

[1] Funding2005_Making Business Development Services Markets Work for Women Microentrepreneurs in the Philippines. (2018, April 13). Retrieved July 12, 2018, from https://www.unh.edu/inquiryjournal/spring-2018/funding-business-development-services-women-

- Market access (e.g. marketing linkages, advertising, packaging)
- Infrastructure (e.g. storage and warehousing, telecommunications, couriers)
- Policy/Advocacy (e.g. training in policy advocacy)
- Input supply (e.g. linking firms to input suppliers)
- Training and Technical Assistance (e.g. management training)
- Technology and product development (e.g. design services)
- Alternative financing mechanisms (e.g. supplier credit)

There is a wide range of BDS providers working in the large cities i.e. Karachi, Hyderabad, Sukkur, Lahore, Multan, Bahawalpur, Peshawar and Quetta but these services providers are relatively hard to locate in small cities and rural areas apart from selected district headquarters. In rural areas, most of the business development services are facilitated by the NGOs, corporations working to strengthen their value chains, and microfinance providers.

The premier business development service offered by the Pakistani government is the Small and Medium Enterprises Development Authority (SMEDA).[2] SMEDA is established in nearly all of the districts of Pakistan for in-person services, and its website offers a centralized list of services—financial, legal, training, and industry support—as well as documentation on districts and sectors, and a database of business services consultants.[3]

In addition to the microfinance institutions and incubators listed elsewhere in this chapter, following are some of the business development service providers and facilitators in Pakistan:

Table 44: Business Development Services (BDS) providers

BD Service Provider	Provinces	Website
Small and Medium Enterprises Development Authority (SMEDA)	All	https://smeda.org/
SMEA-USAID	All	https://propakistani.pk/2018/04/13/usaid-launches-challenge-fund-for-pakistani-startups-and-smes/
Rural Support Programs (RSPs)	All	http://www.rspn.org/
Pakistan Horticulture Development & Export Company (PHDEC)	All	www.phdec.org.pk
Khyber Pakhtunkhwa Board of Investment and Trade	Khyber Pakhtunkhwa	http://kpboit.kp.gov.pk/
Punjab Board of Investment and Trade	Punjab	http://pbit.gop.pk/
Institute of Rural Management Business Development Groups (BDGs)	Sindh	http://www.irm.edu.pk/index.php/programes-and-trainings/business-development-services/
Sindh Enterprise Development Fund	Sindh	https://sedf.gos.pk/
Sindh Board of Investment	Sindh	http://www.sbi.gos.pk/

microentrepreneurs-philippinesPoor Elaborated for the OECD-PovNet Task Team on Private Sector Development and Pro-poor Growth_ELigmann

[1] Rural Finance and Investment Learning Centre. (n.d.). Retrieved July 12, 2018, from http://www.ruralfinanceandinvestment.org/node/64

[2] A. (n.d.). SMEDA. Retrieved July 12, 2018, from https://smeda.org/ https://smeda.org/

[3] Small and Medium Enterprises Development Authority (SMEDA). (n.d.). Retrieved July 12, 2018, from https://consultants.smeda.org/ https://consultants.smeda.org/

Start-up Incubators

In the last few years, there has been a growing trend in Pakistan of business incubators and accelerators. These incubators offer services such as support in developing a product pitch, market analysis, and business management and financial management training. Some incubators also provide seed funding or co-working spaces at a very low rent along with benefits such as reliable internet access.

Incubators in Pakistan and around the world typically only reach a university-educated population seeking to start innovative growth-oriented businesses; however, the model is also applicable to small businesses. The following table lists Pakistan's business incubators, with descriptions from the incubators' own program documents.

Incubator Name	Description
10xc Technology Startup Seed	The 10XC is known for funding different types of startups. They provide a 4-month pre-seed and seed funding programs in exchange for equity. The 10XC is taking applications for the summer batch currently.
Arpatech Hatchery	The Arpatech Technology Ventures incubator is associated with the Pakistan based IT company Arpatech and is located in Karachi. They believe a good brand is made by flawless execution. It has been home to some of the biggest brands of Pakistan today, like EatOye & Sheops.
Basecamp (Peshawar)	Peshawar 2.0's initiative Basecamp offers a coworking space for startups and freelancers in Peshawar.
Cinetic	Cinetic is a part of the NED University of Pakistan and provides a very detailed evaluation procedure for every startup that enters the program. Their program consists of many phases from idea sharpening to launch. Their mentors and trainers help students develop the complete business strategy, marketing plan, and also help in prototyping.
IBA CED	The IBA incubation center provides incubators for small startups that cater 1-3 employees, as well as business incubators for 4 or more employees. These rooms are dedicated to better privacy and discussion space. They also offer different type of entrepreneurial internship programs to provide a better exposure to the business world.
Invest2Innovate	Invest2Innovate offers a business accelerator curriculum to promising entrepreneurs, as well as linkage to investors and an upcoming seed capital fund.
Job Asaan	Job Asaan provides female-only co-working spaces in Punjab, aiming to promote remote work for women, including freelancing and business activities.
Karachi Civic Innovation Lab – PIF	The Karachi Civic Innovation Lab was launched at the Nest I/O with collaboration with Habib University. KCIL has introduced different programs like the Community Innovators' Program, University Internships, Hackathons and Mentoring programs which focus on the social challenges faced in Pakistan.

Karandaaz	Karandaaz Pakistan has launched an annual Women Entrepreneurship Challenge competition, which provides business development support and co-investment up to Pkr. 20 million per business to qualifying women-led businesses. The initial round of the Challenge provided business incubation services to 36 women-led small and medium businesses and offered grant and investment funding to 21 of them.[1]
LUMS Centre for Entrepreneurship	The LUMS Centre for Entrepreneurship is located in Lahore and was ranked #1 in Pakistan by GUST Accelerator Report 2015 for Asia and Oceanic Region. They provide investment plans for startups which show potential and they initially offer a vigorous 4-month training program to train new entrepreneurs for the business world.
Microsoft Innovation Center	Microsoft Centers are situated across the globe in more than 100 locations with success stories from different countries. They provide different entrepreneurial workshops to help new minds sharpen their ideas.
National Incubation Center	The NIC was launched under the public-private partnership with the Ministry of IT & Telecom, National ICT R&D Fund, Jazz & Teamup. Together with different partners and mentors, the NIC gives one to one mentoring and a competitive environment for new and innovative minds.
Nest I/O	Founded by the Iron lady, Jehan Ara, Nest I/O is home to many startups since 2015. It is partnered with Google for Entrepreneurs and Samsung and has reached heights of success in the incubator world in a short period of time. They have facilities like the Media Lab, Mind Gym, and even a Studio.
NSPIRE	Launched by NETSOL, a Pakistan based IT company, NSPIRE also partners with Microsoft and it provides access to all latest technologies for all sizes of startups.
Plan 9	Plan 9 is a Lahore based tech incubator. Since its inception in 2012, it has been home to many successful startups like TiketKataao, Qayaam, HomeStove and many more. They promote a free work environment and provide an all the necessary equipment needed for a startup. To top it all, they provide training and mentoring sessions as well.
Revolt	Revolt is a Peshawar based incubator which provides a vigorous 12-week program to accelerate startups. During this time, the team provides regular training, speaker sessions and commences with a demo day with a final product.
SEED	SEED is an internationally active and recognized incubator based and initiated in Pakistan. It was founded in 2009 and has given birth to multiple successful companies from their roof. It has been home to over 100 companies and has invested almost 1 Billion rupees to promote young entrepreneurs.
Social Innovation	The SIL has run 7 successful Hatchery cycles of startups and is taking entries for

[1] https://karandaaz.com.pk/media-center/news-events/karandaaz-launches-second-women-entrepreneurship-challenge/

Lab	the 8th cycle. These are international incubators for young entrepreneurs with a complete idea development program with mentorship for both local and international market.
Technology Incubation Centre, NUST	Associated with one of Pakistan's largest universities, NUST, the Technology Incubation Centre has been mentoring and hosting startups since 2005. TIC provides students and entrepreneurs a fully equipped environment with experienced mentors and also helps from experienced faculty members.
Tecube	Tecube is a project of Aptech Pakistan and promotes new technologies for young and enthusiastic entrepreneurs. It is situated in Karachi and provides its students with an open and friendly work environment where they can give direction to their ideas.
The Incubator GIKI	The Incubator is an initiative of one of Pakistan's renowned universities, Ghulam Ishaq Khan Institute of Engineering Sciences & Technology. In addition to a fully facilitated office space, the incubator provides per month stipend and free accommodation to entrepreneurs enrolled in the program.
WE Create Centre	WE Create Centre is the first entrepreneurial centre for women. It provides all the necessary facilities for a startup and also a daycare facility where managing work and children will not be a problem.

To access microfinance, business development services, and incubator programs, the AGES beneficiaries will need specific guidance, information, and contacts. Creating business development support groups at the local level, and linking young women to area chambers of commerce, will also support their efforts to start businesses of all sizes that can employ themselves and others.