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A business case for promoting gender-responsive practices in the large-scale food fortification sector in Pakistan

A brief for owners of edible oil and wheat flour mills, salt processing units and their industry associations

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Where does Pakistan's large-scale food fortification sector stand on women's employment?

Globally, women's workforce participation stands at 41.2%[1] and in South Asia it is 25.6%.[2] Only 3 in 10 managerial positions are held by women[3] (and women earn 20% less than men globally). Pakistan has one of the lowest rates of women's formal workforce participation in the world (ILO).[3] Women make up nearly half the population, yet only ~20–23% participate in the formal labour force as compared to 80% for men.[4] In manufacturing, the figure is even lower at just 14%. Further, employed women are overwhelmingly concentrated in informal or unpaid family work. Only ~3% firms in the country are led by women. Pakistan's National Gender Policy[5] recommends ensuring '33% female participation' on all committees, and proposes gender-responsive measures (maternity leave, daycare, flexible work policies) and even tax incentives for women-friendly workplaces in all public and private organizations. Despite that, the World Economic Forum ranked Pakistan 145th out of 146 countries in economic participation and opportunity for women.[1,2] This is not just a fairness issue — but a lost economic opportunity. The large-scale food fortification (LSFF) sector in the country also represents a grim picture of the low female workforce participation (Table 1).[6]

Table 1: Women workforce participation in LSFF sector in Pakistan

SECTOR	TYPICAL WOMEN WORKFORCE SHARE	KEY PATTERN (from Key Informant Interviews [KIIs], 2025)
Wheat flour mills	~4% or less in most mills; 36% in one large flour mill (this is an exception)	Women largely confined to head offices of large brands; almost all workers and managers in milling operations are male
Edible oil refineries	Minimal in production	Among 63 Punjab units surveyed, only 2 female-owned; women confined to advisory or chemist roles where they exist
Salt processing	0–30% depending on company; export-oriented firms higher	Female CEO-led firms report 30% factory and 80% head office female workforce; conservative firms employ women only as receptionists or in packaging

LSFF sector sits at the 'Beginning' stage of gender integration; with some signs of transition towards the 'Initial' stage.[6] See figure below:

Figure 1: Placement of LSFF sector in stages of gender integration

According to the International Labour Organization,[3] closing the gender gap in the workforce in Pakistan by 25% **could increase the GDP by ~9% and create 7.3 million new jobs for women.**

Why should your facility employ more women?

The evidence — including from Pakistan's own LSFF sector — shows that **hiring women in appropriate roles directly contributes to better business outcomes.** Here is what research and LSFF industry personnel themselves report.

1 Lower turnover — and real cost savings

Female employees in manufacturing consistently show lower attrition than male counterparts. In blue-collar settings, women's weekly attrition has been measured at 3.4% vs 5.2% for men, reducing per-worker costs by around 3.3%.[7] When you invest in training a quality assurance officer or a machine operator, lower turnover means a better return on that investment.

"Most beneficial is the low turnover of female workers. Men can take time out on different pretexts like smoking, but women don't… Since women remain in their jobs longer, it brings better return for investment in training."

— General Manager, composite food company (KII, 2025)[6]

"Boys leave more, especially young boys quit after 1–2 years, while girls do not quit jobs… We invest in our workers and if they quit, it is a loss for the company."

— CEO, salt processing company (KII, 2025)[6]

2 Better discipline, attendance, and quality

Evidence from India's warehousing and staffing industries found women workers achieved 11.8% lower per-worker costs in dark stores and 10.3% higher gross margins in staffing companies versus men, primarily due to higher attendance and fewer customer complaints.[7] One study found female staff generated ~8% fewer customer complaints, cutting shrinkage costs by ~0.5% per worker.[8]

"Women are hardworking, dedicated, and disciplined. They do not cause trouble or conflicts. All these factors contribute to enhanced productivity."

— Quality Assurance (QA) Officer, flour milling industry (KII, 2025)[6]

3 Women bring the consumer perspective — your products are made for them

Women are the primary purchasers of edible oil, wheat flour, and iodised salt in Pakistani households. Yet they are almost entirely absent from the production, quality control, and marketing of these products. This is a strategic blind spot.

"It is regrettable that currently the whole process excludes the women who are the primary users of oil."
— Managing Director, edible oil company (KII, 2025)[6]

"We get new ideas more from women, especially educated girls, who come up with new ideas relating to how to improve quality."
— CEO, salt processing company (KII, 2025)[6]

4 Better export market access/opportunities and global reputation

International buyers — particularly in Europe and North America — increasingly require gender-equity indicators from their suppliers as part of Environmental, Social, Governance (ESG) due diligence.[9] A company with no women in its workforce or management is at a competitive disadvantage when bidding for international contracts.

"In the international market, image of the company improves. People outside think of Pakistani women as unproductive. When we show them that we have engaged women, we gain in terms of business."
— CEO, salt processing company (KII, 2025)[6]

What do Pakistan's own businesses show?

Evidence from key informant interviews (KIIs) and secondary data collected across Pakistan's LSFF and related industries shows that gender integration is already happening — and delivering results — in companies that have made the commitment. The following cases are drawn from research conducted specifically for this brief.[6]

Table 2: Observations on women's share in workforce from LSFF and other businesses in Pakistan

COMPANY / SECTOR	WOMEN'S SHARE	RESULTS & LESSONS
LSFF RELATED BUSINESSES		
Large wheat flour mill (Multan)	36% of 1,500 staff — including engineers, machine operators, and QA staff	Female MD and HR Head drive inclusion. Women in production and technical roles. Managers' report dedicated, disciplined staff with low turnover, improving ROI on training. Translation of policy on transport, segregated spaces into actual participation. Demonstrates viability even in a conservative city.[6]
Large food processing company (Karachi-based with nationwide operations)	Grew from 23 to 38 women overall (+65%); management roles grew from 6 to 13 (+117%) during 2016–2018	Introduced employer-supported childcare, flexible hours, safe transport, and medical allowances. Where childcare was provided on site, it was designed as a safe, child-appropriate facility. Achieved 100% maternity return rate. Childcare costs were offset by retention and turnover savings. Named benchmark for Pakistan's LSFF sector.[10]
Salt processing (Karachi)	80% female in head office; 30% in factory	Female CEO (also Chairperson, Pakistan Salt Manufacturers Association) actively champions gender diversity. International buyers value the company's inclusive practices, directly boosting export business.[6]
Large wheat flour mill (Karachi)	Women in head office, production unit, marketing, finance, strategy, Quality Assurance, and 40 retail stores	Demonstrates full value-chain inclusion: from lab testing and production oversight to branding and retail. Company leverages gender diversity in brand positioning. Widely cited as a leading progressive flour brand.[6]
Multi-category food manufacturer (Karachi based)	Female QA officers and microbiologists in technical roles	Management highlights greater creativity and innovation among female staff, especially in quality problem-solving and new product evaluation.[6]
Edible oil company (Karachi based)	Women in head office, site office, administrative and technical functions (lab and quality control)	Demonstrates full value-chain inclusion. Company size and brand differentiation are key moderators of positive gender associations.[6]
OTHER BUSINESSES		
Public-sector energy authority (Lahore-based with nationwide operations)	Female workforce grew from 8% to 16% (2010–2023)	Introduced safe, child-appropriate childcare support where feasible, along with transport, maternity leave and flexible postings. Result: significantly fewer resignations after marriage or childbirth. Proof that enabling infrastructure pays off in any sector.[6]
Large commercial bank (Karachi-based with nationwide operations)	Women's share grew from 12.6% to 15% (2015–2017)	After anti-harassment policies and gender intelligence training: female deposit accounts rose 6.7%, deposits rose 10%. Inclusion directly translated into revenue growth.[6]
Large textile manufacturer (Karachi-based)	67% increase in female staff after childcare support and flexible work arrangement interventions	Safe childcare support, including on-site childcare where appropriate, combined with flexible work arrangements, contributed to a 95% retention rate among mothers. Demonstrates that investment in enabling infrastructure delivers measurable retention and productivity gains.[6]

What are the barriers and how can your facility address them?

Research across LSFF firms identifies three main types of barriers. Each has practical, cost-effective solutions that firms have already implemented in Pakistan.

Table 3: Barriers to gender integration and potential solutions

BARRIER TYPE	SPECIFIC CHALLENGES IN LSFF	PRACTICAL SOLUTIONS FOR INDUSTRY TO ADOPT (ALREADY USED IN PAKISTAN)
Structural (Time, care work, mobility/ transport, wages)	• Long 12–16-hour shifts; night shifts and 24-hour operations • Low wages and small breaks • Long commutes • Factory locations far from residential areas; no onsite accommodations • Unsafe or non-existent public transport • No childcare support	• Offer 4–8 hour shifts or staggered start times for women • Provide or subsidise pick-and-drop transport (can be pooled with nearby factories) • Partner with ride-hailing services or local women-driven transport networks • Provide on-site childcare only where facilities can ensure child safety, supervision, hygiene, and age-appropriate space; otherwise, offer childcare subsidies or partner with nearby accredited childcare providers • Separate work and prayer areas, washrooms and canteens
Institutional (HR practices- Lack of equitable access to opportunities, limited agency, and access to assets and services)	• Recruitment process is driven by male-dominated informal networks preventing female participation • Lack of transparent promotion pathways • No harassment reporting or anti-grievance mechanism; women feel excluded • Pay set informally with no equity checks	• Post jobs transparently (notice boards, university networks, social media) and promote hiring of women through merit • Batch-hire women so they have peer support from day one • Establish an inquiry committee as required under the Protection against Harassment of Women at the Workplace Act (2010) • Introduce a clear salary structure with defined bands • Provide required technical trainings
Cultural (Norms, behaviours, power relations)	• Industry perceived as exclusively male-dominated • Families reluctant to allow women to work in factories • Token hiring — single women do not endure in male-dominated spaces • Male resistance to women in supervisory roles • Women face microaggression and questioned about competence	• Hire a group of women rather than individuals — critical mass normalises women's presence • Start with lower-barrier roles (lab, packaging, QA) and expand gradually • Engage family members during onboarding to build trust • Sensitise male staff: mixed-gender workplaces consistently show better workplace discipline • Pilot in cities / locations first; replicate to conservative areas once a model is proven

Note on costs: The infrastructure investments required are real but manageable. Separate washrooms and prayer areas have minimal cost for medium-to-large facilities. Safe transport can be pooled with nearby firms. Childcare support can be offset by retention gains, but on-site childcare should be considered only where safe, supervised, hygienic, and child-appropriate conditions can be ensured. The research is clear: when policies are implemented, the financial returns are evident through lower recruitment and training costs, improved quality and increased competitiveness.[6]

The business case for gender integration: what to expect if you act

Based on the evidence from Pakistan and globally, here is a realistic picture of the firm level as well as industry/ecosystem level benefits a mill/processing unit owner can expect when hiring and retaining women in appropriate roles:

Table 4: The business case for gender integration for LSFF sector in Pakistan

TYPE OF BENEFIT	TYPE OF INVESTMENT REQUIRED	EXPECTED RETURNS	EVIDENCE AND EXAMPLES FROM LSFF SECTOR IN PAKISTAN
Financial and market performance	Hiring of women in leadership roles	Higher net profit margins compared to male-dominated counterparts; strengthened global competitiveness	**Enhanced reputation and market position** E.g., A recent development includes election of two women to the Executive Committee of an industry association
Productivity, retention, and cost savings	• Hiring at least 10–20% women in QA, QC, packaging roles, • Provision of training on new roles	Lower turnover, improved return on training investments, reduced absenteeism, better quality outputs	**Direct productivity and performance gains** E.g., large flour mill: women are "dedicated, disciplined, consistent"[6]
	Provision of safe transport (pick-and-drop)	Access to a wider female talent pool; fewer absences; better retention	**Enhanced operational stability and lower costs** E.g., Female Multan oil mill owner: 'They should be offered good pay, pick and drop, and safety' — identifies transport as the primary enabler[6] E.g., multi-category food manufacturer: 100% maternity return following employer-supported childcare and flexible work measures; E.g., public-sector energy authority: far fewer resignations after marriage/childbirth following enabling measures such as childcare support, transport, and flexible postings[6,10]
	Safe childcare support: on-site childcare only where child-appropriate facilities can be ensured, or childcare subsidies/partnerships with accredited nearby providers, alongside flexible work arrangements	Higher maternity return and retention rates; reduced post-birth resignations; positive ROI where childcare support is designed around safety, feasibility, and worker needs	
	Separate washroom, prayer room, changing room, canteens	Safer environment that attracts and retains women	**Improved workplace environment and culture** *Note: This component is yet to be explored in LSFF sector and can be a starting point for your investment in gender integration.*
	Anti-harassment system + sensitization training	Buyer confidence; legal compliance	
Innovation and market responsiveness	• Promote gender diverse teams • Address pay gaps	Creative; effective at problem solving; fresh perspectives to improve innovation and responsiveness to markets; improved workplace culture; better consumer insight, stronger brand, improved ESG standing with international buyers	• **Unique consumer insights and innovation** • **Superior workplace ethics and discipline** E.g., large wheat flour mill: employs women QA officers, microbiologists, managers noting women are creative and innovative E.g., salt processing unit: international customers actively encourage diversity; multi-category food manufacturer leverages gender in branding[6]

THE BOTTOM LINE

Firms that integrate women enhance staff retention, reduce costs, improve product quality, drive innovation, and strengthen their position with international buyers. The PFMA Chairman himself put it directly: **"Women are more responsible; if they start working in the mills, productivity will increase."**[6]

Where to start: entry points in your mill/processing unit

A practical way to begin

Rather than attempting to transform the entire workforce at once, facilities may find greater success in adopting a phased approach, beginning with meaningful roles where women can contribute quickly and visibly, and expanding over time as the benefits become clear. This approach allows facilities to begin with roles in which women can demonstrate value quickly, use those early gains to build confidence across the workforce, and expand recruitment progressively as the model proves both workable and beneficial.

Table 5: Entry points for gender integration in LSFF sector

ENTRY ROLE	WHY IT WORKS	PROGRESSION PATH
Laboratory / Quality Assurance	Requires precision and attention to detail; culturally acceptable; separate work area already typical; women in flour/oil/salt labs already demonstrating results (Unity Foods, Ismail, Volka)	QA Officer → QA Manager → Head of Quality / Compliance
Packaging Unit	Often physically separate from production; less exposure to heavy machinery; many companies already use women here (salt, edible oil). Women are reliable and efficient in repetitive precision tasks.	Packing Operator → Packing Supervisor → Production Line Lead
Nutrition / Consumer Outreach	Women as primary food-buyers and household nutrition decision-makers are best placed to communicate fortification benefits to consumers	Outreach Officer → Marketing Coordinator → Brand/Consumer Insights Manager
HR / Finance / Administration	Office-based; fewer mobility constraints; less cultural resistance; builds women's institutional presence and leadership pipeline	HR Officer → HR Manager → HR Director / CHRO
Technology / Computerised Operations	As mills modernise and automate, control room and supervisory roles become viable — physically less demanding, often in separate rooms	Systems Operator → Production Supervisor → Plant Manager

The data in these brief draws on the study *Economics of Gender Integration in Businesses Engaging with Large-Scale Food Fortification*, commissioned by Nutrition International and conducted by Praxsys Associates (2025).

RECOMMENDED CITATION

Nutrition International. (2026). *A business case for promoting gender-responsive practices in large-scale food fortification sector in Pakistan.* Nutrition International.

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NOTES

KII = Key Informant Interview

All data in this brief is drawn exclusively from the study report and the sources cited within it.

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