



Current Practices in Food and Childcare-Service Provision in Bangladesh's Ready-Made Garment Factories

A Situational Analysis Report

October 2015





About this Report

This situational analysis report presents an overview of the current practices in food and day-care-service provision in 15 ready-made garment (RMG) factories in Bangladesh. It is part of the operational research for the project "Improving Nutrition of Female Garment Industry Workers and Their Children in Bangladesh," which BSR is implementing in partnership with the Global Alliance for Improved Nutrition (GAIN).

We used mixed methods for data collection, including focus group discussions with workers; in-depth interviews with factory managers, day-care personnel, and food suppliers; and facility observation. The data collection tools were jointly developed by BSR, Change Associates Ltd., and GAIN, drawing from the experiences of HERproject, BSR's women's empowerment initiative in the global supply chain.

BSR recruited factories to participate in the situational analysis through our private-sector member network. With technical assistance from GAIN, Change Associates Ltd.'s research team collected and analyzed the data between September and November 2014.

Our findings indicated that female workers in the sampled factories had a below-average understanding of what constitutes a balanced diet, and there was a lack of diversity in the food they consumed. On the other hand, managers at factories that are currently providing food to workers pointed out the business benefits of such practices, including higher morale and lower worker turnover. To capitalize on this opportunity, this project aims to address malnutrition faced by female factory workers and their children under 5 through collaboration with international buyers, factory owners, and civil society on nutrition-related behavior change, distribution of energy- and iron-rich food, and promotion of early-childhood development in factories' day-care centers.

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ABOUT BSR

BSR is a global nonprofit organization that works with its network of more than 250 member companies to build a just and sustainable world. From its offices in Asia, Europe, and North America, BSR develops sustainable business strategies and solutions through consulting, research, and cross-sector collaboration. Visit www.bsr.org for more information about BSR's more than 20 years of leadership in sustainability.

ABOUT GAIN

The Global Alliance for Improved Nutrition (GAIN) is an international organization that was launched at the UN in 2002 to tackle the human suffering caused by malnutrition. GAIN is driven by the vision of a world without malnutrition. We act as a catalyst—building alliances between governments, business, and civil

society—to find and deliver solutions to the complex problem of malnutrition. Visit www.gainhealth.org for more information.

ABOUT CHANGE ASSOCIATES LTD.

Change Associates is a women-led organization committed to actively promoting and advocating for the empowerment of Bangladeshi women, less privileged citizens, and female workers. Its mission is to support companies, NGOs, government, and other stakeholders who strive to collaboratively improve the quality of life of disadvantaged people and women in particular. Change Associates supports textile and ready-made garment companies with the design and implementation of workplace-based programs aimed at building a respectful working environment. Visit www.change-bd.org for more information.

Abbreviations and Acronyms

BEPZA Bangladesh Export Processing Zone Authority

BGMEA Bangladesh Garment Manufacturers and Exporters Association
BKMEA Bangladesh Knitting Manufacturers and Exporters Association

BSR Business for Social Responsibility

EPZ export processing zone

GAIN Global Alliance for Improved Nutrition

GDP gross domestic product

icddr,b International Center for Diarrheal Diseases Research, Bangladesh

INFS-DU Institute of Nutrition and Food Science, Dhaka University

IYCF infant and young child feeding

MNP micronutrient powder
ORS oral rehydration solution
RMG ready-made garment
WHO World Health Organization
WPC worker participation committee

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Executive Summary

The ready-made garment (RMG) industry is one of Bangladesh's biggest sources of income, contributing up to 80 percent of foreign exports.¹ The industry employs 4 million people, 80 percent of whom are women, in approximately 4,500 factories.² Despite some improvements in female workers' well-being since joining the formal workforce, the social and health conditions of these workers are far from optimal. These female workers, 60 percent of whom are 24 years old or younger,³ are particularly vulnerable to health issues related to malnutrition.



HERproject, BSR's flagship women's empowerment program, has demonstrated that the workplace is an ideal entry point to improve the health knowledge, access, and behavior of female workers. The workplace provides a physical location to reach women who may be excluded from existing health services provided by the government and NGOs. Female workers can learn about exclusive and continued breast-feeding, infant and young child feeding, and

¹ BGMEA. "Trade Information." Accessed September 7, 2015. http://bgmea.com.bd/home/pages/TradeInformation#.VBeuzfmSwy4

³ Saha, S.; Farzana, S.; and Begum, A. 2014. "Dietary Pattern and Anemia Among Female Adolescent Garment Workers in Bangladesh." Acta Medica International 1(2):103-106.

more, through behavior change interventions. They can also disseminate the information to their colleagues, family members, and neighbors, thus multiplying the effects. Since 2010, HERproject has helped low-income women workers in more than 60 factories in Bangladesh, enhancing their awareness and practices regarding nutrition and maternal care.

In light of these challenges and opportunities, BSR partnered with the Global Alliance for Improved Nutrition (GAIN) to implement a pilot project entitled "Improving Nutrition of Female Garment Industry Workers and Their Children in Bangladesh." Using BSR's network and insights in the private sector, Change Associates Ltd.'s long experience in factory-based programming, and GAIN's expertise in nutrition and private-sector engagement, this multistakeholder project aims to improve the nutritional status of female garment workers and their children 5 and under. To do this, we will:

- » Increase regular consumption of more nutritious foods by women workers in factories.
- » Use peer education to improve female workers' knowledge on nutrition and infant and young child feeding.
- » Develop the business case to encourage the RMG industry to invest in the health of workers and their children.

In a smaller number of factories, the project aims to explore how to promote early-childhood development by upgrading factory day-care centers.

To inform the pilot project design, we conducted a situational analysis in 15 RMG factories to assess the needs and expectations of factory managers and workers on food provision and day-care services in factories.

This analysis revealed several key findings:

- » Female workers in general had poor knowledge and misconceptions on what constitutes a nutritious diet. Less than half (42 percent) of the workers interviewed had a basic understanding of what constitutes a balanced diet, and the majority of them thought rice is the healthiest food.
- » The typical worker family had between two and six members, and families spent between 8,000 and 18,000 taka on food per month.
- » Managers in some factories that provide hot meals found that there was a relationship between serving food and increased productivity, but the causality was not properly documented or referred to.
- » In factories that provide hot meals, only about 3 percent of young adults and 7 percent of older workers preferred to have a food allowance in lieu of food. The majority of the workers were satisfied with the arrangement, as it relieved them from the chore of meal preparation and meant they had time to eat breakfast.
- » In contrast, in factories that do not provide hot meals, more than 90 percent of workers preferred the monetary allowance to food, and managers were adamant about not providing more than the minimum legal requirement. Workers with children under 2 preferred the option of hot meals over food allowances in these factories.
- » Most workers preferred snacks, but managers did not. The most preferred snacks were (in descending order) noodles, yogurt, egg, wheat bread, corn, and local Bangladeshi snacks. Workers least preferred fortified biscuits.
- » Only 13 percent of eligible workers interviewed sent their children to factories' day-care centers. The rate was low because workers preferred to have relatives care for their children at home. They were also unsure about

the quality of the day-care service and worried about industrial accidents and road conditions between their homes and the factories.

Based on these findings, BSR, GAIN, and Change Associates are designing a pilot project in Bangladesh to improve the nutritional status of female workers and children under 5. Since malnutrition is a multidimensional issue that demands multistakeholder collaboration, we call upon the government, business associations, factory owners, international buyers, civil society, and academic institutions to work together on these systematic changes.

Overview of the Nutritional Status of Female Workers in the RMG Industry

Four out of 10 pregnant women in Bangladesh suffer from anemia. An estimated 7.9 percent of GDP is lost due to anemia alone.

Although there were sustained efforts to improve the nutritional status of women in Bangladesh in the past 15 years, the prevalence of chronic energy deficiency was still high: 30 percent in 2007. Clinical vitamin A deficiency and anemia are common among pregnant women and women of reproductive age. For instance, nearly half of all pregnant women in Bangladesh take in less than the recommended dietary allowance of vitamin A, and four out of 10 pregnant women suffer from anemia, particularly in rural areas. This affects the economy: An estimated 7.9 percent of Bangladesh's gross domestic product (GDP) is lost due to anemia alone.

According to the National Micronutrient Survey 2011-12, the prevalence of anemia (with a hemoglobin level of less than 12 gram/deciliter) among non-pregnant, non-lactating women in urban slums was 20.1 percent, and 66 percent of these women had a zinc deficiency. According to a 2008 study of 108 female workers in Dhaka, ⁷ 92 percent of the respondents were anemic. In general, female workers face difficulties in meeting the basic needs of food, clothing, housing, medicine, and education for their families. They also lack adequate access to sexual and reproductive healthcare.

Female workers' ability to improve their nutritional status is constrained by access to food and behavioral factors. In terms of access to food, RMG factories are legally required to provide a food allowance to workers (650 taka per month), which is usually included in the total wage. However, it should be noted that an increase in wage does not always lead to improved food intake. Factories also provide light snacks to workers during normal overtime, and a number of factories in the export processing zones (EPZs) provide workers with hot meals for lunch, and sometimes they provide special snacks for pregnant workers. Serving portions, dietary diversity, cooking methods, and other factors vary across factories, resulting in different effects on workers' nutritional status.

Female workers have low education backgrounds and a poor understanding of what constitutes a balanced diet, micronutrient deficiencies, maternal nutrition, and infant and young child feeding (IYCF). These women lack knowledge about which foods are enriched with protein, carbohydrates, vitamins, or minerals. They said that they do not know the nutritional value of inexpensive foods like pumpkins, leafy greens, vegetable, nuts, seasonal fruits, and small fish. Few women drink adequate amounts of water due to lack of access at home or restricted movement at work. Various access and behavioral factors conspire to create malnourishment among female workers and their children, as well as poor productivity, which leads to diminished business returns.

⁴ Ahmed, T., et al. 2012. "Nutrition of Children and Women in Bangladesh: Trends and Directions for the Future." *Journal of Health, Population and Nutrition*. 30(1): 1–11.

⁶ Helen Keller International. 2006. "Bangladesh: The Burden of Anemia in Rural Bangladesh: The Need for Urgent Action." *Nutritional Surveillance Project Bulletin*. 16: 4.
⁷ Ibid.

 $^{^{8}}_{\circ}$ Gazette on Minimum Wages 2013. The People's Republic of Bangladesh.

⁹ Factories in the EPZ are required to provide food or food allowance to workers. See "FAQ," BEPZA, accessed 15 January 2015, http://epzbangladesh.org.bd/faqs.

Objectives and Methodology

Three factors will be instrumental in improving the nutritional status of female garment workers in the pilot project:

- The food supplied to factory workers must be suitable, affordable, and readily available in the market.
- 2. The interventions must align with the corresponding government regulations.
- 3. The interventions must meet the needs and expectations of factory managers and workers concerning food provision and child-care services in factories.

To inform the pilot project design, GAIN and BSR commissioned operational research to do three things: First, identify the food and products that are suitable for women of reproductive age (addressing factor 1 in the list above). Second, assess the relevant laws and rules and map the main stakeholders involved (addressing factor 2). And third, assess the needs and expectations of factory managers and workers on food provision and day-care services in factories (addressing factor 3).

Change Associates was commissioned to undertake the third component, and the findings are presented in this report. ¹⁰ This situational analysis was intended to help us in four areas:

- 1. Acquire a general overview of workers' knowledge, awareness, and practices related to food and nutrition, as well as their expenditure on food.
- Understand the current arrangement for workplace meals or snacks in factories, including:
 - a. Type and portion of food served
 - b. Average budget per worker
 - c. Frequency of food distribution
 - d. Distribution/service modality
 - e. Satisfaction of workers toward current arrangement
- 3. Evaluate the acceptability and affordability of a range of food/products¹¹ with a select group of factory managers and workers.
- 4. Understand the current child-care arrangements provided by factories, including:
 - a. Physical conditions of day-care centers (e.g. cleanliness, drafting, lighting, and sanitation)
 - b. Operating hours/days, conditions, and appropriateness of facilities (e.g. space, beds, mats, and toys)
 - c. Types and quality of services provided, including qualifications of personnel
 - Food provision in factory (e.g. who provides/prepares the food, types and portion of each serving, frequency of feeding, and who feeds them)

¹⁰ The first two components were undertaken by Business Climate, a business consultancy. This situational analysis has made use of their outputs where appropriate.

¹¹ The list was provided by Business Climate and GAIN.

- e. Workers' uptake of services (why they do or do not use existing facilities, and when do they use them)
- f. Satisfaction of workers toward their current arrangement
- g. Workers' willingness to pay for day-care services

Findings from the above provide insights to stakeholders on the opportunities and barriers to introducing and/or enhancing provisions of food and day-care services in RMG factories.

Chart 1: Process Flow of Situational Analysis



Factory Selection Criteria and Factory Profiles

BSR invited our member companies (international brands and buyers) to nominate their Bangladesh-based supplier factories to join the situational analysis. Early engagement with buyers and supplier groups also helped obtain buy-in for when the project moved onto the pilot and scaling phases.

Five buyers nominated a total of 15 factories to participate in the assessment. It is important to realize that factories that export to international brands and buyers tend to have better working conditions than the average RMG factory. We selected a mix of factories that do and do not provide hot meals for the purpose of comparison. In addition, selection was based on the agreement with individual international buyers and factories, and the following criteria:

- 1. The factory's owner/managers are willing to provide paid time to workers to participate in the assessment.
- 2. The factory is located in Dhaka division.
- 3. Overall, the factories represent different workforce sizes (small: below 1,000; medium: 1,001 to 4,000; and large: above 4,000) and products produced (e.g. woven, knit).

All the factories were strategic suppliers to international buyers and therefore were subject to annual social compliance audits. None of these factories were participating in HERproject at the time of the assessment, ¹² though some had participated in other health programs delivered by other NGOs.

All participating factories were located in Dhaka division. The number of workers ranged from 640 to 8,000, with an average of 3,285 workers. About 60.2 percent of workers in these 15 factories were female. Each factory was assigned a code, from F01 to F15:

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¹² HERproject uses peer methodology to disseminate information among workers, including on nutrition. Workers in HERproject-participating factories are expected to have heightened awareness on food and nutrition. Among the 15 factories, two had previously participated in HERproject.

Table 1: Profiles of Factories Participating in the Situational Analysis

Factory	Number of Workers			Type of	Functioning		Day-Care	Location	
Code					Products	Hours ¹³	Provided	Center Available	
F01	2,050	861 (42)	1,189	1,025	Woven	7 a.m. to 4 p.m.	Yes	Yes	Savar EPZ ¹⁴
F02	2,000	1,200 (60)	800	_15	Woven	7:30 a.m. to 4:30 p.m.	Yes	No	Savar EPZ
F03	3,500	2,835 (81)	665	1,050	Woven	8 a.m. to 5 p.m.	No	Yes	Gazipur
F04	1,700	1,377 (81)	323	1,020	Woven	8 a.m. to 5 p.m.	No	Yes	Gazipur
F05	8,000	4,000 (50)	4,000	4,800	Woven, knitting	8 a.m. to 5 p.m.	No	Yes	Gazipur
F06	4,100	1,599 (31)	2,501	_16	Woven, knitting	Main shift: 8 a.m. to 5 p.m.	No	Yes	Ashulia
F07	3,500	1,925 (55)	1,575	_17	Woven, knitting	Main shift: 8 a.m. to 5 p.m.	No	Yes	Savar (non- EPZ)
F08	4,100	3,731 (91)	369	2,870	Knitting (lingerie)	8 a.m. to 5 p.m.	Yes	Yes	Savar EPZ
F09	3,000	2,550 (85)	450	2,400	Knitting (lingerie)	8 a.m. to 5 p.m.	Yes	Yes	Savar EPZ
F10	640	224 (35)	416	384	Woven	8 a.m. to 5 p.m.	No	No	Savar EPZ
F11	8,000	4,400 (55)	3,600	7,200	Woven	8 a.m. to 5 p.m.	No	Yes	Ashulia

All factories have Fridays as day off.
 Economic processing zone (EPZ)
 Data not available (factory not keeping the data).
 Data not available (factory not keeping the data).
 Data not available (factory not keeping the data).

F12	1,600	880 (55)	720	800	Woven, knitting	8 a.m. to 5 p.m.	No	No	Tongi
F13	4,197	1,679 (40)	2,518	3,358	Woven, knitting	Sewing: 8 a.m. to 5 p.m. Finishing: 1 st shift: 6 a.m. to 3 p.m. 2 nd Shift: 3 p.m. to midnight 18	Yes	Yes	Gazipur
F14	1,550	1,271 (82)	279	1,318	Woven	8:30 a.m. to 5:30 p.m.	No	Yes	Ashulia
F15	1,344	1,142 (85)	202	1,142	Woven, knitting	8 a.m. to 5 p.m.	No	Yes	Baipail

¹⁸ Workers alternate shifts every week.

Methodology

We used a variety of methods in the situational analysis, including in-depth interviews, focus group discussions, and observation of relevant factory environments (including canteens, day-care centers, and food suppliers' kitchens). We used food frequency questionnaires ¹⁹ to provide additional insight. It should be noted that this was not a systematic study of the nutritional status of female workers, but a snapshot of industry practices and preferences. As such, we used primarily a qualitative, not a quantitative analytical lens (although we have used some quantitative data to help illustrate the case whenever appropriate).

We conducted in-depth interviews with management representatives, mostly general managers or assistant general managers from human resources, compliance, and administration departments. We also interviewed caregivers in the day-care centers, canteen staff, and external food suppliers (with the exception of at factory, which has its own kitchen).

We conducted focus group discussions with four different groups of workers:

- 1. Young adult female workers (18 to 22 years old)
- 2. Female workers with children under 2
- 3. Female workers with children between the ages of 2 and 5
- 4. Male and female workers (30 years old or above)

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¹⁹ Food frequency questionnaires provide a quantitative assessment of usual nutrient intake. Detailed information on specific food consumption over the last three days were collected to quantify usual dietary intake.

Table 2: Research Methods, Types, and Number of Respondents

Method	Target	Number of interviewees
In-Depth interviews	 Top-level factory managers or representatives Caregivers in daycare center Owner and cook of kitchen/food suppliers 	 » 15 management representatives » 13 caregivers » Nine food-supplying company staff » Eight factory canteen staff
Focus Group Discussion	Workers' groups (one FGD for each group): 1. Young adult female workers (18 to 22 years old) 2. Female workers with children under 2 3. Female workers with children between the ages of 2 and 5 4. Male and female workers (30 years old or above)	 480 workers (433 women, 47 men) Food frequency questionnaires were conducted with 120 workers
Observation of Physical facility	Food production companies and one internal food-producing unit	» Three food producers (serving four factories)» One in-house kitchen

We interviewed 480 workers through focus group discussions, including 424 women (88.3 percent) and 56 men (11.7 percent). In order to ensure sufficient staff on the production lines, factory managers selected the workers for the focus group discussions, and workers were given the option to decline participation.

The assessment typically started with an opening meeting with factory managers, followed by in-depth interviews with factory managers, day-care caregivers, and food producers (where applicable) or canteen staff. Depending on the time given by the factory, we conducted focus group discussions with factory workers and physical facility observation in parallel or after the in-depth interviews. Each of these activities lasted 40 to 50 minutes, and the entire data collection in one factory took four to five hours.

Limitations of the Situational Analysis

Findings in this report should be interpreted in light of the following limitations on the sample size, time constraints, timing of the research, and availability of secondary data.

First, given that the factories were selected from a limited pool nominated by international buyers, factories participating in the situational analysis tended to share similar characteristics such as working conditions (better than the average) and geographical location (located in Dhaka). Therefore, the sample cannot be considered representative of the RMG industry. We made these selections to

ensure that factory managers were more cooperative, since the request came from their customers (international buyers and brands).

Second, the research team set out to select a mixed sample of factories that do and do not provide hot meals. However, there are not many factories that provide hot meals. Factories located in the EPZs are more likely to provide food due to the prevalent rule of the Bangladesh Export Processing Zone Authority (BEPZA)²⁰: Factories in the zones are required to provide either food or a food allowance in addition to the gross wage. The number of factories located outside of the EPZs that provide food is very low, and only one could be assessed through this situational analysis.

Third, managers in some participating factories could not spare the required time for interviews and surveys, because they did not want to disrupt their production. We shortened the focus group discussions and food frequency questionnaires at the request of these factories. Prior to our research in these factories, it was possible for managers to brief workers who were going to be interviewed and influence their responses. Researchers sought to triangulate the data to arrive at a more objective assessment.

Fourth, standard food frequency questionnaires procedure requires recalling data for a seven-day period. Unfortunately, due to limited time given by managers for the interviews and the difficulty respondents had in recalling what they had eaten over the past seven days, we limited our data collection to three days for more accurate data. Also, we collected data after Eid-ul-Adha, hen people tend to follow better diet regimes, and this might have affected the yielded value of nutrients. Therefore, our food frequency questionnaire data should be used only as reference.

Finally, there were not many secondary data sources available on the nutritional status of RMG workers. Reference data was outdated (some going back 16 years ago) and not specifically about the Bangladeshi population.

As a result, our findings represent a snapshot scenario of the current practices and cannot be construed as representative of Bangladesh's entire RMG industry.

¹⁷

Section 2 (c) for BEPZA Circular dated December 24, 2013, on re-fixation of minimum wages for workers of the enterprises of EPZ: "In addition to the above gross wage, food or food allowance and transport or transport allowance shall be provided by the enterprises. The enterprises that are already providing food/food allowance and transport/transport allowance shall continue, and it shall not be less than what the workers are getting at this moment."

²¹ This is the second-biggest religious festival for Muslims. Cattle are sacrificed and meat is distributed among families, neighborhoods, and poor people as a ritual.

Investigation Area 1: Workers' Knowledge, Awareness, and Practices in Relation to Food and Nutrition

Female workers in general had poor knowledge and misconceptions about what constitutes a nutritious diet. Working mothers were heavily burdened with cooking and spent more on food than the other coworkers.

We collected food-related behavioral data from 480 workers in 15 factories, and we also gave 120 workers the food frequency questionnaires to collect detailed information on specific food consumption over the three days prior to our visit.

This section discusses the following findings:

- » Workers' knowledge and awareness related to food and nutrition
- » Workers' practices on food consumption, grocery shopping, and cooking
- » Workers' expenditure on food

Workers' Knowledge and Awareness Related to Food and Nutrition

The term "balanced diet"²² was not familiar to most workers, and few had a basic idea what this means. Workers were asked the meaning of a balanced diet, and about 42 percent (202 out of 480) mentioned that proper meals must contain a variety of rice; lentils; egg, meat, or fish; and vegetables. Not many respondents said a balanced diet should include dairy products or fruits. The rest (58 percent) responded with vague or partially correct answers, such as that they believed a balanced diet means consuming individual food items such as big fish, beef, mutton, polao, or biryani, rather than a combination of different food groups.

Some common misconceptions included:

- » Rice is the healthiest food.
- » Only expensive items are "balanced foods," and cheaper items such as spinach and vegetables are of low nutritional value.
- » Meat and fish are more nutritious than fruits and vegetables.
- » Imported fruits such as apples and oranges are more nutritious than locally available fruits such as guava and pomelo.

Less than half (42 percent) of the workers interviewed had a basic understanding of what constitutes a balanced diet.

To achieve a balanced diet, one must eat a variety of foods from each of the food groups. According to dietary guidelines for Bangladesh, that means adequate amounts of cereals and cereal products (preferably whole-grain cereals daily); the required daily amount of fish, meat, poultry, egg, and legumes; plenty of daily fruits and vegetables; and adequate amounts of milk and milk products.

Peer influence played a significant role in knowledge dissemination, especially among the older cohorts and workers with children. Workers with children learned mainly from factory doctors, nurses, and welfare officers. The more mature group came to know about nutrition mainly from mass media (e.g. television) and their peers and family members. Young adult workers, on the other hand, learned about what constitutes a balanced diet from sources such as school curriculum, television, and other mass media.

Workers' Practices on Food Consumption, Grocery Shopping, and Cooking

We interviewed workers about their eating practices, as well as who has responsibility for grocery shopping and cooking at home.

<u>Table 3: Worker Groups' Patterns of Food Procurement, Preparation, and Consumption</u>

Worker Groups	Percent of Workers (Male and Female) Who Eat Dinner Together as a Family	Percent of Female Workers Who Have the Sole Responsibility of Buying Food	Percent of Female Workers Who Have the Sole Responsibility of Cooking
Young Adults	98	26	29
With Children Under 2	98	8	52
With Children Ages 2 to 5	95	18	53
30 Years and Older	97	37	29

Food consumption: There was a lack of diversity in the food consumed, especially for breakfast and lunch, as the menu usually consisted of a simple curry with a fried item with rice and lentils. Workers' ability to consume a balanced diet was constrained by the unavailability of affordable nutritious foods in the market. Workers tended to include vegetables, small fish, and egg in their daily meals, not because they knew about their nutritional values or the need to balance their diet, but because these were the foods that they could access. They were not aware of the concept of a food plate or a food pyramid when preparing meals. Their purchasing power also decreased toward the end of the month, as they spent their income on other household expenses and remittances while awaiting the next salary payment.

Dinner was the only meal for which workers could get together with other family members, and workers in all four groups tended to eat the meal together. In 3.15 percent of the cases, the female workers were the last ones to eat during dinner; these workers ate whatever was left after other family members had finished their meals.

Grocery shopping and cooking: Women workers aged 30 or above procured food for their families more often than other cohorts. About one in four young females (18-22 years old) interviewed said they helped buy food. Presumably, they could have some influence over the family's food selection. On the other hand, women workers with children, especially those with children under 2, had

Working mothers with children ages 2 to 5 had the heaviest burden in cooking, while older workers did the grocery shopping but cooked less.

The typical family comprised two to six members (92.6 percent, n=417). Families spent between 8,000 and 18,000 taka on food per month

less responsibility in procuring food, mainly because of other child-caring responsibility at home and the associated time constraints. In general, the family's food-purchasing decisions were affected by factors such as seasonal availability of food, relative cost on a particular day, and, most importantly, the decision made by the head of household.

While working mothers did less grocery shopping than the two other cohorts, more than half of them had to prepare and cook food at home. These women got less time for rest and acquiring personal capabilities. Young women and older workers had fewer cooking responsibilities, as they usually had other family members such as their mother, sister, or in-laws to do it for them.

Workers' Expenditure on Food

The expenditure on food tended to increase with family size. The bigger the family, the more contribution individual workers had to make. It should be noted that 13.1 percent (63 out of 480) of interviewees either did not make any monetary contribution to household food expenditures or had no idea how much was spent because they gave their entire income to their parents.

Table 4: Workers' Average Household Monthly Expenditure on Food²³

Group by Family Size	Number of Respondents	Workers' Average Household Monthly Expenditure on Food (Range)
Single Living Alone	24	2,571 to 4,350 taka
Two- to Three- Member Family	180	5,658 to 7,886 taka
Four- to Six- Member Family	206	7,184 to 8,881 taka
Family With More Than Six Members	7	11,333 to 18,000 taka

According to a research conducted in 2010,²⁴ the average monthly household expenditure on food for a worker family of four was 3,974 taka (44.7 percent of total household expenditures).²⁵ It should be noted that food inflation in Bangladesh averaged 7.93 percent between 2013 and 2015, reaching an all-time high of 9.09 percent in May of 2014.²⁶

Most of the younger workers interviewed lived on their own, either in mass houses²⁷ or hostels, and spent the least on food (2,571 taka per month). Assuming an average worker at grade 7 (the lowest grade) is earning a minimum

²³ Most workers could not recall their own expenses on food, making it difficult to arrive at a pernerson expenditure

person expenditure.

²⁴ War on Want. 2011. "Stitched Up: Women Workers in the Bangladeshi Garment Sector." War on Want.

²⁵ Same percentage as the figure in the "2010 Household Income and Expenditure Survey of Bangladesh."

²⁶ http://www.tradingeconomics.com/bangladesh/food-inflation

Mass houses are small houses/rooms, like hostels, that are usually shared between three or four people.

wage of 5,300 taka per month, food expenditure would constitute 48.5 percent of her income. The percentage dropped for workers with more senior positions and/or those with more experience (e.g. the same figure would represent 19.8 percent of the monthly salary of a grade 1 worker who earns at least 13,000 taka per month).²⁸

Average expenditure on food increased for workers with children. Complementary feeding²⁹ might have led to increased expenditure, and some women considered medical expenses as expenditures on food.

Older workers (30 years or older) who lived on their own tended to spend 41 percent more on food than their younger coworkers. Their contribution to the household food expenditure also increased with the number of family members.

General observations:

- » Workers either did not know or were misinformed about food and nutrition.
- » Women had diverse household responsibilities, and working mothers with young children bore the heaviest burden.
- » Single workers living alone spent the least on food every month, and workers with children between the ages of 2 and 5 spent the most.

For minimum wages for workers at different grades, see http://awaj.info/wp-content/uploads/2013/10/Workers-Voice-Report-on-implementation-of-minimum-wages-July-2014 pdf

When breast milk is no longer enough to meet the nutritional needs of the infant, complementary foods should be added to the diet of the child. The transition from exclusive breastfeeding to family foods, referred to as complementary feeding, typically covers the period from 6 to 18-24 months of age.

Investigation Area 2: Food Provision in Factories

In some factories that provide hot meals, managers reported a relationship between serving food and increased productivity, but the causality was not properly documented or referred to. Workers were also satisfied, as it relieved them from the chore of preparing meals and gave them time to eat breakfast.

Workers in factories that did not provide hot meals preferred the monetary allowance to food, and managers were adamant about not providing more than the minimum legal requirement.

We selected two types of factories for this situational analysis: factories that provided hot meals to workers and those that did not. It should be noted that with the exception of factories located in the EPZs, it is not common for factories in Bangladesh's RMG industry to provide hot meals for workers. On the other hand, factories usually provided snacks during overtime, even if they were not providing hot meals, and that was seen in factories situated in all localities.

In this situational analysis, five factories provided hot meals and the other 10 did not. Among the 10 factories that did not provide hot meals, two of them had suspended hot meal provision for an indefinite period due to the relocation of production facilities. Snacks were provided to workers who worked overtime.³⁰

This section discusses the food-distribution system in both types of factories, and explores workers' expectations and satisfaction, as well as managers' perceptions about the arrangements.

³⁰ Even though factories tend to provide snacks during excessive overtime, excessive overtime is a compliance violation, so they are often reluctant to disclose such practices.



Factories That Provided Hot Meals

Only five of the 15 factories in this study provided hot meals to their workers. Another two factories had stopped the provision due to the relocation of their production facilities. In addition to the required food allowance specified in the minimum wage rule,³¹ these two factories were providing cash allowances (29 to 31 taka per day) in lieu of food.³²

It should be noted that all factories that provided hot meals were also paying the 25-taka daily food allowance to workers, as stipulated by law. The hot meal could be seen as an additional benefit.

Four out of the five factories providing hot meals were situated in the EPZ, with food supplied from two different external suppliers. The non-EPZ factory that provided hot meals had its own cooking facility.

FOOD SUPPLIERS

All the food suppliers we interviewed (three, including the one in the non-EPZ factory) were sole proprietors and had been serving food to these factories for a long period of time. Initially, there were tender calls, and these suppliers won the bid and had been supplying for as long as eight years, with renewable contracts. These suppliers were located near the EPZ and each had the capacity to prepare food for 7,000 to 9,000 people per day.

Suppliers' facilities were subject to buyers'/factories' compliance standards (e.g. on cleanliness, hygiene, etc.). They had separate areas for cleaning, cutting,

Minimum wage circular, dated December 5, 2013.

³² One was located inside EPZ and another one was located outside; they both used to get food from external suppliers.

cooking, storage (grains, spices, and vegetables), as well as refrigerators. The cooking stoves were mostly run by gas, but considering the possible interruption of supply, clean coal was used at times.

FACILITIES AT A FOOD SUPPLIER



These suppliers had between 14 and 25 people on their cooking staff, and they had an additional 20 to 30 staff each for grocery shopping, cutting, cleaning, and general management. The factories' medical teams checked suppliers' staff periodically for communicable diseases, and they were also trained to use good food-preparatory practices. For example, they learned the types of vegetables to cook, how to clean properly, and how to prepare and store raw materials and cooked food.

Each supplier had a head cook. Coincidently, heast cooks from all three suppliers used to work for another factory. They had received a five-day training on food preparation and maintenance of cleanliness and hygiene. Head cooks were usually responsible for grocery shopping from nearby markets, including the Baipail and Shafipur bazaars. For larger purchases, they shopped at Dhaka's Kawran bazaar. One factory had rice and a few other ingredients delivered monthly from Dhaka.

MEALS SERVED

All factories' dining areas were set up in a similar way, with long benches and tables, allowing between 800 and 1,200 workers to dine at the same time. There were separate faucets for drinking, and cleaning water was available in the dining areas.

There was also a common pattern in the food served. The midday meal usually consisted of rice and lentil soup as base, and an accompanying curry as per a fixed schedule.

<u>Table 5: Daily Menu of Factories That Provided Hot Meals (See Appendix for Menu Quantities)</u>

Factory	Place of	Menu ³³						
Code	Cooking	Saturday	Sunday	Monday	Tuesday	Wednesda y	Thursday	
F01	External supplier	Chicken/ beef	Mixed vegetables with prawns	Egg with potato curry	Chicken	Mixed vegetables and mashed potato	Chicken/ beef	
F02	External Supplier	Mixed Vegetables	Beef/egg	Hilsha fish	chicken	Fish with mixed vegetables	Egg and mixed vegetables	
F08	External supplier	Beef/egg	Mixed vegetables and mashed potato	Fish	Beef/ fish	Egg	Chicken	
F09	External supplier	Beef/egg	Mixed vegetables and mashed potato	Fish	Beef/ fish	Egg	Chicken	
F13	In-house kitchen	Egg curry	Mixed vegetables	Egg curry	Mixed vegetables	Egg curry	Mixed vegetables	

Some common practices were observed:

- » Rice and lentil were kept in big bowls on the table and were available in plenty.
- » Side dishes such as curry were distributed in cups or small bowls.
- » Serving portions for sides were about 90 to 120 grams.
- On average, animal protein and vegetables constituted 61 percent and 39 percent of the side dish, respectively.
- Workers had to stand in gueues to collect side dishes.
- » Staff from administration, human resources, or compliance departments were in charge of the entire process.

There were variations in terms of the menu and the process:

- » Two out of five factories avoided fish, fearing discontent over the piece received or easy spoiling, while others ordered fish in particular, considering big fish such as Hilsha fish a special item.
- » The non-EPZ factory provided hot meals as a benefit to workers.

Factories
providing hot
meals had
committees to
ensure food
quality, and they
provided a
feedback channel
between workers
and management.
These
committees had
manager and
worker
representatives.

³³ Friday is a rest day.

- » Some factories provide a different meal once a month, such as polao, roast chicken, etc.
- » In all five factories, worker-participation committees or separate food committees were responsible for the entire process or for part of it (e.g. shopping).

SERVING TIME AND SHIFTS

All except for one factory had one hour for lunch (45 minutes for the odd one). This included 30 minutes for eating and 30 minutes for rest or free time.

The factories usually had shifts to serve all workers in an organized way. There were usually four to five shifts, starting as early as 11:15 a.m. Each shift lasted an hour, which included dining and cleaning time. Workers in the last shift could finish their lunch as late as 2:45 p.m. The batches got shuffled every 15 days, so that no worker had to have lunch early or late every day.

HYGIENE MAINTENANCE

The three food suppliers and one factory cooking facility we visited had to comply with the factory cleanliness standard. Dedicated factory representatives monitored washing, cutting, cooking, and storing areas.

In the factory where food was prepared in-house, factory managers claimed that the entire compliance team, as well as representatives from the food committee, ³⁴ constantly monitored the hygiene, cleanliness, and safety in the kitchen and dining areas.

³⁴ The food committees consisted of representatives from compliance, human resources, medical departments/units, as well as representatives from general workers, and worker participation committee members. Worker participation committees are platforms for worker-management dialogue and are required by Bangladeshi law.

Table 6: Food Consumption, Utensils, Cleaning, and Transportation System

Factory Code	How Food Is Served	Serving Utensils	Cleaning of Personal Utensils	Food Transportation Responsibility
F01	Serving trays, rice and lentil in big bowls on table	With spoon	Suppliers' team	Supplier
F02	Serving trays, rice and lentil in big bowls on table	With spoon	Suppliers' team	Supplier
F08	Serving cups, rice and lentil in big bowls on table	By hand	Self	Supplier
F09	Serving cups, rice and lentil in big bowls on table	By hand	Self	Supplier
F13	Serving cups, rice and lentil in big bowls on table	By hand	Self	N/A

STORAGE AND LEFTOVERS MANAGEMENT

All five factories' suppliers' cooked food as per daily order, based on workers' attendance, so that food waste was not an issue. However, suppliers or cooks prepared 100 to 300 extra units in case of extra demand. To save time, fish was usually fried the night before, stored in a refrigerator overnight, and then cooked with curry the following morning.

Because of the cook-to-order system, there were not many leftovers.

Table 7: Management of Ordering Extra Food and Leftovers

Factory Code	Extra Food Preparation	Leftover Management
F01	Yes	Given away to supplier's staff
F02	Yes	Given away to supplier's staff
F08	Yes	Given away to a nearby fish-feed producer
F09	Yes	Given away to a nearby fish-feed producer
F13	Yes	Given away to cooking staff

WORKERS' SATISFACTION AND EXPECTATIONS ABOUT HOT MEAL PROVISION

Workers in the five factories were satisfied with the free hot meal arrangement. Regardless of age, marital status, and number of family members, there were some common compliments and complaints.

Common compliments:

- » Ease of cooking responsibility: Workers needed to come to work very early in the morning, while bearing the responsibility to cook for themselves and other family members. Workers said it was difficult for them to prepare meals every day and make it to work on time. Many workers said the factory meals relieved them from these chores and gave them time to eat breakfast, which they normally skipped.
- » Ensuring safe food consumption: Workers tended to bring food from home if no meals were served, and they feared food poisoning if the factories had no refrigerators or heating facilities. Hot meals provided by the factory could guarantee food safety to a certain extent.
- » Variety of food options: Workers were happy to be able to eat a variety of protein items (i.e. meat) on a regular basis, which otherwise would not be possible if they had to prepare food themselves.
- » Money saving: Factory-provided lunch helped workers save money on food.

Common complaints/suggestions:

- » Limited menu options: Factories used the same menu repeatedly, except for one factory that changed one item over the years at the workers' request. This pattern made workers feel weary of having the same food every week.
- » Taste and portion size: Some workers felt the portion size was not big enough and that the food did not taste good, especially the vegetable items. In all factories, workers reported that they carried an additional item from home on the days when factories served vegetables.
- » Concerns over hygiene: About 15 percent of the workers from the older group thought those who prepared the food were not maintaining proper hygiene. Another 8 percent of workers with children thought the fish and meat, though scaled and cleaned, still might not be hygienic.
- » Communications: Among the five factories, only one factory discussed these issues in the food committee and responded to workers' feedback to improve food quality. Committees in the other four factories were inactive, mainly because factories outsourced the service to external food suppliers, and they were more focused on compliance and hygiene than they were on collecting and responding to workers' feedback.

Given that four of five factories that provided hot meals were located in the EPZ—where there were no canteens or food stalls, and where very few workers lived within walking distance—workers did not have alternatives to the food provided by factories. In these five factories, only about 3 percent of young adults and 7 percent of older workers said they would prefer to have a food allowance. The majority of the workers were satisfied with the current setup and hoped the factory would continue providing food.

MANAGERS' PERCEPTION OF HOT MEAL PROVISION

Managers provided mixed comments regarding hot meal provision in factories.

Two out of five management representatives agreed that there was both a direct and an indirect relationship between serving food and productivity. According to them, workers from factories that provided food had higher morale than the ones who worked at factories that did not provide meals. Workers were thought to be more motivated and tended to have more energy, because they did not have to spend time preparing food or commuting back home for lunch. As a result, workers may be more productive in factories that provide hot meals. However, factories did not have a systematic way to collect the data. They did not track turnover or absenteeism, and therefore did not know the business benefits of such investments.

On the negative side, two management representatives said providing meals had become a burden to some management staff, because they had to organize, coordinate, manage, and monitor the cooking and distribution processes. Supervision of food suppliers was very time-consuming: Factory management representatives often received calls from suppliers about the unavailability of ingredients, and they also had to periodically visit and supervise the food-preparation facility/dining area. Since food was a very sensitive issue in the industry, managers needed to ensure quality and safety to avoid discontent.

Factories That Did Not Provide Hot Meals

There were 10 factories that did not provide hot meals to workers, although they provided snacks during regular overtime. These factories had in-house food stalls that sold packaged and dried food items, soft drinks, and candies. This type of factory represents the majority in Bangladesh's RMG industry.

FOOD STALLS AND SNACKS

Eight out of 10 factories in this category had a food stall in the facility.³⁵ There were two types of food stalls at factories that did not provide hot meals: permanent and makeshift shops. Both types of shops/stalls were managed by factory-appointed staff or workers, except for one factory, which had an external supplier set up a shop in the dining area.

It should be noted that there was no food shop inside the EPZs, so workers had to bring snacks from outside or go out of the EPZ during lunch or after-work hours if they wanted to buy food.

Food stalls in these factories sold similar types of $\frac{29}{10}$ od and beverages, including packed biscuits, cakes, candy, buns and bread, bananas, fruit juice, energy drinks, tea, and more. Six out of 10 of the factories sold fried snacks like *samucha* and *shingara*, while the rest had either stopped selling them (one factory) or had never sold them (three factories) because managers considered these foods unhealthy, despite the high demand from workers.

³⁵ Among the two factories that did not have a food stall, one was inside the EPZ, and the other had closed its food stall a long time ago due to low interest from workers.



PRICE AND SALES SYSTEM

Items at the food stalls were sold at market prices; factories neither provided subsidies nor marked up the price for profit. There were fixed-price lists available at the stall, displayed at convenient places for workers' reference.

All the food stalls opened twice a day, first from around 10 to 11 a.m., and again from around 3 to 4 p.m. However, food stalls were closed during the lunch hour. The stalls typically served between 200 and 300 customers on an average day, including both workers and middle-management staff. Managers and worker participation committees decided what food was sold.

HYGIENE, STORAGE, AND LEFTOVER MANAGEMENT

Food stalls in all eight factories had to comply with the factories' rules and regulations, and were monitored regularly either by the assigned management department or by a designated committee (in some cases, both).

Items to be included for sale needed to be approved by the respective department and/or committee. Fried items needed to be sourced from approved vendors, and vendors had to use good-quality oil (i.e. bottled/branded). Moreover, expired packed foods were to be returned to the suppliers or the distributors. It should be noted that those factories were following best practices; placing stringent requirements on food quality is not common in the industry.

WORKERS' SATISFACTION AND EXPECTATIONS ON FOOD PROVISION

Workers at the 10 factories that did not provide hot meals either went home for lunch (51 percent) or brought home-cooked food to the workplace (49 percent).

Family structure, distance from home, and the number of family members at the worker's home appeared to influence whether the worker decided to go home or bring lunch to work. Workers with young children tended to go home to feed their children and do other household chores before returning to the factory. Some of them were tired and/or returned to the factory late.

Across all factories that did not provide hot meals, most workers shared the same expectation: The majority (more than 90 percent) wanted the factory to

³⁶ Most of the food stalls were located in or around the dining area. Because space was limited, factory managers preferred to close the stalls during lunch hours to accommodate dine-in workers. Moreover, stalls were run by designated staff and workers, and they were released for meals during lunch hours.

provide them with additional monetary food allowance.³⁷ Only a few workers (those 30 or above, and workers with children under 2) wanted factories to provide food. Workers said they would like to spend the money at their will and contribute more to family food expenditure, although the amount at stake would not be significant.

The majority of workers bought food (snacks and tea) at factory food stalls, and were satisfied with the current arrangement. It's likely, however, that they did not have a reference point for comparison, as these workers had never worked in a factory that provided hot meals. At one factory, many workers wanted the factory to provide hot meals, mainly because a nearby factory was doing that. Those workers, however, were also concerned because they had heard the food was of poor quality.

MANAGERS' PERCEPTION OF FOOD PROVISION

Managers were aware of the potential correlation between serving hot meals and more satisfied/productive workers, but they also thought that it was important for workers to spend their lunch hour with family at home, so they could return to work with more energy.

Managers were reluctant to provide hot meals in the workplace for several other reasons:

- » Perception of managerial staff: Some managers thought it would not be feasible to provide hot meals to workers, and that this would not have any positive effect on the workforce. Some management representatives believed that workers would complain about the quality of food or the arrangement, and small complaints could spark more serious unrest. They did not think about the potential benefits of serving food, such as attracting and retaining good workers, and therefore did not want to take the risk.
- » Lack of successful examples from peer factories: Managers also said they were unaware of factories that provided hot meals outside the EPZ, although there were a number of them. Some managers said the stories they heard from peer factories were mostly about failure, such as worker unrest.
- » Logistical difficulties: Many managers believed that serving hot meals would require additional staff and infrastructure (construction of a canteen³⁸), especially for factories with a large workforce.
- » No intention to go beyond the minimum: Although some managers had considered providing hot meals, they were concerned that nearby factories might feel pressure from their workers to start serving hot meals. Managers did not want to upset this equilibrium by providing more than the basic minimum.

When asked about the possibility of introducing hot meals, managers said it could be an option if they received sustained support from international buyers, if workers contributed to the food cost, and if an industrial association or an authority such as the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), Bangladesh Knitwear Manufacturers and Exporters

BSR and GAIN | Current Practices in Food and Childcare-Service Provisions in Bangladesh's Ready-Made Garment Factories

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Workers received a food allowance of 650 taka per month, in accordance with the law.
 Although it is a legal requirement for factories employing more than 250 workers to have an adequate canteen (see Section 57, the Factories Rules 1979), not all factories have a functioning canteen.

Association (BKMEA), and Bangladesh Export Processing Zones Authority (BEPZA) provided direction or assistance. Even if hot meals were to be provided, managers felt that workers should be "educated" to be more accommodating, accepting the food provided. Management staff also needed to understand more about the business benefits of providing hot meals, such as how this could help improve workers' loyalty and productivity.

General observations:

- » Almost all workers in factories that provided hot meals offered lunch in the workplace. However, in factories that did not provide hot meals, half of the workers brought food to work and another half went home for lunch.
- » Factories located within EPZs were not allowed to operate food stalls or canteens, and workers brought snacks to work to satisfy their hunger during working hours.
- » Food suppliers and food stalls were operated according to individual factory rules and regulations.
- » Workers were comfortable with the current settings, and managers were content with the status quo and did not want to do anything more than the legal minimum.

Investigation Area 3: Factory Managers' and Workers' Preferences on Food and Their Willingness to Pay

Hot meals were most preferred by workers with children under 2 in factories that did not provide hot meals. Snacks were popular among most workers, although managers in both types of factories did not want to disrupt production by distributing snacks, or were reluctant to take on the logistical challenge of providing food to a large workforce.

FOOD PREFERENCES

GAIN commissioned the consultancy Business Climate³⁹ to identify different types of foods (hot meals and snacks), drinks, and food supplements that could be introduced in RMG factories.

Table 8: List of Food Options Suggested

Hot Meal	Snack	Drink	Food Supplement
Rice	Yogurt	Whole milk	Vitamin A for children ages 0 to 59 months
Green leafy vegetables	Boiled egg	Lemon water	Zinc supplements
Small fish	Local Bangladeshi snack (rice crisps with molasses, rice flakes, etc.)	Oral- rehydrating solution	Multivitamin for women
Meat	Corn		Micronutrient powder (MNP)
	Wheat bread		lodized salt (to be used in hot meals)
	Fortified noodles		Vitamin A-fortified oil (to be used in hot meals)
	Fortified biscuit		

³⁹ Business Climate, a business consultancy firm, was commissioned to map and critically assess manufacturers and their products that may be suitable for women of reproductive age and children between the ages of 6 months and 5 years to determine the optimal product (food or supplement), including potential delivery channels and a payment strategy.

Both workers and managers were asked to list which of these foods/drinks/supplements they would like to have or to provide. Respondents were asked to rate the items using a five-point scale, with 1 being the least preferred and 5 being the most preferred.

Managers from one factory refused to answer and firmly indicated that they had no plan to provide any of those options.

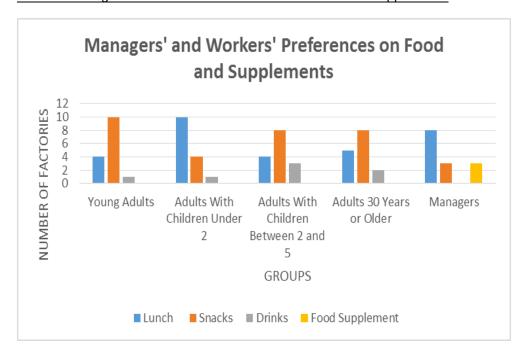


Chart 2: Managers' and Workers' Preferences on Food and Supplements

Hot meals:

- » In factories that did not provide hot meals, hot meals were most preferred by workers with children under 2. However, in factories that were already providing hot meals, this group of workers preferred to spend some time at home during lunch hours to care for their children, instead of staying in the factories for lunch.
- » Managers, especially in factories that did not provide hot meals, were reluctant to provide any food. But if food had to be provided (i.e. because of an executive order), they said they would prefer to serve hot meals rather than snacks.

Snacks:

- » Snacks were most popular (in descending order) among young adults, workers with children between the ages of 2 and 5, and older workers. Workers in factories that provided hot meals wanted to add snacks because they felt the lunch serving portion was too small or the taste was poor.
- » Workers with children under 2 preferred lunch to snacks.
- » The most preferred snacks were (in descending order): noodles, yogurt, egg, wheat bread, corn, and local snacks.

- » Fortified biscuits were least preferred: Almost no workers had heard of them, and many workers did not like to have the same biscuits every day.
- » Snacks were not preferred by the managers in both types of factories. Managers in factories that provide hot meals thought they were providing good food already, while managers from factories that did not provide hot meals either did not want to disrupt production by distributing snacks or were reluctant to take on the logistical challenge of providing food to a large workforce.

Drinks:

- » Most workers did not want drinks. Only those with children between the ages of 2 and 5 showed interest. The most preferred drinks were (in descending order) lemon water and milk.
- » Managers in both types of factories did not want to serve drinks other than water in the workplace.

Food supplements:

- » No workers selected food supplements, most likely because they did not know what they are.
- » Managers in factories that did not provide hot meals expressed more interest in food supplements such as multivitamins and zinc than drinks.
- » No managers in factories providing hot meals preferred food supplements; they did not see the need.

WILLINGNESS TO PAY

All workers in factories that provided hot meals strongly felt that the food should be provided by the factory for free (as is the current arrangement). On one hand, they were already enjoying the benefits without any contribution. ⁴⁰ They were not, however, very satisfied with the repetitive menu and would not want to pay for "low-quality" food. Even among those who were willing to pay, they wanted to pay only a token amount (2 to 5 taka per meal) instead of bearing the full cost.

Workers in factories that did not provide hot meals were willing to pay for meals. The younger the workers, the more willing they were to pay. The amount of contribution ranged from 1 taka to 10 taka per meal, depending on the worker's income level and family size (younger workers were mostly residing with other family members and had more disposable incomes

⁴⁰ Applicable to factories located in the EPZ and outside the EPZ that are currently providing hot meals.

Table 9: Willingness to Pay for Suggested Meal at Work

Food	Range of Co	ontribution	Remarks
	Factories That Provided Hot Meals	Factories That Did Not Provide Hot Meals	
Hot Meals	2 to 5 taka per item	15 to 30 taka per meal	Most preferred by workers 30 years and older from factories that did not provide hot meals
Yogurt	3 to 5 taka	2 to 5 taka	Most preferred by young adult workers from factories that provided hot meals and by workers with children under 2 who work at factories that did not provide hot meals
Biscuits	2 taka	-	Most preferred by young adult workers from factories that provided hot meals
Noodles	3 to 8 taka	5 taka	Most preferred by young adult workers from factories that provided hot meals, and by workers with children under 2 who worked for factories that did not provide hot meals
Egg	3 taka	2 taka	Most preferred by young adults and workers 30 years and older in factories that did not provide hot meals
Bread	-	1 to 2 taka	Most preferred by workers 30 years and older in factories that did not provide hot meals

General observations:

- » If food was to be served in factories, lunch was preferred by managers and workers with children under 2.
- » Snacks were mostly preferred by young adult workers.
- » Many workers were willing to pay a token amount of money for the food of their choice.

Investigation Area 4: Factory Day-Care Centers

Only 13 percent of eligible workers interviewed sent their children to factories' day-care centers. The rate was low because workers preferred to have relatives care for their children at home. They were also unsure about the quality of the factory day-care service and worried about industrial accidents and road conditions between their home and the factory.

We collected data on the day-care centers from all 15 factories, but only 12 factories had functional day-care centers at the time of data collection. We collected data on current arrangements, the physical condition of the day-care centers, the facilities and services offered, the qualifications of caregivers, food provision, and workers' satisfaction and preferences on the services.



According to section 94 of the Bangladesh Labor Act 2006, "every establishment, wherein 40 or more workers are ordinarily employed, there shall be provided and maintained a suitable room or rooms for the use of children under the age of 6 years of such women."

LEGAL REQUIREMENTS VERSUS REALITY

By law, all factories in Bangladesh are required to have a day-care center for workers' children under the age of 6. The act stipulates that factories may include provisions for accommodation, food, and other facilities, but these are not mandatory, so factories can make their own arrangements.

Some of the factories we visited had a separate building with toys, reading materials, and food provision, and some factories had only beds and toilets in the day-care centers. One factory had two units located within the EPZ and had a small day-care center located at one of the units to cater to the needs of all workers.

PHYSICAL CONDITION

The day-care centers were located either within the factory building (five out of 12), or outside the main production facility (seven out of 12). Two out of 12 of the factories that had a day-care center had an air-conditioning system, and the rest of the factories had working ventilation systems. All of the day-care centers were located near the medical center and kept away from the generator, boiler rooms, or power sources. Both tap and drinking water were available, as was bedding for children.

FACILITIES

Workers who wanted to enroll their children in the day-care center, needed to apply to the administration, compliance, or human resource department, fill out an admissions form, and provide the factory with the workers' identification number and photograph. In factories that experienced a high demand for childcare, workers could be put on the waiting list.

In most cases, day-care centers were open during factory-operation hours, but remained closed during overtime, which was outside of normal working hours. ⁴¹ However, if required under special circumstances such as during peak production, managers could keep the day-care center open with limited services.

All the facilities were provided for free, except in two factories, where workers needed to pay 300 taka for admission.

⁴¹ Factory would keep it open if there was demand on any particular day, albeit with limited services.

Table 10: Profile of the Day-Care Centers

Factory Name	Day-Care Facility Available	Location (Inside or Outside of Factory)	Food Provided	Children Capacity Versus Number of Children Observed	Early- Childhood Development Materials	Number of Caregivers	Improvement Plan
F01	Yes	Inside	Yes	10/8	Yes	2	Yes
F02	No ⁴²	-	-	-	-	-	No
F03	Yes	Inside	Yes	50/25	Yes	3	Yes
F04							
F05	Yes	Outside	No	10/9	No	1	No
F06	Yes	Outside	Yes	50/30	Yes	3	No
F07	Yes	Outside	Yes	8/8	Yes	2	No
F08	Yes	Inside	Yes	21/19	No	5	No
F09	Yes	Outside	Yes	25/17	No	3	No
F10	No ⁴³	-	-	-	-	-	-
F11	Yes	Outside	Yes	20/25	No	2	No
F12	No ⁴⁴	-	-	-	-	-	-
F13	Yes	Inside	Yes	45/30	Yes	5	No
F14	Yes	Inside	Yes	6/2	No	1	No
F15	Yes	Outside	Yes	12/10	No	2	No

Four factories provided only snacks; the rest provided snacks as well as lunch, which included *khichuri*, soft rice, and bread and jelly. Factories provided basic early-childhood development materials, such as toys, reading materials, and equipment that promotes physical movement (e.g. a see-saw). Breast-feeding facilities were widely available for all lactating mothers—even if their children did not stay in the day-care center.

Only two factories, which subcontracted the management of their day-care centers to an NGO, had trained caregivers. ⁴⁵ Factory managers selected caregivers based on their childcare experience, such as whether they had their own children, instead of prior day-care experience or educational qualifications.

Only two factories had improvement plans, such as plans to construct new rooms, to move the fixture to a permanent site, or to start providing food or other materials. Two other factories would like to improve on their infrastructure development.

⁴² Used a central day-care center located within another facility under the same supplier group.

⁴³ Currently not available due to ongoing construction work in a new location.

⁴⁴ Stopped due to low or no use from the workers.

⁴⁵ These caregivers were trained by the NGO on early-childhood development for seven to 10 days, but they were not awarded a certification or diploma.

DAY-CARE USE AND WORKERS' PREFERENCES

Among the workers interviewed, only 50 percent (240 out of 480) were eligible (i.e. had children under age 6) for the day-care services, and only 13 percent of those workers (31 out of 240) actually sent their children to the day-care centers.

Workers who used the service were generally satisfied, and managers were also willing to continue providing the services, mainly because it's a statutory requirement. Workers were willing to use the services mainly due to:

- » The children's well-being: Workers thought that their children would be safe, fed, taken care of, and active at the day-care centers, which would not be possible if they stayed at home alone. Workers also said they liked to keep their children closer to see and feed them. Moreover, the factory doctor regularly checked the children's health status and administered necessary vaccines.
- » Word of mouth from other workers: Workers were naturally doubtful of managers' intentions or the quality of services, but once their peers experienced good services and conveyed that to other workers, they began to trust the childcare at the factory centers.

However, day-care use remained low, mainly because workers:

- Were unsure of the quality: Three workers expressed concern about caregivers' attention to children. They had questions about the quality of childcare when two to three caregivers had to take care of 30 to 40 children.
- » Had a caregiver at home: Almost 87 percent (209 out of 240) of eligible workers did not use the day-care center because they had at least one elderly relative at home to look after the children. Usually mothers, mothersin-law, sisters, and neighbors took care of their children, although, in two cases, workers had a paid caregiver at home. No workers were using community day-care centers.
- » Lacked adequate transportation: Workers usually walked or took the bus to work. Traveling with children along the busy roads during peak hours could be risky and stressful.
- Were afraid of industrial incidents and natural disasters: Many workers felt their children were better off at home, because they worried about the risk of fire and workers' unrest (and the agitation that usually followed), as well as natural disasters such as an earthquake. One4management representative said he thought it was not a good idea to let workers bring their children to work, as heavy machinery operated all day and there were always risks of fire and other industrial incidents.
- » Were not aware of the various services: Factories provide day-care services because of legal requirements, and therefore they are not incentivized to actively promote the services. Many workers did not know the range of services provided, including snacks and doctor visits.

WILLINGNESS TO PAY

No worker was willing to pay for any child-caring services, as they strongly felt that factory should be paying for all types of services. In most cases, however, factory managers thought running a day-care center was a burden to their finances and brought no direct business benefits.

Conclusion

This situational analysis examined a sample of factories we selected intentionally to understand the current practices and preferences of managers and workers regarding food and day-care services.

Key Findings

Our analysis revealed several key points related to a variety of issues.

Workers' knowledge, awareness, and practices in relation to food and nutrition: Female workers did not have a full understanding of what constitutes a balanced diet. We found that these workers held several misconceptions over food and nutrition, and these beliefs were reinforced by peers and other mass communication channels.

Workers' diets lacked diversity, especially during breakfast and lunch, and their ability to consume a balanced diet was further constrained by the availability of food in the market.

This highlights the need for training and educational activities that would improve women workers' knowledge of proper nutrition and that would promote behavioral changes in their food-consumption patterns.

Furthermore, working women, especially those with children between the ages of 2 and 5, had the heaviest burden in food preparation. Their expenses increased with the family size, and workers spent at least 2,500 taka per month on food. If these women received better information on the nutritional content of various food items, as well as advice on how to combine foods, especially according to the season, they could improve their family diet and make more economical decisions when food shopping.

Food provision in factories: Workers in the five factories that provided hot meals were satisfied with the free food arrangement, as it had relieved them from their cooking responsibility and provided them with a safer, more varied diet. However, workers did have concerns about the taste, quality, and quantity of the food the factories served, which highlights the importance of having proper mechanisms to receive and respond to workers' complaints. The food committees could play this role.

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Managers at the handful of factories that provided hot meals felt this had a positive impact on workers: They reported increased loyalty and higher productivity among the workforce. However, managers also felt the administrative and operational burden of providing hot meals could be overwhelming. Also, they did not have a systematic way to assess whether the improved productivity and loyalty outweighed the extra investment. Measuring these perceived improvements and developing case studies on the business benefits of providing food to workers, as well as identifying outsourcing solutions, could help make the case for other factories and provide the recognition to these factory managers among their peers.

In factories that did not provide hot meals, managers were aware of the potential positive impacts of providing food, but they also thought it was important for workers to spend their lunch time with family. And they worried about the potential risks of serving food: the fact that once started, they could not stop serving food; potential unrest over food quality; and more.

The majority of workers at these factories bought food at the factories' food stalls, and they were satisfied with this service, even when unhealthy, fried food was sold. Only a few workers (older ones) wanted the factory to provide hot meals, as most workers preferred to have the factory give them an additional food allowance.

Workers tended to demand hot meals at factories that did not serve them when they knew that nearby factories were providing hot meals. However, these workers were also concerned about food quality. This highlights the importance of sharing the success stories and bringing recognition to those factories that took the initial risk of providing food.

Managers' and workers' preferences on food, and their willingness to pay: Workers' preference about food varied depending on their age group. Workers with children under 2 preferred lunch the most, and young adults preferred to have snacks. Drinks were not attractive items among workers and managers, and no workers chose food supplements due to lack of knowledge of food supplements' benefits. If any food was to be served, managers said they would prefer to provide hot meals. In factories that provided hot meals, neither workers nor managers preferred food supplements, but managers at factories that did not provide hot meals considered food supplements an option.

Workers who were currently enjoying hot meals perceived them as an entitlement and did not want to pay for them, or wanted to pay only a token amount to share the cost with factories. Workers in factories that did not provide hot meals were more willing to pay if food was provided.

Factory day-care centers: Although factories were legally required to operate a day-care center, and workers that did use the service were largely satisfied, both managers and workers expressed concerns about the appropriateness and usability of these centers. The main areas for improvement include the training of caregivers, availability of materials on early-childhood development, and the day-care center environment.

It would be useful to define a minimum set of measures to ensure the children's well-being, including a hygienic sleeping place, access to clean drinking water and washing facilities, clean facilities to feed the children (with homemade or facility-made food), breast-feeding facility, early-childhood development activities and materials, caregiver-to-children ratio, waste disposal, and referral capacity for medical care in case the child had fever or diarghea.

There was no strong case established between better day-care services and improved business performance. The business benefits, such as retention of skilled working mothers, will need to be captured in potential interventions for advocacy with managers.

Way Forward

The RMG industry provides economic opportunities to millions of female workers, and the workplace is increasingly seen not only as a production center, but also as a source of social support that can help improve workers' well-being. For issues related to health, the workplace offers a venue for a nutritional intervention that reaches working women through factories' provision of hot meals such as lunch, the sale of healthy foods and fortified snacks in food stalls, and the dissemination of critical health messages that promote behavior change. For the latter, factories can use existing communications channels or innovative workplace programs such as HERproject.

Given that many workers have children under six, and factories are already providing childcare services as required by law, factories can also play a role in promoting early-childhood development. This can be done through the factory's day-care center or through the development of community day-care centers in workers' communities.

Based on these findings, BSR, GAIN, and Change Associates are designing a pilot project in Bangladesh to improve the nutritional status of female workers and children under five. Specifically, we aim to:

- » Use peer education to raise awareness and improve knowledge on nutrition and infant and young child feeding among female workers. We will focus on improving workers' knowledge of what constitutes a balanced diet, improving dietary diversity through "plate construction," and helping these workers with household budgeting on food.
- » Work with factories to improve the nutritious content of the food they serve, and explore how to increase dietary diversity by improving the menu, using fortified oil and iodized salt, training food suppliers, and distributing supplements (e.g. iron-folic acid supplement) via the factory clinic.
- » Work with factories to improve the nutritional value of snack options (considering fortified and natural snacks), since snacks are popular among most workers. Knowing that factory managers have reservations about snacks, we will devote special attention to overcoming the administrative and operational challenges of serving snacks.
- » Enhance communications through the food committee (or relevant structure).
- Establish a business and scientific case for factories to invest in food. We will research interventions including the provision of hot meals or fortified snacks, and we will compare this data against control factories. We will also gather business data such as worker productivity over hours in a work day in order to understand how the time of day affects the food intervention.
- » Upgrade the day-care services by providing training for caregivers, promoting breast-feeding and infant and young child feeding practices, and promoting the link between day-care centers and local health programs and/or community-based day-care centers.

Malnutrition is a multidimensional issue that demands multistakeholder collaboration. We hope our project will help close the gap, but efforts from others are critical to bringing about systematic change:

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- » Establish the current nutritional status of female RMG workers: There is a lack of robust research on the nutritional status of female workers and their children under five. Most research is outdated and/or too small in scale, and the research community can fill the gap by establishing baselines.
- » Create an enabling policy environment: The existing BEPZA Act requires factories located within EPZ areas to provide workers with food or food allowances. Authorities such as BEPZA could establish guidelines on the nutritional content for food served, and promote nutritious diets among factories in the zones.

Factories that did not provide food regarded it as an impossible task. To many, food-provisioning has become a "zonal activity," which does not apply to factories located elsewhere. Business associations such as BGMEA and BKMEA can dispel the myth and encourage member factories to follow good practices outside the zones.

- » Improve practices among food suppliers: Food suppliers have the responsibility to supply safe, quality, and nutritious food. Lessons from the pilot project could be shared among food suppliers to promote industry standards.
- Ensure commitment from international buyers: As evidenced by HERproject, healthier workers tend to be more satisfied, loyal, and productive. International buyers that have a strong interest in Bangladesh should consider options to improve the health status of the workers in their supply chains. They can do this by supporting training activities and/or by collaborating with factory managers on food interventions.

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Appendix 1: Lunch Menu in Five Factories That Provide Hot Meals

Factory Code	Location	Cooking Place	Menu												Oil and Salt	Damarka
			Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Oil and Salt	Remarks
			Item	Amount	Item	Amount	Item	Amount	Item	Amount	Item	Amount	Item	Amount		
F01	EPZ	External supplier	Chick en/ beef	60 grams	Mixed vegetab les with prawns	40+ grams 20 grams	Egg with potato curry	50+ grams 30 grams	Chicke n	60 grams	Mixed vegetabl es and mashed potato	90 grams	Chicken/b eef	60 grams	Oil: Non- branded/open Salt: Confidence	Rice and lentil common, all they can eat
F02	EPZ	External supplier	Mixe d veget ables	90 grams	Beef/eg g	60 grams/50 grams	Hilsha fish	50 grams	Chicke n	60 grams	Fish with mixed vegetabl es	40+ grams 20 grams	Egg and mixed vegetables	50+ grams 30 grams	Oil: Non- branded/open Salt: Confidence	Rice and lentil common, all they can eat
F03	EPZ	External supplier	Beef/ egg	50 grams	Mixed vegetab les and mashed potato	150 grams	Fish	75 grams	Beef/fi sh	50 grams	Egg	50 grams	Chicken	48 grams	Oil: Non- branded/open Salt: ACI	Rice and lentil common, all they can eat. Polao, chicken, and egg once a month
F04	EPZ	External supplier	Beef/ egg	50 grams	Mixed vegetab les and mashed potato	150 grams	Fish	75 grams	Beef/fi sh	50 grams	Egg	50 grams	Chicken	48 grams	Oil: Non- branded/open Salt: ACI	Rice and lentil common, all they can eat. Polao, chicken, and egg once a month
F05	Gazipur	In-house kitchen	Egg curry	50+ grams 30 grams	Mixed vegetab les	90 grams	Egg curry	50+ grams 30 grams	Mixed vegeta bles	90 grams	Egg curry	50+ grams 30 grams	Mixed vegetables	90 grams	Oil: Rupchada Salt: Fresh	Rice and lentil common, all they can eat