SKILL GAP IN THE AGRO-FOOD PROCESSING (API) SECTOR IN BANGLADESH

Presented by

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Study Team

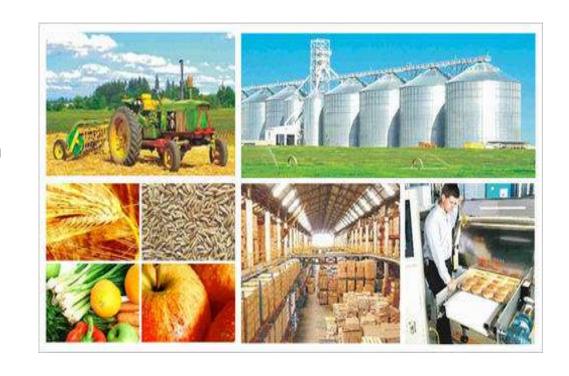
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BANGLADESH INSTITUTE OF DEVELOPMENT STUDIES (BIDS)

Overview of the Sector

A. Definition

The agro-industrial sector is the subset of the manufacturing sector that processes raw materials and intermediate products derived from agriculture, fisheries, and forestry and distributes food and non-food outputs from agro-industry. [da Silva et al., 2009, p.11]

B. In Bangladesh API consists of factories and enterprises that are engaged in:

- I. Fruit and vegetable processing, dairy products, poultry and meat processing, fish processing, ready-to-eat food products, edible oilseed meals, bakery items such as bread and biscuits, breakfast foods, confectionery such as chocolate, and ready-to-serve beverages made from fruits.
- II. It also includes supporting sectors such as food grain milling, tissue culture laboratories, floriculture, cold storage, food-grade packaging manufacturing, and processed food bottling.

Overview of the Sector

C. Size of the market and future growth

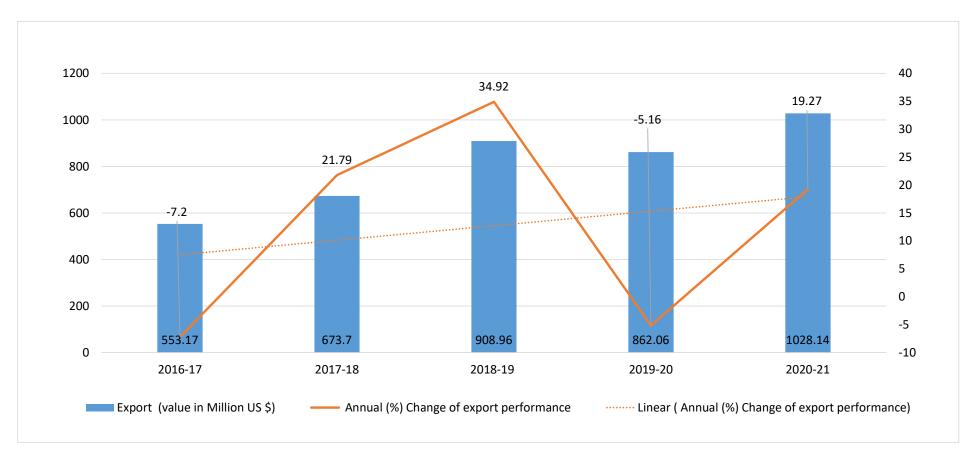
- API has significant global impact on economic development and poverty reduction, in both urban and rural communities (da Silva et al., 2009)
- It is the second largest contributor (12.26 %) to the manufacturing sector after the Readymade garments (43.13 %).
- It produces 12.26 % of the total gross output of manufacturing industries which is worth of Taka 1,387 billion. [SMI 2019]
- The gross value addition of this sector is 59317.4 crore BDT, which is 13.08 % of the total value addition of the manufacturing sector [SMI 2019].
- About 3.12 lakhs of persons are employed in 9,434 API establishments, which is 5.7 percent of total industrial employment (SMI 2019, p.71).

D. Export Performance

- Bangladesh now exports about US \$1028.14 million in processed agro-food products (in 2020-21) [Export Promotion Bureau, 2021]
- API's share of total exports in FY 2019-20 stood at around 2.75 percent.
- It has revealed comparative advantage (RCA) after Textiles and Clothing in 2015 (World Integrated Traded Solution, 2021) and has the potential to rise further in the near future given the RCA (Hossain et al., 2021).

^{*}Author's calculation from Total Export value in Million US (\$) in 2019-20 in 31,316 million US \$, Bangladesh Bank 2021 and Export (value in Million US \$) for Agro-food products 862.06 million US \$, in 2019-20 from Export Promotion Bureau 2021

Figure 1: Export Performance



Source: Export Promotion Bureau, Bangladesh, https://epb.gov.bd/site/view/epb_export_data/-

Objectives

- To analyze labor supply and demand over the next 10-year period (2020-2030).
- To determine sector priorities, assess skill gap by sector, analyze sectorwise occupational & gender composition of employment and assess occupation-wise training requirement by sector and trade.
 - To measure various types of skill mismatch including skill gap, skill shortage, over-education and under-education, horizontal mismatch and other indicators of mismatch of the API sectors.
 - To take stock of the government policy and interventions to produce and upgrade the skill for the Agro Food Processing sector.
 - To assess the type of training programs required to meet the skill demands in the API sector.

Sample Size

 Number of establishments by size and industry (BSIC 2 digits) for food products and beverages [SMI, 2012]

BSIC-2digits	Small	Medium	Large	Total
10 Manufacture of food products	2416	187	105	2708
11 Manufacture of beverages	187	14	5	206
Total firms	2603	201	110	2914

• Determining the Sample size, ,
$$n = \left[\frac{1}{N} + \frac{N-1}{N} \cdot \frac{1}{PQ} \left(\frac{k}{Z_{1-\alpha/2}}\right)^{2}\right]$$
 where, N=population size,

P=population proportion, Q=1-P, k=desired level of precision, $Z_{-}(1-\alpha/2)$ is the value of the normal standard coordinate for a desired level of confidence, 1- α . [World Bank-Bangladesh Enterprise Survey ,2013]

The sample size for API: n=115.53 or 116, Given N=2914 and population proportion, P=0.5, and Q=0.5.

Study Method

- Mixed Method Approach (Qualitative and Quantitative)
- Enterprise Survey (9 Product Lines)
- ii. Employee Survey (one is a skilled one and the other is unskilled according to manager's/supervisor's view).
- iii. Key Informant Interviews (KII) (Ten interviews with BAPA members)
- iv. Focus Group Discussion (FGD) (Two)
- Questionnaire Design
- Survey of Manufacturing Industries (SMI) of BBS
- World Bank-Bangladesh Enterprise Survey (WBES) 2013
- The World Bank's Skills Toward Employment and Productivity Survey (STEP)
- The ILO's School to Work Transition Survey (SWTS)
- Cedefop's European Skills and Jobs Survey (ESJS)
- OECD's Survey of Adult Skills (PIAAC)
- Reflex Project

Conceptual Issues

- Skill mismatch → major source of labor underutilization
- Vertical mismatch: over-education and under-education, experience→ waste of labor productivity & losing a part of output.
- **II.** Horizontal mismatch: (field of study/training vs field of work) assess the relevance of their current job with their field of study and expertise
- III. Skill Gap: Perception of the employer on skill insufficiencies among the workers in a firm, on a 1-10 scale → lower output per worker, increase labor cost, incur additional costs on recruitment and training & reduce firm-level profitability.
- **IV. Skill Shortage:** employers cannot find suitable candidates with certain skills to fill job vacancies :
 - ✓ Existence of unfilled or hard-to-fill vacancies
 - ✓ Recruitment difficulties → recruitment of inadequately skilled workers

List of Surveyed Industries and Employees

Industry	Number of Surveyed Industry	Percentage	Number of Surveyed Employees	Percentage
Sugar Processing	11	9.4	75	13.71
Edible Oil	14	11.97	55	10.05
Starch	4	3.42	13	2.38
Spices	10	8.55	39	7.13
Dairy Products	16	13.68	85	15.54
Automated bakery items	34	29.06	165	30.16
Meat (Processed)	7	5.98	29	5.3
Fruit Processing	18	15.38	73	13.35
Industries Supporting				
Agro-Food Sector	3	2.56	13	2.38
Total	117	100	547	100

Source: BIDS-Skill Survey 2020-2021

Nature of the Surveyed Agro Processing Enterprises

Brief Description of the Surveyed API

Indicators	Full sample
Employment	41,546
(total number of employees)	
Total Number of agro processing	117
enterprises	
Output per enterprise (2019)	2348.47
(in million taka)	
Export per enterprise	59.86
(in million taka)	
Capital stock per enterprise	261.05
(in million taka)	
Capital labor ratio per enterprise	6,283
(in taka)	
Export/Output ratio	0.03
Output per worker (in taka)	56,526

Size of the Enterprises

Categories	Employment	Number of Enterprises
Large (More than 250 workers)	33854	45
Medium (100 to 250 workers)	5673	28
Small (25 to 99 workers)	1697	27
Micro (10 to 24 workers or less)	322	17
Full sample	41546	117

Wage and Employment situation

Occupation (in BSCO 1 digit)	Employment in Surveyed Enterprises	of female workers		wage and	onthly salary, honorarium aka) Female	Percentage of permanent workers	Percentag e of fulltime workers
Managers	2210	2.72		87,064	34,876	95.99	93.25
Professionals	1426	3.65		44,525	29,806	95.71	91.33
Technicians and associate professionals	2209	1.97		21,822	18,589	92.13	90.42
Craft and related trades workers	4323	4.85		20,396	10,086	96.56	92.86
Plant and machine operators, and assemblers	3773	2.91		18,199	14,923	94.43	93.49
Elementary occupations	27605	0.94		10,873	9, 084	71.42	82.69

Note: The Occupation Codes are Classified according to Bangladesh Standard Classification of Occupation (BSCO) on all Economic Activities, 2019, Bangladesh Bureau of Statistics.

Horizontal and Vertical Skill Mismatch

	Horizontal Mismatch (field of study)						Vertical Mismatch (education, experience)					
Occupation (in BSCO 1		llification level Percentage)	Average qual currently hel			Desired years of qualification	Actual year of qualification	Average experience	Average actual			
digit)	S.S.C	H.S.C	S.S.C		H.S.C	(avg. class		desired at entry level (years)	experience at entry level (years)			
Managers	73.24	70.14	53.62		72.14	15.54	14.84	8.09	6.57			
Professionals	84.7	82.92	68.81		79.35	14.46	13.77	5.74	4.47			
Technicians and associate professionals	80.34	81.03	63.83		76.52	13.39	12.49	4.31	3.9			
Craft and related trades workers	88.24	84.85	48.89		74.07	12.04	10.05	4.85	2.73			
Plant and machine operators & assemblers	76.85	72.64	58.14		69.89	11.9	11.65	3.6	3.47			
Elementary occupations	81.4	79.41	25.88		82.61	9.44	7.75	3.46	1.23			
Full Sample	78.89	76.54	57.27		75.03	14.05	13.31	6.15	4.84			

Actual and Preferred type of Higher Educational Institutions

	Prefe	Preferred Education Institute by Employees					Actual Education Institute of the employers					
			(% of r	esponses)			(% of responses)					
Occupation (in BSCO 1 digit)	Public Univer sity	Private Univer sity	Nation al Univer sity	Open Universi ty	Agricult ural Universi ty	Other s	Public Universit y	Privat e Unive rsity	National Universit y	Open Unive rsity	Agricult ural Universi ty	Other s
Managers	48.11	19.12	12.39	1.89	0.63	18	44.4	38.7	12	1.3	0.87	2.83
Professionals	40.19	26.37	17.04	1.93	0.96	14	35.4	37	17.9	3.57	0	6.17
Technicians and associate professionals	22.96	12.59	30.37	8.15	1.48	24	27.1	29.3	34.6	0	0	9.02
Craft and related trades workers	22.86	25.71	22.86	0	0	29	34.4	37.5	15.6	0	3.13	9.38
Plant and machine operators, and assemblers	11.71	18.02	31.53	11.7	0.9	26	16.5	9.71	43.7	5.83	2.91	21.36
Elementary occupations	9.3	9.3	34.88	18.6	4.65	23	19.1	7.14	33.3	16.67	2.38	21.43
Full Sample	36.9	20.07	18.99	4.23	0.99	19	35.7	33	20.4	2.78	0.83	7.24

Horizontal and Vertical Skill Mismatch

- Enterprises prefer employees who have completed their S.S.C and H.S.C education in the Science stream.
- Desired Level of experience at entry level for these positions are between 4 to 5 years, whereas actual experience is between 3 to 4 years.
- The enterprises prefer graduates who have passed from Public Universities for Mangers (48.11%), Professional (40.19 %) and Technicians and associate professionals (22.96 %), Craft and related trades workers (22.86 %) followed by Private and National Universities.
- Reluctant in hiring graduates from Open University (4.23 %) & Agricultural Universities (0.99%).
- Graduates from public and private universities are dominating the current job field for mangers, professionals and technicians' level.
- Graduates from National University are working as Plant and machine operators, and assemblers (43.7 percent) and Elementary occupations (33.3 percent)

Existing Skill Shortage (Time needed to fill up current vacancies)

Occupation (in BSCO 1 digit)	Immediately	Less than a week	More than a week but less than a month	More than a month
	(% of responses)	(% of responses)	(% of responses)	(% of responses)
Managers	9.43	18.11	61.29	11.17
Professionals	14.33	19.45	55.63	10.58
Technicians and associate professionals	25.23	28.97	43.93	1.87
Craft and related trades workers	38.89	19.44	38.89	2.78
Plant and machine operators, and assemblers	22.5	30	45	2.5
Elementary occupations	27.54	27.54	43.48	1.45

Table 8: Existing Skill Shortage (Extent of Difficulties in Filing up the Vacancies)

Occupation	Avg. extent of physical labor involved (1 to 10)	Avg. difficulties in filling up the vacancies (1 to 10)	Present unfilled vacancies per enterprise
Managers	5.94	3.33	2.60
Professionals	5.93	3.86	3.55
Technicians and associate professionals	7.30	2.52	1.74
Craft and related trades workers	6.84	3.59	2.77
Plant and machine operators, and assemblers	7.54	2.72	3.03
Elementary occupations	8.30	3.20	6.88

Skill Gap

Occupation	_	Level of the Male) (%)	employees	Proficiency Level of the employees (Female) (%)			
Occupation (in BSCO 1 digit)	Low proficiency (Score 1 to 3)			•	Medium Proficiency (Score 4 to 7)	· · · · · · · · · · · · · · · · · · ·	
Managers	3.38	27.89	75.55	16.87	40.96	42.17	
Professionals	8.18	41.69	50.13	23.31	45.11	31.58	
Technicians and associate professionals	18.14	43.14	38.73	30.91	35.45	33.64	
Craft and related trades workers	23.33	43.33	33.33	38.24	41.18	20.59	
Plant and machine operators, and assemblers	19.5	58.49	22.01	25.51	53.06	21.43	
Elementary occupations	28.42	57.89	13.68	27.94	58.82	13.24	

Skill Shortage & Skill Gap

- Skill Shortage Problems is not so visible in API, as it does not take more than a month to hire more than fifty percent of the vacant positions for all occupation categories
- That's why the enterprises reported on average 3 as the difficulty for hiring an employee (on a scale of 1-10 where 1= no difficulty and 10 =very difficult)
- However Skill Gap exists in Mid to Low Level Occupation Categories, as AVERAGE
 efficiency score is lower among the three occupation categories: 'Craft and related trades
 workers (23.33 %), 'Plant and machine operators (19.5 %), and and 'Elementary
 occupations' (28.42) at BSCO 1-Digit Level.
- Compared to their male colleagues, female employees percentage is lower in higher proficiency category, hence more skill gap exist in females compared to males.
- At BSCO Code 3 Digit Level :
 - Highest proficiency category: Managing directors and chief executives (75.6%), Production managers in agriculture, forestry and fisheries (79.7%), Physical and earth science professionals (83.3 %) and Finance professionals (100 %)
 - Medium proficiency category: Retail and Wholesale Trade Managers (100%), Life Science Professionals (72.2%), Sales, Marketing and Public Relation Professionals (75%)
 - Lowest proficiency category: 'Artistic, Cultural and Culinary Associate Professionals', 'Assemblers' and 'Agricultural, Forestry and Fishery Labourers'

Reasons for Skill Gap

Occupation (in BSCO 1 digit)	Reason 1 (Multiple Response)	Reason 2 (Multiple Response)
Managers	Lack of proper skills of doing the Job because of lack of specialized training (42.0%)	Lack of proper skills of doing the Job from the educational degree (36.4%)
Professionals	Lack of proper skills of doing the Job from the educational degree (50%)	Lack of proper skills of doing the Job because of lack of specialized training (31.6 %)
Technicians and associate professionals	Lack of proper skills of doing the Job from the educational degree (53%)	Lack of Technical Skills in food handling and processing (33.3%)
Craft and related trades workers	Lack of Knowledge in food safety, sanitation and food testing procedures (66.7%)	The Curriculum taught in educational institutions are backward and don't support the industry's current need (30%)
Plant and machine operators, and assemblers	Lack of Knowledge in food safety, sanitation and food testing procedures (65.7%)	Lack of Technical Skills in food handling and processing (100%)
Elementary occupations	Lack of Knowledge in food safety, sanitation and food testing procedures (65.7%)	The Curriculum taught in educational institutions are backward and don't support the industry's current need (66.7%)

Skill Gap: Actions stated by Enterprises

	Actions that will be taken by enterprise to minimize the skill gap						
Occupation (in BSCO 1 digit)	1st Action	2 nd Action	3 rd Action				
Professionals	Increase training activity / spend or increase / expand trainee programs	Launching mentorship for new & low skilled staffs under efficient supervisors	Using more supervision methods on workers				
Technicians and associate professionals	Increase training activity / spend or increase / expand trainee programs	Implementing strict performance reviews of the staffs on a regular basis	Launching mentorship for new & low skilled staffs under efficient supervisors				
Skilled agricultural, forestry and fishery workers	Reallocating work	Sending the existing workers for training	No responses				
Craft and related trades workers	Increase training activity / spend or increase / expand trainee programs	Reallocating work	Launching mentorship for new & low skilled staffs under efficient supervisors				
Plant and machine operators, and assemblers	Increase training activity / spend or increase / expand trainee program	Reallocating work	Launching mentorship for new & low skilled staffs under efficient supervisors				
Elementary occupations	Increase training activity / spend or increase / expand trainee programs	Using more supervision methods on workers	Sending the existing workers for training				

Self Assessed Skill & Skill Demand

[Employee Survey]

Job Titles in BSCO	Level of proficiency in			Experienc	e in this enter	rprise has	Assessment of the market		
Occupation Code	performing job			improved skill			demand of skill in the industry		
	No Profici ency	Medium Proficient	Highly Proficient	Not at all	Somewhat	Fully	No demand	Medium Demand	High demand
Managers	.9%	52.2%	46.9%	.9%	51.3%	47.8%	2.7%	67.3%	30.1%
Professionals	0.0%	59.7%	40.3%	0.0%	65.7%	34.3%	0.0%	73.1%	26.9%
Technicians and associate professionals	0.0%	88.1%	11.9%	1.7%	78.0%	20.3%	8.5%	74.6%	16.9%
Skilled agricultural, forestry and fishery workers	0.0%	75.6%	24.4%	2.4%	67.1%	30.5%	4.9%	76.8%	18.3%
Craft and related trades workers	0.0%	70.2%	29.8%	0.0%	50.0%	50.0%	0.0%	67.9%	32.1%
Plant and machine operators, and assemblers	1.7%	47.1%	51.2%	1.7%	54.5%	43.8%	1.7%	76.9%	21.5%
Elementary occupations	10.5%	21.1%	68.4%	0.0%	44.4%	55.6%	0.0%	63.2%	36.8%
Total	.9%	60.9%	38.2%	1.1%	58.6%	40.3%	2.6%	72.4%	25.0%

Extent of Skill Gap that can be minimized by Trainings (% of responses)

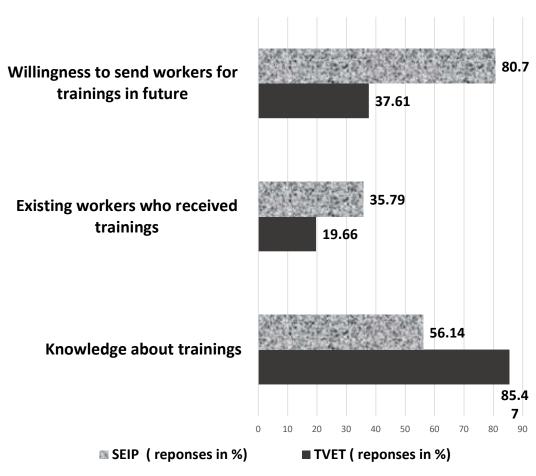
Occupation categories (in BSCO 1 digit)	Fully	Partially	Not at all	
Managers	19.43	74.49	6.07	
Professionals	29.37	67.29	3.35	
Technicians and associate professionals	41.28	55.05	3.67	
Craft and related trades workers	48.57	42.86	8.57	
Plant and machine operators, and assemblers	53.03	44.7	2.27	
Elementary occupations	70.59	28.57	0.84	
Full Sample	37.65	58.51	3.84	

Current Skill Gap Situation

- Top two reasons for Current Skill Gap :
- i) Lack of specialized trainings & lack of knowledge in food safety, sanitation and food testing procedures,
- ii) Lack of proper skills of doing the Job from the educational degree
- Hence, enterprises stated that :i) Increasing Training Activities, ii)Reallocating work and iii) Mentorship are the top three actions to minimize the skill gap.
- However, Can trainings be substitute for knowledge that lack from education degree?
- According to employees' self-assessment data, work experience is the primary factor in enhancing skill.
- Trainings in mid to lower level jobs can minimize the skill gap.

Skill Gap and Trainings

- Majority of surveyed enterprises know about trainings programs provided by TVET, and SEIP.
- The proportion of enterprises that have sent their workers for training is relatively low, with similar rates observed for both TVET (37.6%) and SEIP (35.8%).
- Enterprises are more willing to send their workers to SEIP, rather than TVET Institutions
- It seems SEIP trainings have gained popularity among the enterprises as the trainings are provided by BAPA and the leading agro-food companies like PRAN, IFAD, MEGHNA, WELL FOOD etc.



Vocational Training Received by the Employees

Occupation (in BSCO 1 digit)	Ever attended \ Training		Vocational SE		Vocational Training arranged by employers	
	Yes	No	Yes	No	Yes	No
Managers	24.78	75.22	12.5	87.5	37.17	62.83
Professionals	28.36	71.64	7.46	92.54	44.78	55.22
Technicians and associate professionals	6.9	93.1	3.45	96.55	28.81	71.19
Skilled agricultural, forestry and fishery workers	7.32	92.68	4.88	95.12	21.95	78.05
Craft and related trades workers	14.29	85.71	4.76	95.24	25	75
Plant and machine operators, and assemblers	29.75	70.25	15.7	84.3	38.02	61.98
Elementary occupations	10.53	89.47	10.53	89.47	21.05	78.95
Total	19.6	80.4	9.17	90.83	32.72	67.28

Course-Wise Training Summary of SEIP in TRANCHE-3

		Enrollment		Assessment				Job Placement	
Course	Target	Total	Of Which Female	Total	Absent	Dropout	Certificati on	Total	Percentage (JP Window End) (%)
Quality Control	1,500	825	305	712	3	35	712	712	100.00
Packing Technician	3,850	1,525	691	1,239	2	34	1,239	1,239	100.00
Food Processing	4,800	1,800	801	1,428	14	59	1,428	1,423	100.00
Baking Technology	3,850	1,350	469	1,025	12	64	1,025	1,024	100.00
Sales & Marketing (new)	2,000	-	-	-	-	-	-	-	-
Total	16,000	5,500	2,266	4,404	31	192	4,404	4,398	100.00

Source: https://seip-fd.gov.bd/statistics/

Training Summary of SEIP

- SEIP has been providing training for Agro food Processing Sector in the second phase or TRANCHE-2 (March 2017 to December 2021) of the SEIP programme with four courses, which expanded to five courses in TRANCHE-3 (January 2020 to June 2024)
- Since then a total of 18, 506 youths have been enrolled in the programme and 16, 912 completed (91.4% completion rate) the course successfully with certification.
- About half of the trainees enrolled in these courses are female (8,549).
- Out of those graduates 16, 891 or practically all have been offered job placement in different agro-food processing factories.

Trainings demanded by the enterprises

1	Quality Control training in handling agro food products	10	Mechanical training
2	Biscuit processing and handling machine related to this sector	11	Training on innovation to develop new products
3	Food packing and packaging training	12	Training on finished product checking
4	Food processing ,and handling with hygiene training	13	Fabrication and safety training
5	GMP, GHP related training	14	Product specialization training
6	HACCP training	15	Production management and production strategy related training
7	Life skill training to increase productivity and career development in this sector	16	Training related to food microbiologist
8	Machine technical training	17	Training on Quality Control and Quality Assurance
9	Meat processing training	18	Research & development, food processing

Extent of Automation

Extent to Automation in the Next 5 to 10 Years

Occupation Name	Avg. extent of automation scale of 1 to 10	Avg. extent of job displacement scale of 1 to 10		
Managers	6.00	5.29		
Professionals	6.31	6.06		
Technicians and associate professionals	6.28	4.92		
Skilled agricultural, forestry and fishery	5.47	4.88		
workers				
Craft and related trades workers	6.78	4.89		
Plant and machine operators, and assemblers	6.38	5.67		
Elementary occupations	7.6	5.67		
Full Sample	6.29	5.32		

Growth of the Occupation in Next 5 to 10 Years

Occupation	Degree of occupation growth					
(BSCO Code 3 digit Level)	1 = No growth	2 = Moderate	3 = High	4 = Very high		
	(as usual)	growth	growth	growth		
Managing directors and chief executives	0	63.64	36.36	0		
Business services and administration managers	0	100	0	0		
Sales, marketing and development managers	7.14	92.86	0	0		
Production managers in agriculture, forestry and fisheries	20.83	66.67	12.5	0		
Manufacturing, mining, construction, and distribution	100	0	0	0		
managers						
Life science professionals	23.53	70.59	5.88	0		
Engineering professionals (excluding electro technology)	5.88	82.35	8.82	2.94		
Finance professionals	0	85.71	14.29	0		
Administration professionals	12.82	84.62	2.56	0		
Software and application professionals	28.57	71.43	0	0		
Database and network professionals	0	33.33	66.67	0		
Physical and engineering science technicians	0	100	0	0		
Process Control Technicians	0	100	0	0		
Life science technicians and related associate professionals	0	0	100	0		
Administrative and specialized secretaries	0	100	0	0		
Other craft and related workers	62.5	25	12.5	0		
Food and related products machine operators	0	88.24	11.76	0		
Agricultural, forestry and fishery labourers	0	100	0	0		
Total	14.23	76.42	8.94	0.41		

Findings from KIIs and FGDs

- Lack of expertise and knowledge of the employees in the production process, as workers in this field learn about production process not from curriculum or educational institutions, rather they learn from on-the job experiences.
- If one worker choses to work at different plants (like from dairy production plant to automated bakery production plant) the expertise in one product does not accumulate nor become useful and applicable.
- Skilled and experienced people are needed in quality control and production management with appropriate degrees in food engineering and food processing of specific products.
- Lack of good machine operators, food technologist, mixture man, chemist, quality control officer, packaging supervisor, graduates in B.S.C engineering or diploma on food processing in the automated bakery industry.

Overall Findings

- Enterprises emphasized that increasing training activities is the number one solution to minimize skill Gap → trainings on Quality Assurance, Quality Control, Good Manufacturing Practices (GMP), Good Hygiene Practices (GHP), Hazard Analysis and Critical Control Point (HAACP) are on the priority list of enterprises and should be expanded.
- Unwillingness of enterprises to spend money or send people for training because of the fear that the newly trained people may not join back → Associations intervention is needed to settle this issue.
- Training and awareness raising related to food preservation, maintaining the temperature for storage and during supply/delivery should be a priority investment for cold storage & supply chain management by the enterprises on their own or through third party (private/public or a mixed PPP)
- The current trainings provided by SEIP is more biased towards the Automated Bakery Product Lines. Since it's a diverse sector, other training needs to be incorporated.

Thank You



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