



Republic of Ghana

**3B**

**GHANA STATISTICAL SERVICE  
P.O. BOX GP1098  
ACCRA**

# **INTEGRATED BUSINESS ESTABLISHMENT SURVEY (IBES) 2015 (MANUFACTURING)**

**(CALENDAR YEAR 2013 OR FINANCIAL YEAR INCLUDING AT LEAST SIX MONTHS OF 2013)**

## **GENERAL INFORMATION**

This questionnaire is for manufacturing establishment engaging **less than Thirty (30) persons**. A questionnaire must be completed for each establishment. An interviewer will visit each establishment and assist in completing the questionnaire. A copy of the questionnaire may be retained for the establishment's record.

If book figures are not available, carefully prepared estimates will be accepted.

## **INFORMATION SUPPLIED CONFIDENTIAL**

All information supplied is confidential under the Statistical Service Law, P. N. D. C. Law 135. The information shall be used by Statistical Service in the preparation of statistics in accordance with the Statistical Service Law. The information provided shall not be used for the purpose of taxation.

*In case of any further enquiries, please contact: 0244865832 / 0243267403 / 0244760080 / 0504833815*

**INSTRUCTION FOR COMPLETING THIS QUESTIONNAIRE**

- a. PLEASE COMPLETE ALL PARTS OF EACH QUESTION INCLUDING TOTALS. DO NOT WRITE IN SPACES MARKED **“FOR OFFICE USE”** READ INSTRUCTION ACCOMPANYING EACH QUESTION BEFORE COMPLETING.
- b. Use a dash (-) where the question is applicable but no data is available.
- c. Where the response to a question is zero, write ‘0’
- d. If a question does not apply, write N/A (i.e. Not Applicable) in the space provided.
- e. All monetary values should be recorded in GH CEDIS except where otherwise indicated in a question.
- f. The accounting period covered by this questionnaire should include at least six (6) months of 2013.

**SECTION 1: IDENTIFICATION AND CLASSIFICATION INFORMATION**

ESTABLISHMENT REFERENCE NUMBER

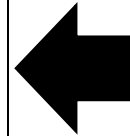
ENUMERATION ZONE NUMBER

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1.1: NAME AND PHYSICAL LOCATION OF ESTABLISHMENT

1.1.1	NAME OF ESTABLISHMENT: .....
1.1.2	STREET NAME: .....
1.1.3	SUBURB/AREA: .....
1.1.4	EXACT LOCATION: .....
	.....
1.1.5	TOWN NAME: .....
1.1.6	DISTRICT NAME: .....
1.1.7	REGION NAME: .....

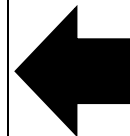


PLEASE  
AMEND IF  
INCORRECT

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1.2: OTHER INFORMATION

1.2.1:	POSTAL ADDRESS:.....										
1.2.2:	TELEPHONE NUMBER: <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										
1.2.3:	E-MAIL ADDRESS:.....										
1.2.4	FORM OF ORGANIZATION (e.g. Head Office, Subsidiary, Single establishment): .....										
1.2.5:	TYPE OF OWNERSHIP (Private, Public, PPP): .....										
1.2.6:	NATIONALITY OF OWNERSHIP: .....										
1.2.7	TYPE OF LEGAL ORGANIZATION (e.g. Limited Liability Co., Partnership etc.): .....										
1.2.8	NAME OF CONTACT PERSON: .....										
1.2.9	YEAR OF COMMENCEMENT OF BUSINESS .....										



PLEASE  
AMEND IF  
INCORRECT

1.3 PERIOD OF OPERATION DURING 2013

1.3.1 PERIOD OF OPERATION DURING 2013

Mark (X) in the box that applies

 1

Operated throughout 2013.  
(Skip to 1.4.1)

 2

Operated for only part of 2013  
(enter number of months).....  
and mark (X) in the appropriate boxes for the period of operation.

J	F	M	A	M	J	J	A	S	O	N	D

 3

Establishment did not operate during 2013.

1.4 REASON(S) FOR NOT OPERATING THROUGHOUT THE YEAR

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.....

1.4.1 How many years has the establishment been located at the current address?

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1.4.2 What were the reasons for locating at the present address? (Multiple responses are possible)

A	It is close to the place where the founder was born, grew up or has family	
B	Infrastructure (power, roads etc.) is good	
C	It is close to where customers are located	
D	There are many workers that the establishment needs in the vicinity	
E	It is close to important suppliers / raw material	
F	Rents / land prices are cheap	
G	The environment is dynamic / it is close to other successful firms	
H	Other (Specify)	

1.4.3 PERIOD OF NORMAL PRODUCTION

For which of these months was the establishment's production average/normal?  
Mark (X) in the appropriate boxes.

J	F	M	A	M	J	J	A	S	O	N	D

1.5 TYPE OF RECORDS OF ACCOUNT KEPT BY ESTABLISHMENT

Does the establishment keep some form of record or accounts? Mark (X) in the box that applies

1 YES  2 NO (*Skip to 1.6*)

1.5.1 ACCOUNTING PERIOD

Please state the accounting period covered by this establishment.

From ..... / ..... / 20 ..... to ..... / ..... / 20 .....  
(DD/MM/YY)

1.6 PRINCIPAL MANUFACTURING ACTIVITY

1.6.1: Describe establishment's principal manufacturing activity during the 2013 financial year. (.e.g. Manufacture of aluminum buckets, manufacture of household electrical appliances, etc.)

.....  
.....

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1.6.2: Other manufacturing activities during the 2013 financial year

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1.6.2.1 .....

1.6.2.2 .....

1.6.2.3 .....


1.6.3: Non-manufacturing activities during the 2013 financial year. (e.g wholesale, retail etc.)

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1.6.3.1 .....

1.6.3.2 .....

1.6.3.3 .....


1.6.4: Is the principal manufacturing activity the same for the 2014 financial year?

Mark (X) in the box that applies

1 YES  2 NO

If No, state the principal activity for the 2014 financial year

.....  
.....  
.....

**FOR OFFICE USE**

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3. **WAGES AND SALARIES (CASH AND IN KIND) PAID TO EMPLOYEES DURING THE 2013 FINANCIAL YEAR**

State all payments, whether in cash or in kind, to employees for work done during the 2013 financial year. In kind refers to the estimated net cost to the employer of those goods and services furnished to employee free of charge or at markedly reduced cost.

**ALL CASH PAYMENTS**

- INCLUDE* Wages and salaries, other cash payments, e.g. bonuses and cost of living allowance.  
*INCLUDE* Wages paid during vacation, sick leave and study leave with pay  
*INCLUDE* Contribution payable by the employees and deducted by the employer such as the Social Security and National Insurance Trust (SSNIT) contributions, taxes, group insurance premium and the like.

**GOODS AND SERVICES PAID IN KIND**

- INCLUDE* Estimated cost of subsidized housing, transport, medical care, free uniforms, goods and the like.

TYPE OF PAYMENTS	<b>WAGES AND SALARIES</b>
	ALL PAYMENTS IN CASH AND KIND (GH CEDIS)
3.1 All Cash Payment	
3.2 Goods and Services paid in kind	
3.3 <b>TOTAL</b>	

4. **SUPPLEMENTS TO WAGES AND SALARIES DURING THE 2013 FINANCIAL YEAR**

- INCLUDE* Employer's contribution on behalf of employees to the Social Security and National Insurance Trust (SSNIT), private pension plans, workmen's accident compensation plan and insurance premiums on hospital and medical schemes and the like.  
 (GH CEDIS)

4.1 Social Security	
4.2 Others	
4.3 <b>TOTAL</b>	

**SECTION 3: STOCKS**

**5. STOCKS OF THIS ESTABLISHMENT DURING THE 2013 FINANCIAL YEAR**

- INCLUDE* the value of all stocks held at the establishment itself or in ancillary locations such as warehouses
- INCLUDE* materials owned by this establishment but held by others for processing
- EXCLUDE* materials owned by others but held by this establishment for processing.
- VALUATION* should be at prices specified in the questions, on comparable basis for both beginning and the end of year. Alternatively, book values may be given.

**DEFINITIONS**

**PURCHASER' PRICES (DELIVERY COST)**

The delivery cost at the establishment including the purchase price, charges for transport, the cost of insurance, the value of packaging materials charged for and all taxes and duties on the goods. Discounts or rebate allowed to the purchaser and the value of packing materials returned to supplier should be deducted.

**EX - FACTORY PRICE (Producers' prices)**

The establishment price charged to the consumer.

*INCLUDE* duties and taxes put on products when they leave the establishment

*EXCLUDE* any subsidies

TYPE OF STOCK	VALUE OF STOCKS (GH CEDIS)	
	AT BEGINNING OF FINANCIAL YEAR 2013	AT END OF FINANCIAL YEAR 2013
	1	2
5.1 Raw material and supplies (at current replacement cost in purchases prices)		
5.2 Work in progress (in purchasers' prices)		
5.3 Fuel (in purchaser's prices")		
5.4 Finished goods (at ex-factory prices)		
5.5 Goods purchased for resale (at ex-factory prices)		
5.6 Other (Specify)		
5.7 <b>TOTAL (sum of 5.1 to 5.6)</b>		



**SECTION 4: FIXED CAPITAL FORMATION**

**6. VALUE OF FIXED ASSETS DURING THE 2013 FINANCIAL YEAR**

**VALUE OF FIXED ASSETS AND DEPRECIATION ALLOWED DURING THE 2013 FINANCIAL YEAR**

Enter the book value of fixed assets at the beginning of the financial year and depreciation allowed at current replacement cost of assets used up during the year through normal wear and tear, foreseen obsolescence and the normal rate of accidental damage.

**BOOK VALUE OF FIXED ASSETS PURCHASED (Column 1)**

*INCLUDE* the book value of fixed assets acquired by the establishment prior to the 2013 financial year.

**FIXED ASSETS PURCHASED (Column 2)**

*INCLUDE* the cost of new fixed assets acquired by the establishment during the 2013 financial year.

**SALES OF FIXED ASSETS (Column 3)**

*INCLUDE* the value of sale of fixed assets during the 2013 financial year.

**DEPRECIATION OF FIXED ASSETS (Column 4)**

*INCLUDE* depreciation allowed at current replacement cost of assets used up during the year through normal wear and tear, foreseen obsolescence and the normal rate of accidental damage.

**BOOK VALUE OF FIXED ASSETS PURCHASED (Column 5)**

*INCLUDE* the book value of fixed assets acquired by the establishment as at the end of 2013 financial year.

*VALUATION* Value at full cost incurred, that is at delivered cost plus the cost of installation including any fee and taxes but excluding financial costs.

ASSETS	BOOK VALUE AS AT THE BEGINNING OF FINANCIAL YEAR 2013 (GH CEDIS) 1	FIXED ASSETS PURCHASED IN 2013 (GH CEDIS) 2	VALUE OF SALES OF FIXED ASSETS (GH CEDIS) 3	DEPRECIATION/ AGE OF ASSEST (GH CEDIS) 4	BOOK VALUE AS AT THE END OF FINANCIAL YEAR 2013 (GH CEDIS) 5
6.1 Land (undeveloped land)				//////////////////////////////////// ////////////////////////////////////	
6.2 Residential Buildings					
6.3 Non-Residential Buildings					
6.4 Other construction and land improvements					
6.5 Machinery, plant and other equipment (except transport and electricity)					
6.6 Generator set & Plant					
6.7 Transport and equipment					
6.8 Furniture, fixtures and office equipment					
6.9 ICT equipment					
6.10 Research and development					
6.11 Computer software					
6.12 Entertainment, literary and artistic originals					
6.13 Other Intellectual Property product					
6.14 Other (Specify)					
6.15 <b>TOTAL (sum of 6.1 to 6.14)</b>					

**SECTION 5: INPUT COSTS**

7.1 REPORTING PERIOD IN 2013 (TIME PERIOD)

For the period 2013, what is the easiest **time period** for you to use in reporting the cost of inputs and the value of your establishment's outputs.

1 1 year  
  2 6 months  
  3 1 month  
  4 2 weeks  
  5 1 week  
  6 other (specify) .....

7.2 **VALUE OF INPUTS PURCHASED**

COST OF MATERIALS (Exclude Household Consumption)

NAME OF INDIVIDUAL RAW MATERIAL/INPUTS	FOR OFFICE USE 1	UNIT OF MEASURE 2	UNIT COST 3		QUANTITY 4	TOTAL COST GH CEDIS (col.3 x col.4) 5
			GH CEDIS	P		
7.2.1						
7.2.2						
7.2.3						
7.2.4						
7.2.5						
7.2.6						
7.2.7						
7.2.8						
7.2.9						
7.2.10 All other raw materials not listed above. (Exclude all fuels except fuels used for the generation of electricity or power)	////	////	////	////	////	
7.2.11 <b>TOTAL (sum of 7.2.1 to 7.2.10)</b>	////	////	////	////	////	

7.3 INDIRECT COSTS

What was the cost to your establishment of each of the following items during the time period in 2013?

COST OF ITEM	VALUE (GH CEDIS)
7.3.1 Rent	
7.3.2 Electricity	
7.3.3 Water (Exclude water that enters the product)	
7.3.4 Telephone	
7.3.5 Fuel, (kerosene, Gas, Petrol, Charcoal, Firewood etc.)	
7.3.6 Stationery and Office Supplies	
7.3.7 Transportation costs (excluding fuel)	
7.3.8 Security Services if not included in wage bill	
7.3.9 Insurance and other business services	
7.3.10 Promotion and advertising	
7.3.11 Maintenance of plant, equipment and buildings	
7.3.12 All other costs (excluding labour costs and interest payment)	
7.3.13 <b>TOTAL (sum 7.3.1 to 7.3.12)</b>	

7.4 Purchase of goods for resale

GH CEDIS	
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**SECTION 6: SALES AND OTHER RECEIPTS OF THIS ESTABLISHMENT**

**8. VALUE OF OUTPUT OR SALES**

8.1 What was your total revenue from sales of your establishment's production and contract work in the time period in 2013? *(If estimation is required, Question 9 should be answered before answering this question and calculate the response from the sum of entries in question 9. 'Column 6')*.

GH CEDIS	
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8.2 Did your establishment receive income for all its output that was produced in this time period in 2013?

Yes

1

No

2

8.3 What was the value of any additional income your establishment made from selling goods that it did not produce or from supplying services in this time period 2013?

GH CEDIS	
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9. REVENUE FROM SALE OF PRODUCTS AND CONTRACT WORK

NAMES OF INDIVIDUAL PRODUCTS FROM WHICH ESTABLISHMENT RECEIVED INCOME	FOR OFFICE USE	UNIT OF MEASURE	AVERAGE UNIT PRICE		QUANTITY UNITS	TOTAL REVENUE (col. 3 x col. 4) GH CEDIS
			GH CEDIS	P		
	1	2	3		4	5
9.1						
9.2						
9.3						
9.4						
9.5						
9.6						
9.7 Other Product(s)	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	
9.8 Sub Total (9.1 to 9.7)	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	
Name products for which raw materials were supplied by customers in the time period. (CONTRACT WORK)	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////
9.9						
9.10						
9.11						
9.12 Other Product(s)	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	
9.13 Sub Total (sum of 9.9 to 9.12)	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	
9.14 GRAND TOTAL (sum of 9.8 and 9.13)	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	////////////////////////////////////	

10. **VALUE ADDED**

10.1 What is the calculated value added in this time period in 2013?

GH CEDIS	
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**TO CALCULATE VALUE ADDED FOR THE PERIOD, TAKE THE TOTAL VALUE OF OUTPUT (answer to question 5.4) and SUBTRACT THE TOTAL VALUE OF RAW MATERIALS (question 7.2.11 col. 5) and TOTAL INDIRECT COSTS (answer to question 7.3.13 [10.1 = 8.1+8.3 + 5.7 col 1 – 7.2.11 - 7.3.13 – 5.7 col. 2] )**

11. **PROFIT AND INTEREST PAYMENTS**

11.1 What is your establishment's profit (before depreciation and interest charges) in this time period in 2013?

GH CEDIS	
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**TO CALCULATE GROSS PROFIT, TAKE THE CALCULATED VALUE ADDED (answer to question 10.1) and SUBTRACT THE TOTAL COST OF LABOUR (answer to question 3.3 and 4.30) i.e. 11.1 = 10.1 - (3.3 + 4.3)**

11.2 How much was your establishment's total interest payments for loans contracted for your business **in 2013?**

GH CEDIS	
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***QUESTION 12 TO 14 EXCLUDED***

**RESEARCH AND DEVELOPMENT**

**SECTION 7: PRODUCT INNOVATION**

A product innovation is the **introduction** to the market of a **new** or **significantly** improved **good or service** with respect to its capabilities, such as improved user-friendliness, components, software or sub-systems. The innovation (new or improved) **must be new to your firm, but it does not need to be new to your industry sector or market**. It does not matter if innovation was originally developed by your firm or by other firms. The next set of questions will refer to this new or significantly improved goods or service as a "product innovation".

15.1. For your financial year 2013, did your firm introduce any goods and/or service to the market that are: **Yes =1; No =2; Don't Know = 3 (If No to all Skip to Section 8). (Please circle)**

<b>A. New to the firm?</b>	1
Your firm introduced a new or significantly improved goods or services that was already available from your competitors in the market	2
	3
<b>B. New to the Ghanaian market</b>	1
Your firm introduced a new or significantly improved goods or services onto your market before your competitors (it may have already been available in other market of other countries)	2
	3
<b>C. New to the rest of the world</b>	1
Your firm introduced a new or significantly improved goods and services onto the market as well as other markets abroad	2
	3

15.2: Using the definition of product innovation above, please estimate the percentage of your firm's total sales in your financial year 2013 from the activities below.

	2013
A. Goods and services innovations introduced during 2013 that were new to your firm	
B. Goods and services innovations introduced during 2013 that were new to Ghanaian market	
C. Goods and services innovations introduced during 2013 that were new to the rest of the world	
D. Other goods and services sold in 2013	
<b>TOTAL</b>	<b>100%</b>

15.3: Whom were these products (goods or services) innovations mainly developed for? **Yes = 1; No = 2; Don't Know = 3 (Please circle)**

A. Mainly for your firm or enterprise group	1	2	3
B. Your firm together with other firms or institutions	1	2	3
C. Your firm by adapting or modifying goods or services originally developed by other firms or institutions	1	2	3
D. Mainly for other firms or institutions	1	2	3

15.4: Please describe the **main** product (goods or services) innovation that your firm introduced to the market in the financial year 2013.

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.....

.....

.....

Product/Service Code (for office use only)

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15.5: In the financial year 2013, what percentage of your firm's total sales was represented by sales from the product (goods or services) innovation described in question 15.4 above?

15.6: Please describe in detail how the **main** product (goods or service) innovation is different from the most similar product or service, if any, previously produced by your firm.

.....

.....

.....

.....

15.7: Do any of the following describe why your firm introduced the main product (goods or services) innovation and were these objectives met by the innovation? (You may choose more than one option) use **Yes = 1; No = 2; Do not Know = 3 to answer questions 15.7a and 15.7b (Please circle)**

	15.7a: Objective for innovation			15.7b: If "Yes" to 15.7a Was this objective met by the innovation		
	1	2	3	1	2	3
A. Replace a product or services offered by your firm						
B. Extend the range of product or services offered by your firm						
C. Increase domestic (Ghanaian) market share						
D. Export to new foreign markets or increase foreign market share						
E. Decrease the cost of production or cost of offering the service						
F. Offer products or service already offered by competitor						
G. Comply with regulation or standards (e.g. safety or environmental regulations)						
H. Deal with a decrease in the demand for other product or service						
I. Other (Specify)						

15.8 Did your firm import material or receive supplies of foreign origin in 2013 for innovation activities?

1 YES       2 NO (*Skip to Section 8*)

15.9: For your firm's most important material input or supply of foreign origin purchased in 2013, how important were the following reason(s) why it was imported rather than purchased domestically? : (Use options 1= Very Important; 2= Important; 3=Not Important) – (Please circle)

A. There are no domestic suppliers	1	2	3
B. Similar input of domestic origin are more expensive	1	2	3
C. Similar input of domestic origin are of poor quality	1	2	3
D. Domestic supplier of similar inputs are too unreliable	1	2	3
E. Other (Specify)	1	2	3

## SECTION 8: PROCESS INNOVATION

Process innovation is the **use (implementation) of new or significantly improved methods** for the production or supply of goods and services. The next set of questions will refer to any new or significantly improved method as a "process innovation". The innovation (new or improved) must be new to your firm, but it does not need to be new to your industry sector or market. It does not matter if the innovation was originally developed by your firm or by other firms. Exclude purely organizational innovation such as changes in firm structure or management practice.

**Use options: Yes =1; No=2; Do not Know =3 to answer 16.1, 16.2, and 16.3. If answer to 16.1 – 16.3 is 2 or 3 Skip to Section 9 (Please circle)**

	Firm			Ghanaian Market			Outside Ghana		
	1	2	3	1	2	3	1	2	3
16.1: During the 2013 financial year, did your firm implement or use any methods of manufacturing or offering services that were new and/or significantly improved to your:	1	2	3	1	2	3	1	2	3
16.2: During the 2013 financial year, did your firm implement or use any logistic, delivery, or distribution method for inputs, product, or services that were new and/or significantly improved to your:	1	2	3	1	2	3	1	2	3
16.3: During the 2013 financial year, did your firm implement or use any supporting activity for processes, such as maintenance systems or operation for purchasing, accounting or computing that were new and/or significantly improved to your:	1	2	3	1	2	3	1	2	3

16.4. Please describe in detail your firm's **main** process innovation (**Referred to in one or more of 16.1 to 16.3**)

16.5: Whom was the **main** process innovation developed for? **Use options Yes =1; No =2; Do not know =3 (Please circle)**

A. Mainly for your firm or enterprise group	1	2	3
B. Your firm together with other firms or institutions	1	2	3
C. Your firm by adapting or modifying goods or service originally developed by other firms or institutions	1	2	3
D. Mainly for other firms or institutions	1	2	3

16.6: Do any of the following reasons describe why your firm introduced the main process innovation and were these objectives met by the innovation? (You may choose more than one reason). **Use Yes = 1; No = 2; Do not Know = 3 (Please circle)**

	16.6a: Objective for innovation			16.6b: If "Yes" to 16.6a was this objective met by the innovation		
	1	2	3	1	2	3
A. Increase the quantity of product or services	1	2	3	1	2	3
B. Increase the total production or amount of services offered	1	2	3	1	2	3
C. Increase the flexibility of production or offering service	1	2	3	1	2	3
D. Increase the speed of production or offering service	1	2	3	1	2	3
E. Increase the speed of delivery to the customer	1	2	3	1	2	3
F. Decrease the cost of production or offering service	1	2	3	1	2	3
G. Other (Specify)	1	2	3	1	2	3

## SECTION 9 - INNOVATION ACTIVITIES

**Innovation activities** include the acquisition of machinery, equipment, software, licensed engineering and development work, training, marketing and research and experimental development (R and D) when they are **specifically** undertaken to develop and/or implement a product or process innovation

17.1: Did your firm conduct any of the following innovation activities in the financial year 2013? Use options Yes = 1; No =2; Do not know =3. (Please circle) If response to all is No =2, then Skip to 17.8

A	<b>Intramural (in-house) Research and Experimental Development (R and D)</b> Creative work undertaken on a systematic basis within your firm to increase the stock of knowledge and its use to devise new and improved product and processes (including software development).	1	2	3
B	<b>Extramural or outsourced R and D</b> Same activities as above, but performed by other companies (including other enterprises within your group) or by public or private research organization (e.g. universities) and purchased by your firm	1	2	3
C	<b>Acquisition of machinery, equipment and software</b> Acquisition of advanced machinery, equipment and computer hardware or software to produce new or significantly improved products and processes	1	2	3
D	<b>Acquisition of other external knowledge</b> Purchase or licensing of patents and non-patented inventions, know-how, and other types of knowledge from other enterprises or organizations	1	2	3
E	<b>Formal training</b> Internal or external training for personnel specifically for the development and/or introduction of new or significantly improved product and processes	1	2	3
F	<b>Market introduction of innovations</b> Activities for the market introduction of your new or significantly improved goods and services, including market research and launch advertising.	1	2	3
G	<b>Other activities (including design)</b> Procedure and technical preparations, including design, to implement new or significantly improved product and processes that are not covered in A-F above.	1	2	3

17.2. Please estimate the amount of expenditure in 2013 for the first five innovation activities mentioned in 17.1 ( A to E) Please include personnel and related costs	2013 GH CEDIS
A. Intramural (in-house) R and D Include labour costs, capital expenditure on buildings and equipment specifically for Rand D	
B. Purchase/or acquisition of extramural or outsourced R and D	
C. Acquisition of machinery, equipment and software: Exclude expenditure on equipment for R and D	
D. Acquisition of other external knowledge	
E. Formal training	

17.3: Were employees hired specifically for the purpose of developing any new and/or improved product(s) or process in the 2013 financial year?

1 YES       2 NO (Mark X in the box). If No Skip to 17.5

17.4: If yes, to 17.3, how many of these workers were hired from	Number	Don't know (DK)
A. Domestic Industry		
B. Domestic Research and Academic Institutions		
C. Foreign Industry		
D. Foreign Research and Academic Institutions		
E. Other (Specify)		

17.5: As a consequence of introducing the innovation(s), did the total number of workers employed by the firm ( Use options Yes= 1; No =2; Do not know =3) (Please circle)	Operatives Workers			Other workers		
	1	2	3	1	2	3
A. Increase	1	2	3	1	2	3
B. Decrease	1	2	3	1	2	3
C. Remain the Same	1	2	3	1	2	3

17.6: How important were the following in motivating your decision to engage in innovation activities. (Use options 1 = Very Important; 2 = Important; 3 = Not Important) (Please circle)	Response		
	1	2	3
A. Customer	1	2	3
B. Competitors	1	2	3
C. Domestic supplier	1	2	3
D. Domestic buyer (firms)	1	2	3
E. Foreign buyer (firms)	1	2	3
F. Multinational Suppliers (located in Ghana)	1	2	3
G. Multinational buyers (located in Ghana)	1	2	3

Source	17.7a: Thinking about innovation, has your firm used the following external sources of information or ideas for any innovation activity in 2013. Use options 1 = Yes paid                      2 = Yes not paid 3 = No                                4 = Not Applicable				17.7b: If yes (1 or 2) in 17.7a, how important was it? ( Use options 1 = Very Important; 2 = Important; 3 = Not important		
	1	2	3	4	1	2	3
A. Knowledge from parent firm	1	2	3	4	1	2	3
B. Knowledge from competitor	1	2	3	4	1	2	3
C. Knowledge from suppliers	1	2	3	4	1	2	3
D. Product or services available in the market (reverse engineering/ observation)	1	2	3	4	1	2	3
E. Academic and Research institutions	1	2	3	4	1	2	3
F. Consultancy firms	1	2	3	4	1	2	3
G. Business associations and workshops/conferences/exhibitions and trade shows	1	2	3	4	1	2	3
H. Professional journal and trade publication	1	2	3	4	1	2	3
I. Government Ministries or programs	1	2	3	4	1	2	3
J. Internet	1	2	3	4	1	2	3
K. Customer Feedback	1	2	3	4	1	2	3
L. Other (Specify)	1	2	3	4	1	2	3

17.8: How important were the following factors in hampering your innovation activities or influencing your decisions not to innovate: (Use options 1 = Very Important; 2 = Important; 3 = Not Important) (Please circle)

<b>Cost factors:</b>			
A. Lack of funds within your firm or group	1	2	3
B. Lack of external sources of funding	1	2	3
C. Innovation costs too high	1	2	3
<b>Knowledge factors:</b>			
D. Lack of qualified personnel	1	2	3
E. Lack of information on technology	1	2	3
F. Lack of information on markets	1	2	3
G. Difficult in finding co-operation partners for innovation	1	2	3
<b>Market factors:</b>			
H. Market dominated by established firms	1	2	3
I. Uncertain demand for innovative goods or services	1	2	3
<b>Reason not to innovate:</b>			
J. No need due to prior innovations	1	2	3
K. No need because of no demand for innovations	1	2	3

## SECTION 10: RESEARCH AND DEVELOPMENT (R and D)

18.1 There are three forms of Research and Development (R and D) which are described below:

### A. Basic research

- Work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without a specific application in view.
- Analysis of properties, structures and relationships with a view to formulating and testing hypotheses, theories or laws.
- The results of basic research are usually published in peer-reviewed scientific journals.

### B. Applied research

- Original investigation to acquire new knowledge with a specific application in view.
- Activities that determine the possible uses for the findings of basic research.
- The results of applied research are intended primarily to be valid for a single or limited number of products, operations, methods, or systems.
- Applied research develops ideas into operational form.
- Information or knowledge derived from applied research may be published in peer-reviewed journals or subjected to other forms of intellectual property protection.

### C. Experimental development

- Systematic work using existing knowledge gained from research and/or practical experience for the purpose of creating new or improved materials, products, processes or services, or improving substantially those already produced or installed.

18.2 Please provide the headcount of all R and D personnel in 2013 according to the categories below.

Category	Total	Ghanaians		Non- Ghanaians	
		Males	Females	Males	Females
A. Researchers					
B. Technicians					
C. Other R and D personnel					
<b>D. TOTAL R and D personnel (sum of A to C)</b>					

18.3 Please provide how much money you spent on R and D in 2013 according to the categories below.

Category	Expenditure (GH CEDIS)
A. Labour costs of R and D personnel	
B. Capital expenditure on R and D (e.g. land and buildings, plant and machinery, vehicles, computers and related equipment, etc.)	
C. Recurrent expenditures on R and D such as electricity, training and education, rent, advertisement, etc.)	
<b>D. TOTAL R and D expenditure (sum of A to C)</b>	

#### Note the following:

- ✓ The labour costs should include only costs on personnel that were involved in R and D.
- ✓ The full price of capital expenses must be reported in the year of purchase (do not depreciate).
- ✓ If the assets has been/will be used for more than one activity, include only an estimate of the portion used for R and D

#### Expenditure should include – but not limited to:

- Expenditure on fixed assets used in the R and D projects of your business.
- Acquisition of software, including fees, expected to be used for more than one year.
- Purchase of databases expected to be used for more than one year.
- Major repairs and improvements on land and buildings.

#### Excluding:

- Other repairs and maintenance expenses
- Depreciation provisions
- Proceeds from the sale of R and D assets.

**SECTION 11: FIRM LEVEL CAPABILITIES, TRUST AND INTERACTION**

(Use options 1 = Agree; 2 = Indifferent; 3 = Disagree) (Please circle)

<b>19.1: Please indicate to which extent your firm identifies and select knowledge</b>			
A. Your firm has active network of contacts with the scientific and research community	1	2	3
B. Your firm has access to journals and magazines to keep abreast of market and technical trends	1	2	3
C. Your firm has regular conduct of technological audit of our company	1	2	3
D. Your firm has ways of monitoring the needs of her clients and customers	1	2	3
<b>19.2: Please indicate to which extent your firm acquires knowledge</b>			
A. Your firm is successful at acquiring the knowledge required to understand customer needs	1	2	3
B. Your firm is successful at acquiring the knowledge required to identify market opportunities	1	2	3
C. Your firm is successful at acquiring the knowledge required to comply with the requirements and expectations of trading partners	1	2	3
<b>19.3. Please indicate to which extent your firm combines knowledge:</b>			
A. Your employees have the skills to fuse or link newly acquired knowledge with existing knowledge	1	2	3
B. Your firm has her knowledge management systems to better use or exchange information, knowledge and skills within our establishment	1	2	3
C. Your firm has a department or coordinator that diffuses and disseminates knowledge within the establishment	1	2	3
D. Different departments can work together easily in our firm	1	2	3
<b>19.4. Please indicate to what extent your firm commercializes its products (goods and/or services)</b>			
A. There is a well-organized marketing department in your firm	1	2	3
B. There are commercialize products and services that are completely new to unit in your firm	1	2	3
C. Your firm has increases in sales of new product in <b>existing</b> markets	1	2	3
D. Your firm has increases in sales of new products in <b>new</b> markets	1	2	3
<b>19.5. Please indicate to what extent you agree or disagree with the following statements about relations:</b>			
A. There is the tendency to trust other organizations	1	2	3
B. There is no well-established relations with buyers	1	2	3
C. There is a well-established relations with suppliers	1	2	3
D. There is no well-established relations with competitors	1	2	3
E. There is a well-established relations with institutional actors	1	2	3

**SECTION 12: INTERVIEWER'S REVIEW**

The interviewer will review the form for the completeness and accuracy in the following section before you complete the certification.

a. **COMPLETENESS CHECKS**

Mark (X) in the box that applies

Have the following questions been completed?

Question	Yes	No
1.3		
1.6		
2.4		
3.3		
4.3		
5.7		
6.15		
7.2.11 col 5		
7.3.13		
7.4		
8.1		
8.3		

Question	Yes	No
9.14 col 5		
10.1		
11.1		
11.2		
15.1		
15.2		
15.3		
15.4		
15.5		
15.6		
15.7		
15.8		

Question	Yes	No
15.9		
16.1		
16.2		
16.3		
16.4		
16.5		
16.6		
17.1		
17.2		
17.3		
17.4		
17.5		

Question	Yes	No
17.6		
17.7a		
17.1b		
17.8		
18.1		
18.2		
18.3		
19.1		
19.2		
19.3		
19.4		
19.5		

*\*If NO explain in "Remarks"*

REMARKS .....

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