

ASSESSMENT OF TECHNOLOGICAL CAPABILITY OF THE INFORMAL FOOD SERVICE OPERATORS IN OYO STATE.

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A PAPER PRESENTATION AT THE 5TH AFRICALICS CONFERENCE

HELD AT
UNIVERSITY OF YOUNDE, CAMEROUN

NOVEMBER , 2022



1.1 Background to the Study

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- **Food service system**, includes all establishments that prepare meals for consumption out of home, as well as for delivery to homes, (Weuffel,2005)

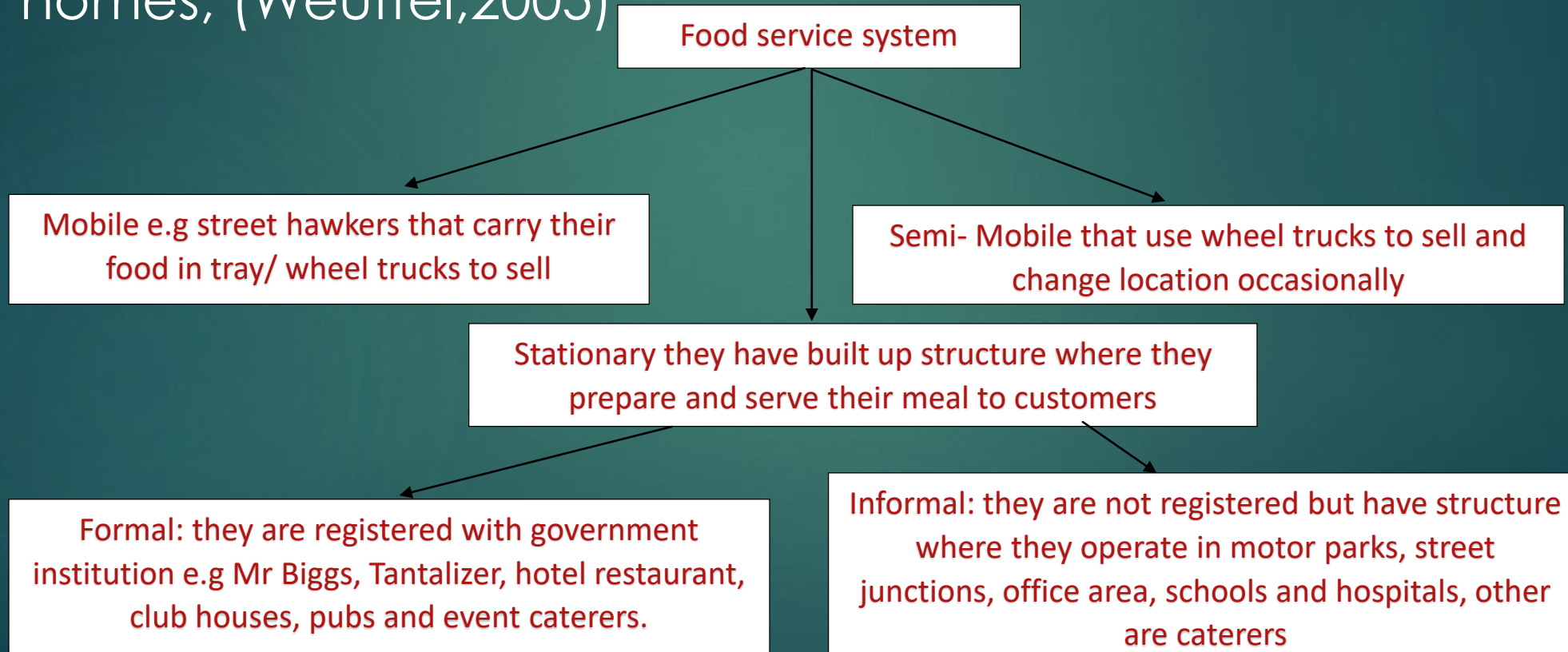


Fig1: Categories of foodservice system Source: Weuffel,(2005)

Background con'td

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- ▶ The informal sector - 60% of the total population of Nigerian firms in 2016, (NBS, 2017), and a fertile ground for growing TC needed for economic development (Efunwole *et al.*, 2019).
- ▶ 2.5 billion people consume food out of home daily due to its changing demography and convenience (Fellows and Hilmi, 2012).
- ▶ 95% of working class Nigerian are vulnerable to food poisoning incidence Akanji *et al.*, (2016) and they spend at least 20% of their income.



Background cont'd

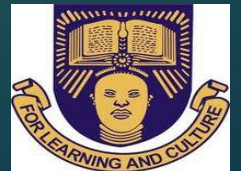
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- ▶ Technology is affecting every aspect of the food service system from the cash register to kitchen operations, thereby changing the way they operate.
- ▶ For example: gas cooker has replaced the use of firewood
- ▶ fruits portions are now neatly wrapped in polythene/take away,
- ▶ food are now being microwaved, and displayed in aluminum glass stand with continuous warming.(See Plate1.1)
- ▶ Use of POS.



Plate 1.1 : Use of new technologies in the informal foodservice system

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1.2 Technological capability (TC)

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- ▶ TC is defined as the ability to absorb and adapt technologies into local settings.
- ▶ And its component are; Investment capability, Innovation capability, Production capability, Marketing capability, Linkage capability (Lall, 2001; Wilson, 2005).



1.3 Statement of problem cont'd

- ▶ Assessing the level of TC of IFO will enhance the development of effective, integrated and preventive strategies by government.
- ▶ Nwankwere, (2017)- technology capability of food and beverages industry.
- ▶ Oluwale *et al.*, (2013) - the informal Nigerian automobile sector. Efunwole *et al.*, (2019) - informal bakery sector.
- ▶ But there is a dearth of information on the TC of the (IFOs), hence this study.



1.4 Objectives of the study

- ▶ The main objective of the study is to assess the technological capability in informal food service system in Oyo State.



1.5 Scope of the study

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- The study was limited to activities of the informal IFOs located in public spaces within urban and rural areas of Oyo States.
- This study does not cover the formal foodservice operators and caterers who operate privately at events, hospitals and schools or registered organizations.



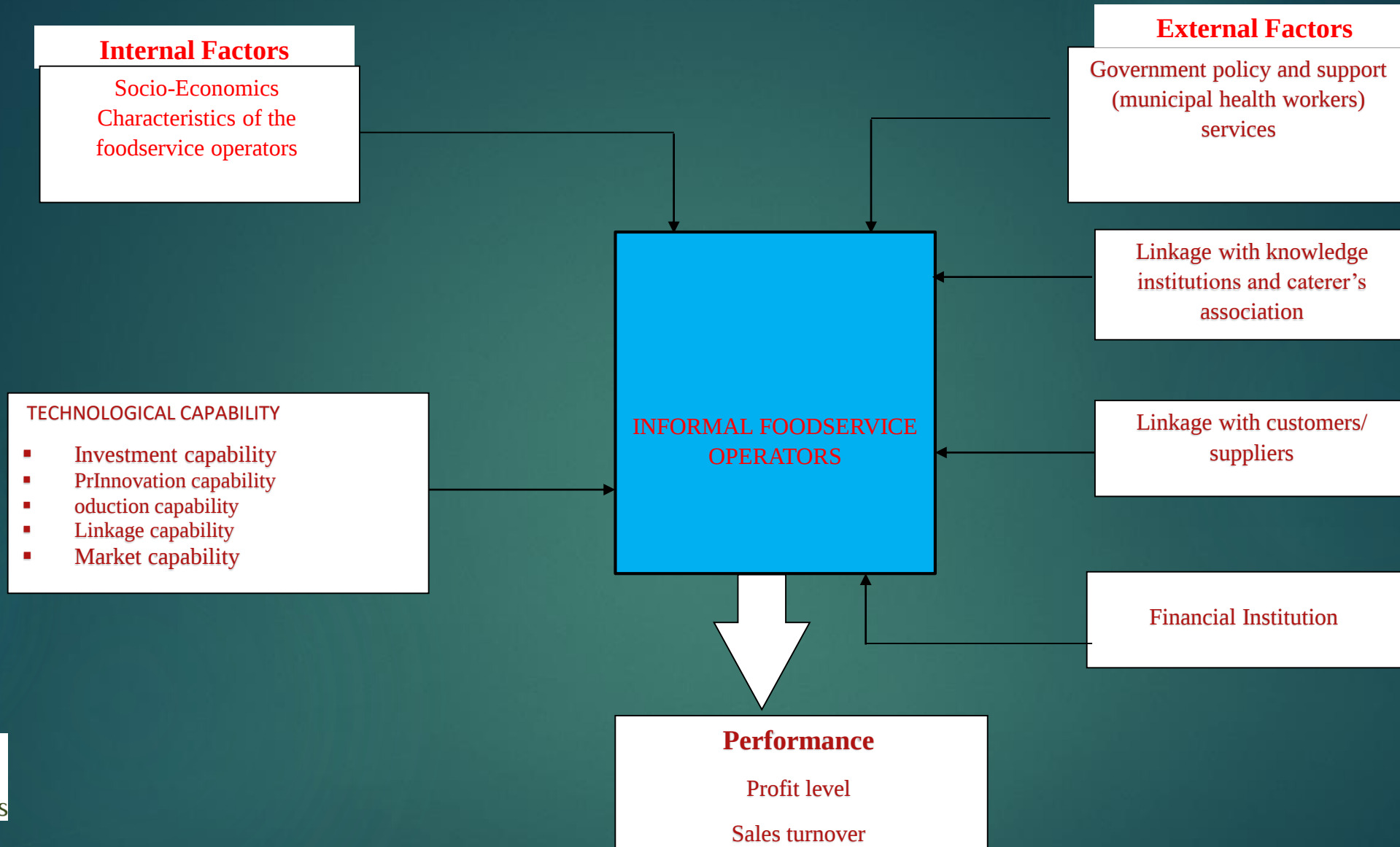


Figure 3.1: Conceptual Framework of Technological Capability and performance of informal food service system in Oyo state.
(Adapted Girvan,1981, modified by the author,2020)

FIG 2: CONCEPTUAL FRAMEWORK

2.1 Study area and sample size

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- ▶ Six (6) LGAs across the three (3) senatorial district within Oyo state, Nigeria.
- ▶ 180 informal IFOs were purposively selected to be administered questionnaire.



The Study Area

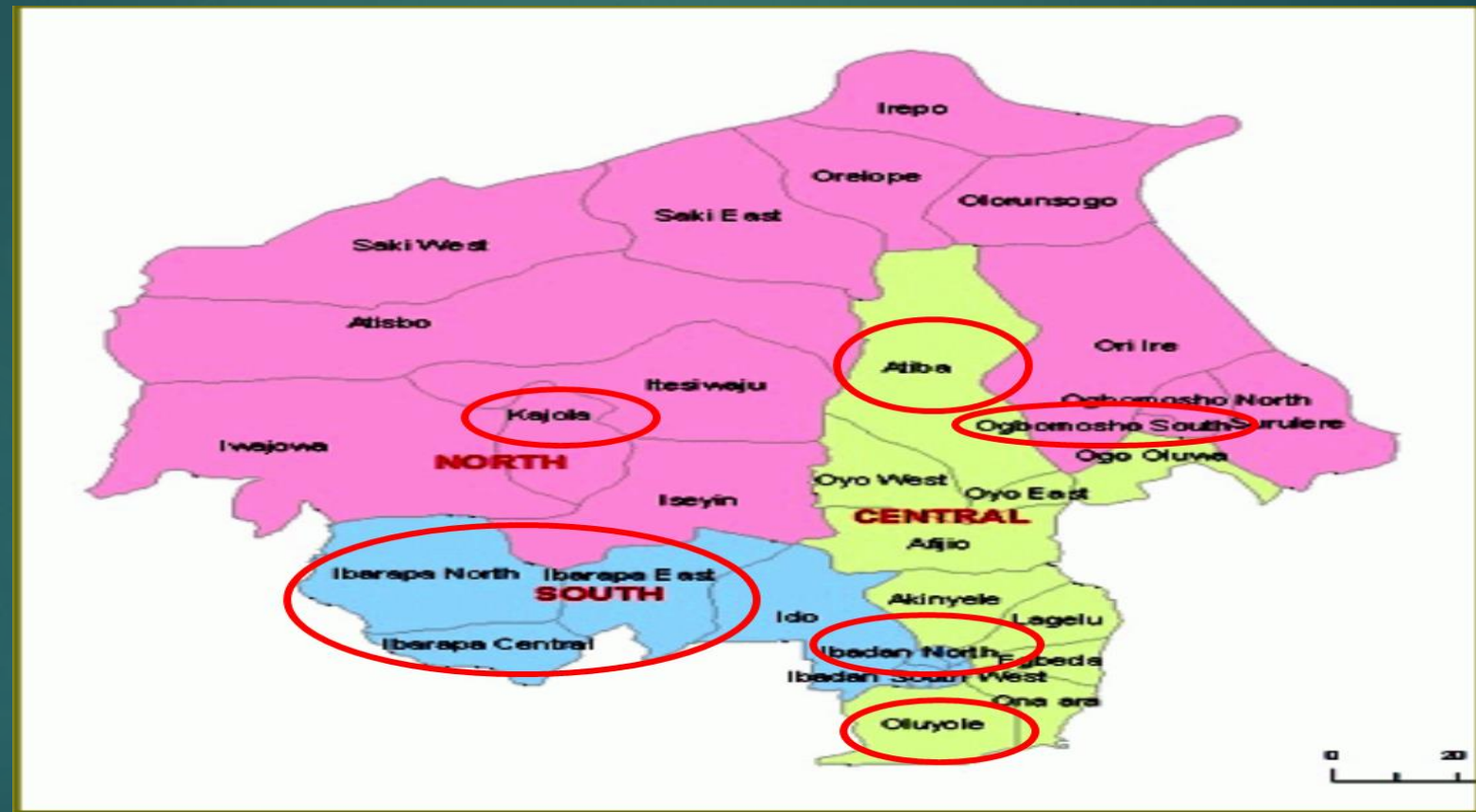


Figure 3. Map of Oyo State (Source: Muse, 2010)

3.2 Research tools

PRIMARY DATA

- ▶ **a. Informal IFOs questionnaire:** open and close ended questions that was used to elicit information from selected IFO.
- ▶ **b. Observational checklist:** an on-the-spot direct observation of the operations, environment and location of the IFO. It is a judgement of the observer using a designed checklist.

SECONDARY DATA

- ▶ Text books, Academic Journals and Publications, Newspaper publications, NIS standards, Internet information.



3.3 Method of data analysis

- ▶ Data obtained were analyzed using descriptive and inferential statistics such as; percentages, frequencies and mean.
- ▶ Analysis of variance (ANOVA) was employed to examine significant relationship among the mean rating of the technological capabilities. Which was employed to determine the factors with significant effect on the IFO technological capabilities.



Investment capabilities of the IFO

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Table 4.1 Investment capability of IFO

Investment capability criteria							Frequency	Percentage
Category	Stationary (N-53)	%	Semi Mobile (N-65)	%	Mobile(N-51)	%		
Present Worth of Business(×N1000)	A	B	C	D	E	F	G	H
5 – 50	2	1.1	3	1.8	19	11.2	24	14.2
51 – 100	5	2.9	6	3.6	20	11.8	31	18.3
101 – 200	8	4.7	10	5.9	12	7.1	30	17.8
201 – 300	10	5.9	19	11.2	-	-	29	17.2
300 – 500	12	7.1	13	7.8	-	-	25	14.8
Above 500	16	9.5	14	8.2	-	-	30	17.8
Total							169	100.0
Source of capital								
Personal Savings	7	4.1	11	6.5	5	3.0	23	13.6
Friends and family	19	11.2	20	11.8	11	6.5	50	29.6
Coop Society	11	6.5	9	5.3	18	10.7	38	22.5
Money Lenders	2	1.1	4	2.3	7	4.1	13	7.5
Bank Loan	6	3.5	6	3.5	3	1.8	15	8.8
Government Institution	5	3.0	7	4.1	2	1.1	14	8.2
Others e.g. <i>ajajo</i> or <i>esusu</i>	3	1.8	8	4.7	2	1.1	12	7.6
Total							169	100.0

Source: Author's survey (2020)

A-Stationary operators; B (%) - A/N ; C- semi- mobile operators; D (%) - C/N ; E- mobile operators; F (%) - E / N ; G- $A+C+E$, H (%) - G / N



Table 4.2 Investment capability of informal IFOs through observational checklist

	Nil	%	1unit	%	2units	%	3units	%	Above 3units	%	Total
Facilities available in the outlet (stationary outlet)											
	A	B%	C	D%	E	F%	G	H%	I	J%	K*
Fridge and freezer	7	13.2	18	33.9	19	35.8	9	17	-	-	53
Gas cookers	9	16.9	22	41.5	20	37.8	2	3.8	-	-	53
Microwave oven	20	37.7	25	47.2	7	13.2	1	1.9	-	-	53
Continuous warming System	6	11.3	12	22.6	27	50.9	5	9.4	3	5.6	53
Food warmers	-	-	4	7.5	6	11.3	27	50.9	16	30.1	53
Blenders	22	41.5	29	54.7	1	1.9	-	-	-	-	53
POS payment method	-	-	2	3.7	-	-	-	-	-	-	53
Others e.g. glass display, take away packs	28	52.8	25	47.1	-	-	-	-	-	-	53
Safety facilities available in the outlet											
Fire extinguishers	47	88.6	6	11.3	-	-	-	-	-	-	53
First aid box	50	94.3	3	5.6	-	-	-	-	-	-	53
	Available				Not available				Total		
	N			%	N				%		
Non slippery floor	25			47.1	28				52.8	53	
Proper drainage system	34			64.1	19				35.8	53	
Pipe borne water supply	12			22.6	41				77.4	53	
Toilet and waste management system	6			11.3	47				88.7	53	

Source: Author's survey (2020) N.B: * is total of stationary outlets sampled.

Table 4.3 Investment capability rating of IFO

	1	2	3	4	5	Mean
Investment capability						2.78
Ability to identify a profitable business	4(2.4)	9(5.3)	17(10.1)	82(48.5)	57(33.7)	4.06
Ability to carry out feasibility study	32(18.9)	39(23.1)	32(19.9)	37(21.9)	29(17.2)	2.95
Ability to procure the materials and equipment needed for good quality meal	70(41.4)	82(48.5)	10(5.9)	6(3.6)	1(0.6)	1.73
Ability to raise enough working capital	47(27.8)	48(28.4)	51(30.2)	10(5.9)	13(7.7)	2.37



Source: Author's survey (2020)

1- Nil

2 – Low

3 - Fairly high

4 – High

5 - Very

high

SS- standard deviation



Cooking and serving area of operation site



Table 4.4 Innovation capability rating of the IFO in last five years

	1	2	3	4	5	Mean
Innovation capability						3.22
Ability to uses of new technology	17(10.1)	17(10.1)	73(43.2)	55(32.5)	7(4.1)	3.11
Ability to introduce new menu	2(1.2)	4(2.4)	15(8.9)	77(45.6)	71(42.0)	4.25
Ability to introduce new method of meal preparation or preservation	12(7.1)	26(15.4)	35(20.7)	46(27.2)	50(29.6)	3.57
Ability to re-organize the whole process	68(40.2)	85(50.3)	7(4.1)	5(3.0)	4(2.4)	1.47
Ability to changes an entire dining environment	22(13.0)	23(13.6)	34(20.1)	40(23.7)	50(29.6)	3.43



1- Nil 2 – Low 3 - Fairly high 4 - High 5 - Very high

Source: Author's survey (2020)



Table 4. 5 Production capability rating of IFO

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	1	2	3	4	5	Mean
Production Capability						3.36
Ability to purchase good quality food						
raw material for production	5(3.0)	47(27.8)	37(21.9)	37(21.9)	43(25.4)	3.39
Inventory management of raw food						
items	3(1.8)	47(27.8)	39(23.1)	45(26.6)	35(20.7)	3.366
Quality management during						
production	6(3.6)	50(29.6)	40(23.7)	39(23.1)	34(20.1)	3.266
Production of good quality food to						
satisfy the consumers	8(4.7)	45(26.6)	36(21.3)	35(20.7)	45(26.6)	3.378
Ability to produce enough volume of						
food to meet demands	6(3.6)	41(24.3)	46(27.2)	33(19.5)	43(25.4)	3.39



Source: Author's survey (2020)

1= Low 2= Fairly high 3 = High

4= Very high

5=Extremely high

Table 4.6 Linkage capability rating of the IFO

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	1	2	3	4	5	Mean
Linkage Capability						3.39
Linkage with consumers	3(3.4)	7(5.3)	18(10.1)	85(48.5)	59(33.7)	4.31
Linkage materials sellers	30(18.9)	38(23.1)	34(19.9)	36(21.9)	27(17.2)	4.04
Linkage with other competitors	71(41.4)	67(48.5)	21(5.9)	18(3.6)	6(0.6)	2.65
Linkage with institutions (Universities and technical colleges)	45(24.8)	42(28.4)	41(30.2)	15(5.9)	23(7.7)	2.23
Linkage with government health inspectors	49(25.8)	37(21.4)	51(25.2)	14(4.9)	14(8.7)	2.89
Linkage with foodservice association	37(27.8)	43(28.4)	51(30.2)	10(5.9)	11(5.7)	3.47
Linkage with financial institutions	94(55.6)	58(34.3)	12(7.1)	5(2.9)	0(0)	1.57

Source: Author's survey (2020)

1= weak, 2= fairly strong, 3 = strong, 4= very strong, 5= extremely strong.



5.1 Conclusion

- ▶ Informal IFOs had fairly high investment capability and that majority of the informal IFOs are mobile and semi-mobile (68.6%).
- ▶ IFOs do not have fire extinguisher(88.4%) or first aid box(94.3%) in their outlet which implies they are prone to danger as a result of fire outbreak.
- ▶ Their production, marketing, innovation and linkage (financial and knowledge) capability were high, fairly high, and low respectively.



5.2 Recommendations

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- ▶ Provision of infrastructural facilities such as stable and regular supply of power and pipe water supply.
- ▶ The mobile IFO should be discouraged through imposition of fines and sanctions.
- ▶ There should be strong linkages between the IFOs and both financial and knowledge institutions.



► Thanks for your
attention

