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### A Comparative Economic Study of the Consumer Spending of the Egyptian Family in Urban and Rural Areas

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#### ABSTRACT

Egypt witnessed economic, political and social changes that had a negative impact on the income of individuals and consequently on the level of their spending and in the consumption pattern as it was found that food spending on food and drink for both urban and rural Egypt represents about 33.9%, 40.2% of The total consumer spending of the family amounting to about 54,516.8 -44,358 pounds for the year 2017/2018, and it decreased, representing about 27.7%, 34.6% of the total consumer spending of the family, which amounts to about 68,970 - 51,728.1 pounds, in urban and rural Egypt, in order for the period 2019/2020. The research aimed to identify changes in the structure of the family's food expenditure on food groups and to estimate the fairness of the food and consumer agreement for the family in rural and urban Egypt to know the impact of local and regional changes on the food agreement and consumption of the family in rural and urban areas. By studying the estimates of the Gini coefficients, it appears that local and regional changes had no effect on the food and consumption expenditure justice of the family in urban Egypt. Also, from the estimates of Gini coefficients, the local and regional changes had no effect on the fairness of spending on food and consumption of the family in urban Egypt. It also appears from the estimates of Gini coefficients that local and regional changes during the Corona pandemic since 2019 had an impact on inequality in food and consumer spending for the family in rural Egypt.

**Keywords:** Consumer spending - Gini coefficient - spending elasticity.

#### INTRODUCTION

Societies, with their different economic, social and political systems, aim to raise the standard of living of their residents through the optimal use of the available natural and human resources with the aim of achieving balanced growth in all fields and distributing results of this process in a fair manner to the maximum extent possible. At a time when the phenomenon of disparity between income levels is spreading, government intervention is necessary to reduce this phenomenon and reduce the differences between social classes by following sound economic policies to address the crises facing society. The study of statistical estimates of the food-consumer relations is of great importance to identify the patterns of the food agreement and consumerism and the extent of the disparity in the degrees of this pattern on their spending on various food commodities and the lack of justice among the masses of consumers. It is clear that the average total expenditure of the Egyptian family is about 63,794 pounds, 50,867 pounds, urban and rural Egypt, in order, while the actual consumption amounted to about 64,945 pounds, 51,704 pounds, urban and rural Egypt, respectively, during the period (2017-2020), This requires identifying the structure of food spending and the extent of distributional justice for the Egyptian society, with a study of consumer flexibility to set consumer spending policies so that the deficit in the food and consumption balance of the Egyptian family can be treated.

**The problem of research:** With the economic, political and social changes during the recent period for Egypt and the world since 2019, which negatively affected the income of individuals and consequently their level of spending, which

resulted in clear changes in the consumption pattern and an increase in the large gap between individuals' incomes and consumer spending in general and the total spending of Egyptian families in urban and rural Egypt. It was found that the food expenditure on food and drink has decreased relatively for both urban and rural Egypt, amounting to about 19,089 – 19,019 pounds, representing about 33.9%, 40.2% of the total consumer spending of the Egyptian family, which amounts to about 54,517 – 44,358 thousand pounds for the year 2017/2018 and to About 19,743 - 18,822 thousand pounds, representing about 27.7%, 34.6% of the total consumer spending of the Egyptian family, which amounts to about 68,970 - 51,728 pounds, in urban and rural Egypt, respectively, for the year 2019/2020, as it turns out that there is a gap between the actual consumption and the total expenditure of the Egyptian family, whether urban and rural Egypt, as it becomes clear that the total expenditure of the Egyptian family amounted to about 56,260 - 47,283 thousand pounds in urban and rural Egypt, respectively, and that the actual consumption of the Egyptian family amounted to about 57,897 - 48,197 thousand pounds in urban areas and rural Egypt in order for the year 2017/2018, while the total expenditure of the Egyptian family amounted to about 71,328 - 54,452 thousand pounds in urban and rural Egypt, in order, and the actual consumption of the Egyptian family amounted to about 71,993 - 55,211 thousand pounds in urban and rural Egypt in order for the year 2019/2020, Which calls for studying the food and consumer spending of the family in urban and rural Egypt, in order to reach the best picture to solve the aspects of the problem and achieve the goal of the research.

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**Research Objective:** The research aimed at the following Changes in the structure of family food expenditure on food groups in urban and rural Egypt.

Statistical estimation of spending elasticities on food commodities in urban and rural Egypt

-Estimating the fairness of the food and consumer agreement for the family in rural and urban Egypt

To know the impact of local and regional changes on the food agreement and consumption of the family in rural and urban Egypt

**Research Method and Data Sources:** The research depends on the method of descriptive and quantitative statistical analysis of food expenditure and the impact of income levels on it during the two study periods with estimation of the individual agreement elasticities on the main food groups in urban and rural Egypt by the double logarithmic formula. The research was based on Engle's curves that cross For expenditure on a particular good is a function of income:

$$(Ex_i = F(c))$$

**Where:**

Ex<sub>i</sub> represents expenditure on commodity c, x<sub>i</sub> represents income

The study was also based on the Loranx Curve and Gini-Coefficient for its analysis of the agreement. To express the size of the inequality in the distribution of income, as it is one of the most important uses in analysing the family income statement at the level of fair income distribution. The Lorenz curve is used to express the fairness of the income distribution on the one hand, in addition to its relationship to the widely used Gini coefficient on the other. If the Lorenz curve falls on the equality line or the optimal distribution line, this means that equality will be complete (100%) in the income distribution. vice versa. Relying on the Lorenz curve, the Italian mathematician "Gini" proposed a vital measure of the degree of inequality in the income distribution, which represents the ratio of the area between the 45° line and the Lorenz curve, (the total area under the 45° line)

The Gini coefficient measures the degree of concentration in income and expenditure in rural and urban areas. Its value ranges from zero in the case of perfect equality to one in the case of inequality. This means that the closer the value of the Gini coefficient is to zero, the closer the distribution is to the ideal distribution. Real income (ranging between 0.5: 0.7 in countries with a relatively unfair distribution, while it ranges between 0.20: 0.35 in countries with a relatively fair distribution), as: The degree of distributive justice = 1- Gini coefficient

-The research also relied on the data published by the Central Agency for Public Mobilization and Statistics, examining income, expenditures and consumption in 2017/2018 and 2019/2020. For my period of change, the sample size amounted to about 24971,22760 families in urban and rural Egypt, respectively, for the years 2017/2018 and 2019/2020. The sample is characterized as stratified cluster distributed according to the relative weights of each governorate, as well as some studies related to the subject of the study.

## RESULTS AND DISCUSSIONS

**First, the structural changes of the family's food expenditure on the different food groups in Egypt:**

This part deals with the study of the structural changes in family spending on food groups in urban and

rural Egypt, and identifying the relative importance of spending on these groups during the period 2017/2018 - 2019/2020.

**A: Structural changes of annual household food expenditure in urban Egypt:**

The data of Table No. (1) shows the increase in the annual food expenditure of the urban family in general between the two study periods, as it rose from about 19,089.4 to about 19743.4, with an increase of about 3.4%. Expenditure on food commodities for the family was increasing, but at varying rates, as the amount of The increase in spending on both cereals and bread, (dairy - cheese - eggs), fruits and vegetables, food products not classified under another item, non-alcoholic beverages by about 12.6%, 2%, 1%, 16.6%, 17.2%, 8.1% respectively, while it was shown that the household expenditure on meat, fish, oils and fats, sugar and sugary foods decreased by 1.7%, 1%, 8.1% and 3.7%, respectively, during the two study periods.

By examining the relative importance of spending on food commodities, it was found that expenditures on meat (dairy-cheese-eggs), vegetables, grains and bread topped expenditures on food, which amounted to about 28.2%, 14.4%, 13.3%, 12.2% of the total expenditures on food in 2017. / 2018, while it was found that meat, vegetables, (dairy - cheese - eggs), cereals and bread topped spending on food, as each of them represented about 26.8%, 15%, 14.2%, 13.3%, respectively, of the total spending on food in 2019/2020.

**B - Structural changes to the annual food expenditure of the family in the countryside of Egypt:**

The data of Table (1) shows that the annual food expenditure of the family in the countryside in general decreased between the two study periods, as it decreased from about 19,019.3 to about 18822.4 pounds, by a decrease of about 1.04%, Expenditure on food commodities for the family was uneven, as the increase in spending on cereals and bread, dairy - cheese - eggs, vegetables, food products not classified under another item, non-alcoholic beverages was about 1.5%, 9.3%, 13.8%, 7.5 % and 0.8%, respectively, while the household expenditure on meat, fish, oils and fats, sugar and sugary foods decreased by 7.9%, 2.9%, 11.6%, 1.6%, 15.2%, respectively, during the two study periods.

By examining the relative importance of spending on food commodities, it was found that spending on meat, vegetables, grains and bread (dairy, cheese and eggs), oils and fats topped spending on food, which amounted to about 27.4%, 14.9%, 13.6%, 10.8%, 9.6% of Total expenditures on food in 2017/2018

While it was found that meat, vegetables, (dairy, cheese and eggs), cereals, bread, oils and fats topped spending on food, as each of them represented about 25.5%, 17.2%, 13.9%, 12%, 8.6%, respectively, of the total expenditures. on food in 2019/2020.

**c- The annual total expenditure of the family in EGP in urban and rural Egypt during the two-study period**

By studying table (1) in the appendix, it was found that there is a gap between the total expenditure and the actual consumption of the Egyptian family, amounting to about -1637, -914 pounds in 2017/2018, and it amounts to about -665,959 pounds in 2020/2019 in urban and rural

Egypt, respectively, and with the increase Total expenditure 24.4%, 14.6% for the Egyptian family in urban and rural by about 26.8%, 15.2% and actual consumption by about Egypt, respectively, during the two study periods.

**Table 1. Annual household food expenditure in Hader and countryside Egypt during the two periods of study**

Statement Foods	Urban					Rural				
	2018/2017		2020/2019		change	2018/2017		2020/2019		change
	Total expenditure	%of food expenditure	Total expenditure	%of food expenditure		Total expenditure	%of food expenditure	Total expenditure	%of food expenditure	
Cereal and bread	2339.1	12.2	2634.7	13.3	12.6	2582.1	13.58	2620.2	13.9	1.47
Meat	5382.9	28.2	5289	26.8	-1.74	5211.6	27.4	4796.3	25.5	-7.97
Fish	1313.5	6.88	1300	6.58	-1.03	1212.6	6.376	1177.2	6.25	-2.92
Dairy, cheese and eggs	2757	14.4	2811.7	14.2	1.98	2058.3	10.82	2250	12	9.31
Oils and fats	1526.3	7.99	1402.3	7.1	-8.12	1819.9	9.569	1609.2	8.55	-11.6
Fruit	1080.7	5.66	1091.6	5.53	1.01	1072.9	5.641	1055.8	5.61	-1.59
Greens	2546	13.34	2968	15	16.6	2840.7	14.94	3231.6	17.2	13.76
Sugar and sugary food	911.6	4.7	878.1	4.45	-3.67	1146.3	6.027	972.4	5.17	-15.2
Food products not classified under other headings	399.3	2.09	467.8	2.37	17.2	394.6	2.075	424.3	2.25	7.5
Non-alcoholic beverages	833	4.36	900.3	4.56	8.08	680.3	3.577	685.4	3.64	0.75
Total	19089.4	100	19743.4	100	3.43	19019.3	100	18822.4	100	-1.04

Source: Compiled and calculated from data: Central Agency for Public Mobilization and Statistics, Income, Expenditure and Consumption Research. ,Calculated as weighted average number of households in sample areas.

**Second: Flexibility for food commodities in urban and rural Egypt:**

Expenditure flexibility is one of the most important indicators that measure the consumer’s reaction to the change in total spending in light of income and commodity price levels. Expenditure flexibility expresses the relative change in spending on a commodity or a group of commodities in relation to the relative change in income, and through which

one can determine the nature of structural changes. of spending patterns on different food commodities, and thus help planners and economists in making appropriate future decisions.

By estimating the spending elasticities of different food commodities in urban Egypt, the data of tables No. (2 and 3)

**Table 2. Statistical estimate of flexibility factors for food commodities in the presence of Egypt during the two study periods.**

Food group	2020/2019			2018/2017		
	F	R <sup>2</sup>	Expenditure flexibility	F	R <sup>2</sup>	Expenditure flexibility
Cereal and bread	** (381.7)	0.96	0.43	** (312.77)	0.95	0.48
Meat	** (420.8)	0.95	0.60	** (463.76)	0.96	0.72
Fish	** (454.3)	0.96	0.57	** (192.1)	0.92	0.68
Dairy, cheese and eggs	** (28.02)	0.62	0.33	** (55.87)	0.77	0.52
Oils and fats	** (11.3)	0.39	0.16	(2.94)	0.15	0.11
Fruit	** (187.3)	0.92	0.45	** (486.49)	0.97	0.73
Greens	*(6.49)	0.28	0.093	** (237.92)	0.93	0.58
Sugar and sugary food	** (45.6)	0.73	0.32	** (20.04)	0.54	0.25
Food products not classified under other headings	*(7.6)	0.31	0.146	*(4.80)	0.22	0.14
Non-alcoholic beverages	** (300.7)	0.95	0.71	** (51.78)	0.75	0.69

Source: Compiled and calculated from data: Central Agency for Public Mobilization and Statistics, Income, Expenditure and Consumption Research

**Table 3. Statistical estimate of flexibility transactions for food commodities in rural Egypt for the two terms of the study**

Food group	2019/2020			2017/2018		
	F	R <sup>2</sup>	Expenditure flexibility	F	R <sup>2</sup>	Expenditure flexibility
Cereal and bread	** (14.1)	0.45	0.189	** (79.26)	0.82	0.21
Meat	** (36.1)	0.68	0.39	** (28.65)	0.63	0.49
Fish	** (102.6)	0.86	0.612	** (31.06)	0.65	0.37
Dairy, cheese and eggs	*(7.64)	0.31	0.185	** (10.29)	0.38	0.23
Oils and fats	(1.59)	0.09	0.109	(2.33)	0.12	0.12
Fruit	** (25.5)	0.6	0.396	** (47.49)	0.74	0.49
Greens	(0.03)	0.002	0.011-	(0.56)	0.03	0.035-
Sugar and sugary food	** (18.3)	0.52	0.264	(0.97)	0.05	0.07
Food products not classified under other headings	(0.04)	0.002	0.016-	(0.04)	0.002	0.011
Non-alcoholic beverages	** (14.5)	0.46	0.388	** (11.86)	0.41	0.33

Where \* Morale at 0.05, \*\* Morale at 0.01 Source: Compiled and calculated from data: Central Agency for Public Mobilization and Statistics, Income, Expenditure and Consumption Research.

Indicate that the internal spending elasticity during the study periods in 2017/2018 and 2019/2020 shows that food commodities (cereals and bread), meat, fish, (dairy Cheese - eggs), (oils and fats), fruits are less than one (necessary commodities), but vegetables are considered one

of the necessary commodities for the urban, while the countryside is considered vegetables and Food products that are not classified under another item of inferior goods, as the spending elasticity is negative (less than zero), but it has not been statistically significant, and the spending elasticities on

food groups for food and drink in both urban and rural Egypt shows the high value of those spending elasticities at the urban level Compared to its counterpart at the rural level in general, which means that these commodities are considered more necessary for the rural population in Egypt .

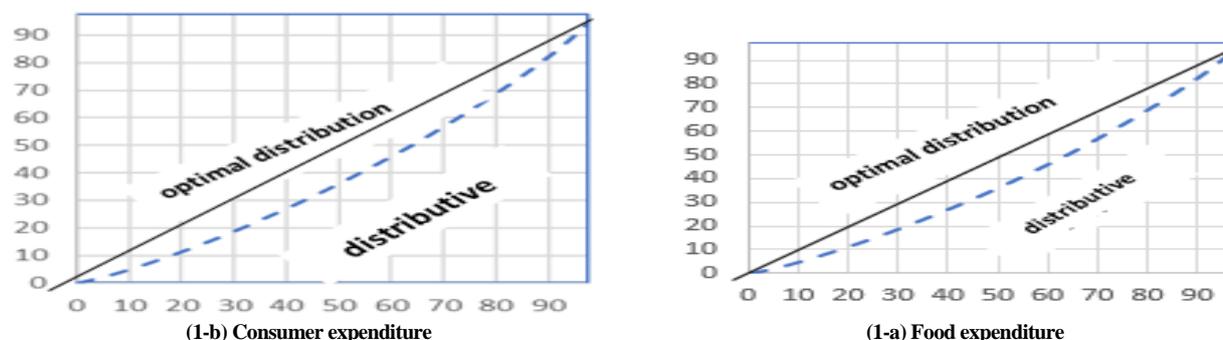
**Third: The justice of food expenditure and family consumption in urban and rural Egypt:**

**1. Food and consumer spending justice in urban Egypt in 2017/2018**

By reviewing and analysing the data of the number of families and their total food and consumer spending in urban areas, shown in Table No. (4), it is clear that the total number of families according to expenditure categories for the year 2017/2018 amounted to about 11,452 families, where their total food expenditures The consumer is about 624.39 and 218.6 million pounds each, respectively. It is also clear that the percentage of urban families who represent low spending categories, which includes the spending category (less than 10-30) thousand pounds, was about 27.35%, while the percentage of their food and consumer spending was about 16.74% and 12.94% for each, respectively. The percentage

of families who represent medium spending categories, which includes the spending category (30-80) thousand pounds, their percentage represented about 61.53%, and their food expenditure percentage was about 64.06%, while the percentage of their consumption expenditures was about 59.62%, while it was found that the percentage of their food expenditures was about 64.06%. The number of families who represent the higher spending categories, which includes the spending category (80-200 or more) thousand pounds, amounted to about 11.12%, and the percentage of their annual food and consumer spending was about 19.2% and 27.78%, respectively.

By measuring the degree of concentration in food and consumer spending in urban Egypt using Lorenz curves, which are shown in Figure (1-a) and Figure (1-b), and with estimates of Gini coefficients, it was found that they amounted to about 0.197 for food spending and about 0.310 for consumer spending, which reflects the achievement of relative justice in each of these two types of spending, however, it was higher for consumer spending.



**Figure 1. Lorenz curve to distribute household food and consumer expenditure in the Arab Republic of Egypt in 2017/2018**

**Table 4. Total annual expenditure according to the categories of agreement in the presence of the Arab Republic of Egypt in 2017/2018.**

Categories Convention	number of families	Average Food expenditure (GBP)	Total food expenditure (GBP)	Average Consumer expenditure (GBP)	Total consumer expenditure (pounds)	Percentage Number of Households	Percentage of total food expenditure	Percentage of total consumer expenditure	The upward cumulative repetition of the number of families	Rising aggregate repetition of total food expenditure	Cumulative upward repetition of total expenditure Consumer
10000-	28	5581.9	156293.2	8072.6	226032.8	0.24	0.07	0.04	0.24	0.07	0.04
-10000	516	8321.3	4293790.8	16133.3	8324782.8	4.51	1.96	1.33	4.75	2.03	1.37
-20000	630	10547.4	6644862	22240.7	14011641	5.5	3.04	2.24	10.25	5.07	3.62
-25000	906	12213	11064978	27133.7	24583132	7.91	5.06	3.94	18.16	10.13	7.55
-30000	1053	13705.9	14432313	31955.1	33648720	9.19	6.6	5.39	27.35	16.74	12.94
-35000	1174	15464.5	18155323	36978.8	43413111	10.25	8.3	6.95	37.6	25.04	19.9
-40000	1195	16929.9	20231231	41677.5	49804613	10.43	9.25	7.98	48.04	34.29	27.87
-45000	992	18513.6	18365491	46566.6	46194067	8.66	8.4	7.49	56.7	42.69	35.27
-50000	909	19672.8	17882575	51448.8	46766959	7.94	8.18	5.83	64.64	50.87	42.76
-55000	643	21451.9	13793572	56591.6	36388399	5.61	6.31	5.99	70.25	57.18	48.59
-60000	615	22517.8	13848447	60847.9	37421459	5.37	6.33	5.99	75.62	63.52	54.58
-65000	454	23831.7	10819592	65879.9	29909475	3.96	4.95	4.79	79.59	68.47	59.37
-70000	668	24415.3	16309420	72042.2	48124190	5.83	7.46	7.71	85.42	75.93	67.08
-80000	396	26898.4	10651766	81042.5	32092830	3.46	4.87	5.14	88.88	80.8	72.22
-90000	284	26916.9	7644399.6	91071	25864164	2.48	3.5	4.14	91.36	84.3	76.36
-100000	402	30307.7	12183695	103226.2	41496932	3.51	5.57	6.65	94.87	89.87	83.01
-120000	237	32942.9	7807467.3	126359	29947083	2.07	3.57	4.8	96.94	93.44	87.8
-150000	179	36489.1	6531548.9	161483.7	28905582	1.56	2.99	4.63	98.5	96.43	92.43
200000	171	45667.5	7809142.5	276394.6	47263477	1.49	3.57	7.57	100	100	100
total	11452	19089.4	218611809	54516.8	624326393.6						

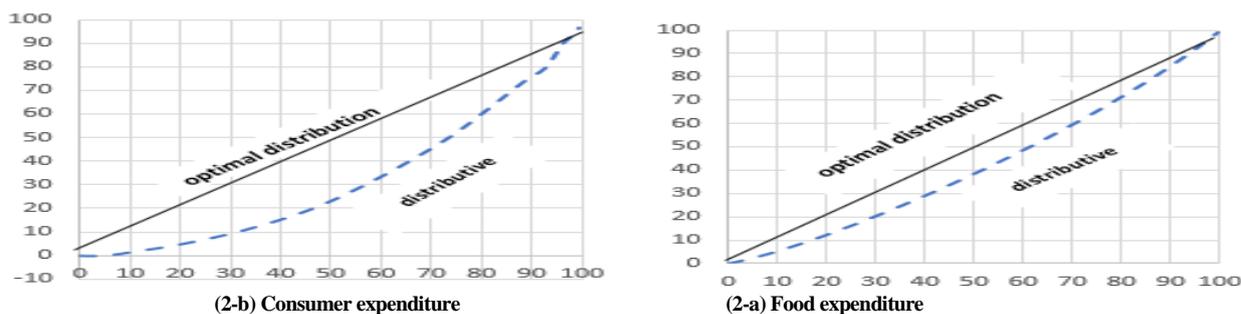
Source: Compiled and calculated from data of the Central Agency for Public Mobilization and Statistics, Income and Expenditure Research 2017/2018

**2- Food and consumer spending justice in rural Egypt:**

Table No. (5) shows that the total number of households according to expenditure categories for the year 2017/2018 was about 13519 families and their total annual food and consumer expenditure was about 257.122 and 599.676 million pounds each respectively. It is also clear that the proportion of rural households representing low expenditure groups, comprising the Convention category (less than 10 - 30) of Pound1,000, accounted for about 32.8% while their food and consumer expenditure was about 22.7% and 19.2% each, respectively. The proportion of households representing medium expenditure groups comprising the Convention category (Pound30,000-80) was

about 62.3% and their food and consumer expenditure was about 69.3% each. The proportion of families representing the top convention groups comprising the UNCCD category (80 - 200 and more) was about 4.9% and their annual food and consumer expenditure was about 8% 11.5%, respectively.

Measuring the degree of concentration in food and consumer expenditure in rural Egypt using the Lawrens curves shown in figure No. 2a and figure No. 2b and estimates of genetic transactions found to be about 0.162 for food expenditure and about 0.236 for consumer expenditure, reflecting relative fairness in both food and consumer expenditure.



**Figure 2. Lorenz curve for distribution of household food and consumer expenditure in rural Egypt 2017/2018**

**Table 5. Total annual expenditure according to the categories of agreement in rural Egypt 2017/2018**

Categories Convention	number of families	Average Food expenditure (GBP)	Total food expenditure (GBP)	Average Consumer expenditure (GBP)	Total consumer expenditure (pounds)	Percentage Number of Households	Percentage of total food expenditure	Percentage of total consumer expenditure	The upward cumulative repetition of the number of families	Rising aggregate repetition of total food expenditure	Cumulative upward repetition of total expenditure Consumer
10000-	51	6656.8	339496.8	7107.8	362497.8	0.38	0.13	0.06	0.38	0.13	0.06
-10000	678	9138.9	6196174	15917.5	10792056	5.02	2.41	1.8	5.39	2.54	1.86
-20000	829	11481.4	9518081	22319.1	18502534	6.13	3.7	3.09	11.5	6.24	4.95
-25000	1244	13560.9	16869760	27131.2	33751213	9.2	6.56	5.63	20.7	12.8	10.6
-30000	1633	15518.1	25341057	31827.3	51973981	12.1	9.86	8.67	32.8	22.7	19.2
-35000	1802	17227.6	31044135	36635.9	66017892	13.3	12.1	11.0	46.1	34.7	30.2
-40000	1580	18855.4	29791532	41385.6	65389248	11.7	11.6	10.9	57.8	46.3	41.2
-45000	1296	20492.9	26558798	46187.9	59859518	9.59	10.3	9.98	67.4	56.6	51.1
-50000	1058	21747.5	23008855	50889.1	53840668	7.83	8.95	8.98	75.2	65.6	60.1
-55000	781	23407.1	18280945	55388.9	43258731	5.78	7.11	7.21	81	72.7	67.3
-60000	605	24316.5	14711483	60119.6	36372358	4.48	5.72	6.07	85.5	78.4	73.4
-65000	410	25863.4	13190334	64524.9	32907699	3.03	4.12	4.41	88.5	82.6	77.8
-70000	561	27111.5	15209552	70750.2	39690862	4.15	5.92	6.62	92.7	88.5	84.4
-80000	322	28443	9158646	76800.5	24729761	2.38	3.56	4.12	95.1	92	88.5
-90000	185	28472.8	5267468	83446.2	15437547	1.37	2.05	2.57	96.4	94.1	91.1
-100000	208	30469.7	6337698	90369.9	10476939	1.54	2.46	3.13	98	96.5	94.3
-120000	126	29961.8	3775187	99848.5	12409186	0.93	1.47	2.07	98.9	98	96.3
-150000	89	31434.2	2797644	117753.3	10480044	0.66	1.09	1.75	99.5	99.1	98.1
200000	62	37611.1	2331888	186620.7	11570483	0.46	0.91	1.93	100	100	100
total	13519	19019.3	257121917	44358.0	599675802						

Source: Compiled and calculated from data of the Central Agency for Public Mobilization and Statistics, Income and Expenditure Research 2017/2018

**-Justice is the food and consumer convention of the family in Hader and countryside Egypt in 2019/2020.**

**1- Justice and Food and Consumer Convention in the presence of Egypt:**

1- Food and consumer spending justice in urban Egypt: by reviewing and analysing the data of the number of families and their total food and consumption expenditures in urban areas, which are shown in Table No. (6), it is clear that the total number of families according to expenditure categories for the year 2019/2020 amounted to about 9794 families, where their total food and consumption expenditures amounted to about 675,490 , 193.367 million pounds each, respectively. It is also clear that the

percentage of urban families who represent low spending categories, which includes the spending category (less than 10-30) thousand pounds, was about 24%, while the percentage of their food and consumer spending was about 14.39% and 10.22% for each, respectively. The percentage of the number of families who represent medium spending categories, which includes the spending category (30-80) thousand pounds, their percentage represented about 56.3%, and the percentage of their food expenditure was about 55.01%, while the percentage of their consumption expenditure was about 47.97%, while it was found that the percentage of The number of families who represent the higher spending categories, which includes the spending

category (80-200 and more) thousand pounds, amounted to about 11.12%, and the percentage of their annual food and consumer spending was about 19.2% and 27.78%, respectively.

By measuring the degree of concentration in food and consumer spending in urban Egypt using Lorenz curves, which are shown in Figure (3-a) and Figure (3-b), and with

estimates of Gini coefficients, it was found that they amounted to about 0.194 for food spending and about 0.334 for consumer spending, which reflects the achievement of relative justice in Both of these two types of spending were higher in relation to consumer spending

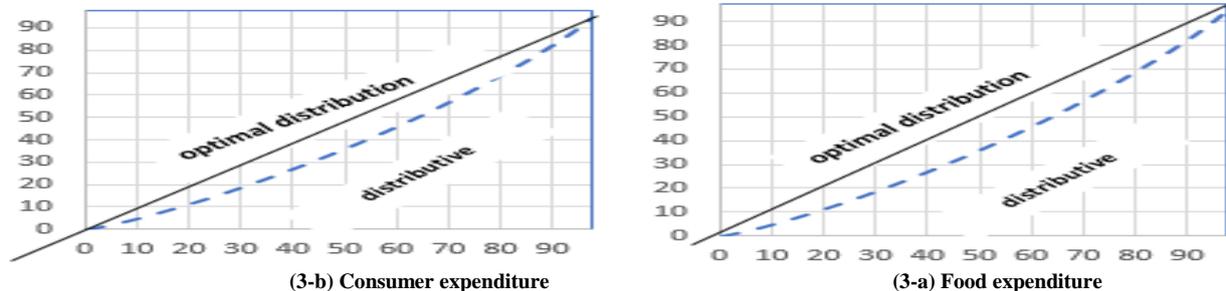


Figure 3. Lorenz curve for distribution of household food and consumer expenditure in the Arab Republic of Egypt in 2019/2020

Table 6. Total annual expenditure according to the Convention categories in the presence of the Arab Republic of Egypt in 2019/202

Categories Convention	number of families	Average Food expenditure (GBP)	Total food expenditure (GBP)	Average Consumer expenditure (GBP)	Total consumer expenditure (pounds)	Percentage Number of Households	Percentage of total food expenditure	Percentage of total consumer expenditure	The upward cumulative repetition of the number of families	Rising aggregate repetition of total food expenditure	Cumulative upward repetition of total expenditure Consumer
10000-	15	6434.8	96522	8096.4	121446	0.15	0.05	0.018	0.15	0.05	0.018
-10000	227	7660.6	1738956.2	15522.7	3523652.9	2.32	0.899	0.522	2.47	0.949	0.54
-20000	320	9460.6	3027392	22263.2	7124224	3.27	1.566	1.055	5.74	2.515	1.594
-25000	503	11186.5	5626809.5	27112.9	13637788.7	5.14	2.91	2.019	10.9	5.425	3.613
-30000	575	12734.9	7322567.5	32107.7	18461927.5	5.87	3.787	2.733	16.7	9.212	6.346
-35000	711	14083.6	10013439.6	36799.8	26164657.8	7.26	5.178	3.873	24	14.39	10.22
-40000	771	15574	12007554	41801.6	32229033.6	7.87	6.21	4.771	31.9	20.6	14.99
-45000	790	16385.1	12944229	46665.6	36865824	8.07	6.694	5.458	39.9	27.29	20.45
-50000	772	17479.3	13494019.6	51421.5	39697398	7.88	6.978	5.877	47.8	34.27	26.33
-55000	700	19368.7	13558090	56593.1	39615170	7.15	7.012	5.865	55	41.28	32.19
-60000	577	20173.8	11640282.6	61359.1	35404200.7	5.89	6.02	5.241	60.9	47.3	37.43
-65000	506	21335.6	10795813.6	65817.4	33303604.4	5.17	5.583	4.93	66	52.89	42.36
-70000	835	22269.4	18594949	72799	60787165	8.53	9.616	8.999	74.6	62.5	51.36
-80000	558	23889.7	13330452.6	82662.4	46125619.2	5.7	6.894	6.828	80.3	69.4	58.19
-90000	440	25444	11195360	91916.8	40443392	4.49	5.79	5.987	84.7	75.19	64.18
-100000	554	27035.4	14977611.6	105099.1	58224901.4	5.66	7.746	8.62	90.4	82.93	72.8
-120000	399	30206.4	12052353.6	128091.6	51108548.4	4.07	6.233	7.566	94.5	89.17	80.36
-150000	269	32939.3	8860671.7	159073	42790637	2.75	4.582	6.335	97.2	93.75	86.7
200000	273	44383.7	12116750.1	329841.6	90046756.8	2.79	6.266	13.33	100	100	100
Total	9794	19743.4	193366859	68969.8	675490221						

Source: Compiled and calculated from data of the Central Agency for Public Mobilization and Statistics, Income and Expenditure Research 2019/2020

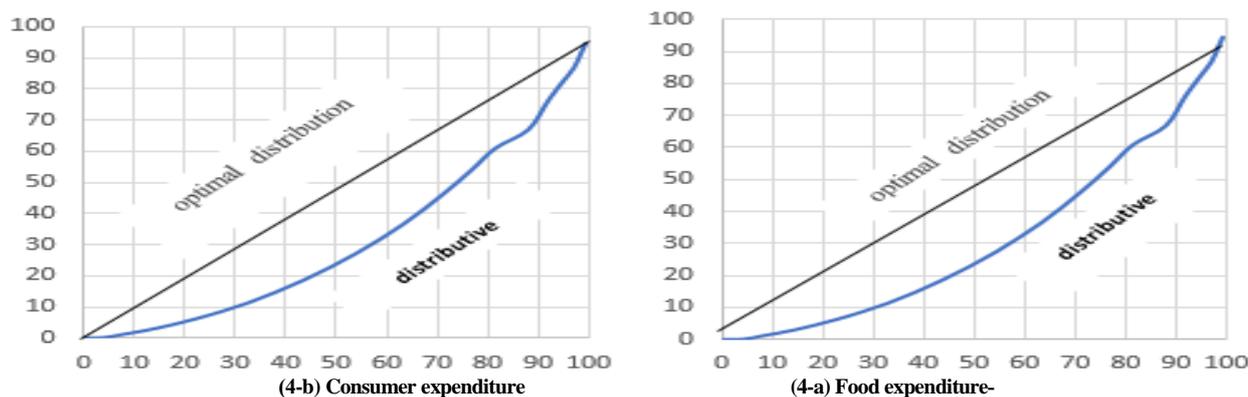
**Justice Food and Consumer Convention in rural Egypt2:**

It is evident from Table No. (7) that the total number of families according to expenditure categories for the year 2019/2020 amounted to about 12,376 families, and their total annual food and consumption expenditures amounted to about 232,946 and 640.187 million pounds each, respectively. It is also clear that the percentage of families in the countryside who represent low spending categories, which includes the spending category (less than 10-30) thousand pounds, was about 22.6%, while the percentage of their food and consumer spending was about 14.04% and 11.32% for each, respectively. It was also found that the percentage of the number of families who represent medium spending categories, which includes the spending category (30-80) thousand pounds, their percentage represented about 69.2%, and the percentage of their food and consumer spending was about 72.99% and 70.58% for each of them,

respectively. While the percentage of families who represent the highest spending categories, which includes the spending category (80-200 and above), amounted to about 8.2%, and their annual food and consumption expenditures reached about 12.99% and 18.1% for each, respectively.

by measuring the degree of concentration in food and consumer spending in rural Egypt using Lorenz curves, which are shown in Figure (4-a) and Figure (4-b), and with estimates of Gini coefficients, it was found that they amounted to about 0.804 for food spending and about 0.818 for consumer spending, which reflects the inequity both in Food or consumption spending.

From the estimates of Gini coefficients, it was found that local and regional changes since 2019 had a negative impact on spending on food and consumer spending for households in rural Egypt.



**Figure 4. Lorenz curve to distribute household food and consumer expenditure in rural Egypt 2019/2020**

**Table 7. Total annual expenditure according to the categories of agreement in rural Egypt 2019/2020**

Categories Convention	number of families	Average Food expenditure (GBP)	Total food expenditure (GBP)	Average Consumer expenditure (GBP)	Total consumer expenditure (pounds)	Percentage Number of Households	Percentage of total food expenditure	Percentage of total consumer expenditure	The upward cumulative repetition of the number of families	Rising aggregate repetition of total food expenditure	Cumulative upward repetition of total expenditure Consumer
10000-	37	7099.7	262688.9	7858.7	290771.9	0.30	0.11	0.05	0.30	0.113	0.045
-10000	463	7942.5	3677377.5	15990.5	7403601.5	3.74	1.58	1.16	4.04	1.691	1.202
-20000	521	10305.2	5369009.2	22234.3	11584070.3	4.21	2.3	1.81	8.25	3.996	3.011
-25000	757	12055.7	9126164.9	27160.9	20560801.3	6.12	3.92	3.21	14.4	7.914	6.223
-30000	1024	13932.7	14267084.8	31874.9	32639897.6	8.27	6.12	5.1	22.6	14.04	11.32
-35000	1257	15414.1	19375523.7	36796.6	46253326.2	10.2	8.32	7.22	32.8	22.36	18.55
-40000	1335	16926.9	22597411.5	41543.6	55460706	10.8	9.7	8.66	43.6	32.06	27.21
-45000	1300	18621.4	24207820	46389.5	60306350	10.5	10.4	9.42	54.1	42.45	36.63
-50000	1149	19600.4	22520859.6	51250.8	58887169.2	9.28	9.67	9.2	63.4	52.12	45.83
-55000	927	20992.4	19459954.8	56105.4	52009705.8	7.49	8.35	8.12	70.9	60.47	53.95
-60000	734	22027.2	16167964.8	60729.1	44575159.4	5.93	6.94	6.96	76.8	67.41	60.92
-65000	581	23060.5	13398150.5	65535.4	38076067.4	4.69	5.75	5.95	81.5	73.16	66.86
-70000	807	24648.7	19891500.9	72154	58228278	6.52	8.54	9.1	88	81.7	75.96
-80000	468	26423	12365964	81326.6	38060848.8	3.78	5.31	5.95	91.8	87.01	81.9
-90000	349	27960.1	9758074.9	89194.3	31128810.7	2.82	4.19	4.86	94.6	91.2	86.77
-100000	300	30608.6	9182580	100119.7	30035910	2.42	3.94	4.69	97	95.14	91.46
-120000	169	30283.2	5117860.8	117386.3	19838284.7	1.37	2.2	3.1	98.4	97.34	94.56
-150000	106	31307	3318542	139970.9	14836915.4	0.86	1.42	2.32	99.3	98.76	96.87
-200000	94	31015.9	2915494.6	214018.8	20117767.2	0.76	1.25	3.14	100	100	100
Total	12376	18822.4	232946022.4	51728.1	640186965.6						

Source: Compiled and calculated from data of the Central Agency for Public Mobilization and Statistics, Income and Expenditure Research 2019/2020

**Summary and recommendations:**

In the last decade of this century, Egypt witnessed economic, political and social changes, which negatively affected the income of individuals and consequently their level of spending, which resulted in clear changes in the consumption pattern and an increase in the large gap between the incomes of individuals and its reflection. The problem of the research was that food spending on food and drink for each From urban and rural Egypt, it amounts to about 19,089.4 – 19019.3 pounds, representing about 33.9%, 40.2% of the total consumer spending of the family, which amounts to about 54,516.8 – 44,358 pounds for the year 2017/2018, and it decreased to about 19743.4 – 18822.4 pounds, representing about 27.7%, 34.6% Of the total household consumption expenditure of about 68969.8 - 51,728.1 pounds, urban and rural Egypt, in order for the year 2019/2020. The research aimed at changes in the structure of the family's food expenditure on food groups in urban and rural Egypt, with a statistical estimate of the spending flexibility on food commodities in urban and rural Egypt. And assessing the justice of the food and consumer agreement for the family in rural and urban Egypt to know

the impact of local and regional changes on the food and consumer agreement for the family in rural and urban Egypt. T: It is clear from the study that the annual food expenditure of the family in urban Egypt increases in general between the two study periods, as it rose from about 19,089.4 to about 19743.4, with an increase of about 3.4%. The increase in spending on cereals and bread, dairy, cheese, eggs, fruits and vegetables, food products not classified under another item, non-alcoholic beverages by about 12.6%, 2%, 1%, 16.6%, 17.2%, 8.1%, respectively. While it was shown that the household expenditure on meat, fish, oils and fats, sugar and sugary foods decreased by 1.7%, 1%, 8.1%, and 3.7%, respectively, during the two study periods.

It was also found that the annual food expenditure of the family in rural Egypt in general decreased between the two study periods, as it decreased from about 19019.3 to about 18822.4 pounds, with a decrease of about 1.04%. Expenditure on food commodities for the family was uneven, as the amount of increase in spending on both Of cereals and bread, (dairy - cheese - eggs, vegetables, food products not classified under another item, non-alcoholic beverages by about 1.5%, 9.3%, 13.8%, 7.5%, 0.8%,

respectively, while it was shown that the family spending on meat decreased, Fish, oils and fats, sugar and sugary foods by 7.9%, 2.9%, 11.6%, 1.6%, 15.2%, respectively, during the two study periods.

It is also clear from the study that the fairness of food and consumer spending in urban Egypt for the period 2017-2018 using Lorenz curves and estimates of Gini coefficients showed that it amounted to about 0.197 for food spending and about 0.310 for consumer spending, which reflects the achievement of relative justice in each of these two types of spending, but it was higher For consumer spending. And it was found that the fairness of food and consumer spending in rural Egypt amounted to about 0.162 for food spending and about 0.236 for consumer spending, which reflects the achievement of relative justice, whether in food or consumer spending for that period.

It is also clear from the study that the fairness of food and consumer spending in urban Egypt for the period 2019/2020 using Lorenz curves and estimates of Gini coefficients showed that it amounted to about 0.194 for food spending and about 0.334 for consumer spending, which reflects the achievement of relative justice in each of these two types of spending, but it was higher For consumer spending. , - From the estimates of Jenny's transactions, it is found that local and regional changes (the Corona pandemic and its repercussions) did not have a tangible impact on food spending justice and achieving consumer spending justice for the family in urban Egypt.

#### The study's recommendations;

- 1-Providing basic food commodities at reasonable prices for families with limited income to rural Egypt, which is considered the neediest with a decent life.
- 2- Public awareness to maintain and improve the level of nutrition for the low-income group for better health in urban rural Egypt.
- 3-Increasing income to compensate for the gap between total spending and actual consumption of the Egyptian family in rural and urban Egypt

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### SUPPLEMENTS

**Table 1. The annual total expenditure of the family in EGP in urban and rural Egypt during the two-study period**

Data	2018/2017		2020/2019		the change	
	urban	Country	urban	Country	urban	Country
Actual Consumption	57897	48197	71993	55211	24.35	14.6
in-kind transfers non-kind transfers (catering and bread difference)	1705	1698	1778	1924	4.282	13.3
consumer spending	1676	2142	1244	1559	-25.78	-27.2
non-consumer spending	54517	44358	68970	51728	26.51	16.6
total spending	1744	2925	2358	2724	35.21	-6.87
	56260	47283	71328	54452	26.78	15.2

Source: Compiled and calculated from data: Central Agency for Public Mobilization and Statistics, Income, Expenditure and Consumption Research. ,

### دراسة اقتصادية مقارنة للاتفاق الاستهلاكي للأسرة المصرية في الحضر والريف

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#### المخلص

شهدت مصر تغيرات اقتصادية وسياسية واجتماعية مما أثر بالسلب على دخول الافراد وبالتالي على مستوى إنفاقهم و في النمط الاستهلاكي وتزايد الفجوة الكبيرة بين دخول الافراد حيث تبين ان الانفاق الغذائي على الطعام و الشراب لكل من حضر وريف مصر يمثل حوالى 33,9 % , 40.2 % من اجمالي الانفاق الاستهلاكي للأسرة البالغ نحو 54516.8 - 44358 جنيها لعام 2018/2017 و انخفض يمثل نحو 27.7 % , 34.6% من اجمالي الانفاق الاستهلاكي للأسرة البالغ حوالى 68969.8 - 51728.1 جنيها حضر وريف مصر بالترتيب للفترة 2020/2019 . واستهدف البحث التعرف على التغيرات في هيكل الانفاق الغذائي للأسرة على المجموعات الغذائية وتقدير العدالة الانفاقية الغذائية والاستهلاكية للأسرة في ريف وحضر مصر لمعرفة أثر التغيرات المحلية والإقليمية على الاتفاق الغذائي والاستهلاكي للأسرة في ريف وحضر . ودراسة تقديرات معاملات جيني تبين ان التغيرات المحلية والإقليمية لم يكن له تأثير على العدالة الانفاقية الغذائية والاستهلاكية للأسرة في حضر مصر . وكما ان من تقديرات معاملات جيني تبين ان التغيرات المحلية والإقليمية اثناء جائحة كورونا وتداعياتها كان له أكبر الأثر على عدم العدالة الانفاقية الغذائية والاستهلاكية بدرجة كبيرة للأسرة في ريف مصر

الكلمات الدالة: الاتفاق الاستهلاكي، معامل جيني، المرونة الانفاقية.