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Ideas for a new global food agenda?**

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**Title of paper:  
Diet Risks in Resource Rich Countries**

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**Abstract**

Following contribution of A.K. Sen on Hunger and Public Action (1989) and G. Otero on Neo Liberal Diet Risk (2015), it makes sense to examine their applications for resource rich countries with special consideration to oil based economies. A modified index is introduced to compare diet risk index (DRI) ranking of countries with current risk indices published by EIU, FAO, WHO. The main objective of the extended risk indices is to find out the sources of food insecurity in higher income countries in developing and developed countries and introduce a basic diet risk categorization. It would pave the way for public actions by policy makers in these countries.

The methodology used in this paper is based on descriptive statistical analysis and quantitative indexing method as well .The macro cross section data provided by FAO is utilized for statistical analysis and indexation tool.

This study examined the correlation of components of risk factors. It shows a positive correlation of diet risk with obesity, export and import dependency and urbanization in resource rich countries.

**Keywords:** Food Insecurity, Neo Liberal Diet, Food Sovereignty, Food safety, Risk Index

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## **Introduction**

Food security has always been a serious concern in poor countries. Less than one billion of people have been suffering from food insecurity and hunger. During the process of development and rapid urbanization, the food based diseases convert from under nourishment to malnourishment and related “transitional diseases” like obesity, hypertension, heart attack , cancers and diabetes (who 2015) . The rapid changing of diet regime from traditional organic food to processed energy dense diet (Otero 2015) lead to new version of food insecurity and malnutrition The rapid income growth of resource rich economies and transitional industrializing countries are accompanied by rapid expansion of urban based service sector with lower human physical mobility but increasing consumption of calorie intakes .

This paper examines the role of main socio economic factors affecting the diet risk by using quantitative method. There are various approaches for estimating food insecurity in which can be classified in two broad supply side and demand side. The classical method of Malthusian focus on lack of food productive capacity, while Post Malthusian literatures relied on distribution challenges . The A.K. Sen human “absorb capacity building” of food security is challenging the supply side economists . He observed the famine happened in colonial era in India ( Sen A.K. 1989). It can be considered as an outcome of economic mismanagement of vested colonial interests. The similar source of food insecurity ( but in quality of food instead of shortage in quantity of affordable food)is observed in post colonial era particularly in some developing countries with domestic and international economic and political vulnerability .

Since 1980s, a new international order for food regime dominated in industrializing economies which is called as Neo Liberal Diet (Otero 2013). The original model of NDR (Neo Liberal Diet Index) considered import dependency, urbanization, female participation ratio, Gini and globalization are hypothetical dominant factor of diet risk. In this paper, other factor like export dependency (export concentration index) added to the indices. Export dependency in developing countries may lead to higher diet risk for several reasons including unanticipated income fluctuations for affording sustained nutritional food and “push effects” (Nurkse R. 1970) in migration.

The study may differ from conventional measurement of food security made by Economic Intelligence Unit (EIU), FAO. These measurement of risk focus on availability and affordability of calorie intakes in average population. The objective of conventional report is to to find out the average hunger or undernourishment index but this study focus on the socio economic component of diet risk in higher income countries .

**Appendix 1:****Table 1. DIET RISK INDEX 2014**

	<b>ECI</b>	<b>CIDR</b>	<b>GINI</b>	<b>UR</b>	<b>FPR</b>	<b>OBES</b>	<b>FSIM</b>
Algeria	0.489787	67.6	35.3	75.5	15.2	24.8	20.1
Angola	0.957625	50.5	42.7	61.5	63.3	10	4
Azerbaijan	0.856274	37.7	33	54.4	62.9	22.5	17.5
Bahrain	0.369315	53	40	88.9	39.2	35.2	9.5
Brazil	0.146828	-3	52.7	85.4	59.4	20	4.9
Canada	0.178598	-81	33.7	81	61.6	28	7.9
China	0.100596	2.1	37	54.4	63.9	6.9	5.8
Ecuador	0.499769	36.4	46.6	69.1	54.7	18.7	7.8
Egypt	0.162935	44.2	30.8	44	23.7	29	21.1
India	0.174651	-3.1	33.6	32.4	27	4.9	4.5
Indonesia	0.151622	12.7	38.1	53	51.4	26	9.6
Iran (Islamic Republic of)	0.571063	28.7	38.3	69.5	16.6	26.1	9
Iraq	0.972126	56.8	29.5	66.4	14.9	23.8	7
Kazakhstan	0.667	-50.6	28.6	50.66	46.1	23.8	4
Kuwait	0.656635	96.2	40	98.3	43.6	40	15.9
Libya	0.764957	92.0	40	78.2	30	33.11	8
Mexico	0.130954	30.7	48.1	79	45.1	28	6.4
Morocco	0.157299	36.4	40.9	58.1	26.5	22.3	12.2
Netherlands	0.097094	84.3	28.9	74.3	58.5	19.8	12.3
Nigeria	0.758085	21.7	43	51.5	48.2	11	17
Norway	0.371967	40.2	26.8	80.2	61.2	23.1	9.4
Oman	0.591519	93.4	40	74.2	29	31	12.4
Qatar	0.518538	89.0	40	99.2	50.8	42.3	9.4
Russian Federation	0.369606	-27.5	39.7	74.3	57.1	24.1	13.5
Saudi Arabia	0.738415	88.1	40	82.9	20.2	34.7	14.6
South Africa	0.119	2.8	65	63.3	44.5	26.8	6.3
Turkey	0.068601	0.8	40	74.3	29.4	29.5	5.1
UAE	0.405	94.7	40	85.2	46.5	37.2	7.6
United States	0.095461	-24	41.1	83.1	56.3	33.7	5.5
Venezuela	0.760345	56.6	44.8	94.1	51.1	25	18.4

## Appendix 2:

**Table 2. RANKING of DRI IN FOUR CATEGORIES**

	ECI	CIDR	GINI	UR	FPR	OBES	FSIM	DRI
Algeria	3	4	2	3	1	1	4	2.571429
Angola	4	3	4	3	4	1	1	2.857143
Azerbaijan	4	2	2	1	4	1	4	2.571429
Bahrain	3	3	4	4	2	3	2	3
Brazil	2		4	4	4	1	1	2.666667
Canada	2	1	2	4	4	2	2	2.428571
China	1	1	3	2	4	1	1	1.857143
Ecuador	3	2.0	4	3	3	1	2	2.571429
Egypt	2	3	2	1	1	2	4	2.142857
India	2	1	2	1	1	1	1	1.285714
Indonesia	2	1	3	2	3	2	2	2.142857
Iran (Islamic Republic of)	4	2	3	3	1	2	2	2.428571
Iraq	4	3.0	1	3	1	1	2	2.142857
kazakistan	2	1.0	1	2	2	1	2	1.571429
Kuwait	4	4.0	4	4	2	4	4	3.714286
Libya	4	4.0	4	3	1	3	2	3
Mexico	2	2	4	3	3	3	1	2.571429
Morocco	2	2.0	4	2	1	1	3	2.142857
Netherlands	1	4.0	1	3	4	1	3	2.428571
Nigeria	4	2	4	2	2	1	4	2.714286
Norway	3	3	1	4	4	1	2	2.571429
Oman	4	4.0	4	3	1	3	3	3.142857
Qatar	4	4.0	4	4	3	4	2	3.571429
Russian Federation	3	1	3	3	3	1	3	2.428571
Saudi Arabia	4	4	4	4	1	3	3	3.285714
South Africa	2	1	4	2	2	2	1	2
Turkey	1	1	3	3	1	2	1	1.714286
UAE	3	4.0	4	4	3	3	2	3.285714
United States	1	1	3	4	4	3	1	2.428571
Venezuela (Bolivarian Rep. of)	4	3.0	4	4	3	2	4	3.428571

VERY HIGH RISK (More than3) HIGH RISK,(2-4-2.99) MEDIUM RISK(2-24) AND LOW RISK(less than 2)

ECI stands for Export Concentration Index ( It represents export dependency and Mono Product risky economy)

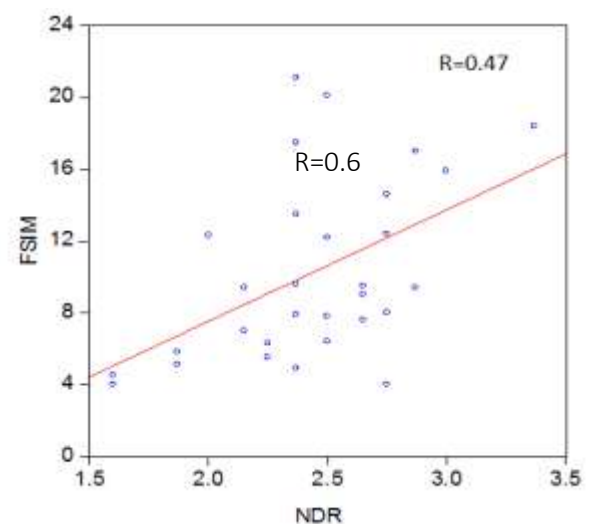
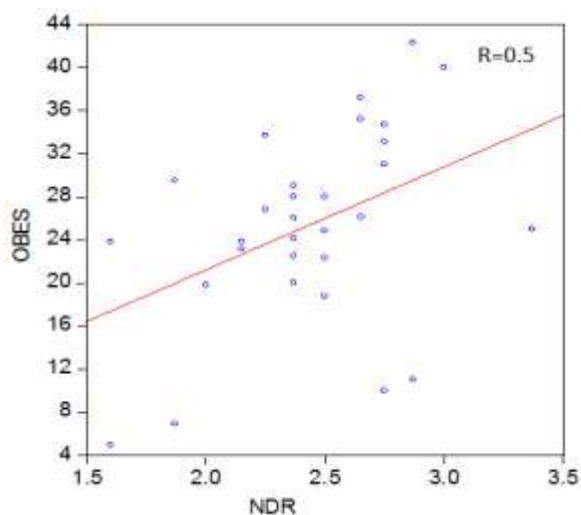
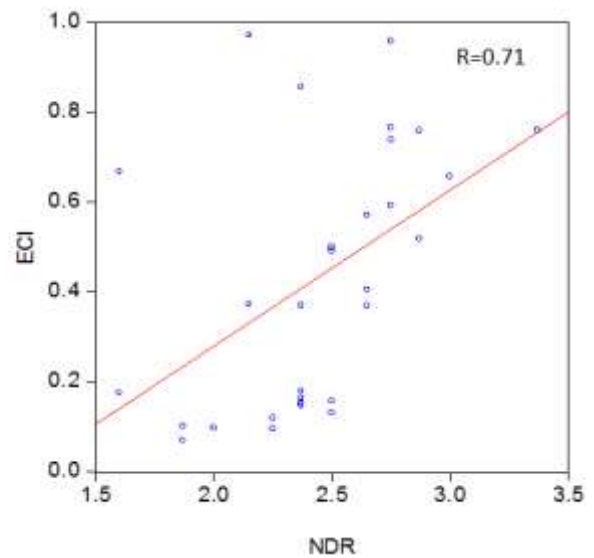
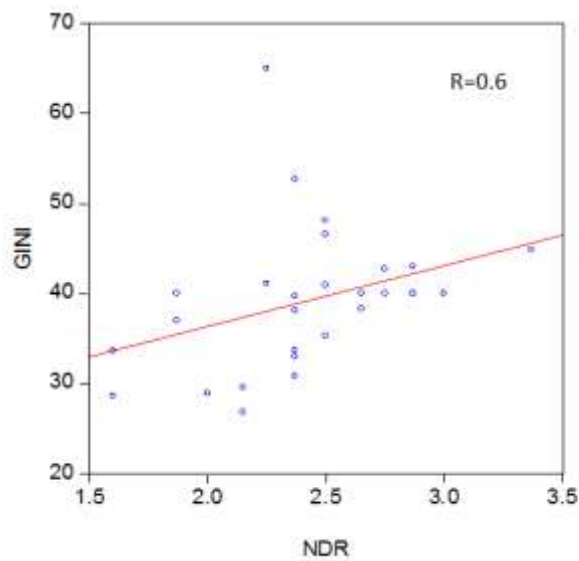
CIDR stands for Cereals Import Dependency Ratio

UR stands for Urbanization Rate (Urbanization usually affects diet regime from traditional food into more processed foods)

FPR stands for Female Participation Ratio (Female participation is a development indicator but at the same time increase diet risk and usage of processed foods )

OBES stands for Obesity Rate ( Share of country,s populatin suffering from Obesity )

FSIM stands for Food Share of Total Imports



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