

Survey of Nutrition and Social Development in the World

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DOI: 10.6007/IJARBSS/v3-i12/432 URL: <http://dx.doi.org/10.6007/IJARBSS/v3-i12/432>

Abstract

Paying attention to social development in the world has been dramatically upward during the last 25 years. For the first time United Nations paid attentions to social aspects of development (1968). Before this period, the development concept was limited solely on the economy field and just rise in per capita income and economic growth was considered as a symbol of communities' development. A developed government and community is one which has fulfilled minimum needs of the residents in the areas of housing, education, nutrition and health care, there is no doubt that the nutrition of each individual is associated with the state of his mental and physical health. This research has been done on determining nutritional indicators and social development indicators and the relationship between them in 1391. The population of this research is all the countries of the world. To select some cases to study, we needed some countries having access to statistics of target indicators of nutrition and social development. The study samples were selected using sampling method. According to sampling method and sample selection criteria and according to UNICEF website in 2006-2010, data required for this research was formally announced only in 23 countries. SPSS software was used to analyze data. Mean and standard deviation from descriptive tests and, Pearson correlation coefficient from inferential tests were used for significance correlation. The results suggest that there is a significant relationship between nutrition and social development.

Keywords: Nutrition, Development, and Social Development.

Introduction

Social development can be considered as a movement towards better compatibility between the individual and society, providing security to citizens in all areas, creating equal conditions. Social development should result in more prosperity for people to have more satisfying life. Social development can occur in a society in which class gap, discrimination and exploitation are minimized and there is a fair distribution of income and power and the gap between poor and rich is decreased. It seems that development and social welfare are two sides of one coin. About the importance of social welfare it has been said that these are not the targets of development but they themselves are considered as development. It means a government and

a society can be considered as developed one who has fulfilled minimum level of its residents' needs in housing, education, nutrition and health. Maybe someday, nutrition was considered just to satisfy people's physiological needs, but today nutrition is not only a necessity of life, but healthy food pattern is recognized as an important factor to improve communities and promote production and productivity in countries. This study aimed at determining the indices of social development and nutrition and also checking if there is a significant relationship between nutrition and social development.

Research framework

Nutrition

Although health is dependent on several factors, such as heredity, environment, lifestyle and culture, but nutrition and physical activity are so important for health (Duyff, 2002). There is no doubt that every person's nutrition is associated closely with his physical and emotional health and sufficient amounts of nutrients maintain health and improve his performance (Koch & Pokorn, 1999).

Protein - calories malnutrition or lack of micronutrients are some part of wrong nutrition and many chronic diseases such as cancer, heart - cardiovascular disease, diabetes, and ...all are related to indulge in conserving certain nutrients or wrong eating patterns (Aldana et al, 2006). The role of nutrition has been known as the most controllable risk factor for these diseases (Schaller & James, 2005).

Knowledge of nutrition is one of the factors in addition of the individual, affects on the family and friends' eating habits. Many people consider physicians as source of nutritional information, while studies have found that physicians have inadequate and low nutritional information (Ozcelik et al, 2007).

Malnutrition is "food shortages associated with increased mortality." Hunger and malnutrition are the regrettable realities of the world. While people are living in many industrialized societies malnutrition every year leads to the deaths of 5.6 million children under age 5 in non-industrial societies. Malnutrition has serious effects on children such as secondary infections immune deficiency, lack of learning and failure in school. Moreover malnutrition threatens in women's ability to have healthy children in the future and continuing generation cycle. Good nutrition is the cornerstone of health and development, not only for the present but also for future generations. Women who are well-fed face fewer risks during pregnancy.

Greatest physiological stress in women's lives is produced during pregnancy that creates the most important change in their living situation. This physiological stress is due to fetus needs. That's why pregnant women need increased energy and nutrients compared with normal women. Mother feeding is associated with her success in fertility, pregnancy, maternity, health care and fetal growth. Significant increases metabolism in pregnancy emphasizes on the importance of nutrition and diet in this particular period of the life cycle. (Sajadi, Kaboudi, 1999).

Nutrition during pregnancy affects on birth weight and infant health and considering that one of the most important parameters determining the baby's chances of survival and normal growth is birth weight, so this issue will become more important. Miscarriage, stillbirth, neonatal death and fetal malformations are increased in times of famine and there is a

significant relationship between the average weight and average height at birth and infant survival (Pourabdollahi & Ebrahim, 1999).

Low birth weight (less than 2500 grams) has been an important factor for neonatal death and long-term health problems such as learning disabilities and mental disorders in America. Mortality in children with low birth weight due to prematurity or intrauterine growth is 40 times higher than normal birth weight infant death. So it seems that the relationship between infancy mortality and birth weight of the baby is more than during pregnancy. It is believed that with the reduced rate of low birth weight, infant mortality dramatically reduced (Sajadi Kaboudi, 1999).

Breastfeeding is recommended for all infants and it should start as soon as birth and should last until 6 months of age exclusively. Breast milk is most suitable one for infants for many reasons. Some of the most important reasons are: transferring immune booster factors, emotional communication between mother and child, suitability of protein and other nutrients for the baby, Getting adequate amounts of fat and fluid in milk, providing much needed minerals and lack of pollution (Fanaroff & Martin, 2002). Breastfeeding, vaccination and antibiotic treatment can save 3 million newborn lives every year.

Malnutrition can impact on the nutritional status by increasing diseases. The highest mortality rates in Africa and Southeast Asia is due to pneumonia and diarrhea. Availability of safe drinking water is very important because lack of safe drinking water causes acute diarrhea in young children less than 1 year and it is related strongly with infant mortality rates. Health care and prescription vitamin A supplement 2 or 3 times a year can prevent blindness and death and save the lives of millions of children every year.

Development

Development is one of the issues discussed not only in the field of development sociology, but also in many fields of sociology, in particular, and in the social sciences field, in general. Development was introduced as an inclusive term after World War II. Several definitions have been provided for development, all of them have a common feature: move forward from the current situation to the desired situation. Development has comprehensive economic, social, political, cultural and ...dimensions and these aspects are closely related to each other. Development complete fulfillment depends on fulfilling its all dimensions. Development is a time consuming process whose fulfillment required large changes; So it is not a goal to be achieved in the short term. Bostus Moores, the conservative founder of social history, used development term to refer to the process of gradual evolution from the year 1768 (Azad Armaki, 2008).

Development sociologists, compare development issues with growth issues. Development means expansion, enlargement. Contrary to the growth implications this term is broad and multi-dimensional it involves fundamental changes in society to lead to material and spiritual prosperity (Azkia, 1993). Classical scholars of social science thought that development of human society depends on economic growth and progress, but they further noted that beside the economic growth and development, the society requires some necessities like equitable distribution of income, diverse talents and human personalities prosperity, physical and mental health, increased life expectancy, social equality, freedom, social human communication away from different kinds of domination, and, in general, it requires establishing civilian and

humanitarian society, so nowadays it is said that all kinds of developments are reasons to provide a civil and humanitarian society. Such a society can be considered as a developed society in the true sense.

In general, there is no comprehensive agreement between planners and scientists about the meaning of the word "development". But what they all agree on is that the development is necessary, and everybody is looking for it but according to his/her thought. Development of a highly complex and multifaceted phenomenon and its meaning cannot be understood unless its various aspects are considered simultaneously.

Some of the most important points should be considered in definition of development include, first, the development should be considered as a category of value, second, it should be considered as a multi-dimensional and complex process, and third, we should consider its association and its vicinity with improvement concept (Azkia and Ghafari, 2006).

Social development

The concept of social development is unclear and complicated and includes views and various topics that are not only different but also sometimes are opposite. Nancy (2000), interpreted social development to "responsibility". Responsibility of governments, professionals, financial investors and governments – nations as members of the world community but most importantly social development is related to human rights, and more broadly workers' rights, organized or unorganized, the right to development and the right to the higher quality service, the right to a healthy environment and an equal share of the benefits of economic growth. Styes (2001) defines social development as an interdisciplinary and cross-sectional area in search of material and social welfare of people in all society levels. This definition explains two points: first, satisfaction of people basic needs by providing the minimum requirements and second, increasing the freedom that can be measured by choices that people can have. In his opinion social development goals are followed through people participation to maximum extent in determining objectives and the development outcomes.

Azkia considers social development as a concept associated closely with the way of life of a community people and it is related to heighten public life level through the creation of favorable conditions in the areas of poverty alleviation and improved nutrition, health, housing, employment, education, and spending leisure. Also he considers improvement in social conditions of a community and in the broader dimension discussion related to civil society, social democracy, social justice, social welfare and social capital as central topics of social development (Azkia and Ghafari 2006). On the other hand, social development includes a dimension of the development emphasizes and concentrates on human interactions, social institutions and relationships with each other (Piran, 2006).

Paying attention to social development has been dramatically upward in the last 25 years in the world. For the first time the United Nations (1968) showed attention to the social aspects of development (Akbari, 2002).

All issues that have been raised so far in the field of social development are classified into two categories: welfare-oriented and Marxist approaches:

Theorists of welfare-oriented perspective, consider social development towards a better quality of life. For example, Warner believes that social development is summarized in providing

people living facilities in society. In expressing importance of living facilities Weber believes that life chances include access to better living conditions and better personal life experiences.

Marxist views have chosen political approach in discussing of social development and they believe in establishing social justice and political practices based on social equality. For example, Dong Kim's opinion can be referred who believes social development is a measure of the change in the social structure not only allows the most deprived communities to demand their share of national resources but also helps them in achieving them. In his opinion if society structural change is in a direction to provide necessary chances for deprived category to access their share of national resources, this direction is development process. In fact, in their opinion (Marxist view) social development process is a process that in a society free from exploitation, social exploitation can be achieved (Nateghpoor, 2008).

Research objectives

1. Identifying nutritional indicators
2. Identifying social development indicators

Materials and Methods

In this study, the population is the whole world countries. In order to select some samples to study, we needed those countries which have access to the index data on nutrition and social development in the years 2006-2010. Samples of the study were selected using existed sampling method. Due to sampling method and sample selection criteria and a visit to UNICEF website, only 23 countries had formally announced the required data for this study in 2006-2010.

Regarding our issue, selected social development indicators are: life expectancy at birth, infant mortality rate, the mortality rate for children under 5 years, access to safe drinking water, access to sanitation facilities and the share of household income.

As other indices, percentage is needed for the statistics calculation. So, in order to convert the raw age of life expectancy to life expectancy, 83 years of age is considered as the highest life expectancy in the world, which belongs to Japan. Then, we divided life expectancy by human life in the studied countries and a raw number was obtained. Multiplying this number in 100, levels of life expectancy is obtained. In order to obtain the conversion rate of infant mortality and children mortality in percent, the above method was used. The highest rate of infant mortality is in Sierra Leone, with 114 cases, and the highest mortality rate for children under 5 years is in Somalia, with 185 people. Since the 2 infant mortality rates and children mortality rates are negative indicators, numerical values of these two indicators are subtracted from one to have a positive indicator. In order to determine the numerical value of the index of social development, this study selected indicators are added, and the resulting values is divided by the number of indicators.

Selected indicators of nutrition in the study, according to current statistics are infants with low birth weight, early breastfeeding, weight deficits in children under 5 years and children aged 6 to 59 months who are taking vitamin A. According to the two negative indicators of infants with low birth weight and weight deficits in children under 5 years, these indices subtracted from one to have a positive indicator and entered the software. In order to determine the nutrition

numerical values, selected indices are added and the resulting value is divided by the number of indicators.

Findings

- ✓ **Nutrition indicators statistics using data from UNICEF website in the years 2006 - 2010**

Using UNICEF website, nutrition indicators can be found in Table 1.

Table (1): statistics on indicators of nutrition, using the UNICEF website in 2006-2010

	Infants with low birth weight (%)	Early breast feed (%)	Weight deficits in children under 5 years (%)	Children aged 6 to 59 months who are taking vitamin A(%)
1) Angola	11	55	16	28
2) Azerbaijan	10	32	8	89
3) Bangladesh	22	43	41	100
4) Bolivia	6	61	4	24
5) Cameron	11	20	16	89
6) Central Africa	13	39	24	0
7) Chad	22	34	30	68
8) DR Congo	13	39	11	84
9) Korea	6	18	19	99
10) Ethiopia	20	69	33	84
11) The Gambia	11	53	18	100
12) Ghana	13	52	14	93
13) Guatemala	11	56	13	36
14) Haiti	25	44	18	21
15) India	28	41	43	34
16) Indonesia	9	44	18	80
17) Kenya	8	58	16	62
18) Malawi	13	58	13	96

19) Financial	19	46	27	99
20) Mongolia	5	81	5	61
21) Mozambique	16	63	18	100
22) Nicaragua	9	54	6	7
23) Nigeria	12	38	23	91

✓ **Statistical indicators of social development between the years 2006-2010, using the UNICEF website**

Using UNICEF website, social development indicators can be found in Table 2.

Table (2): statistics on indicators of social development, using the UNICEF website in 2006-2010

	life expectancy at birth	Life expectancy at birth (%)	Infant mortality rate	Infant mortality rate (%)	Mortality Rate in children under 5 years	Mortality Rate in children under 5 years (%)	Access to safe water (%)	Access to sanitation (%)	Household income share (%)
1) Angola	51	61	98	85	161	89	50	57	62
2) Azerbaijan	71	85	39	34	46	25	80	81	42
3) Bangladesh	69	83	38	33	48	26	80	53	41
4) Bolivia	66	79	42	36	54	30	86	25	61
5) Cameroon	51	61	84	73	136	75	74	47	51
6) Central Africa	48	57	106	92	159	88	67	34	49
7) Chad	49	59	99	86	173	96	50	9	47
8) Congo	57	68	61	53	93	51	71	30	53
9) Korea	69	83	26	22	33	18	100	83	62

10) Ethiopia	59	71	68	59	106	58	38	12	39
11)The Gambia	58	69	57	50	98	54	92	67	53
12) Ghana	64	77	50	43	74	41	82	13	48
13) Guatemala	71	85	25	21	32	17	94	81	58
14) Haiti	62	74	70	61	165	91	63	17	63
15) India	65	78	48	42	63	35	88	31	45
16) Indonesia	69	83	27	23	35	19	80	52	45
17) Kenya	57	68	55	48	85	47	59	31	53
18) Malawi	54	65	58	50	92	51	80	56	46
19) Financial	51	61	99	86	178	98	56	36	46
20) Mongolia	68	81	26	22	32	17	76	50	44
21)Mozambi que	50	60	92	80	135	75	47	17	52
22) Nicaragua	74t	89	23	20	27	15	85	52	57
23) Nigeria	51	61	88	77	143	79	58	32	49

✓ **Mean indicators of nutrition and social development between the years 2006-2010**

Nutrition and social development indicators mean can be found in Chart 2 as a comparison between studied countries.

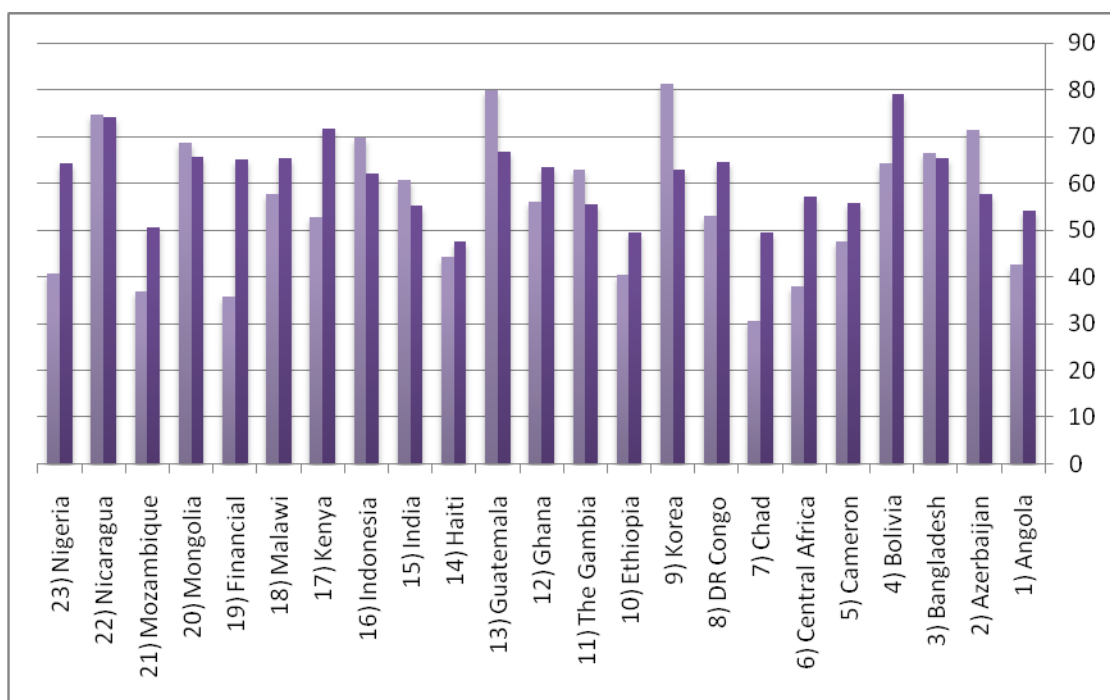


Chart (1): Statistics on mean indicators of social development and nutrition in general in the years 2006-2010 using SPSS software

In chart (1) light pepper bar shows mean social development and dark pepper bar shows mean nutrition in general in the studied countries in the years 2006-2010.

✓ **Mean nutritional indicators in general in the years 2006-2010**

Table (3): Mean nutritional indicators in general in the years 2006-2010

	Number	Mean	Minimum	maximum	Standard deviation
Low Weight Infants (%)	23	13.06	5	28	6.25
Early breast feed (%)	23	37.13	3	72	19.01
Weight deficits in children under 5 years (%)	23	18.86	4	43	10.41
Children aged 6 to 59 months, who use vitamin A (%)	23	56.30	3	98	27.84
Nutrition in general	23	61.01	47.5	79	8.21

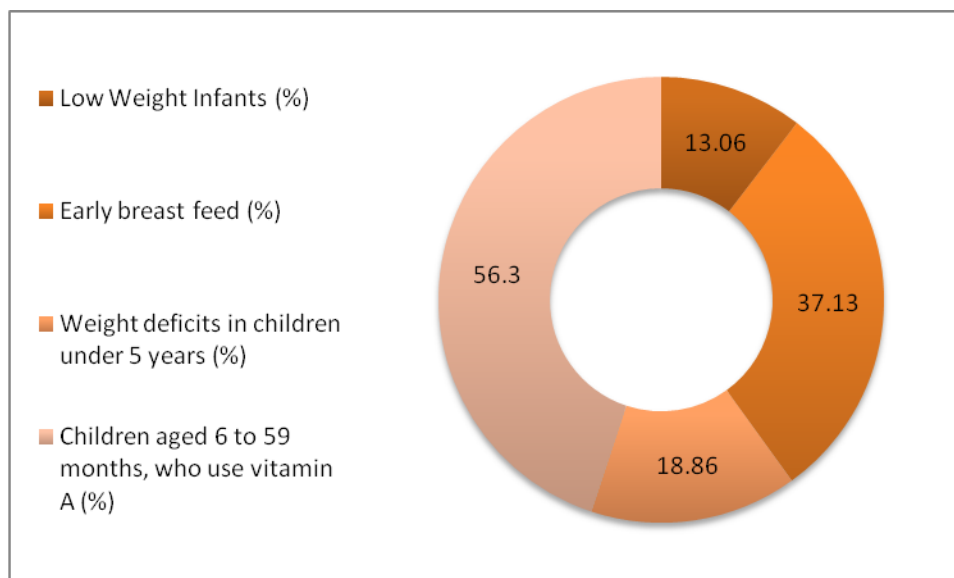


Chart (2): General mean nutrition indicators between the years 2006-2010

✓ **Mean indices of social development in general between the years 2006-2010**

Table 4: Mean indices of social development in general between the years 2006-2010

	Number	Mean	Minimum	The maximum amount	Standard deviation
Life expectancy at birth (%)	23	72 .08	57	89	10.21
Infant mortality rate (%)	23	52	20	92	24.07
The mortality rate for children under 5 years (%)	23	51.95	15	98	28.96
Access to safe water (%)	23	72	38	10	16.71
Access to sanitation (%)	23	42	9	83	22.49
The share of household income (%)	23	50.69	39	63	7 .10
Development as a whole	23	55.47	5.30	81.33	15.12

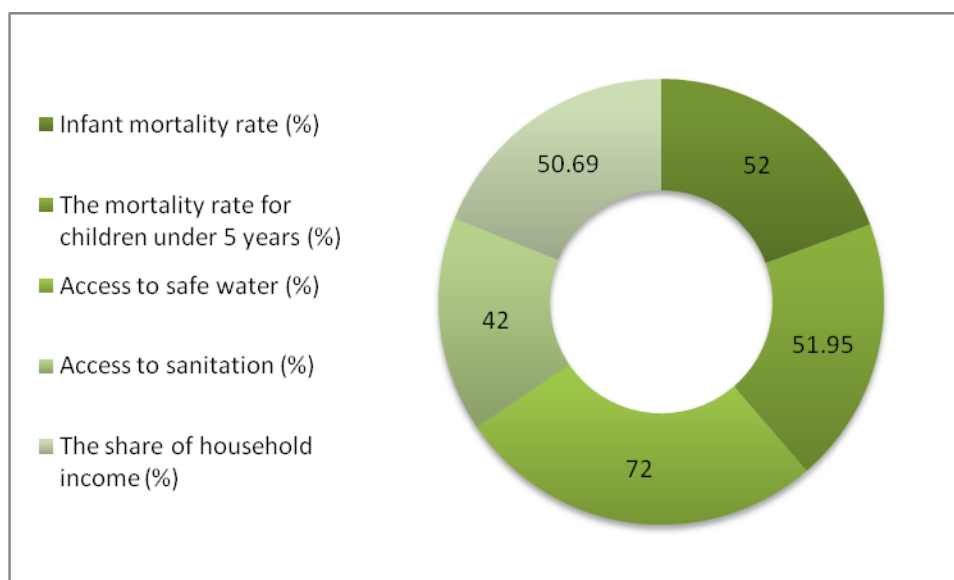


Chart 3: Mean indicators of social development in general between the years 2006-2010

✓ **Pearson correlation between nutrition and social development in the years 2006-2010**

Table 5: Pearson correlation between nutrition and social development in the years 2006-2010

	Life expectancy at birth (%)	Infant mortality rate (%)	The mortality rate for children under 5 years (%)	Access to safe water (%)	Access to sanitation (%)	The share of household income (%)	Total Development
Infants with low birth weight (%)	0.219 Sig = 0.315	0.415 Sig = 0.048	0.436 Sig = 0.037	0.349 Sig = 0.103	0.489 Sig = 0.018	0.297 Sig = 0.168	0.472 Sig = 0.023
Early breast feed (%)	0.421 Sig = 0.046	0.525 Sig = 0.010	0.482 Sig = 0.020	0.455 Sig = 0.029	0.088 Sig = 0.691	0.040 Sig = 0.856	0.449 Sig = 0.032
Weight deficits in	0.293	0.262 Sig =	0.188 Sig =	0.291 Sig =	0.199 Sig = 0.364	0.418 Sig = 0.047	0.298

children under 5 years (%)	Sig = 0.175	0.228	0.391	0.178			Sig = 0.168
Children aged 6 to 59 months who use vitamin A (%)	0.074 Sig = 0.737	0.103 Sig = 0.641	0.415 Sig = 0.032	0.082 Sig = 0.709	0.066 Sig = 0.766	0.037 Sig = 0.866	0.123 Sig = 0.577
Nutrition in general	0.426 Sig = 0.043	0.532 Sig = 0.009	0.568 Sig = 0.005	0.477 Sig = 0.021	0.253 Sig = 0.245	0.159 Sig = 0.468	0.533 Sig = 0.009

- According to Table (5), between the years 2006-2010, there is a significant correlation between infants with low birth weight and infant mortality indicators, mortality in children under 5 and access to sanitation and development in general.
- According to Table (5), there is a significant correlation between early breastfeeding and indicators of life expectancy at birth, infant mortality rate, the mortality rate for children under 5 years, access to safe drinking water and general development in the years 2006-2010.
- According to Table (5), there is no significant correlation between weight loss in children under 5 and the share of household income in the years 2006-2010.
- According to Table (5), there is a significant correlation between children who use vitamin A and children mortality rates in the years 2006-2010.
- According to Table (5), there is a significant correlation between general nutrition indicator and life expectancy at birth, infant mortality rate, the mortality rate for children under 5 years, access to safe drinking water and total development.

Discussion:

This study carried out about nutritional indicators and indicators of social development and the relationship between the two in 2012. Using available sampling methods and UNICEF website, 23 countries were submitted to study. 6 indicators were considered for social development: life expectancy at birth, infant mortality rate, the mortality rate for children under 5 years, access to safe drinking water, access to sanitation and the share of household income. indices means are: Life expectancy at birth (72.08%), infant mortality rate (52%), the mortality rate for

children under 5 years (51.95%), access to safe drinking water (72%), access to health facilities (42%), the share of household income (50.69%), respectively. According to UNICEF statistics, 4 indices for nutrition are considered: infants with low birth weight, early initiation of breastfeeding, weight deficits in children under 5 years and children ages 6 to 59 months who take vitamin A. Using the statistical software, the mean of these indicators between the years 2006-2010 are: infants with low birth weight (13.6%), early initiation of breastfeeding (37.13%), weight deficits in children under 5 years (18.86%) and children ages 6 to 59 months who take vitamin A (56.3%). Generally, nutrition mean was 61.01% and social development mean was 55.47% between the years 2006-2010, respectively. Using Pearson correlation and according to Table 5, the index of the nutrition related to life expectancy at birth between the years 2006-2010 was early initiation of breastfeeding. In other cases, there were significant correlations between infants with low birth weight and early breastfeeding, children ages 6 to 59 months who take vitamin A and children under 5 years mortality rate, early initiation of breastfeeding and access to safe drinking water, low-weight infants and access to sanitation facilities, weight deficits in children under 5 years, and the share of household income between the years 2006-2010. Generally, it was found that there is a significant relationship between nutrition and social development and the hypothesis was confirmed in this study.

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