

# Impact of National Security on Food Security: Evidence from Pakistan

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**Abstract**---- Pakistan is one of the country in the developing countries which is known for its agricultural and economic growth but still the food security conditions are not satisfactory. Although the country is trying to meet the MDG's by increasing the food security and reducing the hunger in the country. All the scholars and philosophers are agreed on the point that food insecurities occur when there are insecurities at national level and when we talk about security at national level then it not only include use of force and military might to protect the country from conventional foes and other non-state elements but also include multidimensional security. These dimensions include economic, environmental, security of society, security of natural resources and war risks. This study targets to measure the relationship between national security and food security conditions in Pakistan. For getting results, quantitative regression analysis is used and correlation is checked between all the variables of the food security and national security. For analysis the collection of data is done by the assistance of World Bank, Pakistan Statistical Bureau, UNDP, UCDP, FAO, and the Pakistan Economic Survey. This study allows us to analysis the economic instability, an increase in war risk, insecurity in society, security of environment and insecurity of natural resources and its correlation with food insecurity. Analysis of the results, help us to draw recommendation which are most appropriate and feasible according to the need of the country.

**Index Terms**----economic growth, food security, national security, security of environment, security of natural resources, regression, war risk.

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"Hunger," says Kenyan farmer Sevu Kanyasya, "is like this: if you're hungry, you cannot sleep at night. If you have hunger, you cannot plan for your life. You cannot think about anything except the hunger that you have. It creates conflict in the family, and can tear it apart. We used to be so hungry."

Food insecurity and security of the Nation are the issues that draws the attention of most of the scholars in the world. Many scholarly studies and articles are found on these issues (Ashgar& Muhammad 2015; Amir &Tanvir 2013; Wheeler & Von Braun 2013; G.T 2013;Avalew 2014; Zseleczy 2014; Robert Klinterberg 1977) contribute a lot in the topic of national security and food security.

The aim of this paper is to examine the relationship of five components of National security with food security.

The central question of this paper is:

- Will the food security conditions improve if the National security is improved in the country?

To address this the study analyzed all the five components of national security with all the four strands of the food security.

## I. Economy and Food Security

Economy and food security of any country are two interlinked elements. By the year of 2007 and 2008 there was an abrupt increase in the price of wheat up to 130%. By the end of the year 2008 there was a decline in the increasing trend of the food stuff because of weaker economy.

In developing countries like Pakistan, the government focus on reserving enough quantity of wheat but this was not the solution because having enough food will not assure food security. Food security will only have fulfilled when all the four strands of food security are

fulfilled. All the four strands of food security are interwoven and closely linked with national security. Therefore, having enough food available is not enough until it is in the access of all the people all the time.

**a. Inflation:** One of the most common indicators of economy is inflation. When the purchasing power of the people decrease due to an increase in the price of the commodities then this situation is known as inflation.

According to Keynesian theory "*An increase in demand/cost becomes a cause of increase in the inflation rate.*"

Food utilization will be greatly affected if there is more inflation in the market. People will suffer from food insecurity or will have less food than the required daily calories requirement because of high prices of food stuff. Along with food utilization food accessibility will also adversely affected because of high prices.

**b. Gross savings:** Gross savings of any country shows the economic stability of the country. The economic growth of the country is referred to the increasing capacity of the country in the production of goods and services. Increasing gross saving moves the country to the safer side and makes people more food secure.

An increase in the economy of the country will not resolve the issue alone there is a need of complete strategic planning to pull out the country from food insecurity conditions.

By the increase of 10% in the economy, food security will also increase by 6%. Food accessibility and food availability will be greatly affected. Reason behind this phenomenon is: food accessibility is linked with purchasing

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power of the people, when the people have more room to spend then they will ultimately buy more food and government should spend more for fulfilling the growing demands of the people. Hence, gross savings will be affected if food accessibility is increased. Same is with food availability, whereas, food utilization and food stability will not be affected as much the above two mentioned strands of food security caught the impact.

### III. Environment and Food security:

The sum of all the surroundings with which an individual interacts throughout his life is included in its environment. The environment include water, land, air, sunlight and all the organisms that are responsible for damaging or improving the mental and physical status at any stage of the life of the individual. The positive impact of the environment can be easily seen by the health and other activities of the individual.

Emission of CO<sub>2</sub> (Carbon Dioxide) gas and the agricultural land are most important indicators to check the security of environment. CO<sub>2</sub> effect the health of the animals and also of the human beings. Therefore, a stabile quantity of all the gases must be maintained in the air for proper growth and health of the individuals.

Agricultural land plays a significant role in maintain food security in any country. 1.3 billion people earn their livelihood from small farms or by indirect relation to the farm whereas, 2.5 billion people directly earn their livelihood from agriculture.

Food utilization and food stability are the two pillars of food security those are greatly affected by any increase/decrease in the agricultural land. When utilization is more but also the stability of food is maintained then the farmers will start producing less crops because they don't want to sell their products at low prices. Therefore, agricultural land will be decrease. Availability and accessibility of food will also catch the impact of increase/decrease in the agricultural land.

Pakistan is an agricultural based economy and the strength of the economy depends on the production or products extracted from this sector.

All the four strands of food security are greatly affected by emission of carbon dioxide gas. The emitted gas has direct effect on the growth of plants and the yield of the edible crops directly affect the food security in the country.

### IV. Natural Resources and Food security

The resources which are used as a source to obtain of production from the crops that helps in fulfilling the fiber, energy and other requirements of the living organisms. These resources are of two types. 1.renewable resources and 2.non-renewable resources. Renewable

resources are the resources that never become extinct e.g. sunlight, air, water etc.

Whereas, non-renewable resources include all the resources that once finished then took millions of years to replenish e.g. fossil fuels. The natural resources that become a part of my study are land, water, and productivity of the soil.

Food accessibility and food stability are greatly affected by the increase/decrease of the natural resources. Food accessibility shows that food is in the access of all the people all the time, that means the food is present in abundance in the market and also in cheap rates. For minimizing the supply and demand gap there is a need of continuous production of edible crops and that require land and water which is our natural resources. Therefore, by increasing/decreasing the natural resources food accessibility and food stability will be greatly affected.

### V. War Risk

War is the phenomenon that not only damage the land and people but also the economy of the country. The country which is dragged in that condition is then struggles for years to regain its lost economy and stabilizing other things that include food shortages, famine, and drought etc.

Hunger is the phenomena that mostly becomes a cause of war. War destroys the crops, livestock, food supplies, and hence ultimately results in food shortages.

**Global Conflict Risk Index (GCRI):** A special type of scale that is used to measure war risk in any country. It uses 25 types of variables in 5 different ways to check war risk in the country.

When food availability and food stability is attained then the risk of war will be more. Food availability and food stability are linked with the social status of the people and societies and then of the states. Rich societies attract the deprived and hungry societies then ultimately they fought for making their people food secure. Hence, war risk is found more in the states where food availability and food stability is more.

### VI. Security of the society and Food security

When people live, and interact with each other and share the same resources, culture, political scenario, and territory. Society is perhaps the smallest unit that comprises to form a city, town and then country. Two main components of society are taken as a part of my study which are peacekeeper in the society and theft rate in the society.

Peace and harmony between a group of people is only possible when all the people in the society work for the betterment of the society by using the collective resources provided in the society. These actions improve the confidence among the members of the society and also

reduce the risks of damage to the assets that are collectively made by the members of the society.

If the theft rate in the society is more than mean, there is uneven distribution of wealth in the society and there is a need of social protection programs. A rich society is more food security because they have more room to spend whereas, a poor society will be food insecure and there will be less food security and more theft rate.

Theft rate in the society affects the food utilization, food stability and food availability. When there is unequal distribution of wealth in the society then the poor group of people who don't have proper food utilization, and are not sure of food stability and food availability will surely attack the rich people and this will result in an increase in the theft rate in the societies. To control the increasing theft rate government should spend more budget on the purchase of arms to control the theft rate and for making the society secure. Therefore, an **increase** is seen in the budget spent on arms when food stability, food utilization and food accessibility is more in the society.

## VII. Food availability and food production index

Food availability is linked with the sufficient and appropriate quantity of food available domestically or by import is known food availability. Best and most favorable condition of food availability is that when it is accessible to all the people, all the time. Food availability is measured by Food Production Index (FPI) that include all the edible and nutritious food and crops that can be used as a source of energy. An increase in food production index causes an increase in food availability. Stronger economies have more food availability as compared to developing unstable economies like Pakistan.

Food availability of the country can be increased if the national security of the country is improved. Studies reveal that war affects the economy of the country and specially if the country is agricultural based economy. Crops and land in the war affected areas destroyed by mines and by the activities of the troops. The land also becomes barren because of the use of weapons hence decreasing the availability of the food. As food availability is measured by food production index, a direct relationship is found.

A decrease in food production index causes a decrease in food availability whereas, an increase in food production index becomes a cause of increase in food availability.

Hence, to have a suitable condition of food availability it is necessary that national security (along with all variables) conditions of the country are improved.

## VIII. Food accessibility and purchasing power parity

Food accessibility is linked with the social status of the people. The rich people of the society, more access they should have to food. Therefore, the best way to measure the accessibility of the food is by measuring the purchasing power of the people.

All the four strands of food security are interlinked. If there is enough food available in the market but it is of very high price and out of the access of the people, then such availability is useless. Therefore, along with availability of food accessibility is of equal importance.

Economy is one of the components of national security. When economy of a country gets weaker that shows a negative trend in the value of the money. If the value of money/currency decreases that means, there will be a decrease in the purchasing power of the people. Therefore, decrease in the purchasing power of people makes them food insecure.

Therefore, results reveal that stable economy of a country shows increased purchasing power of the people and ultimately food accessibility increases. A stable economy is a fruit of improved national security. So, we can say that if the national security conditions of the country are satisfying then we will get a stable economy and a stable economy results in increased food accessibility.

## IX. Food utilization and health expenditure:

Third and second last strand of the food security is utilization of food. It is linked with proper utilization of food and proper intake of quality food that may fulfill the daily calories requirement. Food availability and food accessibility may attain but along with that food utilization is of equal importance. It is possible to attain food accessibility but it is difficult to maintain quality and standard of the food.

Hunger is a situation that takes years to develop. Less agricultural productions, war conditions, drought, high food prices, natural disasters, malnutrition, and depletion of natural resources are the motivators to this condition. If the quality food is not in the access of the people, then it is obvious that they will become weak and less resistant to diseases. If the situation prevails then they will fall ill and should spend on their health and hence health expenditure will increase. Therefore, the best proxy to measure the food utilization is by the budget they spent on purchasing medicines.

When we talk about national security the first thing that came in mind is war conflict. If the country is facing such situations, then ultimately the economy of the country will see a down turn and currency will lose its value. The agricultural land and crops in the war area

destroyed and hence decrease the availability of food. This decrease in food become a start of increasing rates and inflation and If the value of the money decrease and the rates of the commodities increases, then the purchasing power of the people decrease, and when the purchasing power decreases ultimately the food utilization will decrease and people will spend more on purchasing medicines. Hence, results reveal that national security also effects food utilization. A positive increase in national security cause an increase in food utilization

## X. Food stability and long run employment:

Food stability is linked with time. Time shows that for how long would the proper nutritious be available to the individual?

Employment and food security of the society are closely linked with each other. For reducing poverty in the society, the people should have a source of income. A stable source of income provides a stable income and a stable income guarantees food stability. Contrary to this if the people are long run unemployed then there will be not a proper source of income and without a stable income the food stability cannot be maintained.

Employment also has a relation with war conflicts. The foreign investors only focus on the markets where they have a large profit. Such types of markets are only possible when there is an atmosphere of peace whereas, in the conditions of war the first thing that got its impact is market.

There are two type of employments in the country. One is long term employment and the other is short term employment. Long term employment involve people for a long term of time and eradication of poverty is for long term and food security will be maintained for a longer period. Along with food security health maintained, education, and living standards will also increase. Whereas, short term employment is for short time and engage people for short time and household food security is maintained for a short time.

## XI. Methodology

The main aim of the study is to find out the impact of five elements of national security on food security. Food and security are two of the most emerging, important and hot issues of the society and then a nation. The study reveals the relationship of the variables of the national security with food security and then with their sub variables and shows its impact on all the four strands of food security.

The indicators used in the research are those which are used by the most reliable sources and organizations for their research works.

Data is collected from World Bank, UN, Pakistan Statistic bureau, Pakistan economic survey and WDI. Cross-Sectional type of data is used in the research and a sample size of 25 observations is used which starts from 1990 to 2015. This type of data shows a snap shot of the events of the specific time.

Log-log model is used in the research to minimize the variance of the data and estimation of the collected data is done in the SPSS. List of indicators used in this research are as follow:

- I. Economy.
- II. Inflation rate.
- III. Gross savings (%of GDP).
- IV. Environmental security.
- V. Carbon dioxide emission.
- VI. Agricultural land c. Security of Natural resources.
  - a. Water.
  - b. Land.
  - c. Soil productivity.
- VII. War risk
  - a. War risk index.
- VIII. Security of society.
- IX. Peacekeeper (% of GDP spent on defense).
- X. Theft rate.

List of dependent variables used in the research are:

- I. Food availability (food production index)
- II. Food accessibility (purchasing power parity)
- III. Food utilization (health expenditure)
- IV. Food stability (long run employment)

Log-log model is used in this research and nature of data is cross-sectional. Cross-sectional data captures a clear picture of the situation just like a snap shot of the events. That's why I used cross-sectional data.

$$\ln(y) = a + b\ln(x) + e$$

### I. Food availability

$$\ln Y_1 = \ln b_1(\text{saving\% of GDP}) + \ln b_2(\text{inflation}) + \ln b_3(\text{co2 emission}) + \ln b_4(\text{agricultural land}) + \ln b_5(\text{war risk}) + \ln b_6(\text{theft rate}) + \ln b_7(\text{\%of GDP in defense}) + \ln b_8(\text{natural resource income}) + \mu$$

In this research the data of food availability is taken from FAO. Increased food availability decrease the risk of food insecurity. Left side of the equation contains the variable of food availability and represent the double log model whereas, the right side of the equation shows other variables used in the research and on which we should check the impact and represent log-log model.

### II. Food accessibility

$$\ln Y_2 = \ln b_1(\text{saving\% of GDP}) + \ln b_2(\text{inflation}) + \ln b_3(\text{co2 emission}) + \ln b_4(\text{agricultural land}) + \ln b_5(\text{war risk}) + \ln b_6(\text{theft rate}) + \ln b_7(\text{\% of GDP in defense}) + \ln b_8(\text{natural resource income}) + \mu$$

To measure the accessibility of the food a proxy variable is used in this research that is purchasing power of people. Purchasing power parity shows that the more the power of purchase of the people the more they will be food secure. Left hand side of the equation shows food accessibility and is also a representation of log-log model and right-hand side of the equation shows independent variables used in the research.

### III. Food utilization

$$\ln Y_3 = \ln b_1(\text{saving\% of GDP}) + \ln b_2(\text{inflation}) + \ln b_3(\text{co2 emission}) + \ln b_4(\text{agricultural land}) + \ln b_5(\text{war risk}) + \ln b_6(\text{theft rate}) + \ln b_7(\text{\% of GDP in defense}) + \ln b_8(\text{natural resource income}) + \mu$$

Food utilization is measured with the help of proxy variable that is expenditure on health. The more the people will consume healthy food the less they should spend on health issues and other illness related to health that become worse when proper food is not utilized. Left-hand side of the equation shows the variable of food utilization and right hand side shows other variables used in the research.

### IV. Food stability

$$\ln Y_4 = \ln b_1(\text{saving\% of GDP}) + \ln b_2(\text{inflation}) + \ln b_3(\text{co2 emission}) + \ln b_4(\text{agricultural land}) + \ln b_5(\text{war risk}) + \ln b_6(\text{theft rate}) + \ln b_7(\text{\% of GDP in defense}) + \ln b_8(\text{natural resource income}) + \mu$$

Food stability is linked with the time that for how long the individual will be food secure. To measure the stability of food long run employment is used as a proxy variable. Data of Pakistan Statistical Bureau and World Bank is used to measure the long run employment.

## XI. Results and discussions

### a. Food availability=FPI

Food availability is measured with the help of proxy variable that is food production index. More food is available and in the access of people less people will be food secure. From the variable of economy, the sub-variable of gross savings shows significant impact on availability of food. Results reveal that emission of carbon dioxide gas, war risks, and theft rate shows significant results. A minor

change to these variables greatly affects the availability of food whereas, inflation, agricultural land, natural resources and peace keeping also prove significant if the confidence interval is kept at 10.

**Food availability= Food production Index (FPI)**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
1 (Constant)	30.309	39.061		.776	.0449			
Inflation	-.043	.075	-.107	-.570	.57	.071	-.141	-.039
Saving	-.133	.133	-.089	-.	.0329	-.285	-.244	-.069
CO2 emission	1.268	.279	.963	4.540	.000	.949	.750	.312
Agricultural land	-1.944	3.015	-.154	-.645	.0528	.081	-.159	-.044
Natural resource income	-.028	.071	-.053	-.394	.0699	.618	-.098	-.027
War risk	.097	.141	.115	.692	.0499	.854	.170	.048
Theft rate	-.138	.098	-.150	-.	.0180	.222	-.331	-.096
Peacekeepers	-.075	.197	-.048	-.381	.0708	.570	-.095	-.026

### b. Food accessibility=Purchasing Power Parity(PPP)

Food accessibility is linked with the purchasing power parity and the social status of the people. An increase in the purchasing power of the people shows that accessibility to the food is more. Inflation, gross savings, CO2 (carbon dioxide) emission and natural resources income shows significant impact on the purchasing power of the people whereas, agricultural land, war risk, theft rate, and peace keeping are also significant when we increase the confidence interval to 10.

**Food accessibility= PPP = Purchasing power parity Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
1 (Constant)	5.186	16.728		.310	.0761			
Inflation	.024	.032	.095	.762	.0457	.190	.187	.035
Saving	.063	.057	.065	1.116	.0281	-.198	.269	.051
CO emission	.795	.120	.934	6.647	.000	.966	.857	.303
Agricultural land	.224	1.291	.027	.173	.0865	-.082	.043	.008
Natural resources income	-.042	.030	-.122	-.	.0189	.552	-.325	-.063
War risk	.007	.060	.013	.117	.0908	.795	.029	.005
Theft rate	.013	.042	.021	.297	.0770	.432	.074	.014
peacekeeper	.150	.084	.148	1.770	.0096	.741	.405	.081

a. Dependent Variable: Purchasing power parity

### c. Food utilization=health expenditure

Food utilization is measured with the help of proxy variable. If the people consume proper dietary requirements as per the calorie requirement of the body, then there are less chances of falling ill. If fewer budgets are spent on health, then more can be used on food. Inflation, carbon dioxide emission, agricultural land, theft rate and

peace keeping can greatly change the results if we control these variables. Whereas, gross savings and war risk are also important variables when we keep the confidence interval at 10 as per thumb rule.

**Food utilization= Health expenditure**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations		
	B	Std. Error	Beta				Zero-order	Partial	Part
1 (Constant)		60.659				.011			
Inflation	100.184			1.652	2.284	.036	.307	.496	.125
Gross saving income	.265	.116	.342		.337	.074	-.290	.084	.018
CO emission	.069	.206	.024						
Agricultural land	2.494	.434	.974	5.751	.000	.920	.821	.316	
Natural resource income	8.029	4.682	.327	1.715	.010	-.155	.394	.094	
War risk	-.061	.110	-.060	-.558	.578	.466	-.138		.031
Theft rate	-.428	.219	-.260				.691	-.439	
peacekeeper				1.956					.107
	.336	.153	.189	2.204	.043	.519	.483	.121	
	.493	.306	.162	1.609	.012	.729	.373	.088	

#### d. Food stability=long run employment

Stability of food is linked with the employment of the people. If the people are employed for long run, then it is obvious that their food security will be maintained for longer time because they have a source of income to purchase food items.

Inflation is significant when the confidence interval is kept at 10 whereas, gross savings, CO2 (carbon dioxide emission), agricultural land, natural resources income, war risk, theft rate and peace keeping are very important and significant that even a mirror change to these can produce abrupt and huge changes.

**FOOD STABILITY=LONG RUN EMPLOYMENT**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations		
	B	Std. Error	Beta				Zero-order	Partial	Part
1 (Constant)	88.941	95.394			.932	.036			
Inflation	-.013	.182	-.016	-.072	.094	.338	-.018		.006
Gross saving	-.228	.324	-.074	-.704	.049	-.313	-.173		.058
CO emission	3.230	.682	1.197	4.736	.000	.801	.764	.388	
Agricultural land	-6.563	7.363	-.254	-.891	.038	-.246	-.218		.073
Natural resource income	-.391	.173	-.361	-.038	.293	-.492			.185
War risk	-.558	.344	-.322			.509	-.376		
Theft rate	-.191	.240	-.102	-.798	.043	.453	-.196		.133
peacekeepers	.694	.482	.217	1.441	.016	.784	.339	.118	

## XII. Policy Options and Recommendations

A famous saying:

*“Food insecurity anywhere, threatens peace everywhere”*

The two important goals of MDG include poverty eradication and hunger elimination. Food insecurity becomes a cause of political instability, restlessness in

society, violent conflicts, and other worse conditions in the society.

From a very conscious investigation it is revealed that from 131 districts of Pakistan 80 districts are suffering from food insecurity. 48.6% of population have no access to the food. 67.7% people in Federally administrated triable areas (FATA), 61.2% people in Baluchistan, 56.2% people in Khyber Pakhtunkhwa and 23.6% people in the Capital (Islamabad) are food insecure. This is an alarming condition.

There is a need of changing policies according to the need of the hour. The best way to curb the poverty and food insecurity is to increase the income of the poor people. When we discuss about the food security then only food production at private level is not enough. Along with food availability food accessibility is also important. Therefore, the new policies should refine and strengthen all the four strands of food security. For that the policies, should focus on two main parts of the macroeconomic policy.

1. **Pro-poor growth** the growth process should also include the poor people. They should be provided by the infrastructure of the market and also by investing in human capital will also help to improve the conditions. The rapid economic growth will help to escape from food insecurity as well as the stable food price will help the poor to overcome the short-run fluctuations.
2. **Investing in social security networks, trusts, and corporation** with the members of community, helps to increase availability and accessibility of food.
3. **Government** should invest in the latest researches. Modern and modified system should be introducing that may help to increase soil productivity, reduce water losses, and control pest.
4. **Loss of food** in getting the yield from crops can be minimized by using latest techniques. 15% loss in rice, 13% loss in wheat and 12% in maize is recorded which is a huge loss. This loss can be minimized if latest extraction methods are introduced to farmers.
  - a. Researches on seeds should be done that may have increased resistance against unfavorable environmental conditions and may increase the productivity of crops.
  - b. Latest technologies should be introduced that may help to increase the yield and lower the cost of production.
5. **“National Commissions on Farmers”** should be established in the areas where the productivity of the crops is more. This commission should focus

on the new researches and should introduce those technologies to the farmers. This commission should also focus on evaluating and analyzing the previous policies to renovate them according to the demand of hour.

6. **Smuggling and theft** should be controlled in the tribal areas. It is estimated that every month 1800 mm ton of flour is smuggled to the neighboring country Afghanistan. This is a critical issue and the government should control it wisely as well as politically.
7. **Increase in emission of carbon dioxide** badly effects the health of living organisms and the production of crops. Such policies and rules should be made by government that describe a limit of emission of carbon dioxide gas for all level of manufacturing units in the country. The manufacturing unit that emit more carbon dioxide gas or other harmful chemicals should be banned. Heavy taxes should be lay on such manufacturing units and the gained tax must be used for subsisting the food commodities.

### XIII. Conclusion

Food security and national security are the two main issues in Pakistan. Food security conditions will become even worse if necessary measures will not be taken by the government.

National efforts are required along with government efforts to handle the situation for becoming worse.

There is a need of such policies that may help to control the situation and more towards a more satisfactory stage.

Increase in the productivity and agricultural production will help to maintain and control the situation. Food security is not only the availability of food but along with that there is also a need of accessibility, proper utilization and stability are equally important.

Increase production is important but there must be equal concentration on the storage of food. Such policies should be introduced that may help to protect the producers of food as well as food. The growing population also increase the need of food, therefore, advancement in agricultural sector is required. By choosing the latest techniques of cultivation we can meet the other end of the thread. Researches should be conducted on government level and it should take initiatives to improve and update the agricultural techniques to meet the goal of food security.

A positive impact is also seen by the environmental variable. There is also a need to control the emission of

carbon dioxide gas. Strick rules and policies must be made and implemented on the violators of the rules.

A positive trend is also seen when we check the its impact with the food availability and food accessibility whereas, a negative trend is seen with food stability and food utilization.

Hence, to increase the food security and national security, joint efforts are required at national as well as government level. Along with that latest adaptations in agricultural sector is also required. Adopting latest and modern techniques in agricultural sector and joint efforts at national and local level will help to achieve the unrealistic targets.

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