Prof. Dr. Iram Khalid

Abstract

Food security has established as a concern of national security in terms of state development and progress. Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Concerns of food security and economic development act together reinforcing one another in the practice of development. A country which is not able to generate the required food and lacks resources and affordability of buying food from the international marketplace meeting the gap of supply and demand is not a state that is sufficient in food sovereignty. Food Security therefore is essential for national security.

Keywords: Food Security, Urbanization, Climate Change, India, Pakistan, Regional Initiative

Introduction

Food security is a national security issue. Today's world is experiencing conflict in Syria, South Sudan, Yemen, and Nigeria. Major element behinds the conflict is food insecurity. So it is important to focus on food security as a long term goal that will help to manage many conflicts in the fragile world. Food security is about nutrition, conflict the impact of climate change, urbanization and poverty. Hunger influences the human behavior in tolerance and event violence. As Pakistan is experiencing extremism and militancy specifically in those areas where people are living live without proper state services.

Food security can cause conflict in many different ways like sudden food price rises can cause conflict in equalities among the citizens to buy food can cause grievance food insecurity can force the people to support conflict. Unplanned urbanization, migration, displacements again can be the reason of conflict another important issue is off climate change which can undermine both food security and human security. Climate change is also likely to undermine the capacity of states to provide the opportunities and services that help people to sustain their livelihoods. In certain circumstances, therefore, these direct and indirect impacts of climate change on food and human security may in turn increase the risk of violent conflict.

National security in traditional sense is all about military security. This notion of security deals with the threat emanating from one state against the other. This view of security is narrow in its spectrum as it overemphasizes the needs of the nation-state to ensure its security and gives a secondary status to the needs of the individual in order to survive. With the emergence of globalization, trans-nationalism, emergence of non-state actors, global warming etc. states have to deal with the threats other than

^{*}Author is Professor, Department of Political Science, University of the Punjab, Lahore.

emerging from their fellow nation-states. In this context, traditional conceptualization of security requires broadening and widening in its scope in order to deal with the emerging challenges regarding the survival of the individual in a nation-state. Challenges such as global warming are so magnanimous in their threat reach that they not only risk the survival of individuals and states alone but the future of living beings on planet earth.

In this context, the first effort was made by Copenhagen school of thought led by Barry Buzan and Ole Weaver. They introduced the concept of Human Security to define the non-traditional threats to the security and survival of the state by focusing on the sustainenace, survival and progression of individuals at large. Human Development Report titled "New dimensions of Human Security" (1994) elaborates the textual understanding of the non-traditional security threats. According to that report, human security or non-traditional concept of security can be divided into seven categories. They are:

- Economic security
- Food security
- Health security
- Environmental security
- Personal security
- Community security
- Political security

There are factors that influence sustainable food security include: literacy rates; levels of farmer education; agricultural research and extension capacity; transport infrastructure; non-agricultural income opportunities; social support systems; international security and confidence in international trade; domestic civil strife; international capital movements, etc. To challenge conventional understanding of food security and to convince the experts to understand food security in context of human security which is important for national security of every state?

Research Question

- □ What are the implications of People's dissatisfaction about food supply availability access and utilization of food?
- □ How this issue of food security can influence the national security of States of Pakistan?
- □ What are the major challenges for Pakistan regarding the issue of Food Security?
- □ What can policymakers do to improve food security in Pakistan?

Epistemological and ontological considerations are based on qualitative interpretation and singular case study method is used to understand the issue of food security relating to Pakistan. In this method I have also relied on documents published by the Government of Pakistan. to evaluate the strength of these documents, I have also conducted structured interviews from specific strata of various regions in Pakistan. The response from these interviews further helped me to formulate my views.

Food Security and Human Security

Human Security is "the right of all people to live in freedom and dignity, free from poverty and despair", from want equal opportunity to enjoy all their rights and fully develop their human potential". Human security aims at ensuring the survival, livelihood and dignity of people in response to current and emerging threats.

The human security approach, based on its core vision to achieve freedom from fear, want and indignity,. By emphasizing the triangular relationship between peace and security, development and human rights, human security can highlight the indispensable relationship between these variables, and ensure that poverty reduction strategies are attentive to the root causes and the remedial solutions needed in order to stem the persistence of abject poverty, violence and other forms of fragility

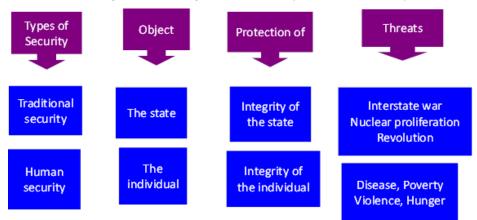


Figure 1 Challenge of balancing Human Security and State Security

Food Shortage and Human Security in Pakistan

- Availability of Food
- Accessibility of Food
- Utilization of Food
- Prevailing Conditions of Food Insecurity

It was during the mid-1970 that the conception of food security surfaced, as a result of food crisis around the world. During 1974 the World Food Conference termed the

security of food as assuring a stable supply and stability of prices for necessary provisions at both the national and global level: "Availability at all time of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices".

In 1983, the analysis of FAO concentrated on food accessibility, providing for a definition which gave emphasis on creating a balance between supply and demand, emphasized in terms of economic convenience: "Ensuring that all people at all times have both physical and economic access to the basic food that they need" (FAO 1983).

The definition of food security has been improved a number of times all through the previous years to take account of domestic, individual, national and regional level of analysis. The writings of Amartya Sen brought to prominence important questions of "access" and "entitlement" leading to acceptance of a defining food security, accepted in the World Food Summit (1966) and expressed as: "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (World Food Summit, 1996).

The definition includes four elements, namely: availability, accessibility, the status of nutrition (utilization of food) and steadiness.

- a) Food Availability: This states that food should regularly be available in adequate quantity and quality according to people's flavor and preferences, which is an essential, but not an adequate feature of food security. Domestic making, imports, food support and release of the public reserve through a definite year adds to the making the food obtainable, while exports, additions to the public stockpile and food wastage manufactured throughout post-harvest procedure, seed input and nonhuman usuage reduce the amount of food item presented for the utilization of human beings. Altogether, accessibility of food involves many factors which consist of manufacturing, processing, storage, circulation, market system and technology (Iqbal, M & Amjad).
- b) Food Accessibility: Another imperative determinant of food security is access. Food accessibility depends on dynamics like that of income, income supply containing remittances, disproportionate income, real prices of food, landlessness, gender, literacy and the standing of employment. This essential contribution of Sen in this regard underlines the fact that even if food is available, its requirement of accessibility can make households vulnerable and lead to severe hunger and malnutrition as was the case of West Bengal's Indian Famine of 1943. Considering the case of South Asia, this factor is vital for explaining on why having made better the availability of food; both indicators of famine and undernourishment have revealed marginal progress (Iqbal, M & Amjad, R).

- c) Food Consumption (Nutritional Aspect): This entails efficient biological utilization of food (absorbing food) through sufficient food, hygienic water, cleanliness and healthcare for accomplishing nutritional health which convenes all of the physiological requirements needed for a vigorous and healthy life. Henceforth, food absorption has an aspect of public health and education affixed with it (Iqbal, M & Amjad, R).
- d) Stability: This states that at all times, people have access to sufficient food not including any possibility of trailing physical and economic accessibility because of economic shocks, consequential higher prices, natural catastrophes (flood, famine, underground eruption, hurricane and tsunamis) and conflicts. During times of fluctuating global food cost, the countries of South Asia face the challenge of balancing the requirements of food security and that of giving inducement to farmers for enhanced outputs and productivity (Iqbal, M & Amjad, R).

Another factor completing the definition includes

e) Vulnerability: Food insecurity to the vulnerable of the populace might be caused because of psychological, economic, political and economic reasons (FAO, 2008)

The Foremost Sources of Food Insecurity in South Asia

The countries of SAARC have a population of above than 22 percent and to this India alone contribute about 1.17 billion people (over 17 %) of it. Pakistan and Bangladesh on their own part contribute to 2.5% and 2.4%, respectively. In most of the countries, the growth rate of the population has become sluggish over the years with Sir Lanka accomplishing a growth rate of 1.3, while Nepal, India, Bangladesh and Pakistan have also progressed in that direction, although Pakistan still has a rate of growing population higher than the other countries.

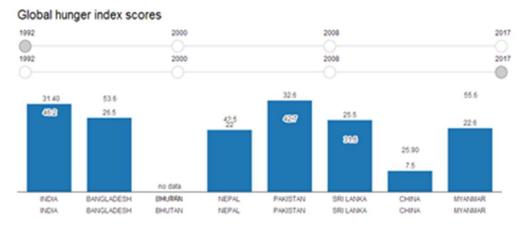
a) Urbanization: The poor of urban areas generally are among those most vulnerable to food insecurity. Inspite of high rate of growing population in the rural region, reduced percentage rates of the rural population in these areas approximately in all of the countries (apart from for Sri Lanka in the period of 1991-2006) summit to the fact of a hastened migration from the rural and towards the urban regions. Migration is the result of factors, the 'push and pull. The pull factors of the cities present privileged earnings, better prospects of employment and better accessibility of services of health and education , while the push factors forcing migrants to depart from the rural vicinities comprise of features akin to dislocation by conflict, calamities , drought , landlessness , land dilapidation along with pressures from the population lying on land. While on one hand , the expansion of cities raise the inhabitants of net food buyers , conversely does it reduce the arable terrain by altering agricultural land productivity and the water sources for industrial and residential usage. Therefore, urbanization as a process is a threat for region's food security (Iqbal , M & Amjad).

- b) Climate: South Asia's agricultural productivity also is prone to greater and variant weather conditions. The potential outlook of changing climate signifies that the region of South Asia is liable to becoming warm in this century. Freshwater availability is expected to lessen, increasing the risks of flooding along the coastal lines. For agricultural productivity it has been envisaged that mounting temperature may decrease the growth of rice, wheat and cereals (ICRIER et .al, 2009). Varieties of agricultural sub-sectors are affected and add to the changing climate. Any disregard or malfunctioning on the part of South Asian countries not to lead to development and approval of technologies needed for mitigating climate changes , adaption of agricultural sustainability and environmental friendly practices would direct food insecurities in the region (Iqbal, M & Amjad, R).
- *c) Other Reasons:* Other reasons of food insecurity include the availability of food, its accessibility, vulnerability and absorption. Food availability and its accessibility are related to demand of food and its supply. Availability of food is established through local production of food, the quantity of food stockpiled and the withdrawal of earlier food stock. As far as the accessibility of food is concerned, it normally is reflected as being within the perspective of household income and the scheme of food distribution. Other features of food security include income of a household, preference for food, cooking machinery, food distributing structures and the overall population (Wickramasinghe, 2014).
- *d) Poverty:* Income poverty along with additional multidimensional characteristic of poverty i.e. denial of access to clean power, water and cleanliness often are factors considered to be causes of undernourishment. Low revenues become a cause for insufficient access to food while malnutrition is responsible for poverty by lowering productivity of generations becoming a cause for inter-generational reassignment of poverty (Wickramasinghe, 2014).
- e) Share of Food Spending: Sharing of the food payments amongst people who have low incomes is also a helpful indicator for determining region's food insecurity. According to what has been predicted by the Engle's law, expenditure of food is high with population's poor sector. The share of food has reached to about 75% in Pakistan, 71% in Nepal, while the rest are above 60% (FAOSTAT, 2014). Having such high levels of food spending, families only can acquire for essential food items and their consumption (Wickramasinghe, 2014).

Food Insecurity- The Case of Pakistan

Dependency on Wheat Based Food Security: Concerns of food security and economic development act together reinforcing one another in the practice of development (Timmer, C, 2004). A country which is not able to generate the required food and lacks resources and affordability of buying food from the international marketplace meeting the gap of supply and demand is not a state that is sufficient in food sovereignty (Pinstrup-A, 2009). Food Security therefore is essential for national

security. Rising food prices in the beginning of the 21st century has raised alarming bells in terms of food security, in particular in the developing world to which Pakistan is not an exception. For achieving a 'food-secure' and 'pro-poor' agricultural development, Pakistan is in need of adopting an all-inclusive approach increasing production of all types of food, instead of concentrating simply on food security based on wheat. Additionally, new technologies on agriculture should benefit and diversify occupation of the farmers and those involved in non-farming sector.



Malnutrition: Despite considerable progress in supplying food, malnutrition is a much prevalent phenomenon in Pakistan (Ahmed, M, et. al, 2010). Although the per capita availability of food has been higher than what has been recommended on an average level at the national level (Khan, M, 2003), nonetheless almost one-third of pregnant women were found to be malnourished and more than 25 percent of the babies had stumpy rates of growth during 2001-2002. Malnutrition became the most important setback for about 30 percent of the infants and the death of children in Pakistan during 2001-2002 (Planning Commission and UNICFE, 2004).

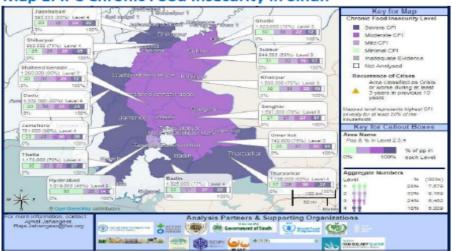
Micro-Nutrient Deficiency: Micronutrient deficiency is also persistent in Pakistan and is considered as "hidden hunger" reflecting arrangements of food deficiency, reduced maternal health and sustenance , higher saddle of morbidity and decreased contents of micronutrients in the soil , especially that of iodine and zinc (Pakistan , 2010). Insufficiency in the micronutrients influences resistance, growth and the mental improvement among Pakistan's women and children. This specifies that regardless of having adequate amount of food accessibility much of the population, generally women and children do not have access to a nutritious balanced foodstuff. Rising levels of 'calorie-based poverty' indicates that many people lack access to healthy food. Additionally, discrepancies in accessibility to education and health are also important. Simply highlighting increased supply of food does not guarantee food security. Under such situations supplying constant and nutritious food along with its distribution also is an essential concern (Pinstrup-A, 2009).

Future Trends of Food Security: Continuous rise in population likely would increase the demand of food. Conversely, what needs to be mentioned is that the future requirement of food would be unusual from that of today for the following reasons:

- a) Increase percentage of older people because of their longer ages.
- b) Better urbanization and appearance of big metropolitan.
- c) Changing composition of families and their structure.
- d) Changing patterns of food utilization.
- e) Occurrence of ailments including Cardiac, Hepatitis and Diabetics
- f) Quick infiltration of Super marketplace and Global Food Chains in countries which are developing.

Therefore, for future needs, foremost spotlight needs to be incentivize agricultural manufacturing in accordance with future necessities. The system of production therefore necessitates superior manufacturing of fruit, vegetables and other goods

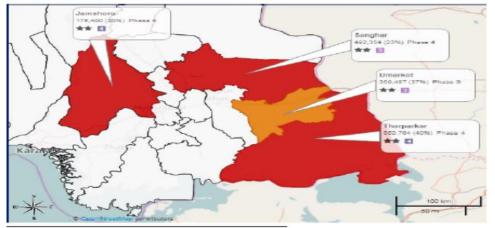
The IPC Chronic Food Insecurity focuses on the long-term persistent food insecurity and provides information to inform medium and long term strategic objectives. The IPC Chronic Food Insecurity analysis has been conducted for 18 districts of Sindh province during November 2016 - April 2017. The preliminary findings ranked 7 districts in Level 4 – Severe Chronic Food Insecurity including Tharparkar, Jacobabad, Badin, Thatta, Dadu, Jamshoro, and Shikarpur; 10 districts in Level 3 – Moderate Chronic Food Insecurity; 1 district in Level 2 – Mild Chronic Food Insecurity; while none in Level 1 – Minimal Chronic Food Insecurity.



Map 1: IPC Chronic Food Insecurity in Sindh

The IPC Acute Food Insecurity analysis focuses on food insecurity at a specific point to inform short-term strategic objectives. Since May 2017, the IPC Acute Food

Insecurity analysis has been also conducted for 4 drought prone districts of Sindh. According to the preliminary findings, 3 districts (Tharparkar, Jamshoro, and Sanghar) are classified in Phase 4 - Emergency, while 1 district (Umerkot) is in Phase 3 - Crisis.





Dependency on Markets: Around 68% of Pakistan's population earns their living from the sector of agriculture. In the country's rural areas food's economic accessibility generally is controlled by various levels of household landholdings, teaching and employment. Although, food is predominately produced in Pakistan's rural vicinities, much of the masses have lesser economic accessibility to food when compared to that of the urban region (World Bank, 2008 & Staatz et, al, 2009). Dependency on the markets for obtaining food for people who are insecure both in the rural and the urban districts is a regular attribute (Ahmed, 2010). Regrettably, efforts by the government for provision of assistance to the consumers are seldom intended for rural households. Moreover, accessibility to factors like sanitation, provision of clean drinking water and understanding concerned to storing food, processing, essential nutrition and facilities concerning health and infrastructure are not meager in the rural districts. For that reason, improving the infrastructure of the market, making arrangements for programmes of net safety, providing improved facilities regarding education and health are to be considered central components for reducing persistent insecurity in both the rural and urban vicinities (Ahmed, M and Farooq, U, 2010).

Opportunities of Development in Food Security

1. Moving towards Initiatives for Regional Food Security: Individually states, through the introduction of safety net programs have had positive impacts in terms of food availability and its accessibility, however food security can better be ensured if states co-operate regionally. The states of South Asia need to work on working upon enhancement of regional trade and giving way to integrating among the market of the

world. Regional Initiatives taken included formulation of the South Asia Preferential Trade Area (SAFTA) and that of the Food Bank which acted as a reserve for securing food for countries of SAARC all through the times of food scarcity, promoting partnerships between the countries resolving problems of food shortage in the course of collective action. These measures have been a good mechanism for resolving periodic calamities; region's individual countries need to have an enduring policy for accomplishing food security. If every country is not food secure achieving regional food security would not be possible. Making advancements in seed banks, investing in research of agriculture and expansion, activities of agricultural expansion and transmission of technology are few of the measures which can be undertaken (Mittal, S & Sethi, D, 2009).

- 2. Focusing on Areas of Research in Agriculture: In agricultural research, states need to work together on the following (i) Developing new ranges, hybrid and types (ii) Methods of water and natural resource administration (iii) Focusing on new techniques of science like that of Remote Sensing and GIS, biotechnology, predictions of weather and torrents, administration of disasters (iv) Trade of technology-Trading germplam, exchanging breeds and types, methods on managing water and natural source (v) capacity building all the way through developing human resource and regional capability (v) harmonizing policies and performances of those recounted to protecting Biodiversity, bio-safety practice and local knowledge (Mittal, S & Sethi, D, 2009).
- **3.** *Political Will:* Both India and Pakistan can eradicate problems of malnutrition, climatic catastrophes, dependency on international markets and water scarcity if the political establishments have the will to do so. Exchange of knowledge and technology in the above mentioned areas would ensure a secure future for food requirements of the respective countries, with other states of following suit (Mittal, S & Sethi, D, 2009).
- **4.** *Trade:* Another way of making better situations of food security includes trade. The trade of food products can have an important role for attainment of food security and stability of the food prices. Imports assist in stabilizing the local prices whilst developing food availability and accessibility (Mittal, S & Sethi, D, 2009). If countries are to make progress in securing food for their population, states especially India and Pakistan need to look beyond political hostilities and differences moving towards economic and trade cooperation for their countries and the region of South Asia.
- 5. *Moving Beyond the Narrowed Focus of Self-Sufficiency:* South Asian states need to move beyond the constricted focus of self-competence taking into consideration their own comparative advantages, especially in this age of globalization (Mittal, S & Sethi , D , 2009).

- 6. Establishing Programs and Mechanisms for Preventing Food Wastage: It is important to reduce wastage of food, for which strategies on integration of harvest management, storage and transportation require development (Mittal, S & Sethi, D, 2009).
- 7. *Infrastructural Development:* Achieving food security calls for strengthening infrastructure in the rural areas. Infrastructures of irrigation need to be rebuild and developed urgently, well-organized systems of markets need to be build up for controlling prices at local and national level, food markets need to be regulated for controlling artificially created scarcities, mass storages need to be constructed and investments need to be enhanced in agricultural research and advancement (Mittal, S & Sethi, D, 2009).
- 8. *Enhancing Trade:* Failures in operationalization of the food ban calls for a greater role in regional trade. Conversely, for increasing regional trade, India and Pakistan need to work on confidence building measures. This is in addition to the tariff and non-tariff barriers hindering South Asia's intra-regional trade in food (Mittal, S & Sethi, D, 2009).
- **9.** Cross-Border Proposals: Further initiatives for cross border food securitization includes; harmonizing the standards of food quality, cooperating mutually on human resource and physical infrastructures, improving regional connectivity by creating shortest routes of trade and removing non-tariff barricades in food trade and elating ban on the import and export of food products (Mittal, S & Sethi, D, 2009).

Conclusion

National security means to secure society and defend the existence of state. So if food is not secure, even sovereign, the society will become in secure. Put food first, will help the society to become safe. In Pakistan this important and intrinsic element of national security is generally over looked. If government may include food security in its priority list then it will contribute in comprehensive security of Pakistan. Food insecurity and poverty not exist in a vacuum there are many political social and economic factors those can cause food insecurity and grievance in society as Brinkman and Hendrix find that food insecurity that cause protest and riots civil conflict and terrorist attack. Due to negative economic growth societies face disturb social and political orders which can cause a threat to national security.

References

Ahmed M, C, Croraton A, Qayyum M, Iqbal and P Dorosh 2010. Impact of Domestic Agricultural Trade Liberalization and Market Reform Policies on Food Security in Pakistan. Chapter 5 In Kumar, *et al.* (eds.) *Liberalizing Food Grains Markets: Experiences, Impact, and Lessons from South Asia.* Oxford University Press. Athreya VB, Bhavani RV, Anuradha G, Gopinath R, Velan AS 2008. Report on the state of food insecurity in rural India. Swaminathan Research Foundation. Barnett, J. and Adger, N(2007): Climate change, human security and violent conflict.

Political Geography, 26(6), pp. 639-655

Chattopadhyay N 2008. Climate change and food security in India. *International symposium on climate change and food security in South Asia* in Dakha, Bangladesh, August 25 to 30, 2008.

FAO (1983).

FAO (2008) Report.

Food Security in South Asia: Strategies And Programmes For Regional Collaboration. From <u>http://pide.org.pk/pdf/foodsecurity/research/FS3.pdf</u>

Fullbrook D 2010. Food as Security. Food Security, 2: 5–20.

ICRIER 2009 . Food Security in South Asia: Issues and Opportunities. *Working paper No. 240*. Indian Council for Research on International Economic Relations. Mittal , S , Sethi , D (2009) Food Security in South Asia : Issues and Opportunities. *Working Paper No: 240*. Indian Council for Research on International Economic Relations.

Pinstrup-AP 2009. Food Security: Definition and Measurement. *Food Security*, 1: 5-7. Planning Commission and UNICEF 2004) *National Nutrition Survey 2001-2002*. Islamabad:

Staatz J. M., D. H. Boughton, and C. Donovan 2009 .Food Security in Developing Countries. . *Staff Paper 2009-03*. Department of Agricultural, Food and Resource Economics, MSU, East Lansing, Michigan.

Statistics of poverty, or poverty of statistics: A reference to 55th Round of NSS. p. 305. *From* <u>http://mospi.nic.in/mospi_seminarseries_nov04_5_1_final.pdf</u> (Retrieved July 18, 2011).

Thomson W 2012. India's Food Security Problem. *The Diplomat*. April 02, 2012. Timmer CP 2004. Food Security and Economic Growth: Asian Perspective. *Asian Perspective Economic Literature*.

Wickramsinghe, U 2014.Realizing Sustainable Food Security In Post 2015 Development Era : South Asia's Progress, Challenges and Opportunities. *Development Papers 1402*. United Nations ESCAP.

World Bank 2008. World Development Report. Washington, DC: World Bank. World Food Summit (1996).