# THE POST FLOOD ANALYSIS OF THE FOOD SECURITY AND THE NEED ASSESSMENT FOR INTERVENTION IN THE FLOOD AFFECTED AREAS OF DISTRICT THATTA, SINDH

Ali Gul Khushik Dr. Sobho Khan Jamali Abdul Rahman Nizmani

#### ABSTRACT

This study aims at analyzing the situation of food security and livelihood conditions in the district Thatta, Sindh and the need assessment for interventions to cope up with the food insecurity. Two union councils were selected randomly for the said analysis from the flood affected UCs of the district. The present study analyzes the vulnerability of the region to declining trend of food consumption, impact on livelihood, income generation activities, labor opportunities for asset-less poor laborers, shelter arrangements for people returning to their ancestral abodes.

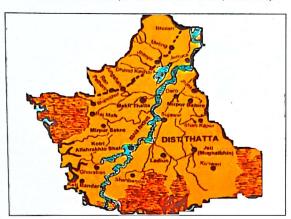
## BACKGROUND AND INTRODUCTION

The monsoonal rains and subsequent floods from late July to September 2010 caused a catastrophe for Pakistan, the impact of which is considered larger than that of the Asian Tsunami, Haiti and Kashmir Earthquakes combined. The latest assessment figures reveal that 1,802 people have died and 20.35 million have been affected throughout Khyber Pakhtunkhwa (KPK), Punjab, Paluchistan and Sindh (UN Office, 2010: 20).

The 19 districts of Sindh province have been severely affected due to super flood. Flood entered in Sindh province on August 5, 2010 with intensity of 1000,000 cusec water (Ibid: 59). Same time there was heavy rainfall of monsoon in Sindh. It has destroyed thousands of villages in 19 districts. People settled in the villages had shifted on the safety band, roads, schools buildings, relief camps, neighboring cities and districts.

Thatta District is one of the worst affected districts in Sindh. It is located in the province of Sindh, Pakistan. The district is administratively subdivided into 9 tehsils - These are: Ghora Bari, Jati, Mirpur Bathoro, Mirpur Sakro, Shah Bander, Sujawal, Thatta, Kharo Chan and Keti Bander. It has 55 Union Councils, According

to the 1998 census of Pakistan, it had a population of 1,113,194 of which 11.21% were urban (Government of Pakistan, 1999: 287).



District Thatta is one of the most backward districts of Sindh. The District is bordered on the north by Jamshoro District on the east by Hyderabad, Tando Mohammad Khan and Badin District and India, on the South by Rann of Kutch area and the Arabian Sea, on the west by Karachi. Major part of Thatta Taluka is a mountainous area known as Kohistan touching the Kalat region. The Makli Hills close by Thatta is a rocky elevation. High rate of un-employment has been recorded in the district. It varies for males and females as well as for rural and urban areas, and the education is very low in urban and rural areas.

This district has been known as an under developed and backward district of Sindh due to land degradation, disastrous area, strong feudal system, illiteracy, poor health services and lack of development facilities. Sea intrusion is the main problem of the district. It has eaten up millions of acres of agriculture land. It has severely impacted the livelihood of the people.

The district is also disaster prone area. The district was hit by a flood disaster in 2007 which caused a huge human and material

loss in the district. The Flood 2010 has damaged many villages in the district; the severely affected Talukas are Thatta, Sijawal, Mirpur Bathoro, Mirpur Sakro and Jati. Apart from the destruction of the infrastructures, the people have lost their livelihoods such as agricultural loss, livestock loss, household belongings, food and other necessary items to keep themselves alive.

## FOOD SECURITY: CONCEPT AND IMPLICATIONS

Food security exists when all people, at all times, have physical and economic access to enough safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle.

The amount and quality of food available globally, nationally and locally can be affected temporarily or for long periods by many factors including climate, disasters, war, civil unrest, population size and growth, agricultural practices, environment, social status and trade. When there is a shortage of food, prices tend to increase. In this scenario, richer people may still be able to feed themselves; poorer people will have difficulty obtaining sufficient safe and nutritious food without assistance. At the household level, sufficient and varied food needs to be prepared safely so that people can grow and develop normally, meet their energy needs and avoid disease.

For more than 800 million people who do not get enough regular, healthy food, ill health and a shorter life expectancy are real risks (Mellor, 2008: 362). Children, and especially very young children, who suffer from food insecurity, will be less developed than children of the same age who have had sufficient food. They will most likely be shorter and weightless, and be less able physically and intellectually, because of poor nutrition. Women are another major victim of the food security.

Poor people lack access to sufficient resources to produce or buy quality food. Poor farmers may have very small farms, use less effective farming techniques, and/or be unable to afford fertilizers and labor-saving equipment, all of which limit food production. Often they cannot grow enough food for themselves, let alone generate income by selling excess to others. Without economic resources and a political voice, poor farmers may be forced on to less productive land possibly causing further environmental deterioration. Addressing poverty is critical to ensuring that all people have sufficient food.

Without sufficient calories and nutrients, the body slows down, making it difficult to undertake the work needed to produce food. Without good health, the body is also less able to make use of the food that is available. A hungry mother will give birth to an underweight baby, who then faces a future of stunted growth, frequent illness, learning disabilities and reduced resistance to disease. Contaminated food and water can cause illness, nutrient loss and often death in children.

#### OBJECTIVES

In order to gather information necessary for operational adjustments and plans, an assessment/study was conducted in two floods affected union councils of Thatta district on January 19, 2011. Two union councils were selected randomly for sample survey. The selected Union Councils for the assessment were Bello and Ali Bahar. Tehsil Suiawal.

The major objectives of the Study/Assessment included:

- Provide up to date analysis of the Food Security situation in two flood affected union councils of the District Thatta for taking into account food security needs of the community,
- Analyze the gap between the food security requirements and actual provision of these needs so that a plan to fill the gap is logical designed.

## RESEARCH METHODOLOGY

Given the time and resource capacity, it was difficult for us to do 100 percent population survey of the District. Therefore we decided to make a random selection of two union councils out of the affected union councils of the District, whereas nine villages were selected on the basis of snowball sampling methodology.

Two teams were formed for the field survey. A questionnaire consisting 33 questions was designed for the field survey. In each village, a focus group discussion (FGD) of 10 people average was organized to respond to the questions. The average time taken by the one FGD was one hour. One investigator was discussing the

questionnaires with group and the second investigator wrote down the responses.

## DATA COLLECTION

The survey team collected data on the prescribed format from the nine villages of two union council of Taluka/Tehsil Sijawal.

S.No	Tehsil	Union Council	# of Villages
1	Sijawal	Bello	5
2	Sijawal	Ali Bahar	4
Total	1	2	9

Source: Revenue Department, District Thatta

The details of the villages and households are given in the tables below:

UNION COUNCIL RELLO

S.No	Village Name	Population	Total Households
1	Achar Mirbahar	315	45
2	Bachal Shah	315	45
3	M.Ismail Korejo	105	15
4	Jogi Khaskheli	175	25
5	Haji Abdullah Ghoto	1134	162
Total		2044	292

Source: Survey Data, 2010

#### UNION COUNCIL ALI BAHAR

S.No	Village Name	Population	Total Households
- 1	Ghulam Hyder Jamari	189	27
2	Pathoo Malah	630	90
3	Sher Muhammad Jamari	350	50
4	Sano Khan Jamari	301	43
Total		1470	210

Source: Survey Data, 2010

## DATA ANALYSIS ANDRESULTS

## A) General

A glance at the socio- economic profile of these households (HHs) gives a clear picture of their vulnerability in terms of livelihoods and food security levels.

Total HHs	Headed by women	HHs headed by Disabled	IIIIs Destroyed	Total acre of agriculture land destroyed
502	73	29	333	946
%	15	6	66	1.88

Source: Survey Data, 2010

Out of total 502 households, 15 percent households are headed by women. That is a too big a figure. Similarly 6 percent households are headed by the physically or mentally challenged people. 66 percent households are totally destroyed. It is to note that the floods submerged 100 house structures in the villages surveyed but 34 of these houses are somehow not totally washed and the residents are using them still for shelter and the 66 percent figure in the table represents those housing structures that are totally erased and the family is forced to find some alternatives most of them in the camps. Average land size per household destroyed is 1.88 acres.

#### B) Agriculture

Agriculture is the mainstay of village communities in the surveyed villages with 89 percent of the people fully or partially engaged in the agricultural farming.

S.No	Total HHs	HHs fully/partially dependent on agriculture farming
1	502	446

Source: Survey Data, 2010

The average landsize in the villages is 5.3 acres whereas around 2 percent of the agriculture land is destroyed in the floods. The average landsize for the vegetables or kitchen gardening is 1.6 acres.

The primary staple food used and grown by the communities here is rice followed by wheat and whereas the cash crops include oilseeds, vegetables, and sugarcane. The land tenure system is cruelly biased against the tenant. He (tenant) receives only 33

percent on average. The remaining agriculture produce either goes to the landlord or to the agriculture expenses on tractors use, fertilizers and seeds.

Farming is based on the regular irrigation channels. The irrigation system has been totally destroyed by the last year's floods. The wheat sowing season has already passed and the upcoming season for cultivation of oilseeds and vegetables is getting close and the chances to repair the irrigation system are very bleak.

This will have irreparable consequences on the population as both the cash crops and staple foods crops will not be sown and reaped. This will render the communities poor and hungry.

According to the results of our survey, the people need the assistance in terms of:

- a) Irrigation Systems Recovery
- Provision of machinery for land reclamation/leveling and repairing
- c) Provision of seeds and fertilizers/pesticides

At present no organization has come forward to meet any of the said needs.

## C) Livestock

Livestock is important component of rural sector in terms of food and cash. Every household has two animals (average) – buffalos in most cases. But cows and sheep/goats are also there. Our survey shows, as hypothesized, that livestock plays a key role in the lives of the surveyed households in both union councils. Dairy products including milk, butter and yogurt are on the regular menu of the communities. It also provides meat for the communities. In addition to these direct contributions to their diet and nutrition, they sell the milk on regular basis. The income generated from the milk sale not only provides cash for other needs of the households but it also help the household to buy other food items like cooking oils, flour, rice, pulses and sugar etc. It is almost impossible for the rural communities to run the kitchen without livestock. Our findings show that the animals are also sold to meet other emergent or planned cash challenges.

The livestock is grazed in the forests and fields. Fodder crops like Maize, Barseeng, Loosan and Jantar (local names) are also cultivated for the livestock. The floods have equally impacted both natural and cultivated fodder crops. As there is no water in irrigation canals, watercourses, so there is neither natural grass and nor cultivation, thereof.

There are many repercussions for the livestock farming communities. It has become very difficult for them to feed their animals properly, which is translated on the poor health of animals reducing the milk production. On the other hand if the farmer wants to sell animals because of this problem, weak animal health coupled with increasing supply of the animals in the market has drastically reduced the prices of the livestock in the market as well.

The survey shows that livestock farmers in these union councils need assistance in terms of:

- a. Fodders immediately
- b. Fodder crop seeds after the irrigation systems are repaired
- c. Veterinary services in terms of treatment, vaccination
- d. Credit to raise more animals

Our survey reveals that despite these huge challenges facing the livestock sector no organization or government agencies are working there except some initial steps by government for vaccination of animals during the floods.

## D) Enterprise Development

The major enterprises/businesses in the surveyed villages are general stores, pan-cigarette cabins, tea hotels, and needle work (both sewing and embroidery) mostly done be the women. According to our finding 11 percent of the households are fully dependent on these enterprises.

The last year's floods have also taken its toll of the enterprises. Almost all the shops and cabin structures have been washed away or totally destroyed, whereas the tools and equipments of women entrepreneurs have also been washed away. So practically no enterprise exists in its previous running shape. The entrepreneurs have neither shops and equipments nor the fresh seed capital to restart.

The entrepreneurs need credit and tool kits to start afresh. Some entrepreneurs also need training in some vocations and enterprise development. No organization works to help the communities in this sector.

# E) Social Mobilization and Community Development

None of the households in the surveyed village is member of any community based organization, village development organization. Nor does any organization works here for the community development, though some non-government organizations were working in the villages surveyed before floods for some time. But after flood they have never turned up into these villages.

## CONCLUSION AND RECOMMENDATIONS

Key findings of the sample assessment/study conducted in Union Councils Belo and Ali Bahar of Tehsil Sujawal in district Thatta, highlighted that the floods had negative impact on human, natural, physical, social and financial capitals of the communities. The vulnerability of people had increased not only due to shock of floods but the people also lost small assets and floods made it difficult for them to tap narrow opportunities of cultivation and agriculture labor. Moreover, declining trend of food consumption (frequency of intake of meals per day) was also noted in the villages (especially among women) where people have just returned from the displacement. The small village based entrepreneurs such as carpenters, cobblers, craftsmen, blacksmith, etc., either had lost their stocks and capital in floods or they had consumed the resources. Among fishing communities, loss of nets and tools besides damages to the boats stalled livelihood cycle of significant number of people. It was also noted that the floods had destroyed the drinking water sources, latrines and other infrastructure. Women and children found life stressful upon return whereas men were apprehensive of their future. It is expected that majority of them may end up in major urban centers as unskilled daily wage laborers or may disintegrate permanently from their native villages and communities,

The survey field team's findings on current need are:

- Livelihood support for starting agriculture to poor farmers (Land preparation, Seed, Fertilizer)
- Income generating activities/small scale businesses/ enterprises
- Rehabilitation of irrigation water channels
- Labor opportunities for asset-less poor laborers
- Supply of safe drinking water or water filters in inundated villages
- Shelter/temporary arrangement in villages for people returning to their communities
- Support to communities for repair of damaged houses/hand pumps
- Repair of the damaged communal infrastructures, i.e. schools, water channels, hospitals, roads, etc.
- Among fishing communities, assistance for nets, tools and repair of boats.

A quick analysis of the local markets revealed that the supply chain is intact and rural markets are well connected with the urban centers including mega market of Karachi. The team concluded that the core issue is lack of purchasing power among the people instead of issue of availability. All agriculture inputs, tools, nets, etc. are available in the local supply chain. There were also instances where assessment team came across small entrepreneurs who lost their stocks and consumed cash in hand during the initial days of the crisis. The other significant point is the interlinking of local markets of Sindh province where markets have ability to

respond to the demands through their traditional system of trading. During floods when roads were cut off, there was temporary inflation due to limited supplies but with the restoration of market access, prices have come to normal pattern and assessment team did not identify any notable market distortion in prices.

In the macro-economic context, Pakistan is experiencing inflation but federal government has taken steps by increasing interest rates by 50 basis points in September 2011 and also announced other measures. Given the huge volume of an overall economy of Pakistan and ability of national, provincial and district markets to adjust, the current distribution of cash by the government and other organizations would have no or little impact in increasing the inflation in rural areas. The district is generally peaceful and there are no major security risks.

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