



Federally Administered Tribal Areas (FATA)

AGRICULTURE ACTION PLAN

FATA Sustainable Return and Rehabilitation Strategy

Recovery of Livelihoods and Sector Rehabilitation





Foreword

It is very heartening to see a sector specific action plan that provides for further clarity and direction in the agriculture sector. The Agriculture Action Plan (AAP) is a well thought and comprehensive document which compliments the FATA Sustainable Return and Rehabilitation Strategy (FATA SRRS) and provides for a clear road map in achieving the objectives of the FATA SRRS for Agriculture and its sub-sectors.

In FATA the agriculture sector is pivotal, representing the mainstay of the local economy and is a significant source of livelihoods in FATA. Since the FATA SRRS is a first-step guiding document for the coordination of the recovery and rehabilitation efforts, the Agriculture Action Plan comes across as a supplementary document to the FATA SRRS for the Government as well as the International Donor Community to be able to support Agriculture and its sub-sectors in FATA. The Agriculture Action Plan addresses urgency/ short-term prioritization (two year scenario) as well as longer term implementation needs, reflecting internally respective variations in terms of number of beneficiaries and coverage of geographical areas.

I would like to thank the Food and Agriculture Organization of the United Nations (FAO) for partnering with us in putting together this Agriculture Action Plan for FATA Sustainable Return and Rehabilitation Strategy.



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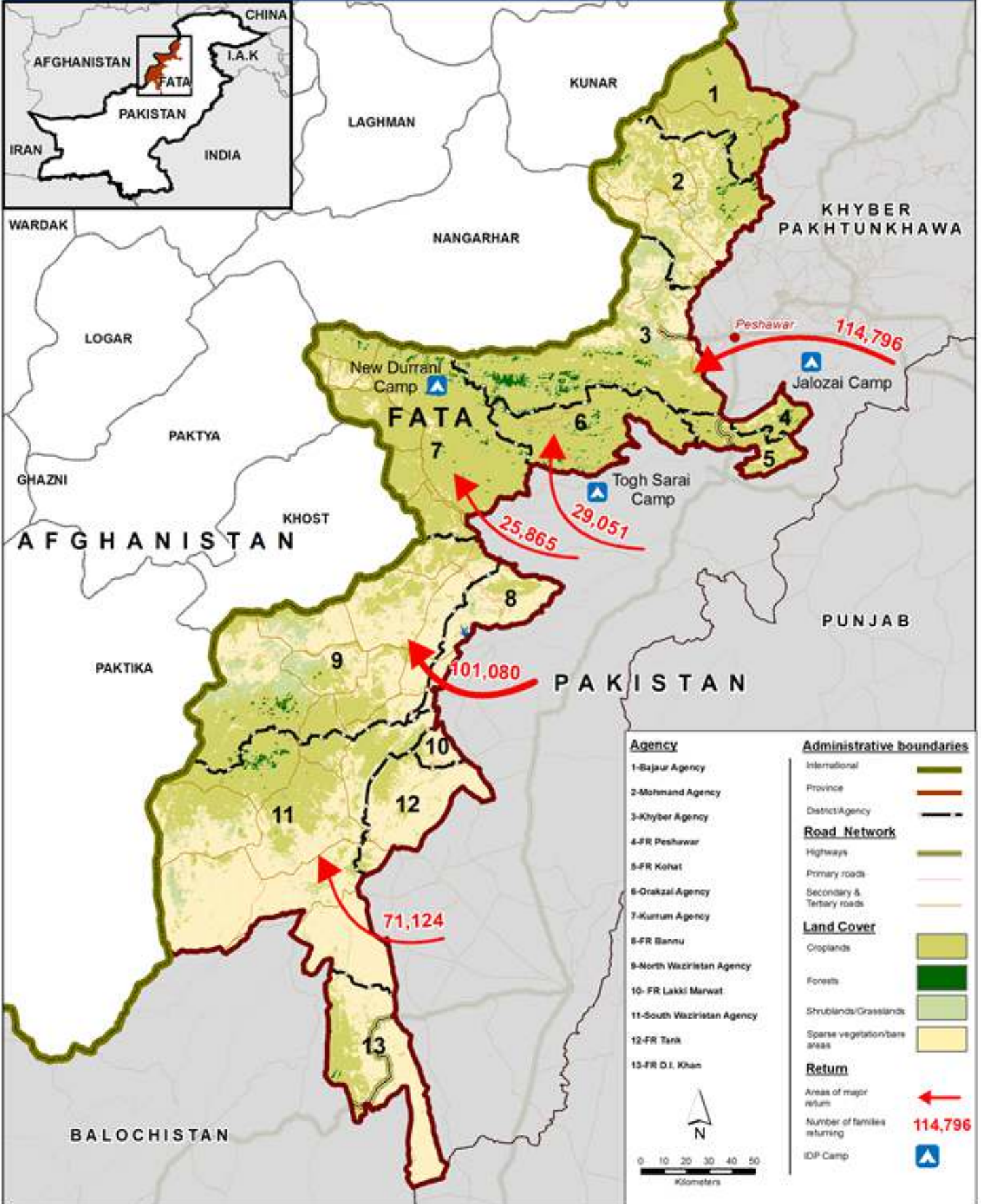
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Abbreviations and Acronyms

AAP-RR	Agriculture Action Plan for Return and Rehabilitation (FATA)
AI	Artificial Insemination
CBO	Community based Organization
DFID	Department for International Development (UK)
DFSA	Detailed Food Security Assessment
DRM/DRR	Disaster Risk Management / Disaster Risk Reduction
ECHO	European Commission Agency for Humanitarian Aid and Civil Protection
FAO	Food and Agriculture Organization of the United Nations
FATA	Federally Administered Tribal Areas
FDGs	Focus Group Discussions
FFS	Farmer Field School
FSC	Farm Services Centre
GDP	Gross Domestic Product
NGO	Non-Governmental Organization
IRC	International Rescue Committee
IVAP	IDP Vulnerability Assessment Profiling
PPR	Pestes des petits ruminants
SDPI	Sustainable Development Policy Institute
SRRS	Sustainable Return and Rehabilitation Strategy
TDPs	Temporarily Dislocated Persons
UN	United Nations
USAID	US Agency for International Development
USD	United States Dollar
USDA	US Department for Agriculture
WFP	World Food Programme



AAP RETURN & REHABILITATION FATA AREA MAP (APRIL 2015)





Summary

The Federally Administered Tribal Areas (FATA) are considered as the most underdeveloped and food insecure region of Pakistan. They are characterized by extreme isolation, cultural conservatism and adherence to tribal values and practices that have to some extent promoted rivalries amongst the various tribes, leading to features of lawlessness and violence. The rugged and inaccessible topography, limited water resources, high illiteracy and ethnic diversity pose serious challenges for economic growth and human development. Moreover, severe droughts and intermittent insecurity in the last decade have triggered internal migration and further increased the vulnerability of the poor, particularly women and children.

Due to security concerns and military operations against non-state armed groups - particularly since 2008 - large population groups have been frequently displaced to and from FATA. The latest waves of displacement have lately brought the total displacement caseload up to an estimated 311,000 families (April 2015). Although this represents around 2 million persons - currently the 6th largest caseload of internally displaced populations worldwide - this crisis remains largely unperceived by the international community and this despite its geo-strategic importance and potential repercussions at international levels.

However, the military has been working hard to secure the area and ensure peace which they are now confident to have achieved in most areas. Consequently, displaced families have recently started the process of returning to their places of origin to re-establish their lives and livelihoods. The FATA Secretariat has set out a comprehensive return and rehabilitation plan for the entire region. As part of this effort, the civilian authorities, FATA Secretariat, federal government and armed forces are working hand in hand to ensure the safe and sustainable return of the temporarily dislocated persons (TDP). In this respect the government has recently finalized a strategy, FATA Sustainable Return & Rehabilitation Strategy (FATA SRRS), to support the voluntary return of over 311,000 (of which close to 10% have already returned) TDP families to their areas of origin in FATA over the next two years (2015/2016).

The displaced families can be categorized as very vulnerable, the majority of TDP families are faced with multiple challenges in meeting their basic needs and are frequently forced to resort to negative coping mechanisms for survival, causing chronic poverty and food insecurity. The analysis of returnee population highlights substantial constraints in the ability of households (in de-notified areas) to recover from displacement. Despite the restoration of the security situation in the areas of origin, the fear of uncertainty about the future persists. The loss of livelihoods and reduced opportunities for full recovery is a major constraint preventing successful returns. As there are only limited other employment or income generating livelihoods options, in FATA the agriculture sector is pivotal, representing the mainstay of the local economy - crop production, livestock rearing and forest products and their sector environments provide over 90 percent of all livelihoods in FATA. This applies to both, TDPs and to those who returned or are supposed to return to their places of origin – all are predominantly agricultural communities.

However, the damage caused to the agriculture sector in FATA during the past decade, and particularly during the recent and on-going operations against militants by the Pakistan Army, has not only disrupted the livelihoods of many people but increased dramatically the vulnerability and desperation of local communities and of those who intend to return to their places of origin. The conflict has caused massive damage and losses to agriculture land and to irrigation structures, livestock populations and animal shelters, soil and water conservation facilities, water harvesting structures, fish ponds and hatcheries, commodity processing facilities, and forest and rangeland areas. Moreover, the damage to the market infrastructure has severely disrupted the local supply chains and links with external markets. Furthermore, sector related government facilities have been damaged or destroyed. In addition to the direct damage caused, the agriculture sector in FATA suffers from important structural problems seriously hampering a sustainable rehabilitation and development of rural livelihoods. The conflict situation has therefore severely constrained the region's employment generation and food security capacity. Abandonment of crop land over several years, rapidly depleting food stocks coupled with lack of resources to resume agricultural activities,





loss of productive assets, lack of access to cash and rapidly diminishing coping mechanisms are threatening the food security of the people, preventing their agriculture-based livelihoods to resume.

In terms of the strategic approach to be applied for the rehabilitation of FATA, experience from other countries around the world has shown that GDP growth from agriculture has been twice as effective at reducing poverty, and thereby contributing to social stability, compared to GDP growth originating from other sectors. Increased agricultural production will also increase demand for related sectors, such as rural services, agro-processing, agro-business, the transport and communication sector, and is thereby a catalyst for employment creation in a series of related domains.

Therefore, fund mobilization for assistance should be geared towards enabling crop and livestock farmers, not only to cover their minimum needs to sustain food production but also to facilitate the desperately needed additional income and employment generating capacity of the sector. Creating income-generating opportunities for returnees will help them meet their basic needs of food and other necessities and will minimize pressure on the local communities altogether. In this context, it becomes pivotal to apply efficient measures to sustainably reduce the cost of production for crop and livestock production. Many of the affected vulnerable rural households will remain burdened by asset/harvest/income losses over the medium-term while also suffering from the loss of other sources of income due to the state of disrepair and the generic economic downturn. For these most vulnerable farming households, assistance should therefore target the lack of working capital which poses the greatest threat to safeguarding remaining production assets and to the recovery of the agricultural sector in the affected areas. Direct support to the resource-poor and crisis-affected communities should however not simply be punctual in response to a crisis but should - where feasible - comprise actions oriented towards longer-term socio-economic development of the agricultural sector.

Equally important and critical in such a complex and protracted crisis situation, is creating resilience by reducing risks in preserving and protecting crucial assets and options for food security - i.e. to

strengthen the resilience of livelihoods systems to absorb (or cope) and recover in a sustainable way from the impacts of a calamity, reduce risks and mitigate future effects on their food and nutrition security and agro-ecosystems.

Consequently, the formulated support to the most vulnerable (affected) farming communities will contribute to the overall achievement of three overarching objectives:

- Increased levels of food security and rehabilitation of rural livelihoods;
- Reduction of poverty, enhanced social cohesion and peaceful coexistence;
- Resilience capacity of affected communities and public sector to anticipate, absorb and recover from external pressures, shocks and crisis - including potential conflict and unrest.

In order to achieve these basic objectives in the areas most affected by the return process, the food security and sector rehabilitation response for agriculture should aim at:

- optimizing the utilization of resource endowments (sustainable natural resources management - water, land, forest) for increased productivity in agriculture (crops, livestock, and fisheries), and related income and employment on a cost-effective and sustainable basis;
- overcoming the status of stagnating production levels; based on a secure level of production for home consumption, the farming communities should be given the means to increase production volumes in order to benefit from existing and new markets inside and outside of their region (taking advantage of a value chain approach); and
- ensuring that emergency/short-term initiatives and medium-term rehabilitation / stabilization efforts are rationally combined in order to form a sound basis for the long-term development of the sector; in this respect, simultaneous institutional building and human resources development will be fundamental for creating the needed implementation capacity and lasting sustainability of public sector services provision - including for crisis prevention, preparedness and mitigation.



The programme would target particularly the most vulnerable - with a particular focus on women and youth - of the below beneficiary groups:

- Returnee families with no significant alternative income earning or job alternatives seeking employment and income generating opportunities in the agriculture setting of FATA;
- Small-scale and food insecure farming (receiving/hosting) communities “stayees” in the geographical areas of FATA most affected by the influx of returnees - to also enhance social cohesion;
- In addition: Public sector and governmental entities having to address the impact of the returnee and sector rehabilitation process in the related agricultural and rural setting.

Translated into pragmatic action, by taking a community driven and watershed management approach, the strategy should be focusing on:

- Recovery and sustained protection and management of vital natural resources - water, land, forests;
- Access to production inputs, including provision of adapted on-farm handling/storage, and processing devices and rehabilitation of water harvesting/irrigation facilities for vulnerable farming communities;
- Appropriate and timely provision of veterinary and phytosanitary services to ensure prevention of and protection from animal and plant diseases;
- Farmers and beneficiaries training, support to advisory service provision and technology transfer, as well as related handling, processing and marketing support for targeted beneficiaries groups through participatory group approaches and Farmer Field Schools - along a value chain approach;
- Community based production and processing, including community kitchens, backyard and peri-urban horticulture - to increase the nutritional value of food at household level; and contribute to social cohesion between resident 'stayees' and returnee populations;
- Support to institutional capacity development for disaster risk management, environmental protection and climate change; including strengthening food security and natural resources information monitoring and analysis;
- Coordination and monitoring structure to ensure optimal resource allocation and synergy of interventions carried out by all partners in the sector recovery approach.

The Agriculture Action Plan is designed to assist the two-year scenario of the FATA SRRS (2015/2016) as well as match an overall rehabilitation and sector stabilization period of four years. The difference relates to the parameters of (a) urgency/shorter-term prioritization (two years scenario), and (b) longer term implementation needs, reflecting internally respective variations in terms of number of beneficiaries and coverage of geographical areas.

Once implemented the AAP would directly benefit a total number of about 193,000 most vulnerable rural families or roughly over 1.5 million people. These target beneficiaries would comprise 60 percent returnee households and 40 percent local resident “stayees” households to ensure social cohesion of the programme - these families would recover their livelihoods and be able to sustain food security and acceptable income levels. In addition, a large number of government staff as well as private service providers would benefit from rehabilitation of service facilities, contract

<u>FATA - AGRICULTURE ACTION PLAN</u> <i>Funding Needs in USD Million</i>	Total 4 years	SRRS (2015-16) 2 years
A. Field Coordination and Monitoring - Agriculture Sector Rehabilitation	1.90	1.20
B. Revitalization of Essential Food Crop Production to Ensure Household Food Security	45.06	35.03
C. Support to Smallholder Horticulture and Commodity Marketing for Income Generation	2.82	1.81
D. Strengthening Crop Advisory Systems and Community Capacity Building	0.48	0.48
E. Revitalization of Livestock Production to ensure Food Security and Income Generation	31.52	20.18
F. Strengthening Livestock Support Services and Community Capacity Building	1.89	1.23
G. Rehabilitation of Irrigation and Water Management Systems	10.53	5.68
H. Recovery, Protection and Sustainable Management of Forests and Rangelands	3.19	1.09
Grand Total	97.39	66.69

arrangements, capacity building and training. It should also be highlighted that by supporting the agriculture sector - the rehabilitation and stabilization of the main economic sector of FATA - a series of positive side effects and spill-overs would materialize, such as the revitalization of its sector environments, including inter alia rural services, agro-processing, agro-business, the transport and communication sector. The overall effect of ensuring and sustaining food security, the creation of income and employment, and the built-in dimension of social cohesion would therefore contribute to the longer-term stabilization of the FATA region.



Introduction

Although representing a stand-alone Action Plan to assist the Government-led Return and Rehabilitation process related to the Agriculture Sector in FATA, the herewith presented FATA Agriculture Action Plan for Return and Rehabilitation (AAP-RR) has also been elaborated to serve as a supplementary reference document (Agriculture Sector, including crop and livestock production, forestry, fisheries and natural resources management) to the FATA Sustainable Return and Rehabilitation Strategy (FATA SRRS) 2015-2016 prepared by the FATA Secretariat and launched in April 2015. It aligns specifically with its pillar IV Reactivation and Strengthening of the Economy. Under this pillar, short-medium term agriculture-based livelihood opportunities and economic revitalization will be promoted with the focus on crop production, livestock, industry, commerce & trade, small business and skills development.

The FATA-SRRS is part of the Government of Pakistan's Master Plan for Donor Coordination (TDPs and Floods) developed by the Economic Affairs Division (EAD). The concept of the Action Plan is also linked to the FATA Sustainable Development Plan 2006-2015 of the FATA Secretariat. The agro-technical content of this document derives mainly from reports and data prepared by FAO Pakistan and the FATA Secretariat. It is important to state that conclusions and recommendations made as well as in particular the technical elements of the Action Plan itself are based on participatory consultations between senior technical advisors of the FATA Secretariat and FAO specialist, including field consultations with affected rural communities and field staff. This document was formulated by Albert T. Lieberg, FAO Senior Policy and Programme Advisor/Consultant.



SITUATION AND IMPACT ANALYSIS

Background

With a population of around 196 million people Pakistan is currently the 6th most populated country worldwide and geographically larger than Germany and France together. The country is however marked by low social development indicators, ranking 141 out of 182 countries in the United Nation's Human Development Index, and with 46 percent of the population being multi dimensionally poor and an additional 15 percent near multidimensional poverty.

The Federally Administered Tribal Areas (FATA) covering 27,200 km² spans the region situated along Pakistan's border with Afghanistan with the Durand Line forming the region's western border. Its rugged mountainous terrain and sparsely populated valleys are home to around a dozen Pashtun tribes and hundreds of clans and sub-tribes. This narrow drought-affected belt in north-western Pakistan comprises seven agencies (Bajaur, Khyber, Kurram, Mohmand, North Waziristan, Orakzai and South Waziristan) and six frontier regions (FRs) (Bannu, Dera Ismail Khan, Kohat, Lakki, Peshawar and Tank). The population of FATA as per the 1998 Census was 3.2 million, which is presently estimated to have increased to about 4.6 million.

The FATA is considered as the most underdeveloped and food insecure region of Pakistan. It is characterized by extreme isolation, cultural conservatism and adherence to tribal values and practices that have to some extent promoted rivalries amongst the various tribes, leading to features of lawlessness and violence. Moreover, given the cross-border tensions with Afghanistan, FATA is in a chronic alert condition. The rugged and inaccessible topography, limited water resources, high illiteracy and ethnic diversity pose serious challenges for economic growth and human development. Moreover, severe droughts and intermittent insecurity in the last decade have triggered internal migration and further increased the vulnerability of the poor, particularly



women and children. Women in these areas have no direct participation in social or public affairs and have little say in decision making regarding household management and other matters pertaining to their lives. The Purdah system is rigorously enforced, restricting women to households and settlements. Women have limited linkages with the outside world and tribal taboos affect their access to social services and productive resources.

The region has long been an area of geostrategic importance, but has experienced high levels of instability especially since the former Soviet Union's invasion of Afghanistan. Given its specific context, FATA remains one of the most insular regions of Pakistan. Lack of access to basic services and productive livelihood opportunities continue to hinder the development of a large part of the population with high levels of militancy remaining a concern for most residents of FATA, given its continued impact on their daily lives.

Years of regional instability underpinned by decades of poor governance have shaped the crisis that continues to unravel in FATA. Although significant efforts have been made in recent years to introduce legal and institutional reforms, marginalization and inequity continue to prevail because the current legislation and institutional framework is inadequate for addressing FATA's considerable development challenges. The situation has created an enabling environment for militants who have been able to exploit citizens' frustrations and challenge state legitimacy by offering alternative models of protection, justice and even income generation to the people of FATA.

A combination of factors has spawned militancy and violence in FATA, these include:
chronic poverty;

- lack of alternative employment;
- semi-autonomous administrative structures that perpetuates socio-ethnic, political, and economic marginalization;
- a legal system reliant on a weak executive and judicial authority;



- spill-over effect of the Afghan war and war against terrorism;
- Infiltration and proliferation of extremist elements and accelerated exploitation and recruitment of idle youth and unemployed adults.

Despite the state's efforts (most notably by the armed forces) to control and eliminate militancy in this area, the persisting problem of militancy has resulted in the destabilization of the area, huge population displacement, and high levels of vulnerability.

Factors underlying poverty in FATA:

- historical political and social isolation;
- poor quality and coverage of institutions responsible for the provision of basic services such as health, education, communications and productive enterprises;
- lack of effective institutions for skill training to enable the labour force to shift from low productivity to high productivity sectors;
- inadequate credit and institutional support for micro-enterprise for low income groups;
- inadequate public and private investment in basic infrastructure and social services;
- social practices that preclude participation in economic life by women.

Poverty has to some extent made the population vulnerable to extreme tendencies and criminality. In the absence of viable options to earn a living, the lure of illicit activities such as smuggling (e.g. consumer goods and weapons) and drug trafficking is as difficult to resist as the call of extremist elements.

This situation makes development activities in the region more challenging, but not impossible. Indeed, the correlation between security incidents in the region, the high geostrategic importance for national and international peace efforts, and low levels of development indicators would point to the need for serious, large-scale development in FATA.



Displacement and Return

Due to the above mentioned security concerns and military operations against non-state armed groups - particularly since 2008 – large population groups have been frequently displaced to and from FATA with all agencies having been affected. Patterns of displacement and return movements have coexisted and remained dynamic. New displacements from one location occur in parallel with returns to a different location. Though there are numerous variables influencing such population movements, the primary factor is security. As a general trend, when insecurity increases there is displacement, and when insecurity decreases people return. In addition, families often displace themselves due to fear and the likelihood of terrorist activities in areas directly neighboring government notified areas.

While in recent years it had already been possible for some groups of temporarily dislocated persons (TDPs) to return home (most notably to Bajaur and Mohmand in 2010), displacement from FATA escalated thereafter again in 2014 following military operations in North Waziristan (Zarb-e-Azb, June 2014) and Bara tehsil in the Khyber agency (Khyber, October 2014). The wave of displacement has lately brought the total FATA displacement caseload up to an estimated 311,000 families (April 2015), of which around 70 percent are women and children. Although this represents around 2 million persons or TDPs - currently the 6th largest caseload of internally displaced populations worldwide - this crisis remains largely unperceived by the world community, and this despite its geo-strategic importance and potential repercussions at international levels. In order to meet the emergency food and other needs of a registered caseload, humanitarian agencies are currently supporting 1.6 million people displaced from FATA, both in camps and in host areas of the neighbouring Khyber Pakhtunkhwa, known as KP formerly the North-West Frontier Province.

However, the military has been working hard to secure the area and ensure peace which they are now confident to have achieved in most areas. Consequently, displaced families have recently (2015) started the process of returning to their places of origin to re-establish their lives and livelihoods.

Displacement and Return (in no. of families)

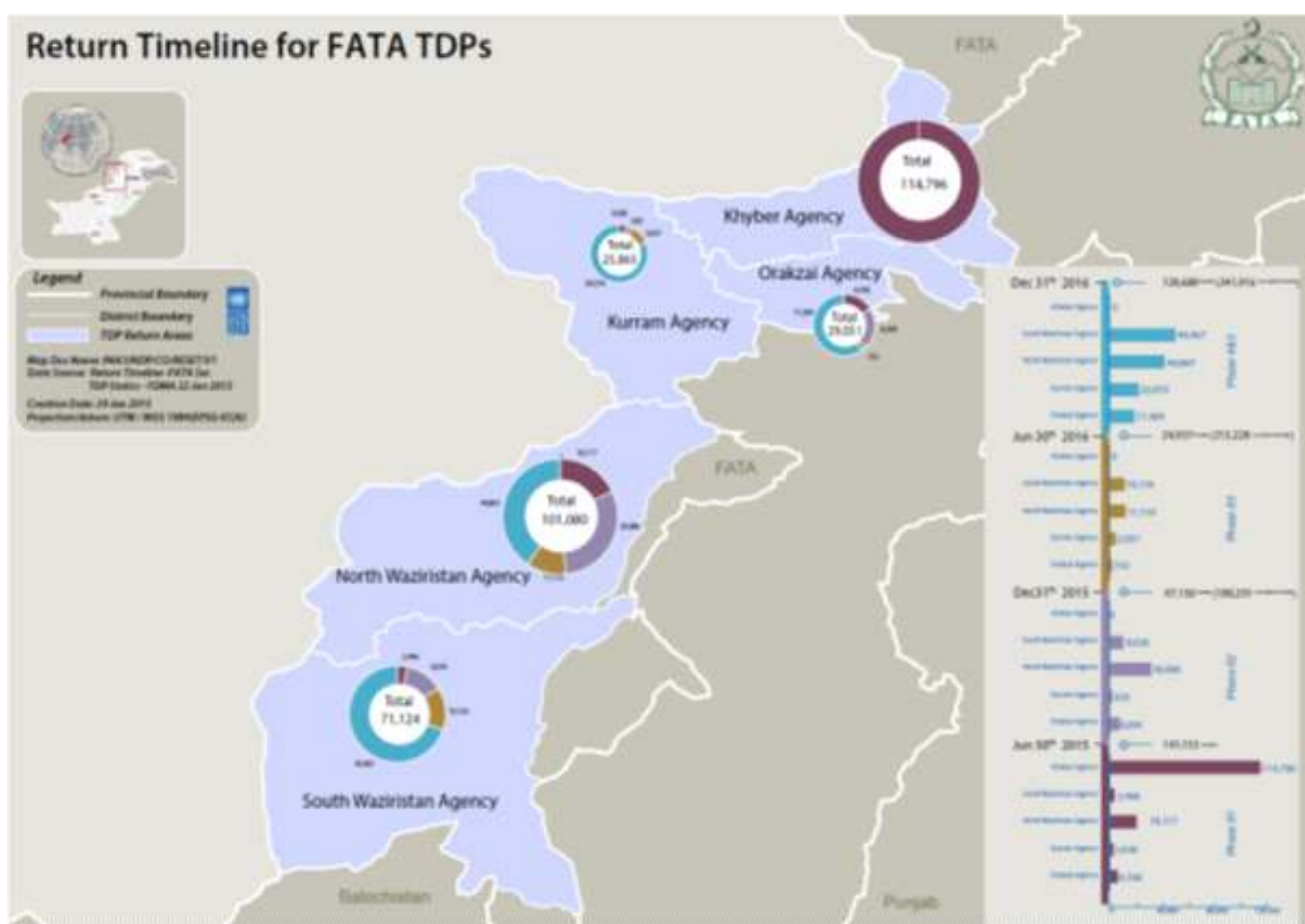
Agency	Total Registration	NADRA Verified	Registered Return	Spontaneous Return	Un-Registered Return	Active for Food	Total Balance
Bajaur	86407	72895	72895	0	0	0	0
FR-Tank	2256	2228	1852	0	0	376	376
Khyber	176396	97367	11260	0	15730	86107	86107
Kurram	56122	47802	21937	6135	2022	19730	25865
Mohmand	48954	36759	36759	0	0	0	0
NWA	102047	101788	0	0	0	101788	101788
Orakzai	48656	38275	8660	8367	14114	21248	29615
SWA	94096	71124	4146	44	7455	40988	66978
Grand Total	614934	468238	157509	14546	39321	270237	310729

Source: FATA Disaster Management Authority (April 2015)

While there has been considerable efforts in the past to organize TDPs' return to FATA, this is the first time that the FATA Secretariat (provincial government) has set out a comprehensive return and rehabilitation plan for the entire region. Indeed, as part of this effort, the civilian authorities, FATA Secretariat, federal government and armed forces are working hand in hand to ensure the safe and

sustainable return of the TDP population. In this respect the government has recently finalized a strategy (FATA Sustainable Return & Rehabilitation Strategy – see below section II.) to support the voluntary return of over 311,000 TDP families to their areas of origin in FATA over the next two years (2015/2016). The process will be sequenced in order to ensure maximum results such that tentative caseloads of TDP families are helped to return to FATA in four phases.

The government has initiated the first phase of returns in March 2015 and hopes to provide return support to an estimated 141,155 TDP families before the end of June 2015. TDP families from Khyber Agency make up most of the expected returnee households in the first phase, with smaller caseloads from South Waziristan, North Waziristan, Kurram and Orakzai also returning in this phase. The great majority of the returnee families belong to agricultural communities having their livelihoods options closely related to crop production and livestock rearing.



Vulnerability of Affected Population

Displaced persons, in many cases, had been forced to leave their houses very quickly with minimum preparation and always with uncertainty about their potential duration of displacement. This uncertainty, coupled with increased frequency and longer durations of displacement, further deteriorates livelihoods and food security status of the displaced. According to the findings of the Pakistan Food Security Cluster survey in 2014, TDP families are often displaced over many years, mostly living in off-camp areas. About 30 percent of TDPs reported displacement duration of more than four years. With such a long duration of displacement added to an extended reliance on external support, discontinuity of livelihood activities and uncertainty about future reduces the

chance of full recovery of livelihoods. Moreover, many TDP households, due to the long periods of time spent in their displaced areas, initiate livelihood activities as a coping mechanism to survive after being away from home for so long. As a result, the immediate and longer term needs of such group of TDPs are quite different from other TDPs, whose displacement was shorter, or even of those who were displaced in camps.

According to various assessments carried out by the humanitarian community, the displaced families can be categorized as very vulnerable. Indeed the majority of TDP families are faced with multiple challenges in meeting their basic needs and are frequently forced to resort to negative coping mechanisms for survival. Directly affecting the desperately needed return process, the below summarizes some major challenges which substantially constrain social and economic development pivotal for sustainable recovery and peace building.

Food security:

As per the National Nutrition Survey, Pakistan is facing a silent crisis of malnutrition that is amongst the worst in the world; similarly, stunting rates are very high in rural areas and are at the highest level of 58 percent in FATA. Only 35 percent of the families had acceptable food consumption. Taking into account overall household expenditure on food and the food consumption patterns, 38 percent of households in FATA were considered food secure, while 16 percent were food insecure and the remaining 46 percent fell into the borderline category.

Basic health:

FATA has poor infant and maternal mortality rates. The infant mortality rate is 87 per 1,000 live birth. The maternal mortality rate is 380 female deaths per 100,000 live births, which is significant higher than the national maternal mortality rate.





Water and sanitation:

In FATA, prior to the latest conflict just 41 percent of the population had access to improved drinking water sources and just 28 percent of households had access to improved sanitation. While current figures are not available, the coverage is expected to have decreased. Inadequate access to sanitation at the household level increases risks to sanitation related diseases such as diarrhoea and, for children the risk of stunting and Polio. In addition, most schools and health centres are without access to adequate water and sanitation facilities.

Basic education:

The educational status in FATA, already lower than the national average, has suffered significantly as a result of insecurity and displacement. In FATA, the majority of the population remains illiterate – according to the Pakistan Social and Living Standards Measurement 2012-13 Survey Report, the adult literacy rate (10+ years) for FATA is 24 percent (female 10%, male 37%) while the Net Enrolment Rate stands at 32 percent (female 24%, male 41%).

Basic infrastructure:

The physical infrastructure in FATA was indeed inadequate even before the latest conflict. While it is true that the demographic characteristics of the FATA population (low population density, large households and largely rural population) make it extremely challenging for the state to provide adequate infrastructure and services, the lack of access to schools, health facilities, clean drinking water and sanitation in the area is particularly alarming. Furthermore, the population continues to lack access to electricity and a functional system of roads and bridges for transportation and commerce. Where rudimentary facilities do exist, they are often not functional. In addition, reports from the FATA Secretariat show that following years of crisis, whatever basic infrastructure and services were available before have been largely damaged or destroyed. This lack of infrastructure and services continues to alienate the population and creates a perception of ineffectiveness on behalf of the state to deliver basic services to the population of FATA.



Employment and economic development: Youth unemployment is a grave problem in FATA, as over 50 percent of the men are unemployed and 60 percent of those employed are involved in unskilled labour. There are very few private sector job opportunities other than basic commerce, and most of the youth getting the chance, whether educated or uneducated, move to other parts of the country or to the Gulf countries to find employment. Most of them lack technical or vocational skills and find employment as unskilled labourers. It is widely held that unemployed and uneducated youth are particularly vulnerable to the influence of the militant groups.

The absence of industries in FATA and the bleak situation of access, power and communication infrastructure, coupled with the legal and administrative barriers, have prevented local or external investment in the vertical or horizontal expansion of the economy. Damages to private enterprises, such as shops, small factories and industries have not yet been assessed in detail, but visits to the affected areas have shown that in many areas the damages to small, medium and large enterprises are substantial.

Child protection:

Within the context of the continuing conflict in FATA, the manifold vulnerabilities of children in the territory have increased substantially. Accordingly, the right of a child to be protected from violence (physical, psychological, emotional, socio-cultural and gender-based), neglect and exploitation remains seriously compromised. Examples of current key child protection concerns in FATA include the recruitment of children by armed groups, the radicalization of children, abductions, child labour, child marriage, and death/serious injury caused by landmines.

Marginalization of rural women:

From early pre-adolescence, women are subject to exclusion from social interaction outside the network of neighbourhood relatives. Due to this restriction on their mobility, as well as travel difficulty due to the lack of adequate roads, and/or the negligible availability of medical services, women suffer high rates of disease and mortality especially during child birth. Almost all women are illiterate in the conventional sense and have virtually no opportunities for employment outside the home or off-farm and cannot avail technical advice from government departments even when available.

Social cohesion:

Already the 2010 Post Conflict Needs Assessment identified countering radicalization and fostering reconciliation as one of the four strategic objectives stating that growing alienation and disenchantment with the state combined with high levels of illiteracy had allowed militants to find considerable support among the people of FATA, particularly among unemployed young men. In various surveys, citizens continue to express a disconnect with the government services, but have expressed keen interest in working together with the government to find solutions that will allow them to live in a safer, more peaceful environment.

The situation of those who return:

Exposed to the same serious structural challenges stated above as the rest of the local communities, focus group discussions (FGDs) conducted with returnee populations highlight substantial constraints in the ability of TDP households (in de-notified areas) to recover from displacement. Despite the restoration of the security situation in the areas of origin, the fear of uncertainty about the future persisted. The loss of livelihoods and reduced opportunities for full recovery are a major constraint preventing successful returns. In addition to the concerns on security and livelihoods, the unavailability of basic facilities, like housing, health and education, were reported as significant constraints for completing the return process. In a nutshell, livelihood support and provision of basic facilities were reported as necessary conditions to return.

According to related assessments, livelihoods were already badly affected at the time of displacement, but little recovery was reported after their return to the areas of origin. Furthermore, income levels for agriculture or livestock based livelihoods - as stated, far over 90 percent of all returnees families depend for their livelihoods almost entirely on crop production and livestock related activities - were reduced significantly. Insufficient livelihood assets, coupled with a lack of financial capital, were reported as serious limitations for rapid recovery. Multiple coping strategies, mostly negative, were adopted by many of the returned families to ensure livelihood activities including selling of assets and debt borrowing. Agriculture, including homestead gardening was not fully recovered due to the unavailability of seed, fertilizers, agricultural tools and non-functioning irrigation systems. Restoration of irrigation systems is reported as one of the most important needs



fully recovered due to the unavailability of seed, fertilizers, agricultural tools and non-functioning irrigation systems. Restoration of irrigation systems is reported as one of the most important needs to restore the agriculture based livelihoods followed by provision of seeds and fertilizers. Furthermore, as reported by key informants access to functioning markets is more difficult in return areas. Major constraints in access to markets included high transportation costs, poor road conditions and an unstable security situation.

The reported notable reductions in their sources of income and indeed income levels, especially in the agriculture and livestock sectors, combined with the perception of insecurity, translates into a heightened vulnerability to food insecurity among the returnee population. On question about their most pressing need, the returnee families reported livelihood restoration including agriculture and livestock support as their top need followed by the provision of shelter and food.

Critical Livelihoods and Food Security Situation of Returnees in FATA

- 60 percent of the respondents owned agricultural land but over 86 percent reported cultivating land and thereby contributing to family food security. Land cultivated was however reported to be significantly less after return compared to before displacement. Income from selling livestock products, sales from own crop production, revenue from business and trade was found to have reduced significantly in the return situation, compared to the level prior to displacement.
- In terms of income (cash), 29 percent of households reported non-farm unskilled daily labour as their most important source of income. However, overall 59 percent of the respondents suggested not having enough financial resources to buy food from the market.
- On the other hand, taking loans from friends and relatives to meet basic needs, and support from government and UN was reported by a much higher proportion of households in the return situation (50%) compared to pre-displacement. The main reason stated for taking loans was to fulfil household food needs (62 %), followed by medical expenses (13 %).
- Unavailability of agricultural inputs was reported as the major constraint for recovery of agriculture activities (57 % of households) followed by destruction/damage to irrigation infrastructure (28%) and unavailability of land (9 %).
- Households reported having much less livestock in the return situation compared to their situation prior to displacement. Amongst the surveyed households, the total number of large ruminants decreased from 4418 (before displacement) to 1317 (after return), small ruminants from 10887 to 3221, equines from 1263 to 823 and poultry from 15902 to 6209. A significant quantity was sold during displacement. Most households reported inadequate availability of fodder/feed, medication, water and shelter for animal.
- Overall, only 28 percent of the households were having acceptable food consumption, while 18 percent had poor food consumption and 54 percent were in the border line consumption group. Female headed households were much worse off with 56 percent of them with poor consumption levels. However, as expected, households owning agricultural land and households owning livestock had better food consumption than those without.

Pivotal Importance of the Agriculture Sector

The agriculture sector in Pakistan accounts for 22 percent of the country's GDP (of which 50% comes from livestock, 47% crop production, 1.5% is related to fisheries and 1.5% to forestry) and employs 45 percent of the national workforce. Agricultural exports are an important source of foreign exchange including cotton and cotton based products (about one-third of agriculture exports), fruits, rice, fish and leather. Other sectors in the economy are heavily dependent on agriculture, for example in the manufacturing sector the performance of cotton ginning, spinning and weaving is closely linked to the performance of the cotton production.

As there are only limited other employment or income generating livelihoods options, in FATA the agriculture sector is pivotal representing the mainstay of the local economy -crop production, livestock rearing and forest products and their sector environments provide up to 97 percent of all livelihoods in FATA. As also apparent from the above analysis, this is no different for the TDP families and those who returned or are supposed to return to their places of origin - these are predominantly agricultural communities.

Most rural tribal and certainly poor rural tribal, did not meet their food needs primarily by their own cultivation, but by a variety of strategies, including the sale of livestock and livestock products, casual labour, temporary migration and remittances from relatives. It is important to stress that term such as “livelihoods” and “food security” are not always interpreted so widely with in the governmental and non-governmental agricultural bureaucracy.

The tribal people are predominantly pastoral and engaged in rain-fed subsistence farming and livestock rearing however susceptible to recurrent drought. Other activities include mining, cross border trading with Afghanistan, and smuggling. Remittances, which are extremely difficult to estimate, are reportedly a significant source of household income. Primary sectors remain undiversified and the poor lack appropriate skills to tap alternate sources of income available. Rural households did not rely mostly on their own production of food and both adults and children





engage in agricultural activities which however unfortunately discourages school attendance.

Women contribute a significant portion of the agricultural labour force in cropping and livestock activities. They spend a major portion of their day attending livestock and poultry, and share the responsibility for weeding, harvesting, and threshing. Despite this, they have severely limited access to policy and decision making and agricultural support services, including extension services, and little control over management of natural resources. Women-headed households make up between five and seven percent of households, and more in some areas where many men leave to seek work outside of the region.

The poorest rural families with no access of owned land make their living from small agriculture activities mostly as share croppers or through wage labour including crop production and animal husbandry, firewood collection, craftwork, and small enterprises like tailoring or tending small shops. Sharecroppers are obligated to provide most of their family's labour to agricultural production on the land allocated to them.

Agricultural characteristics in FATA

Cropping systems:

Small-scale landholders make up the majority of farmers in FATA. The majority of landholdings (57 per cent) are smaller than one hectare. By far the largest majority of farms (91 %) are cultivated by their owners (only very little land is rented). Farms are engaged in crop production mainly at the subsistence level which is characterised by underutilisation of land, poor productivity and risk-averse behaviour. Only 8.3% of the total area of FATA is cultivated, with another one per cent in fallow, accounting for approximately half of all potentially cultivable land. Some 44 per cent of the cultivable land is under small-scale irrigation, while the remaining farms rely exclusively on rainfall. Water for irrigation is provided through a combination of delivery systems, including tube wells, dug wells, lift pumps, surface irrigation networks and traditional community-built canals. In some areas, however, entire irrigation systems have ceased to function for a long time.

Cropping intensity is low with only a small fraction of farmland producing more than one crop per

year. Most of the cropped area is planted with wheat, barley, maize and rice. During Rabi season, most of the farmers cultivate wheat, followed by, where circumstances allow, some seasonal vegetables. During Kharif season, farmers cultivate maize, in a few cases some vegetables and pulses. Overall production and yields in FATA compare poorly to figures for the country as a whole. While yields for rice and maize are just slightly lower than national figures, the yield for wheat in FATA is just 38 percent of the national average. Wheat production falls far short of local needs and the deficit is imported from other parts of the country or abroad. Only few households are in a position to supplement income at times by the cultivation of higher-value vegetables and orchard produce such as apple, apricot, date, fig, grape, peach, persimmon, plum, pomegranate and walnut. Poppy and cannabis are still cultivated in some parts of FATA and remains a major source of income for farmers especially in remote areas.

Livestock:

Livestock and poultry are an essential component of the rural economy, providing income support for most farm households (milk, meat, wool, draught power and dung). It is estimated that in FATA about three out of four farming families typically keep some livestock to contribute to their household food needs and/or for commercial purposes. Most animals graze on common waste and fallow land (shamilat), and need supplementary feed during winter and spring. Keeping livestock also serves as a safety net in times of hardship. If crops fail, animals can be slaughtered and consumed or sold in the market. The size of the herd depends on the household's capacity to purchase animal feed in the winter and spring months when natural fodder is scarce. Feed shortages, coupled with poor veterinary coverage and traditional practices of over-stocking, have left animals malnourished and susceptible to parasites and disease. Some 4.9 million ruminants and 6.6 million birds are being reared across FATA, in addition to livestock belonging to Afghan refugees and nomads.

Limited fish farming is practised mainly at the household level on wasteland and marginal lands. Fish farms and hatcheries play a vital role in provision of fish to the local as well as regional markets of FATA. The climatic conditions are widely favourable for trout and carp fish in particular.





Forestry and rangeland:

Forests are an integral part of the rural economy, playing a significant role in local livelihoods in the mountainous areas. Forests meet the fuel, fodder and timber requirements of the rural population, besides providing critical ecological services. Forests create jobs, particularly in operations such as felling, transportation, saw mills and sale depots. Commercial undertakings as diverse as charcoal kilns and furniture factories also rely on forest resources. At the subsistence level, the collection and sale of medicinal herbs, work generally done by women, provide some income support for poorer households. In Kurram and Orakzai tribal agencies, the collection and sale mazri for basket, bed and rope making was traditionally a source of income for poorer households but overexploitation has resulted in a sharp decline in productivity.

Sector Damage and Related Challenges for Return and Rehabilitation

The damage caused to the most important economic sector of the FATA economy - the agriculture sector - during the past decade, and particularly during the recent and on-going operations against militants by the Pakistan Army, has not only disrupted the livelihoods of many people but increased dramatically the vulnerability and desperation of local communities and of those who intend to return to their places of origin after difficult periods of displacement. The conflict has caused damages and losses to agriculture land and to irrigation structures, livestock populations and animal shelters, soil and water conservation facilities, water harvesting structures, fish ponds and hatcheries, commodity processing facilities, and forest and rangeland areas. Moreover, the damages to the market infrastructure have severely disrupted the local supply chains and links with external markets. Furthermore, sector related government facilities have been damaged or destroyed. The conflict situation has severely constrained the region's employment creation and food security capacity. Abandonment of crop land over several years, rapidly depleting food stocks coupled with lack of resources to resume agricultural activities, loss of productive assets, lack of access to cash and rapidly diminishing coping mechanisms are threatening the food security of the TDPs and preventing their agriculture-based livelihoods. This is particularly alarming given that agriculture and livestock is the base for almost all livelihoods in FATA.



Direct Sector Damage:

As a result of unrest and displacement, the agriculture land in many areas of FATA has remained fallow (up to 20%) for consecutive seasons, standing crops the same as orchards were left unattended losing generated production, substantial amounts of seed stock were destroyed or spoiled and agricultural activities were affected due to restricted movement of the population. Application of fertilizer was prohibited across FATA, thereby impacting soil fertility and farm productivity. Estimates of the DFSA 2014 indicate that considering the most vulnerable small farmers there would be **at least about 178,000 returnee households with immediate needs of crop/agriculture support** to kick-starting field activities contributing to basic food security of their families.

Infrastructure including the conventional irrigation systems, water harvesting structures, tube-wells, on-farm bunds, water channels and ditches have been badly damaged or destroyed. Initial estimates revealed that 218 irrigation systems had been damaged in all seven agencies. Verified data suggest that there are at least 56 partially and 83 completely damaged schemes which would need urgent rehabilitation. In order to fully rehabilitate FATA's irrigation systems for agricultural use, it is estimated (FAO) that a total of USD 13.3 million is needed to rehabilitate over 370 irrigation schemes, including primary and secondary agriculture related government structures (offices) had been damaged in all the seven agencies. The natural forests in the border areas sustained heavy damages during the military operations. As these forests have been used by the militants for the purpose of training, storage of weaponry and hide outs. Hence during the military operation these forests were pounded and bombed for flushing out the militants. The forests caught fire and natural regeneration and biodiversity sustained huge damages. The vegetation in waste and grazing lands were cleared for security reasons. These natural resources need immediate rehabilitation and restoration of the ecosystem.

Prior to displacement, the average household ownership of small and large ruminants was reported as 7.5 and 2.6 respectively. In addition, the average number of poultry owned was reported at 13.4. Due to the conflict large numbers of livestock were either lost or sold at very cheap prices during displacement in order to gain quick access to cash. Estimates of the DFSA 2014 indicate an overall loss in livestock populations of the displaced families from FATA of 77-87 percent, due to various

reasons, predominantly deaths and distress selling. The average number of large ruminants per household declined from 2.6 animals to 0.6. Likewise, ownership of small ruminants declined from 7.5 to 1.0, and poultry ownership declined in an equally high proportion, from 13.4 to 2.2 poultry birds per household.

Landless Mobile Pastoralists (kochi/powinda/ajar) are the sub-tribe of the Ghilji Pashtun tribe with a population of 4 million in Pakistan and Afghanistan. They move along the FATA- Afghan border from Pishin right up to Bajawar. They have substantial contribution to the economy of FATA and Pakistan producing mutton, beef, hides, milk, wool and physical labour. Their pastoral area and mobility has been highly disturbed by the situation along the Pak-Afghan border. At present they have no access to human health and veterinary services. Their livelihoods sustained huge losses due to mortality of their animals as a result of conflict and subsequent military operations. Securing their livelihoods and their role as custodians of FATA mountains need proper redressal during the emergency and recovery phase.

Similarly, animal shelters were destroyed and substantial amounts of animal feed resources (in the form of wheat straw, maize stock and fodder seeds) damaged, and rangelands degraded due to conflict and displacement. Findings of the DFSA 2014 indicate that to carry out the totality of the planned return and rehabilitation process, there would be roughly 415,000 heads of livestock in need of fodder and vaccination in FATA. The conflict has also badly affected both commercial poultry as well as household poultry farming which was earlier practiced in some parts of the region. Estimates of the DFSA 2014 indicate that there would be **at least about 31,000 returnee households with immediate needs of livestock production support** (restocking in particular) to ensure basic food security of their families.

The Livestock and Dairy Development Directorate in FATA is the only entity in the livestock sector providing services in animal health and breed improvement through 735 veterinary institutions (veterinary hospitals and dispensaries). During the crisis in FATA, 85 veterinary facilities were damaged by militants, as a result of which the department has had to function in rented premises, placing an extra burden on the government treasury.

Due to the conflict and displacement, most of the water bodies were damaged. The fish farmers have lost their fishing gear. Likewise, the fish hatchery at Malana in Kurram Agency with a production capacity of approximately 50,000 fry has been damaged thus cutting off the supply of fingerlings to the communities. The fish farms and hatcheries play a vital role in provision of fish to the local as well as regional markets of FATA. Due to the displacement of and protracted conflict, 62 fish farms were damaged and need rehabilitation..

Major underlying Sector Challenges

In addition to the direct damage caused, the agriculture sector in FATA suffers from important structural problems seriously hampering a sustainable rehabilitation and development of rural livelihoods.

Low productivity and technology levels in crop production:

Land reclamation for agriculture purposes is at very low levels while cropping intensity across FATA has fallen to 116 per cent over the last four years, with only a small fraction of farmland producing

more than one crop per year. Most of the cropped area is planted with wheat, barley, maize and rice, indicating that households give priority to food security and lack the knowledge and expertise to produce high-value tradable products. FATA agricultural economy is portrayed by many observers as a "traditional" or even "mediaeval" subsistence-based-system of isolated farmers using techniques that have remained unchanged for centuries. In the same context, the concept of surveillance and prevention of pest and diseases on crops and livestock is still new in FATA, and is not practiced properly and timely. As a consequence, there are substantial crop losses.

Limited access to agricultural inputs:

Agriculture inputs like seed, fertilizer, planting material play a key role in increased production. Unfortunately, in FATA there is limited access of farmers to quality inputs reason being the non-availability of inputs at the local level as well as the low purchasing power of the farmers. Thus, the use of inferior quality of agriculture input leads inter alia to poor agriculture production and limits market opportunities.

Water scarcity and inefficient use of irrigation water:

In FATA, water scarcity is the major limiting factors for agriculture production. Technologies on high efficiency irrigation such as surface water harvesting and soil and water conservation still needs to be introduced in the majority areas of FATA. There is lack of investment in irrigation infrastructure and its major maintenance, lack of coordination in site identification and shortage of electricity to run tube wells. In addition, there is little focus on surface water harvesting and water recharging. On one hand, there is less water available for irrigation, while on the other hand, the available water is not efficiently used. The on-going desertification problem in the FATA is also negatively affecting the water availability. Less water recharging is a major contributing factor for low water absorption and subsequent storage. Low recharging is linked with the lack of vegetation cover in the catchments. This requires rehabilitation of catchment areas through planting and other soil and water conservation measures like bio-engineering.



Low productivity of livestock and weak veterinary services:

Livestock productivity is mainly constrained due to scarcity of fodder, poor quality local animal breeds, poor animal management, disease outbreak and irregular vaccination programmes, poor infrastructure, ill-managed pasture and grazing land, Livestock as non-commercial enterprise, high cost of treatment, improper hay storage, lack of awareness, and low capacity of advisory staff and farmers. Furthermore, support to value chains and value addition, access to loans and support to market control over cross border smuggling is lacking. Due to the poor range condition, there is not enough nutritious feed available for the livestock during most of the year.

High post-harvest losses and poor market infrastructure:

It is estimated that more than 40 percent of the farm produce is lost either pre-harvest or at post-harvest stage. Post-harvest management and processing is imperative to add value to the product and also utilize second/third grade fruit/vegetable to fetch better economic output. However, farm/market linkages and infrastructure are poor discouraging surplus production.

Weak agriculture advisory services:

The public extension services in FATA have had little effect in terms of increasing agricultural productivity and farm incomes at the small-scale household level. Extension approaches in the past have fallen short of their targets because of a lack of genuine community participation, an emphasis on government managed demonstration sites and a lack of capacity of front-line field staff. Experience has shown that previous types of approaches to agricultural development have created an increasing dependency on government line departments such as the Directorates of Agriculture, Livestock and Forestry and so preventing any chances of an emerging self-reliance. Due to the poor agriculture extension services, and limited interaction with Agriculture Research, there is also a huge problem of technology dissemination and adaptation, which leads to poor agriculture practices. Good agriculture practices/approaches like Farmer Field Schools have not yet been institutionalized.

Low government investment in agriculture and technology development:

Though the agriculture sector is the major contributing sector for livelihoods, food security and nutrition in FATA, the financial resource allocation to this sector by the government is not at par with the needs. To stimulate the potential benefits from the sector, the current level of investment needs to be increased substantially with a more targeted approach. Insufficient resource allocation and low capacity and orientation of the government departments are a major hindrance, especially regarding needed innovative agriculture.

Marginal exploitation of fisheries:

The fishery sector has always remained a low priority sector despite the great potential to generate encouraging results for improving local livelihoods, food security and nutrition. However, the sector lacks baseline information data including availability of fish and seed, technical capacity, and capacity to bring awareness to the general public on the significance of the fishery sector as a whole.

Degradation of natural resources – water, soil and vegetation cover

Figures for forest cover in FATA, ranging from 18 percent to 19.6 percent, with the vast majority of the land being either barren, waste land, or pasture. What becomes apparent however is that forest cover is declining rapidly as a result of timber extraction (legally, for local use and sale, and illegally for export to areas outside of the region), prolonged periods of drought, uncontrolled grazing, and pressure for fuel wood and fodder collection. The gap between production and use is widening and current levels of extraction are unsustainable. Over-exploitation has also affected the natural regenerative capacity of forests.

With forest resources rapidly disappearing, the environment services provided by natural ecosystems have also diminished. The water retention capacity of soils has fallen, the region now suffers flash floods, and the quality and quantity of fodder has been seriously affected. Rangeland and pasture areas are in a depleted state, partly from overgrazing but also because of extended periods of drought, providing insufficient feed to the grazing animals, on which the local people highly rely in terms of food, nutrition and cash income. According to estimates, current productivity of the rangeland is less than 60 percent compared to its potential. Ruminants belonging to Afghan refugees are thought to have added to the problem. Soil erosion and land degradation is therefore a major concern, with denuded hillsides unable to retain soil and water. Erosion increases the incidences of flash floods which destroy crops, farmland and valuable infrastructure, while low water retention has led to a drawing down of the water table, creating scarcity where none existed a few generations ago.

For the growing population of FATA, it has become increasingly difficult to obtain water in sufficient quantities to irrigate crops and meet domestic requirements. The drought that the region has experienced over the past decade has severely depleted water resources. The effects vary from place to place but are clearly visible in some areas where surface sources carry very little water or have dried up completely. Elsewhere, the water table has fallen by several feet.





Summarized key challenges

- Low household income from agriculture and increasing poverty levels
- Limited jobs and low wages in agriculture
- Low and partially critical household food and nutrition security
- Temporary / permanently abandonment of farm land
- Reduction of crop production productivity (inadequate practices and input/output constellation)
- Unavailability of and/or inadequate access to quality agriculture production inputs
- Discouragement of farmers to invest/apply good practices (limited cash income)
- Critical water management practices and limited functional irrigation facilities
- Increased risk of pests and disease outbreak
- Inadequate handling, processing, storage, and marketing (high post-harvest losses)
- Weak or absent crop advisory/extension systems
- High numbers of animals (loss of assets) being sold/liquidated (due to cash needs)
- Low livestock productivity (fodder shortages, local breeds, management practices)
- Weak or absent veterinarian services / increased risk of outbreaks of trans-boundary diseases
- Depletion of rangelands and grazing areas
- Depletion and degradation of wood and forest resources
- Increasing depletion of water resources
- Poor public sector investment in agriculture and low capacity for disaster risk management

STRATEGY

Strategic Approach for the Agriculture Sector

In order to sustain adequate standards of living, combat poverty and substantially increase and maintain food security in FATA, it is important to strengthen and enhance the sector of the local economy that currently provides livelihoods for the vast majority of the local population. As indicated earlier, the livelihoods of most of the rural population in FATA depend directly or indirectly on agriculture and its sector environment. The population in these rural communities mostly affected by the direct and indirect impact of the crisis situation and the return process are nevertheless already amongst the poorest communities in Pakistan and most of them live below the poverty line.

Mostly applying low or underexploited input/output production systems, these geographical areas have however a substantial potential for agriculture development, comprising crop production, livestock, fisheries and forestry. Experience from other countries around the world has shown that GDP growth from agriculture has been twice as effective at reducing poverty, and thereby contributing to social stability, compared to GDP growth originating from other sectors. Increased agricultural production will also increase demand for related sectors, such as rural services, agro-processing, agro-business, the transport and communication sector, and is thereby a catalyst for employment creation in a series of related domains.

Therefore, fund mobilization for assistance should be geared towards enabling crop and livestock farmers, not only to cover their minimum needs to sustain food production but also to facilitate the desperately needed additional income and employment generating capacity of the sector. Creating income-generating opportunities for returnees will help them meet their basic needs of food and other necessities and will minimize pressure on the local communities altogether.

In this context, it becomes pivotal to apply efficient measures to sustainably reduce the cost of





production for crop and livestock production. Many of the affected vulnerable rural households will remain burdened by asset/harvest/income losses over the medium-term while also suffering from the loss of other sources of income due to the state of disrepair and the generic economic downturn. For these most vulnerable farming households, assistance should therefore target the lack of working capital which poses the greatest threat to safeguarding remaining production assets and to the recovery of the agricultural sector in the affected areas. Farmers and input suppliers are unable to appropriately (pre-) finance agriculture production due insecurity-related losses and high levels of poverty. Therefore, some of the recommended initiatives (chapter III) are designed to address the critical situation of accumulated debt and unavailability of needed working capital amongst the most vulnerable farming communities in FATA, through appropriate (recovery) supply of indispensable production inputs - working capital in kind - crucial to sustain food production in returnee communities and kick-start the re-vitalization of the sub-sector.

Direct support to the resource-poor and crisis-affected communities should however not simply be punctual in response to a crisis but should - where feasible - comprise actions oriented towards socio-economic development of the agricultural sector. Equally important and critical in such a complex and protracted crisis situation, is creating resilience by reducing risks in preserving and protecting crucial assets and options for food security - i.e. to strengthen the resilience of livelihoods systems (including individuals, households, communities, institutions and agro-ecosystems) to absorb (or cope) and recover in a sustainable way from the impacts of calamity, reduce risks and mitigate future effects on their food and nutrition security and agro-ecosystems. When households, communities and networks for goods and services are resilient, people realize positive livelihood outcomes (sufficient income, food security, safety, proper nutrition, good health etc.) and ecosystems are preserved and protected for current and future generations.

Consequent to the above findings and considering that the seriously affected communities in FATA are already amongst the poorest of the country, the formulated support to and rehabilitation of the most vulnerable (affected) farming communities will contribute to the overall achievement of three overarching objectives:

- Increased levels of food security and rehabilitation of rural livelihoods;
- Reduction of poverty, enhanced social cohesion and peaceful coexistence;
- Resilience capacity of affected communities and public sector to anticipate, absorb and recover from external pressures, shocks and crisis - including potential conflict and unrest.

In order to achieve these basic objectives in the areas most affected by the return process, the food security and sector rehabilitation response for agriculture should aim at:

- optimizing the utilization of resource endowments (sustainable natural resources management - water, land, forest) for increased productivity in agriculture (crops, livestock, and fisheries), and related income and employment on a cost-effective and sustainable basis;
- overcoming the status of stagnating production levels; based on a secure level of production for home consumption, the farming communities should be given the means to increase production volumes in order to benefit from existing and new markets inside and outside of their region (taking advantage of a value chain approach); and
- ensuring that emergency/short-term initiatives and medium-term rehabilitation/stabilization efforts are rationally combined in order to form a sound basis for the long-term development of the sector; in this respect, simultaneous institutional building and human resources development will be fundamental for creating the needed implementation capacity and lasting sustainability of public sector services provision-including for crisis prevention, preparedness and mitigation.

With respect to the latter, and based on the assumption that lasting peace and security can eventually be achieved, it would be imperative to carry out a multidisciplinary (including agriculture and its sector environments) Joint Government - United Nations Comprehensive Damage and Needs Assessment to accurately quantify reconstruction and development needs. Such joint assessment would form the backbone for a specific medium to long-term recovery and development strategy needed to be developed with the objective to (1) delineate in detail the needed bridging elements between the recovery/rehabilitation stage and medium- to long-term policy and strategy reforms required to modernize the sector, and (2) assist the FATA Secretariat in the preparation of a priority medium/long-term Strategic Action Plan for the agriculture sector, and preparation of a strategy document for a Reconstruction Conference, if and when it should take place.

Target area and main beneficiary groups of the Agriculture Action Plan

With the delineation of target areas in all seven FATA agencies - which will strongly depend on an iterative and gradual process of formal de-notification of potential return areas by the Pakistan Army and the FATA Secretariat - the definition of ultimate target beneficiaries becomes implicit. The programme would target particularly the most vulnerable- with a particular focus on women and youth - of the below beneficiary groups:

- Returnee families with no significant alternative income earning or job alternatives seeking employment and income generating opportunities in the agriculture setting of FATA;
- Small-scale and food insecure farming (receiving/hosting) communities “stayees” in the

- geographical areas of FATA most affected by the influx of returnees - to also enhance social cohesion;

In addition:

Public sector and governmental entities having to address the impact of the returnee and sector rehabilitation process in the related agricultural and rural setting.

As far as the returnee programme is concerned, it remains however fundamental to call for a cautious and (for the time being) modest approach. Despite the current significant return process, the political and security situation remains fragile. The political will followed by coherent and pragmatic action needs to be demonstrated in a sustainable and convincing manner, and the issue of control over land has to be tackled in a transparent and realistic way, contributing to building the basis for successful rehabilitation and revitalization of the agricultural and thereby most important economic sector in FATA.

Translated into pragmatic action, by taking a community driven approach and based on the impact analysis and sector challenges outlines above (see chapter I), the food security and agriculture rehabilitation and stabilization strategy should be focusing on:

- Recovery and sustained protection and management of vital natural resources - water, land, forests;
- Access to production inputs, including provision of adapted on-farm handling/storage, and processing devices and rehabilitation of water harvesting/irrigation facilities for vulnerable farming communities;
- Appropriate and timely provision of veterinary and phytosanitary services to ensure prevention of and protection from animal and plant diseases;
- Farmers and beneficiaries training, support to advisory service provision and technology transfer, as well as related handling, processing and marketing support for targeted beneficiaries groups through participatory group approaches and Farmer Field Schools- along a value chain approach;
- Community based production and processing, including community kitchens, backyard and peri-urban horticulture - to increase the nutritional value of food at household level; and contribute to social cohesion between resident 'stayees' and returnee populations;
- Support to institutional capacity development for disaster risk management, environmental protection and climate change; including strengthening food security and natural resources information monitoring and analysis;
- Coordination and monitoring structure to ensure optimal resource allocation and synergy of interventions carried out by all partners in the sector rehabilitation approach.

The scale and scope of the assistance plan recommended has been based, inter alia, on the following considerations:

- The political will to allow for de facto rehabilitation of agriculture, in potential areas of return, ensuring security of access by developing partners, and lasting peace for the vulnerable and largely traumatized populations willing to return to their places of origin;
- A realistic dimension of achievable project objectives (especially regarding the number of beneficiaries), given the limited timeline of December 2016 (two years duration) set by the FATA SRRS of the government for immediate Rehabilitation plus another two years for Sector Stabilization;

- The currently limited and overstretched government and local implementation capacity for the execution of rehabilitation projects;
- Proposing too many and costly initiatives/projects represents a high risk of under-disbursement of donor funds and failed (sub-optimal) achievement of project objectives - due to the given limited implementation capacity and restricted timeframe; this would automatically backfire on the reputation and credibility of the implementing entities, technical cooperation and government ministries alike - reducing potential for successive donor support;
- Similarly, existing localized crop calendar needs have to be respected within any input-related project, and therefore represent, per se, a limitation in terms of speediness and number of initiatives to be implemented within a given period of time.

Overall, when it comes to the formulation of recovery and rehabilitation needs within a defined timeframe and with limited levels of local implementation capacity, it is of paramount importance to focus on a realistic perception of the given circumstances listed above. However, these proposals should only be seen as a first stepping stone to launch and kick-start a process that will hopefully culminate in the elaboration of further recovery and development initiatives/projects needed for the rehabilitation and stabilization of the sector, especially in the areas affected by the return process.

At the same time however, support by other sectors and actors - in particular housing, initial food support, feeder roads, power supply, and social services including basic sanitation, health and schooling - facilitated inter alia by the FATA SRRS will be fundamental for the success of any such programme, as it will have to simultaneously assist families to sustain food production and farming income, and thereby sustain resilience capacity especially during the onset of the rehabilitation efforts.

The elaborated programme proposals (chapter III/IV) - which form the bases of project proposals - are not definitive in nature, i.e. once donor interest is confirmed, working sessions between the donor, government line ministries and FAO will review and fine-tune the proposals in order to reach a common agreement, including scale of financial assistance and support duration, geographical





and beneficiaries targeting, and implementing partners. Therefore, there is sufficient flexibility for modifications even at a later stage. Equally, although ideally all implemented simultaneously, each individual programme or project proposal has been designed to suit also a stand-alone implementation – for the production oriented components of the programme, a respective capacity building module would accordingly be integrated to counteract any dependency on other parallel measures to be implemented.

National and International Security and Related Need for International Assistance

Addressing the humanitarian and development needs of underserved communities is causally related to improving political and social stability. The foundation of political opposition and extremist ideologies is, to a great extent, based on people's level of satisfaction with the services their government provides and whether there are real opportunities. Through humanitarian and development assistance tailored to communities' defined needs, people can see their government responding and realize improvements in their economic environment that open up opportunities to better their personal, family and community situation. A higher level of satisfaction with the direction of their lives will lower behaviors that create instability, such as extremism and violence. From the perspective of the international community, emphasis can therefore be expected for humanitarian and development initiatives in the remote, very poor, rural agencies of FATA most at-risk of generating political instability and providing potential refuge for terrorists.

Given the fragile security context and the escalating development challenges, an approach is needed addressing the key grievances and causes of instability in targeted, disadvantaged and vulnerable communities. There is considerable agreement surrounding the causes of instability and conflict in FATA. They include, as indicated, widespread poverty and food insecurity, rapidly growing population, political marginalization, alleged corruption, weak state institutions, declining government revenues, growing natural resource scarcity, and violent religious extremism. A strategic approach is indicated with humanitarian and development programming tailored to address the drivers of instability and to respond directly to the articulated needs and frustrations of

communities in the most needy areas of FATA. This includes improving the livelihoods of citizens in disadvantaged and vulnerable communities and improving governance capacities to mitigate instability.

While addressing humanitarian and recovery needs for displaced families and those willing to return to their places of origin, targeted local agro-economic development activities, based upon community identified needs and opportunities, can help foster food security, generate income and improve livelihoods thus promoting stability in the short- to medium- term. Interventions need to address food security, agricultural productivity and other deficiencies that limit economic prospects for targeted communities. Access to, and quality of, basic services need to be improved, especially in the remotest areas. In addition to providing requested assistance, development initiatives must include participation and capacity building for the target communities. The community needs to lead the determination of what assistance is provided. Integrated local programming needs to be responsive, flexible, targeted and linked to local governments.

In a nutshell, in order to develop an active stake in their futures and communities, populations in highly unstable areas need to experience a direct impact in their daily lives, see improvement in their communities, and perceive state institutions as responsive to their needs and promoting political/civic empowerment. While not a universal remedy, such an approach can make a contribution to counteract the forces threatening FATA's overall stability and thereby contributing to national and international security.

Poverty, hunger and food insecurity are firstly humanitarian issues, but they have decisive social and political implications. Poverty and unmet food needs contribute to civil instability, they feed discontent, and force people to selling assets, migrate, or engage in illicit activities, which are both an obstacle to development and a source of tensions and instability. They also affect people's diet which translates into immediate and long-term health and development problems. When crisis happens, families turn to negative coping mechanisms in order to meet their food needs, including removing children from school, reducing expenditures on healthcare, skipping meals and substituting less nutritious foods, and incurring new debts. Ensuring that individuals have adequate access to affordable nutritious food is thus a fundamental pillar of any comprehensive approach to food security and an indispensable investment in security and sustainable development.

Consequently, in order to stabilize the situation in FATA, efforts must be made to address entrenched poverty, hunger and malnutrition, calling for measures aimed at meeting immediate basic needs and support to income generation and employment, as well as pragmatic institutional and technical support for the food and agriculture sector to contribute to longer term sustainable development and livelihoods, and in doing so break the vicious circle of conflict leading to poverty, leading to more insecurity.

Alignment with existing Strategy and Policy Frameworks

Although representing a stand-alone document, the FATA Agriculture Action Plan for Return and Rehabilitation (AAP-RR) has also been elaborated to serve as a supplementary reference document to the FATA Sustainable Return and Rehabilitation Strategy (FATA SRRS) 2015-2016 prepared by the FATA Secretariat and launched in April 2015. It aligns specifically with its pillar IV Reactivation and Strengthening of the Economy. Under this pillar, short-medium term agriculture-based livelihood opportunities and economic revitalization will be promoted with the focus on crop production, livestock, industry, commerce & trade, small business and skills development. The FATA-SRRS is part of the Government of Pakistan's Master Plan for Donor Coordination (TDPs and Floods) developed by the Economic Affairs Division (EAD). The concept of the Action Plan is also linked to the FATA Sustainable Development Plan 2006-2015 of the FATA Secretariat.

The current FAO – Pakistan Country Programming Framework 2012-2017 (CPF) puts immediate emphasis on reducing poverty and hunger in line with Millennium Development Goal 1 (MDG 1) building a more sustainable and resilient agriculture and food systems. The AAP-RR contributes mainly to the CPF's Priority Area 1 Support to Food Security Policy and National Zero Hunger Programme for Enhanced Food and Nutrition Security, including reduced household food insecurity and malnutrition in rural and urban areas, enhanced productive safety nets and support to the Pakistan Integrated Nutrition Strategy, and implementation of the FAO's DRM/DRR Programme targeting post-emergency acute food insecurity and promoting agricultural livelihood early recovery in areas affected by floods, earthquake and displacement; and to Priority Area 3 Disaster Risk Reduction and Emergency Response including Natural Resource Management, including support to vulnerable rural population to adapt to fragile ecosystems, climate change, man-made and natural disasters; collaborate with international, national and provincial partners to improve their capacity to monitor and assess national emergencies and trans-boundary pest and disease outbreaks, and design and implement programmes to assist vulnerable rural populations impacted by such events. In relation to the United Nations framework, the AAP-RR contributes mainly to two strategic priority areas (SPAs) of the One-UN Programme-II (2012-2017): SPA 6 Food and nutrition security for the most vulnerable groups, and SPA 3 Increased resilience to natural disasters, crises and external shocks.





MAIN TECHNICAL AREAS OF ASSISTANCE

Guided by the above strategy, the implementation of the Action Plan focuses technically on a community-driven development CDD approach in order to resume and develop rural livelihoods through the enhancement of agricultural productivity, livelihood diversification, and increased resilience of livelihoods to threats and crises. The technical elements of the Action Plan rest on the following principles of implementation:

- Multidisciplinary and integrated approach to address agriculture recovery and livelihoods rehabilitation requirements of the four inter-linked sub-sectors (crops, livestock and fisheries and forestry), which form major parts of livelihoods in the conflict-affected areas;
- Natural resource management based on a watershed development approach and sustainable land use (i.a. recovery and protection of forests and rangelands, agro-forestry practices in support of integrated crop and livestock production systems, and conservation agriculture to enhance the fertility and moisture holding capacity of soils);
- Strengthening of existing formal and informal community based organizations CBOs- farmers' groups and water user associations, and other common interest groups contributing to social cohesion between resident 'stayees' and returnee populations and ensuring sense of ownership.
- Gender mainstreaming and empowerment of women. Women's access to, control over and management of natural resources will be promoted, as well as women specific agricultural support services and creation of employment and livelihoods opportunities for rural women;
- Use of participatory research and extension processes such as Farmers Field Schools FFS and Women Open Schools, to promote, demonstrate and disseminate improved technologies and practices appropriate to the agro-ecological zones of FATA;
- Mainstreaming and integration of Disaster Risk Management DRM, environmental protection, and climate (change) smart agriculture.

The Action Plan addresses the major challenges for the return process and sector rehabilitation through the below programme components.

TECHNICAL COMPONENTS OF THE ASSISTANCE PLAN

In order to optimize programme effectiveness and ensure location specifics, it should be highlighted that the implementation of any of the below initiatives will be preceded by a pre-implementation damage and needs assessment (including beneficiaries identification and quantification) in the prioritized target areas, based on participatory community driven approach.

The herewith recommended rehabilitation assistance plan for the FATA agriculture sector comprises the below main technical components.

FATA - AGRICULTURE ACTION PLAN

- A. Field Coordination and Monitoring - Agriculture Sector Rehabilitation
Rehabilitation and Stabilization of Crops Agriculture
- B. Revitalization of Essential Food Crop Production to Ensure Household Food Security
- C. Support to Smallholder Horticulture and Commodity Marketing for Income Generation
- D. Strengthening Crop Advisory Systems and Community Capacity Building
Rehabilitation and Stabilization of Livestock Production
- E. Revitalization of Livestock Production to ensure Food Security and Income Generation
- F. Strengthening Livestock Support Services and Community Capacity Building
- G. Rehabilitation of Irrigation and Water Management Systems
- H. Recovery, Protection and Sustainable Management of Forests and Rangelands

Field Coordination and Monitoring -Agriculture Sector Rehabilitation

Since the beginning of the FATA rehabilitation process, the Government, UN agencies and NGOs have started or are increasingly planning activities in agriculture, food security and livelihoods-related areas in support of the crisis affected rural and agricultural communities in FATA. With the gradually increasing number of related activities by a series of respective actors, there is an urgent need for strengthened coordination within/between the parties involved in the rehabilitation and stabilization effort - public entities, UN agencies, bilateral cooperation, NGOs and other partners and stakeholders.

In order to maximize impact, avoid duplication of efforts/activities and ensure quick coverage of all affected regions with relevant and technically sound initiatives, the objective is to establish a pragmatic coordination and implementation facility (a cell/unit) for continuous monitoring of impact initiatives geared towards the recovery of farming communities mostly affected by the crisis. For this, data need to be centralized and made available to actors involved with agriculture and food security, as a means of supporting proper planning and decision-making. An important dimension would be the collection and streamlining of food security and natural resources information and analysis (including prices of food, agricultural commodities, and production inputs) as part of an overall effort to improve continuous updating on several vital dimensions of the communities targeted in agriculture and the rural setting. Overall, the proposed initiative would contribute to generating a comprehensive foundation for accurate decision making and assistance planning, and more efficient utilization of funds and greater cost effectiveness of recovery efforts in agriculture.

The intention is to create a consolidated approach between the various development partners in order to achieve rapid relief, recovery and rehabilitation of agriculture-based rural livelihoods of the

affected communities, thereby contributing to poverty alleviation and increased food security. Furthermore, through the creation of substantial capacity building in-country (i.a. food security and natural resources information and analysis), the response and resilience capacity of government and national partners would be strengthened. The strengthened coordination, data monitoring and analysis function will establish a platform for regular meetings and information-sharing, and will encourage collaboration in joint rapid livelihoods and agriculture assessments, creating synergies, linkages and partnerships between various actors. In particular, the field coordination and monitoring unit would closely relate to and complement the work of the Food Security Working Group.

Under the overall supervision of the FATA Secretariat Rehabilitation and Reconstruction Unit RRU, the Agriculture Field Coordination and Monitoring Cell- to be staffed by specialist programme officers to be assigned to the RRU - would inter alia: Establish an office facility in Peshawar at the FATA Secretariat; Strengthen contacts with/amongst the current and potential stakeholders operating in agricultural/livelihoods recovery and rehabilitation initiatives in FATA; Collect and centralize pertinent data and information requirements on a regular basis, and in parallel set up a food security and natural resources information and analysis facility for the affected areas; Create a forum for regular meetings and consolidated action by all development partners for the recovery of agricultural communities - with special emphasis on livelihoods development, food security and poverty alleviation; hold information meetings at provincial and federal levels; Verify the various on-going and planned projects and initiatives of the various partners, point out potential geographical and/or subject-matter-related duplications and sub-optimal distribution of resources, as well as necessary synergies, and facilitate respectively a coordinated verification of initiatives; Coordinate and supervise implementation of donor-funded FAO rehabilitation and sector stabilization projects.

Rehabilitation and Stabilization of Crop Agriculture

The following three programme proposals will extend the available land, increase the subsistence crop productivity and the small scale commercial agriculture (off-season vegetable cultivation, and seasonal vegetables and orchards production), through the use of higher inputs, the adoption of improved technologies and practices (through participatory research and extension processes such as Farmer Field Schools), better on-farm water management, crop diversification, minimizing post-harvest losses, agri-business development (processing and marketing), and improved agriculture support services. The majority of the target beneficiaries will be the most vulnerable smallholders cultivating less than two acres of land.





Revitalization of Essential Food Crop Production to Ensure Household Food Security

In order to ensure food security, the returning dislocated people need urgent support to resume cultivation of food crop. In particular, this programme will ensure:

1. Clearance (reclamation) of abandoned agricultural land through Cash for Work/Machinery schemes where required.
2. Provision of essential agricultural production inputs, such as improved seeds (maize, rice, wheat and other appropriate food crops), fertilizer and tools/implements, including seed/grain storage structures. Seed multiplication on farmers' fields.
3. Capacity building and training covering Good Agriculture Practices (GAPs) in improved crop production technology and post-harvest management will be provided to the beneficiary farmers through adoptive research and extension services.

Support to Smallholder Horticulture and Commodity Marketing for Income Generation

Farmers' feedback indicates the aim for higher economic returns from their work. In this regard, there are a number of geographical areas in FATA where higher value crops can be grown. The focus will be on gradually shifting from subsistence agriculture (traditional low value crops) to more progressive commercial farming (vegetables and orchards). In particular, this programme will ensure: Major thrust will be given to development of rainfed and irrigated agriculture, floriculture, roots and tuber plantation crops, aromatic and medicinal plants, bee keeping and sericulture for augmenting food supply, exports and generating employment in the tribal areas. Indigenous products like Honey, chilgoza and walnut could be traded as organic products due to high demand. A special market survey will be pre-requisite to better understand existing flow and marketing mechanism and the niche value of the indigenous organic products. Farm Services Centers should be hub for the development of horticulture.

1. Completion and adoption of marketing analysis/value chain studies to determine the one pocket areas for profitable commodities for each agency, and completion of feasibility studies and business development plans for all crop-based processing and marketing ventures undertaken by the programme. Support to the identification of markets and support to commercial linkages.

2. Provision of production packages to interested small-scale farmers for tunnel farming for off season vegetable production, and establishment of vegetable value chains through provision of improved production inputs and technology to more entrepreneurial minded families already engaged in such activities before the conflict. Provision of machinery and equipment to the most feasible value chains.
3. Provision of pilot micro-irrigation units (e.g. mini-sprinklers and drip irrigation systems) to smallholder fruit and vegetable producers and homestead farmers to demonstrate more efficient systems of on-farm water management.
4. Provision of training in processing technologies, appropriate storage, quality assurance, packaging, market intelligence and transportation to executive members and technicians of farmers' organisations and co-operative societies supported by the programme; Provision of household storage devices, such as metal silos and pilot community-based grain, seed and food storage facilities to demonstrate modern and appropriate technologies for post-harvest storage;
5. Establishment of registered private fruit nurseries at each agency level for the provision of certified fruit plants to the communities in FATA, and rehabilitation of fruit orchards through provision of improved saplings and necessary inputs. For provision of improved bud wood and root stock to the nursery growers a Germ Plasm Unit (GPU) will be established.
6. Formation and strengthening of Farm Business Schools (FBS) to finally graduate them to Producer Marketing Groups (PMGs) groups, within the farmers' organisations supported by the programme, and provision of materials, equipment and training to establish income generating ventures such as vegetable and fruit processing, milk and egg production, bee keeping etc. (specifically targeted at women's' groups).
7. Establishment of a marketing information system (including the potential for usage of mobile phone technology) amongst all stakeholders of the various subsectors of agriculture (cereals, vegetables, fruits, livestock and fisheries), i.e. farmers/fishers organisations, co-operative societies, farm shops and other suppliers of agricultural inputs, traders and processors (from within and outside of FATA).





Strengthening Crop Advisory Systems and Community Capacity Building

The capacity building of farmers through interest groups formation and, in particular, strengthening of Farm Services Centres (FSC) and Farmer's Advisory Services Units is an important element for the rehabilitation of agriculture. The strengthening of existing and formation of new grass root level farmer groups will provide a common forum to all relevant development partners and government line departments to access farmer groups, build their skills and knowledge and to promote input supply and market linkages. In this regard, it is essential to take advantage of existing Farmer Services Centres by developing them into multi-purpose and diversified groups. FSCs can then also be used for the preparation of management plans at village or watershed levels.

The FATA Secretariat line directorate for agriculture will be provided with support to help them expand their services to farmers. By improving and extending the advisory services provided by the existing extension centres (farm service centres and fruit nurseries etc.), the aim is to train farmers and provide them with the necessary know-how, equipment and inputs to improve the quality and quantity of production. Farmers will be trained in aspects of productivity such as how to reclaim agricultural land and improve subsistence crop productivity as well as small-scale commercial agriculture (off-season vegetable cultivation, seasonal vegetables and orchards). They will be encouraged to use better inputs, adopt improved technologies and practices (through participatory research and extension processes such as farmer field schools), practice better on-farm water management and crop diversification, minimize post-harvest losses and adopt improved agribusiness development practices (processing and marketing such as grading and cool chain systems). The shift from traditional low-value crops to high-value enterprises will be promoted strongly. Women will be trained in kitchen gardening and other women-specific activities by female extension workers. In particular, this programme will ensure:

1. Rehabilitation of Farm Services Centres (FSC) at agency level and up-grading of facilities provided by the FSCs; Strengthening of crop reporting services in FATA for land management and planning.
2. Establishment of Farmer Field Schools (FFS) within farmers' organisations, including the promotion of conservation agriculture (i.e. minimum tillage, mulching, inter-cropping, crop rotation, etc.), integrated plant nutrition management (i.e. green manures, organic food production, etc.), on-farm

water management, agro-forestry/live fencing, integrated pest management, more efficient harvesting techniques and appropriate on-farm processing and storage; Training of FFS Facilitators - facilitators would be selected from lead farmers' organisations and co-operative societies, NGOs and field staff agriculture department; Preparation and publication of farming calendar and tailor-made training materials on maize, rice, wheat and horticultural production, processing and marketing in FATA.

3. Training of subject matter specialists from both public and private sector service providers in modern/and appropriate approaches and techniques to the production of maize, rice, wheat and other field crops, fruits and vegetables (to support the agricultural field assistants and FFSs); Establishment of links with the private sector for inputs and services.

Rehabilitation and Stabilization of Livestock Production

1. The following two programme components will restock lost animals, rebuild animal shelters, improve the animal feeding resources and practices, improve breeds, develop small scale animal produce businesses, improve milk processing and other value chains, improve marketing structures and processes, support the kitchen gardening with backyard poultry, and improve livestock support services (e.g. veterinary, artificial insemination). The component will mostly benefit smallholder livestock owning families, and those who suffered substantial or complete loss of livestock - as well as poor rural women with little or no access to land. Large quantities of Afghan origin small ruminants belonging to mobile landless pastoralists are entering in every winter into FATA and bring trans-boundary contagious diseases. Measures for disease surveillance need to be undertaken at entry points.



Revitalization of Livestock Production to ensure Food Security and Income Generation

Increasing livestock productivity and the value of its related chains (meat, wool, skins and hides, dairy products, eggs etc.) will improve the food and nutrition security of the most vulnerable households, and will create new jobs and income generation vitalizing the local economy. The pro-poor and pro-gender-balance nature makes livestock a critical productive asset in rural areas. In particular, this programme will ensure:

1. Re-construction of animal shelters:

This activity will re-construct model animal shelters damaged or destroyed due to conflict. Support will be provided to the most vulnerable and food-insecure households. Shelters will be attached to the beneficiaries' house and will accommodate 3 large and 5-6 small ruminants on average. The shelters will be constructed using locally available material and resilient design that could withstand the harsh weather conditions and provide safe and clean space for livestock production. On demonstration basis Bio gas plants shall be constructed to overcome the energy shortage.

2. Re-stocking of small ruminants and improved breed of cows:

This activity will focus on restocking of sheep and goats for the most vulnerable households (4 small ruminants per hh), as well as providing local breed of cow (preferably Achai or other) to targeted beneficiaries (1 large ruminant per HH).

3. Sustainable provision, production and handling of fodder:

Activities proposed seek to improve livestock growth through provision of high producing multi-cut fodder seed to support livestock during two seasons; Irrigated fodder production will be expanded through the provision of improved seeds and fertilisers to FFSs to reduce the pressure on rangelands to be rehabilitated; Provision of manually operated chopping machine to farmers groups (each of 10 families) to optimize the maximum intake of fodder and reduce the wastage; Provision of initial material for the local preparation of animal feed and supplements; Pasture development for livestock production through control grazing system, introduction of improved varieties of grasses, clovers and fodder trees on communal land.

4. Calf fattening for meat production:

Cattle fattening units will be established through provision of high meat producing calves at the age of 8-9 months along with other support (feed and veterinary supplies) to the community groups already engaged in this activity; Capacity building trainings will be provided to farmers groups having prior experience in such activities.

5. Poultry production:

Rehabilitation of existing poultry farms and establishment of small broiler poultry farms to provide sustainable income generation opportunities and build the entrepreneurial competency of poultry farm owners. The female-led homestead poultry units will be provided each with 8 birds (7 hens and 1 cockerel of the age of four to five months), one drinker, one feeder, one wire mesh for making poultry coop, three eggs collection trays, and poultry feed for one month will be distributed among the most vulnerable families who have lost their poultry assets, almost immediately generating income from egg sales on receipt of the birds; The beneficiaries - mostly poor rural women - will be organized into producers groups (each of 20 families) and each group will also be provided with 4 female and one male turkey for broodiness.

6. Processing, handling and marketing:

Provision of milk collection equipment and the establishment of sales points within livestock breeders' co-operative societies assisted by the programme; Provision of milk collection kits (milk can, milk pail, yogurt tray and lasi bucket) for the hygienic collection and transportation of milk; Establishment of milk collection and processing and marketing units (two in each Agency) through the provision of milk chillers and basic equipment in each agency; Establishment of model meat sale points - the sale point will be equipped with basic tool necessary for slaughtering and meat processing; Establishment of formal livestock market (mandis) at agency head quarter level for creation of competitiveness.

7. Rehabilitation of fish farms and hatcheries:

Due to displacement of and protracted conflict, many fish farms were damaged and need rehabilitation. This programme will sustain fish farming by rehabilitating fish hatcheries in target agencies. These hatcheries will then provide fingerlings to the fish farmers in the area and will restock the fingerlings in natural water bodies.

8. Value chain feasibility studies and market information system:

Completion and adoption of marketing analysis/value chain studies to determine the most profitable commodities in targeted agencies of FATA; Completion of feasibility studies and business plans for all livestock-based processing and marketing ventures undertaken by the programme; Establishment of a marketing information system (including the potential for telecommunication) amongst all stakeholders of the crops, livestock and fisheries sub-sectors, i.e. farmers/fishers organisations, co-operative societies, farm shops and other suppliers of agricultural inputs, veterinary services, traders and processors (from within and outside of FATA);



Strengthening Livestock Support Services and Community Capacity Building

In terms of livestock, the FATA Secretariat line directorates for livestock and dairy production will be provided with support to help them expand their services to farmers. By improving and extending the advisory services provided by the existing extension centres, the aim is to train livestock keeping farmers and provide them with the necessary know-how, equipment and inputs to improve the quality and quantity of production. The strengthened extension centres will help farmers restock lost animals, rebuild animal shelters, improve animal feeding resources and practices, develop better breeds, build small-scale businesses, improve milk processing and other value chains, enhance marketing structures and processes and support backyard poultry. This component will benefit primarily smallholder livestock-owning families, especially women family members and those who have lost livestock in the crisis. Special emphasis will be put on upgrading the veterinary services in FATA. In particular, the programme will focus on:

1. Strengthening capacity building and training:

Training programmes on livestock best management practices to farmers; Training of unemployed youth in homestead livestock production and basic animal health; Implementation of FFSs in cattle rearing and management, goat rearing and management and poultry rearing and management within the CBOs and L&DDF supported by the programme; Training of FFS Facilitators - facilitators would be selected from lead CBOs, NGOs and field staff of the livestock and dairy development department FATA; Preparation and publication of tailor-made training materials on milk, mutton, wool and poultry production, processing and marketing for FATA; Training of subject matter specialists from both public and private sector service providers in modern techniques and approaches to animal production and health; Training and equipping of community-based enumerators and inseminators in animal disease surveillance, basic animal health and artificial insemination (AI); Completion and adoption of two studies, i.e. adequacy of breeding services in ruminants; and production of non-traditional cattle feed.

2. Provision of equipment and veterinary supplies to service providers:

Public veterinary service providing institutions require restoration and re-equipment with basic equipment, vaccines, drugs and supplies to enable them to adequately serve the needs of herders and farmers. This activity will provide support to veterinary hospitals/centres and dispensaries serving cooperatives and individual farmers through: Provision of basic veterinary equipment, diagnostic tools, medication and supplies packages (including liquid nitrogen containers, artificial insemination guns, AI straw and sheaths etc.); Delivery of local (Sahiwal breed) and imported (Holstein Frisian and jersey breed) semen straw to the selected veterinary centres; Provision of dewormers and vaccines against prevalent diseases (particularly Foot and Mouth Disease, Hemorrhagic Septicaemia, Black Quarters and Anthrax in cattle and buffaloes, PPR, Enterotoxaemia, Pleuro-pneumonia, Pox and Anthrax in sheep and goats and Newcastle disease and Fowl cholera and Pox in rural range poultry) to families keeping poultry and ruminants.

Rehabilitation of Irrigation and Water Management Systems

FATA is an arid and semi-arid zone, which receives little precipitation. The water table is low and there is little water available from surface sources. Water is however the most limiting factor for agriculture production. This component is pivotal for the Action Plan, and has direct implications with the rest of the components. There is vital need for efficient soil and water conservation to sustain water recharging capacities. The recommended interventions will expand availability of water and improve the efficiency of its management and use, through rehabilitating community watercourses and water control and harvesting/irrigation structures, and strengthening Water User Associations. While numerous tube-wells had been constructed in the past to improve irrigation, many of these have been destroyed and are now dysfunctional needing rehabilitated. Where possible, efficient irrigation techniques will be explored and introduced at the community level. Applying a watershed development approach, this programme will in particular ensure:

1. Repair and rehabilitation of community managed water courses/irrigation schemes:

This programme will rehabilitate critical irrigation channels and strengthen Water User Associations (WUAs) directly benefitting small holder growing crops, vegetable gardens and fruit orchards for improved management and equitable use of irrigation resources. The rehabilitation activities will be implemented under the framework of Cash for Work/Training. Building on FAO's vast experience in the repair, rehabilitation and expansion of irrigation schemes in Pakistan, the activity will be initiated with a joint feasibility study by the On-Farm Water Management Departments to identify and prioritize community managed water courses and related infrastructure and develop the scope of work for their rehabilitation. In order to achieve greater impact, every effort will be made to link crop production support with the irrigation rehabilitation activities in a sustainable manner. In addition, the introduction and use of micro-hydro stations for supporting economic activities will be promoted.

2. Rehabilitation of water harvesting structures:

This programme envisages rehabilitating damaged and degraded water harvesting schemes in FATA through the construction of check dams, rehabilitation of earthen ponds, flood control gated structures, diversion bunds, delay action or storage mini dam structures to minimize erosion and run off losses and conserve water for the use for pastures, crop and vegetable production, orchard development and livestock. The livelihoods of large majority of the people of FATA continue to depend on community resources and hence management of watersheds and natural resources are critical in the area. The critical watersheds making catchments areas of the rivers and streams need to be rehabilitated through integrated watershed management interventions.

Recovery, Protection and Sustainable Management of Forests and Rangelands

With forest resources rapidly disappearing, the environment services provided by natural ecosystems have diminished dramatically. The water retention capacity of soils has fallen, the region now suffers from flash floods, and the quality and quantity of fodder has been seriously affected. Rangeland and pasture areas are in a depleted state, partly from overgrazing but also because of extended periods of drought. Soil erosion and land degradation is therefore a major concern, with denuded hillsides unable to retain soil and water. Erosion increases the incidences of flash floods which destroy crops, farmland and valuable infrastructure, while low water retention has led to a drawing down of the water table creating serious scarcity where none existed a few generations ago. To address these pivotal challenges, this programme will in particular ensure:

- 1. Restoration of degraded land to productive range and forest land (i.e. determination of carrying capacities, construction of soil and water conservation measures, and planting of improved fodder grasses, shrubs and trees by community organizations under terms of partnership with specialist public or private sector service providers and managed by the beneficiaries through livestock associations; Soil conservation measures will be implemented for demonstration purposes). Communities will be trained to manage and protect the restored rangeland through improved controlled grazing schemes.*
- 2. Sustainable management of forests: To ensure the sustainable management of forests under radically different circumstances than a century ago. For this to happen the Joint Forest Management approach is to be adopted.*
- 3. Ecosystem Based Bio-diversity Conservation: Major focus should be to increase the relative values of wild resources as an incentive to communities for their conservation*
- 4. Agro and social forestry: For the maintenance of ecological balance, production of bio-mass and provision of firewood to the local communities large scale plants shall be grown in private forest nurseries to meet the public demand. Agro forestry will receive major thrust for efficient recycling of nutrients, nitrogen fixation, organic matter addition. Agro/farm forestry will promote higher income generation by evolving technology, extension and credit support.*
- 5. Olive cultivation and top-working: There is a lot of potential for olive cultivation and top-working in FATA. The estimates reveal that natural olive trees of indigenous variety cover about 90,270 hectare area of South, North, Orakzai and Kuram agencies of FATA. These trees if top-worked with improved bud wood and properly managed and products marketed can fetch approximately Rs.72,143 million to the local population. Similarly improved varieties of Olive can be cultivated on cultivable waste land and farm land.*
- 6. Establishment of private tree nurseries to provide multi-purpose and fruit tree seedlings and building material to FFSs, farmers' associations and livestock associations; Social forestry schemes will be established through farmers' associations under terms of partnership with specialist public or private sector service providers and managed and protected by the beneficiaries.*
- 7. Initiation of pilot schemes for non-forest timber products through joint forest management plans between community organizations and the Divisional Forest Offices, including the harvesting and marketing of non-timber forest products such as Mazri, medicinal herbs, mushrooms and honey.*

8. Capacity building and training will be provided to Forestry Units and rural communities on appropriate natural resources management, joint forestry management, and inter linkages with the productive rural sector.

FAO'S EXPERIENCE IN FATA AND COMPARATIVE ADVANTAGE

The comparative advantage of the Food and Agriculture Organization (FAO) of the United Nations lies in its role as the world's agricultural knowledge agency for policy development, integrated capacity building, technical cooperation, response to agricultural emergencies and support to rehabilitation/recovery, support to rural and agricultural development and investment, collection and dissemination of global information, and for the development and implementation of major international treaties and agreements. The comparative advantages of the organization are as follows:

- Authority and status as a global intergovernmental organization, and as an honest broker
- Unparalleled information source and institutional memory
- Broad networking capacity with Members and other partners
- Decentralized capabilities, with professional and multidisciplinary staff
- Capacity to respond to unforeseen needs of member countries
- Responsible financial and administrative management.

Since Pakistan joined it in September 1947 soon after its independence, FAO has been working with the Government throughout this development process supporting policy development, technical assistance, capacity building and pilot and key demonstration projects. Pakistan is also pilot country for the One UN system and FAO has been at the forefront of developing the approach that ensures the highest priority is given to the agriculture sector in line with the government's priorities. FAO Pakistan has a long running supportive relationship with Government at all levels in the sectors of agriculture, livestock, fisheries and forestry. FAO Pakistan established an office in Peshawar in 2010, where a team of experts in related sectors is efficiently and effectively carrying out assigned activities. Having full knowledge of the FATA's special conditions; both Agro-ecological as well as administrative, FAO has successfully implemented projects in Bajaur, Orakzai, South Waziristan, Khyber, Mohmand and Kurram agencies and is currently implementing two projects in Kurram and Khyber Agencies: "Emergency support to the restoration of agricultural-based livelihoods of returned families in Kurram Agency of the Federally Administered Tribal Areas (FATA)" and "Critical Livelihood support to protect and restore Agriculture based livelihoods of conflict affected farming families of Federally Administered Tribal Areas (FATA)" to support the communities that returned in 2012 and afterwards.

The overall implementing capacity of FAO Pakistan is high. After the 2010 floods, FAO Pakistan delivered USD 87 million during 2011 through a team of international (technical, operations, procurement etc.) and national staff, plus backstopping from the Regional office in Bangkok and FAO Headquarters. Currently FAO has 27 projects on-going in the country with the total budget of USD 74 million funded by donors, i.e., USAID, USDA, DFID, ECHO, AusAid, Belgium and UN.

AGRICULTURE ACTION PLAN FOR RETURN AND REHABILITATION

The FATA Agriculture Action Plan is designed to support the SRRS two-year scenario (2015/2016) as well as match an overall rehabilitation and sector stabilization period of four years. The summary table below highlights the respective funding requirements accordingly. The difference relates to the parameters of (a) urgency/shorter-term prioritization (two years scenario), and (b) longer term implementation needs, reflecting internally respective variations in terms of number of beneficiaries and coverage of geographical areas.

<u>FATA - AGRICULTURE ACTION PLAN</u> <i>Funding Needs in USD Million</i>	Total 4 years	SRRS (2015-16) 2 years
A. Field Coordination and Monitoring - Agriculture Sector Rehabilitation	1.90	1.20
B. Revitalization of Essential Food Crop Production to Ensure Household Food Security	45.06	35.03
C. Support to Smallholder Horticulture and Commodity Marketing for Income Generation	2.82	1.81
D. Strengthening Crop Advisory Systems and Community Capacity Building	0.48	0.48
E. Revitalization of Livestock Production to ensure Food Security and Income Generation	31.52	20.18
F. Strengthening Livestock Support Services and Community Capacity Building	1.89	1.23
G. Rehabilitation of Irrigation and Water Management Systems	10.53	5.68
H. Recovery, Protection and Sustainable Management of Forests and Rangelands	3.19	1.09
Grand Total	97.39	66.69

The AAP-RR is conceived as a living document, to be adjusted according to the development on the ground, inter alia the security situation (sustained de-notification of target areas), the pre-conditional arrangements to be ensured by the FATA Secretariat and its partners (e.g. provision of immediate shelter and food aid to vulnerable returnee communities) in line with the principles of the SRRS, the de facto magnitude, socio-economic and socio-psychological characteristics of the returnee households, and the availability of donor funding support.

Once implemented the AAP would directly benefit a total number of about 193 000 most vulnerable rural families or roughly over 1.5 million people. These target beneficiaries would comprise 60

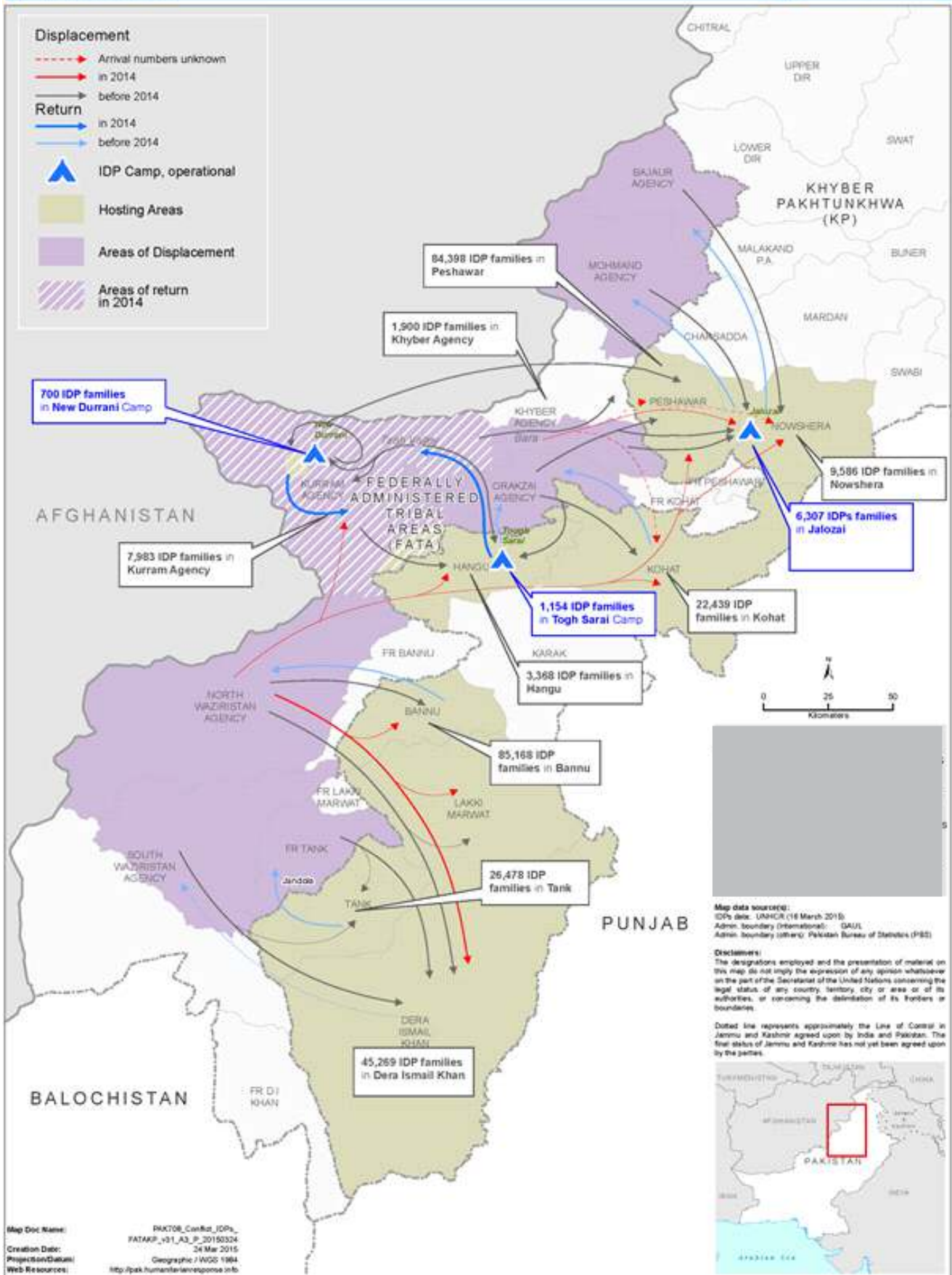
percent returnee households and 40 percent local resident “stayees” households to ensure social cohesion of the programme - these families would recover their livelihoods and be able to sustain food security and acceptable income levels. In addition, a large number of government staff as well as private service providers would benefit from rehabilitation of service facilities, contract arrangements, capacity building and training. It should also be highlighted that by supporting the agriculture sector -the rehabilitation and stabilization of the main economic sector of FATA - a series of positive side effects and spill-overs would materialize, such as the revitalization of its sector environments, including inter alia rural services, agro-processing, agro-business, the transport and communication sector. The overall effect of ensuring and sustaining food security, the creation of income and employment, and the build-in dimension of social cohesion would therefore contribute to the longer-term stabilization of the FATA region.



Appendices:

FATA - AGRICULTURE ACTION PLAN		For a total of four years		For two years (SRRS 2015 & 2016)		
	Unit	Physical Targets	Funding Needs	Physical Targets	Funding Needs	
Programme Components:		no.	USD Mio	no.	USD Mio	
A.	Field Coordination and Monitoring - Agriculture Sector Rehabilitation	Cell	1	1.900	1	1.200
B.	Revitalization of Essential Food Crop Production to Ensure Household Food Security			45.062		35.029
B.1	Clearance (reclamation) of abandoned agricultural land	Ha	38,000	18.088	17,100	8.140
B.2	Provision of essential agricultural production inp.	Set	177,810	26.672	177,810	26.672
B.3	Capacity building and training	No	21,581	0.302	15,538	0.218
C.	Support to Smallholder Horticulture and Commodity Marketing for Income Generation			2.818		1.810
C.1	Completion and adoption of marketing analysis/value chain studies	No	4	0.200	1	0.050
C.2	Provision of production packages for seasonal and off-seasonal high value crops	Set	5,000	0.575	3,750	0.431
C.3	Provision of pilot micro-irrigation units	No	5,000	0.875	3,750	0.656
C.4	Provision of training and provision of storage devices	Set	5,000	0.675	3,750	0.506
C.5	Establishment of fruit nurseries	No	25	0.375	10	0.150
C.6	Formation and strengthening of Farm Business Schools	No	105	0.042	40	0.016
C.7	Establishment of a marketing information system	LS	1	0.076		-
D.	Strengthening Crop Advisory Systems and Community Capacity Building			0.477		0.477
D.1	Rehabilitation of Farm Services Centres (including training and capacity building)	No	7	0.392	7	0.392
D.2	Establishment of Farmer Field Schools (including training and capacity building)	No	150	0.060	150	0.0600
D.3	Training of subject matter specialists	No	50	0.025	50	0.025
E.	Revitalization of Livestock Production to ensure Food Security and Income Generation			31.523		20.181
E.1	Re-construction of animal shelters	Shelter	7,000	4.200	3,150	1.890
E.2	Re-stocking of livestock for small herder families	Heads*	131,675	20.238	98,756	15.179
E.3	Sustainable provision, production and handling of fodder	Set	3,398	1.121	2,549	0.841
E.4	Calf fattening for meat production	package	2,100	2.100		-
E.5	Poultry production	package	30,982	3.253	20,448	2.147
E.6	Processing, handling and marketing	LS	1	0.200		-
E.7	Rehabilitation of fish farms and hatcheries	farm/hatcheries	100	0.310	40	0.124
E.8	Value chain feasibility studies and market information system	LS	1	0.100		-
F.	Strengthening Livestock Support Services and Community Capacity Building			1.886		1.232
F.1	Strengthening capacity building and training	LS	1	0.080	72%	0.0579
F.2	Provision of equipment and veterinary supplies to service providers	LS	1	1.806	65%	1.1739
G.	Rehabilitation of Irrigation and Water Management Systems			10.533		5.6763
G.1	Repair and rehabilitation of community managed water courses/irrigation schemes	Schemes	290	8.483	145	4.2413
G.2	Rehabilitation of water harvesting structures	Schemes	82	2.050	57	1.4350
H.	Recovery, Protection and Sustainable Management of Forests and Rangelands			3.189		1.086
H.1	Restoration of degraded land to productive range and forest land	Ha	1942	2.097	777	0.839
H.2	Establishment of private tree nurseries and social forestry schemes	Ha	1214	0.492	486	0.197
H.3	Pilot schemes on non forest timber products & strengthening of value chain	No	8	0.400		-
H.4	Capacity building and training for Forestry Units and rural communities	LS	1	0.200	25%	0.050
Grand - TOTAL				97.387		66.690

* 124,000 small animals for 31,000 hh (4 small animals /hh); 7,746 large animals for 7,746 hh.
 grey area means 'not applicable'



Crop Calendar for FATA

Crops	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	
Barley			Harvesting period						Planting period				
Maize					Sowing period			Harvesting period					
Millet				Sowing period						Harvest period			
Rapeseed (Sarson)			Harvesting						Sowing				
Rice					Planting period				Harvest period				
Sorghum					Planting period				Harvest period				
Soya bean/ red beans, mung beans					Planting					Harvest			
Sunflower	Spring planting				Spring harvest				Autumn planting		Autumn harvest		
Wheat				Harvest period						Planting period			
Pulses (lentils, gram, mash)				Harvesting period					Planting period				
Vegetables													
Onions					Harvesting		Sowing				Transplanting		
Peas	Sowing		Picking									Sowing	
Peas off season					Planting			Picking					
French Beans				Sowing		Picking							
Potato Rabi		Harvesting							Planting				
Potato Kharif					Planting					Harvesting			
Okra		Sowing			Picking								
Tomato Rabi		Transplanting			Picking							sowing	
Tomato Kharif				sowing		Transplanting		Picking					
Chilli		Sowing	Transplanting		Picking								
Cucumber		Sowing						harvesting					
Fruits													
Apple	Planting						Picking					Planting	
Peach	Planting				Picking							Planting	
Plum	Planting			Late	Picking	End						Planting	
Persimmon	Planting								Picking			Planting	
Apricot	Planting				early	Picking	early					Planting	
Pear	Planting								Picking			Planting	
Sweet Orange	Picking	Planting				Planting						Picking	



FATA Secretariate, Warsak Road, Peshawar