

“Build Back Better”

**RECONSTRUCTION AND REHABILITATION OF THE AGRICULTURE
INFRASTRUCTURE**

(To be read with ERRAS Livelihoods Rehabilitation Strategy)

EARTHQUAKE RECONSTRUCTION AND REHABILITATION AUTHORITY

1-Background

1.1 Overview

The October 8, 2005 earthquake struck very heavily on life and property in AJK and NWFP province of Pakistan. Thousands of people lost their life and those who survived are faced with the problem of disabilities, shelter and means of making a living. Earthquake Reconstruction and Rehabilitation Authority (ERRA) have developed a strategy to help the affected people for their livelihood on sustainable basis. Livelihood covers both abilities and resources essential as a means of living. These are sustainable when these cope with and recover from stresses and shocks, without affecting natural resources.

Azad Jammu and Kashmir (AJK) and the affected areas of North West Frontier Province (NWFP) are located to the north-east of Pakistan. The total population affected in nine districts is 3.5 million, spread cover an area of 30,000 km.²

The population in these areas generally lives in scattered households having a family size of about nine. Average life expectancy is low: 51 years for women and 52 years for men. By and large, these are food deficient areas. Literacy rate varies but is substantially higher in AJK. Literacy rates are lower for women than for men. In several pockets in NWFP such as Kohistan, women are predominantly illiterate; however, there is a strong demand for schooling and quality education among the population.

1.2 Agriculture in Affected Areas

The affected areas fall under dry temperate zone having mixed subsistence farming including crops, livestock, horticulture and forestry activities. Generally farms are owner-operated and small, with an average land holding of 1.4 hectares and a cultivated area of 0.7 hectares. Farm productivity is constrained by small fragmented holdings, harsh climatic conditions, low quality seeds, limited fertilizer use and poor pest and disease control. Affected Districts of AJK and NWFP are mostly having common features of farming systems.

A comparatively small number of households in affected districts are without farming land and are mostly female headed. These households have sufficient space to shelter and raise livestock and usually have some vegetables and fruits in kitchen gardens. They rely on sales of different local items including forest products, milk, eggs, livestock, fruits, vegetables and firewood, etc.

1.2.1 AJK

There are 72,800 hectares of cultivated land of which 6,200 hectares are irrigated. Maize, with some 65,400 hectares planted every year is a major crop. Other important crops include wheat (23,300 hectares), and fodder and vegetables (2,113 hectares).

1.2.2 NWFP

Of the total affected area (1.7 million ha) 0.25 million ha (15.4 percent) is cultivated. Out of this only 71,600 hectares (28.92 percent) is irrigated. Of the total uncultivated area, 709,983 hectares is classified as forest.

1.2.3 Losses to Agriculture Sector

Estimated losses of crops in the affected areas range from 30 to 75 percent. Agricultural tools and equipment were lost to a large extent. The fruit already harvested was mostly destroyed. In some cases the trees were also destroyed due to landslides or cracks in the soils. Some damage was also done to the fodder and timber trees planted on farm lands. Land slippage caused shifting of entire ledges of soil, creating entirely new terraces still needing stabilization.

The slope of the land in some cases was changed, giving rise to new slopes that require re-grading irrigated lands including complete re-alignment of water distribution systems. Many natural springs and water sources were dried up or shifted down-slope, creating problems not only regarding drinking water supplies and sanitation for both humans and animals but for crops and irrigation also.

It is estimated that 50 to 60 % of the irrigation structures were damaged. In some extreme cases entire fields were lost due to slides, particularly in the steeper valleys both in AJK and NWFP.

1.2.4 Government Institutional Arrangements

1.2.4.1 Azad Jammu & Kashmir:

Overall responsibility for agriculture and livestock is vested with the Secretary of Agriculture and Animal Husbandry. The Agricultural University at Rawalakot imparts agricultural education. AJK University offers multidisciplinary programmes. AJK has an extension services management academy (ESMA) at Muzaffarabad.

1.2.4.2 There are Agriculture establishments at District, Tehsil and Union Council level. At District and Tehsil level there are Agriculture Officers. At Union Council levels there are Field Assistants and Supervisors who are diploma holders. In some cases these facilities have Agriculture Officers.

1.2.4.3 NWFP:

In NWFP, there is Agriculture Department headed by Secretary Agriculture, Livestock and Cooperatives. NWFP Agricultural University conducts degree program in agriculture and livestock. There are adequate arrangements for training of support staff. The Agriculture Department provides the extension services. At the District, Tehsil and Union Council level the extension research and development activities are performed by staff similar to those in AJK.

2- Research and Extension Review

2.1 World Wide

One can better understand about extension by looking at following statements:

- a) Extension is an informal educational process directed towards the rural population. This process offers advice and information to help farmers solve their problems. Extension also aims at increasing the efficiency of the farm families, increasing their farm production and raising their standard of living.
- b) Extension is a process of working with rural people with a view to improving their livelihoods. This involves facilitating farmers to improve their farm productivity and also developing their abilities to direct their own future development.

Universally the extension services are mostly run by government agencies. Government system usually does not have provisions for rewarding superior performance or for a wage system based on merit. Promotion criteria are based on seniority and length of service. Among many of the government departments, the agricultural department and extension service have a low public esteem. Extension managers need to learn what motivates employees within the context of their roles. They have to perform a variety of functions but motivating employees is perhaps the most complex. This is largely due to the reason that what motivates employee's changes constantly.

Agricultural extension services are under tremendous pressure to become more effective, more responsive to client, and less costly to government. Although it is difficult to delineate the impact of extension on agricultural productivity and growth from that of other factors yet a number of studies reveal a high economic return of investment in agricultural dissemination.

Extension has proven to be successful when a clear-cut mission exists, constraints in extension environment are taken into account, there is access to available information, internal technical capacity exists, methodologies are balanced and reinforcing, the internal management system provides for personal motivation, supervision, delegation of authority, and regular plans of work, farmers are involved in problems identification and interactive in setting programs and securing feedback, adequate funds are budgeted for programmed operations, clear structural and organizational lines of authority exists and no roles or functions conflict with the primary mission.

2.2 Pakistan's Context

Agricultural extension is a provincial and State subject in Pakistan. The extension organization has expanded manifolds and has undergone structural modification from time to time, either through national initiatives or supported by various international agencies. Agriculture extension services in Pakistan are provided mainly by the public sector extension system.

Provincial and State Agricultural Departments in Pakistan are huge bureaucracies with many sections and employees. Mobility is a factor that inhibits the field performance of Agriculture Officers and Field Assistants. Low salaries for field staff are source of discontent and low morale, which result in limited job performance. The opportunities for promotion are virtually non-existent at the Agriculture Officers and Field Assistant's levels. Field workers should be contacting large numbers of farmers. Agricultural Extension has a much weaker voice than the research institutions or universities in the sectors.

Extension is faced with a number of working and performance problems. The average yields at farmer's fields hardly exceed 30 percent of their potential. The sizeable difference in yields is attributed mainly to the lack of effective extension services. The extension services need strengthening both in terms of personnel and resources. The extension staff in particular, lacks proper training and their working and living conditions also require improvement.

3- Participatory Approaches

3.1 Introduction

Most of the earlier extension models had a tendency towards top down policy formulation, centralized planning and decision making, one way communication, authoritarian leadership and undemocratic hierarchical organizational structures. Experience has shown that this approach to development creates an increasing dependence of the people on the development agencies. In fact too much dependence on outside sources can easily prevent the emergence of self reliance.

Through out the world there is growing realization that government alone can not help people to develop. There is also strong evidence that when rural people organize for their own benefit, much can be achieved. Participation is important to the farmers because it increases exposure to different information sources, awareness of new information and practices, confidence of new practices and in oneself, initiation and adoption rate and productivity. Thus the involvement of local people in development initiatives can be considered as key to success of any development program.

3.2 Assumptions

The participatory approach assumes that

- Farming people have much wisdom regarding production of food from their land, but their levels of living and productivity could be improved by learning more of what is outside.
- Much can be gained from "indigenous knowledge".
- Effective extension can not be achieved without the active participation of the farmers themselves, as well as of research and related services.
- Extension efficiency is gained by focusing on important points based on expressed needs of farmers.

In participatory approach, program planning is controlled locally, often by such groups as farmer's associations and community organizations. These associations and community organizations formed under the participatory approach serve as vehicle of development, which facilitates the process of rural appraisal, need assessment, program planning and implementation, resource generation, and monitoring and evaluation.

3.3 Merits and Demerits

The group approach has its own merits and demerits.

3.3.1 Merits

- It has potential of greater extension coverage, which is impossible through individual methods.
- It is cost effective
- The group approach generally offers a more reflective learning environment.
- The group approach provides a supportive atmosphere.
- A wide range of issues may emerge when farmers sit together, listen to each other, and share their experiences with each other, discuss their problems and think of alternative courses of action.

3.3.2 Demerits

- There is a lack of control of the program from the center.
- It may be difficult to manage central reporting and accounting for a participatory approach.
- The pressure with local people might try to bring to bear on central units with the participatory can also be seen as a disadvantage by some government officials.

Nothing seems more crucial for a successful agricultural extension service than the availability of technologies for dissemination among rural people, which actually fit their needs and interests. This situation demands an extension approach, which could generate technologies tailored to meet the needs of local farming conditions.

3.4 Participatory Approach in Pakistan

The farmer community in Pakistan had a tradition to get together and share work load on occasions like sowing and harvesting of crops, cleaning of water courses and grass cutting in hilly areas.

Agha Khan Rural Support Program is pioneer in Pakistan to introduce the idea of Community Organization (CO) in rural development and agriculture extension. Since then lot of other NGOS have emerged who are involving community for their interventions. Now each province has rural support program organizations along with National Rural Support Program. These RSPs have established a network for collaboration in the name of RSPs Network. Simultaneously government has been proactive in launching a number of community based projects with local and international support. These organizations and projects have used Community Organizations (COs) as an instrument for extension and rural development activities. The substantial and organized extension work has not been undertaken through these COs except improvement in receiving mechanism and enhancing community extension linkages. Besides there has been an isolated and sporadic efforts without much inter organizational cooperation and interaction. Research has unfortunately been only under the public sector, top down and without having the appreciation of farmer's needs and problems.

The experience of farmer field school as extension technique has registered reasonable success in the promotion of crops, horticulture and livestock in the country. This technique has helped in upgrading know how, insight and group action among target farmers. The model can be replicated in earthquake affected areas for field and crops, horticultural, livestock and preferably as an integrated approach. The experience and expertise are available right within NWFP and AJK. The needed support can be had from_NARC, Islamabad and CABI SA, Rawalpindi who pioneered this approach in the country.

3.4.1 AJK and Group Approach

The Government of AJK has initiated quite a number of community based development projects in collaboration with Government of Pakistan, FAO, UNDP, IFAD, World Bank, WFP and other International donors. The main projects are Northern Resource Management Program (NRMP), Sukathar Water Shed Management Project, Bhimber Upland Project, Extension Services Management Academy (ESMA), Neelum & Jhelum Valley Community Development Project, Area Development Project, Community Infrastructure Development Project and AJK Community Development Project. The major NGO's are NRSP, Islamic Relief and Sangi. There is a mushroom growth of NGO's after the earthquake.

3.4.2 NWFP and Group Approach

The Government of NWFP has also launched community based projects like Malakand Rural Development Project, Swiss Community Based Resource Management Project, Barani Area Development Project, Rural Water Supply and Sanitation Project. The major NGOS are Sarhad Rural Support Program, National Rural Support Program, Sangi Development Foundation, Plan International and others. Many national and international NGOs have emerged after the earthquake.

4- Field Observations

4.1 The majority of extension staff holds Agriculture degree in different disciplines but very little in extension. The other disciplines provide technical knowledge but extension requires additional knowledge and skill to communicate that knowledge so that farmer can comprehend that. The agriculture graduates are not offered general management courses during their studies so they feel raw hand and feel difficulties in the management of office and other administrative affairs.

4.2 The professionals are de-motivated due to lack of facilities, promotion and unattractive working environment. The people putting in more than twenty five years of service are still working on same scale and have not got any promotion yet. The staff posted at remote and difficult areas does not stick to such areas and most of the time striving for the transfer to more attractive areas or home district. The difficult areas lack education, health, and communication and transport facilities. The posting at such locations get less monetary benefits than in big cities where one gets more money in the form of house rent. The posting to such areas is considered as punishment. The department is understaffed specially the Battagram, Shangla and Kohistan Districts in NWFP.

4.3 The line departments dealing with NRM activities are working in isolation. Each department, Agriculture, Livestock and Forest, advocates for its own component where as farmer is in need of coordinated and comprehensive extension approach.

4.4 The line department's staff lacks mobility, especially the field staff. The field is far stretched coupled with hilly and mountainous terrain. The public transport is hardly available in most parts of the region. The earthquake has further aggravated the situation due to damage to roads and other infrastructure.

4.5 The Earthquake has inflicted heavy losses on building infrastructures. Some buildings have been totally demolished and those still intact are not safe to sit in, the equipment and fixtures have also been damaged. The offices have been either established in temporary shelters, tents or people have squeezed in the left over parts of the office premises as an ad-hoc arrangement. Lot of national and international NGOs have jumped in for relief and rehabilitation work. They have caused very high inflation in the rent of office and residential buildings. The government departments generally do not have that amount of funds so they are finding it very difficult to find suitable office or residence.

4.6 The water irrigation system has been damaged. Most of the water channels are damaged, some are totally destroyed and others have changed the course. This has adversely affected the farm production. The source of irrigation water has been a major contribution in boosting agriculture production in the area and enhancing the income of the farmer's household. Most of these household have been deprived of their livelihoods based on farming. They have either shifted to other places in search of employment or they have resorted for other enterprises.

4.7 The research did not get that much priority. There are few research stations like (Ternab Research Station and Hazara Research Station) and agriculture farms (Baffa, Sharan and Battakundi) in NWFP. These do not cope with the needs of the farmer community. The research centers are not well equipped with research facilities. Whatever research is being conducted is hardly benefited by the farmers. There is a lack of linkages and feed back among extension, research and community.

The situation in AJ&K is not different rather it is discouraging. Literally there is no research facilities and research station. There is some agriculture farms mostly used for demonstration purposes. The Extension Department depends upon the recommendations of research in Punjab or National Agricultural Research Center. The research findings and recommendation may not suit to Earthquake Affected area due to different ecological zones.

4.8 The availability of timely and quality supply of agriculture inputs is another major problem. The access to areas is difficult which raises the cost. The small land holdings and low income makes it beyond the reach of the farmer.

4.9 The farmer faces difficulties and lack skill in marketing agriculture produce. He is not getting the return of his hard work and cost. He is not aware of value addition to the produce and post harvesting techniques. There is lot of potential for fruit and vegetable production.

4.10- The Shinkiari Tea Research Station has done lot of work on tea cultivation but the farmers have not yet adopted the cultivation of this crop on large scale as a cash crop.

4.11 Mansehra, especially the Baffa and Shinkiari belt has lot of potential for Tobacco cultivation. The Pakistan Tobacco Company and Lakson Tobacco Company are doing extension work which has raised the production of the crop and income of the farmer community

4.12 Certain belts in the earthquake affected area have great potential for vegetable, fruit and medicinal plants which need focused extension services for these specific crop productions.

4.13 The NGOs and community based projects have introduced participatory approach in agriculture. In some areas the COs are being used as platform for delivering extension messages. The techniques of Farm Service Center and Farmers Field Schools have been adopted by Agriculture department in NWFP and elsewhere. There is lack of coordination between Agriculture Department and NGOS. The NGOS generally do have Social Organizers but not Agricultural Professionals. Sometimes their recommendations are just to meet their targets whether those are suitable or not for the area.

4.14 ESMA Academy had contributed a lot in producing diploma holders in agriculture and livestock. The academy also offered lot of short courses for professionals of different organizations. The Earthquake had devastating effect; the whole building has been raised to ground. The equipment and material has also been destroyed

5. Recommendations

5.1 Organic Agriculture: An ecological production management system that promotes and enhances biodiversity, biological cycles, and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain, or enhance ecological harmony. The primary goal of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people.

5.2 Training in Extension: The extension department professionals should hold degree in extension or they should be given training on extension techniques before they are fielded. Those who have already been posted should get training on extension techniques. The training program on Extension Techniques and Inter Personal Skills (communication, motivation, conflict resolution, office management and documentation) should be designed.

5.3 Motivation and Incentives: The lack of motivation should be improved through periodic promotion, attractive incentives for hard, difficult and devoid of facilities areas like education, health and accessibility.

5.4 Extension Forum: The farmer is engaged in agriculture, livestock and forest activities simultaneously. The professionals of all these departments should establish common forum at district level to discuss and design comprehensive and coordinated extension strategy and program for the benefit of the farmer community.

5.5 Mobility: The mobility of extension professionals plays a crucial role in developing rapport with the farmer community which is an effective tool of extension. The professionals can be made mobile through credit facilities to buy vehicles like motor bikes or cars.

5.5 Infrastructure: The office infrastructures with office fixture and equipment, like computer and accessories, fax, photocopiers and funds for running, repair and maintenance of the equipment are established at district, sub- division and union council level as per requirement.

5.6 Rehabilitation of Infrastructure: The Office and Irrigation System Infrastructure needs to be rehabilitated to support both the extension professionals, paraprofessionals and farmer community for effective extension services and farm production.

5.7 Field-Oriented Research: The priority should be given to field oriented research that meets the needs of the farmer. The research station must have extension and communication wing to bridge the gap between the farmer and the research component. The visit of the farmer to research station will provide an opportunity to both the researcher and farmer to share experience and problems and make research more objective oriented.

5.8 Agriculture In-puts supply system: The community organizations should be motivated, oriented in enterprise development and supported to establish agriculture inputs shops to ensure in time and quality supply of agriculture inputs.

5.9 The Marketing of Agriculture Produce: The farmer should be provided skill in post harvesting and value addition techniques for farm produce which will fetch higher price and enhance the income. The community organizations can be encouraged, trained and motivated to involve in marketing of agriculture produce by establishing farmers marketing boards. The Malakand Fruit and Vegetable Development project Swat has given orientation and skill training in post harvesting and marketing of vegetable and fruit.

The Swiss Community Based Resource Management Project Swat has registered a good success in changing the trend of the farmer who has gone commercial market oriented. Almost the whole valley is turned into orchard farming and farmer's income has increased. Such projects should be designed and implemented with modifications keeping in view the local conditions. The Government should encourage the private enterprise to establish cottage industry.

5.10 Focused Extension Program: Focused extension programs should be designed for specific agriculture production areas like fruit production, vegetable production, Medicinal plants, Beekeeping, Sericulture etc

5.10 Community Organizations: The grassroots level institution plays crucial role in sustainability of any development endeavor. These institutions provide a forum to deliver extension message with low cost and less time. The resources can be pooled to get agriculture inputs at low rate (Whole sale) and sharing of experience and expertise can fetch hire price for the farm produce.

Different NGOs, national and international, development projects have tried to establish Community organizations (COs) at village or Mohalla level but majority of such COs was short lived, only till the time the NOGo remains. The policy should be formed to bring uniformity of philosophy in establishing CO so that they survive even after the NGOs have left. The line departments can use these COs as a forum to deliver extension messages and for development activities.

5.11 Capacity Building

5.11.1 Farmer Community: The capacity building of the farmer is another important component. The farmer is not market oriented. His hard work is being cashed by the middle man or the trader. He lacks skills in planning, harvesting and post harvesting techniques, adding value and marketing farm produce.

5.11.2 Professionals and Para Professionals: The majority of officers are not trained in extension services. They generally feel incapacitated in Proposal and Report Writing, Office and Financial Management. They are also not so conversant with the emerging participatory approaches and techniques of extension and development. The Para Professionals also need orientation and training in participatory approaches and techniques of extension and development.

5.11.3 Training: Training is a crucial component of any capacity building program. There is a need to have continuous training need assessment along with evaluation and follow up of training. The following trainings are recommended on priority the basis of discussion with professionals and Para professionals during field visits. The number of training events and participants has been calculated keeping in view the staff strength given in the following table for community training the number of union councils is the base.

Details of the Staff			
No	District	Officers	Field Asst/Supervisors
AJ&K			
1	Muzaffarabad	12	58
2	Bagh	9	44
3	Poonuch	7	25
4	Neelum	4	7
	Total	32	134
NWFP			
1	Abbotabad	5	24
2	Mansehra	6	36
3	Battagram	3	11
4	Kohistan	3	9
5	Shanghla	3	8
	TOTAL	20	88
	Grand Total	54	226

Trainings to be conducted							
No.	Training Event	No. of events	No. of Days	No. of participants	Places/ Location	Cost / training	Total cost
	Officers						
1	Extension, its techniques & methods and Social Mobilization						
		2	4	27		216,000	432,000
2	Participatory Development and PRA Techniques						
		2	4	27		216,000	432,000
3	Office Management (documentation, rules & regulation)						
		2	4	27		216,000	432,000
4	Project proposal and report writing						
		1	5	25		250,000	250,000
	Field Assistants/Supervisors						
1	Extension, its techniques & methods and Social Mobilization						
		9	4	25		200,000	1,800,000
2	Participatory Development and PRA Techniques						
		9	4	25		200,000	1,800,000
	Community Training						
1	Gross Root paining & crop production						
		16	6	25		300,000	4,800,000
	Training Co-ordination		42			15,000	630,000
	Grand Total						10,576,000

5.12 Irrigation System

5.12.1 Irrigation System Infrastructure: The affected and damaged irrigation system need to be rehabilitated and potential should be explored for new structures to harvest the water for the irrigation of crops, fodder production and fish farming. The data should be compiled in collaboration with the concerned departments for this intervention.

5.12.2 Irrigation System: The damaged and destroyed water channels should be rehabilitated. Where the channels have changed the course there the water should be harvested with the construction of water reservoirs and channels. The specific extension programs should be designed keeping in view the soil profile and ecology of the area.

6. Extension Services Management Academy (ESMA)

6.1 ESMA has been offering diploma courses for Livestock Assistants & Agriculture Field Assistants since its inception. It has also catered for the need of short courses of different organizations and line departments from AJK and across Pakistan. The earthquake had devastating affect on the academy because it not only destroyed the infrastructure but also equipment and printed educational material. The rehabilitation of the academy should take into consideration the post earthquake scenario. The needs of the community, organizations and line departments have taken new dimensions. There is a need to offer courses in diversified disciplines so that those who are trained either get gainful employment or contribute practically to their organizations or field of discipline. The community members should be offered courses which can support and ensure the livelihood sustainability e.g.

- a. Extension services
- b. Hotel management
- c. Ticketing
- d. Catering services
- e. Customer services
- f. Bee keeping
- g. Sericulture
- h. Commercial dairy production
- i. Commercial poultry farming
- j. Agriculture and Livestock Farming and Marketing.

6.2 The officers serving in the departments (Agriculture, Livestock, Forest and LG&RD) and offering extension services generally do not hold extension degree. The ESMA should devise and offer 6 month course for serving officers to build their capacity in Extension, Management and Leadership.

6.3 The traditional diploma courses for Agriculture and livestock Assistants have not given that much importance to extension techniques. The courses need to be revived and revised with focus on extension techniques. The field attachment, for a specified period, i.e. $\frac{1}{4}$ of the course duration, should be made mandatory before the certificate is awarded.

6.4 The ESMA should also offer courses in Extension and management skills.

6.5 The Academy should be made an independent / autonomous body with its own board of directors. The academy should earn revenue through the above mentioned courses. The revenue earned should be incurred on the development of the academy with financial support from government.

6.6 Reconstruction and rehabilitation: The building should be reconstructed keeping in view that it copes with the needs of courses recommended as above.

6.7 To make the academy strong academic institution it must have latest equipment and material. Being far from the city it should have comfortable and reasonable hostel facilities with ensured

supply of power and water. The academic and support staff should also have residential accommodation so that they do not waste time in commuting from Muzaffarabad daily.

6.8 The success of any academic institution depends upon its academic faculty. Very special packages should be offered to hire strong academician so that they stick to the academy.

6.9 There is a high turn over of staff due to deputation from line departments and students suffer a lot. The academy should have its own cadre with ample chances of promotion and other benefits.

7. Damage Assessment and Standardization Of Field Facilities

Damage assessment and standardization of agriculture facilities and infrastructure is done keeping in view the ERRA livelihood strategy.

Standardized Facilities:

These facilities are divided into three categories:

Category I :Tehsil Agriculture offices (TAO)

These offices are located at tehsil level and are responsible to look after all the activities in concerned tehsil and are governed by Agriculture officers along with supporting Staff.

Category II : Agriculture Circle Offices (ACO)

Tehsil is divided into circles and each circle consists of four - five union councils and is run by Agriculture officer along with supporting Staff.

Category III : Agriculture Extension Centers (AEC)

The circles are further subdivided into Agriculture Centers. These centers are located at union council level and work at grass route level in close contact with the community. These facilities will be run by agriculture supporting staff.

Category – I Tehsil Agriculture Office (TAO)				
No	Facilities	Covered Area	Rate Rs/sft	Total Cost
1	Five Office Rooms	845	2000	1,690,000
2	One Training Hall	720	2000	1,440,000
3	One Store	144	2000	288,000
4	Two Baths	128	2000	256,000
5	Garage/Equipment Shed	240	1000	240,000
	Total	2077		3,914,000

Residence				
No.	Facilities	Covered Area	Rate Rs/sft	Total Cost
1	Two Rooms	390	2000	780000
2	One D/Dinning	280	2000	560000
3	One Kitchen	120	2000	240000
4	One Store	120	2000	240000
5	Two Baths	128	2000	256000
6	Veranda/Lobby	72	2000	144000
	Total	1110		2,220,000

<u>Staff / Chowkidar Quarter</u>				
No.	Facilities	Covered A	Rate Rs/sft	Total Cost
1	Two rooms	338	2000	676000
2	One Kitchen	99	2000	198000
3	Bath	64	2000	128000
4	Veranda/Lobby	72	2000	144000
	Total	573		1,146,000

<u>Agriculture Equipments at Tehsil Level</u>				
No.	Name of Item	No. Required	Price	Total Cost
1	Spray machine Steel body 10 lit	3	4500	13500
2	Power Spray Machine	1	35000	35000
3	Pruning Scissors	6	550	3300
4	Pruning Saw	3	590	1770
5	Grafting & Budding knife	6	550	3300
6	Water Sprinkler	2	500	1000
7	Spade	6	300	1800
8	Shawl	6	100	600
9	Measuring Tape	2	200	400
10	Drilling machine	1	8000	8000
11	Trolley	2	800	1600
12	Weighing Balance with weights	1	2000	2000
13	Hoe Long (Pail)	6	500	3000
14	Hoe Small (Khurpa)	12	200	2400
15	Pick Axe (Ganti)	6	100	600
16	Lawn Rack	6	300	1800
	Total			80,070

<u>Furniture and Fixture at Tehsil Level</u>				
No.	Item	No.	Price Rs.	Total
1	Office Tables	5	7000	35000
2	Office Chairs	20	2000	40000
	Officer chairs	2	6000	12000
3	Almarah	2	8000	16000
4	Rack	4	1000	4000
5	Stationary	1	10000	10000
6	Computer with printer	1	60000	60000
7	Over head projector	1	10000	10000
8	White Board	1	2000	2000
9	Soft Board	2	2000	4000

10	Flip Chart Board	1	1000	1000
11	Tables for Training Hall	3	5000	15000
12	Chairs (Training Hall)	20	1200	24000
13	Fax Machine	1	15000	15000
	Total			248,000

<u>Agricultural Inputs</u>	
Pesticides	Price Rs.
Insecticides	20000
Fungicides	20000
Rodenticides	20000
Total	60,000

<u>Summary</u>		
<u>Category-I Tehsil Agriculture Office (TAO)</u>		
<u>Facilities</u>	<u>Cost in Rs.</u>	<u>Cost in US \$</u>
Estimated cost for construction of TAO	3,914,000	65,233
Estimated cost for the construction of A.D's accommodation.	2,220,000	37,000
Estimated cost for the construction of staff / chokidar Quarter	1,146,000	19,100
Compound wall	420,000	7,000
Estimated cost of the furniture and fixture	248,000	4,133
Estimated cost of the equipment / instrument	80,070	1,334
Estimated cost of Pesticides	60,000	1,000
Total Cost	8,088,070	134,800

<u>Category – II Agriculture Circle Office (ACO)</u>				
No.	Facilities	Covered Area	Rate Rs/sft	Total Cost
1	Four Office Rooms	507	2000	1014000
2	One Training/Meeting Room	620	2000	1240000
3	One Store	144	2000	288000
4	Two Baths	128	2000	256000
5	Garage/Equipment Shed	240	1000	240000
	Total	1639		3,278,000

<u>Agriculture Officer Residence</u>				
No.	Facilities	Covered Area	Rate Rs./sft	Total
1	Two Rooms	390	2000	780000
2	One D/Dinning	280	2000	560000
3	One Kitchen	120	2000	240000
4	One Store	120	2000	240000
5	Two Baths	128	2000	256000
6	Veranda/Lobby	72	2000	144000
	Total	1110		2,220,000

<u>Staff / Chowkidar Quarter</u>				
No.	Facilities	Covered Area	Rate Rs./sft	Total
1	Two rooms	338	2000	676000
2	One Kitchen	99	2000	198000
3	Bath	64	2000	128000
4	Veranda/Lobby	72	2000	144000
	Total	573		1,146,000

<u>Agriculture Equipments at (ACO)</u>				
No.	Name of Item	No. Required	Price Rs.	Total
1	Spray machine Steel body 10 lit	3	4500	13500
2	Power Spray Machine	1	35000	35000
3	Pruning Scissors	6	550	3300
4	Pruning Saw	3	590	1770
5	Grafting & Budding knife	6	550	3300
6	Water Sprinkler	2	500	1000
7	Spade	6	300	1800
8	Shawl	6	100	600
9	Measuring Tape	2	200	400
10	Drilling machine	1	8000	8000
11	Trolley	2	800	1600
12	Weighing Balance with weights	1	2000	2000
13	Hoe Long (Pail)	6	500	3000
14	Hoe Small (Khurpa)	12	200	2400
15	Pick Axe (Ganti)	6	100	600
16	Lawn Rack	6	300	1800
	Total			80,070

<u>Furniture & Fixture at (ACO)</u>			
Name of Item	No. Required	Price Rs.	Total
Tables	3	7000	21000
Chairs	12	2000	24000
Officer Chair	1	6000	6000
Almarah	2	8000	16000
Rack	2	1000	2000
Stationary	1	5000	5000
White Board	1	2000	2000
Soft Board	2	2000	4000
Flip chart board	1	1000	1000
Tables for Training Hall	2	5000	10000
Chairs (Training Hall)	16	1200	19200
Total			110,200

<u>Agricultural Inputs</u>		
No.	Pesticides	Price Rs.
1	Insecticides	15000
2	Funjicites	15000
3	Rodenticites	15000
	Total	45,000

<u>Summary</u>		
Category – II <u>Agriculture Circle Office (ACO)</u>		
Facilities	Cost in Rs.	Cost US \$
Estimated cost for construction of (ACO)	3,278,000	54,633
Estimated cost for the construction of Agri Officer accommodation.	2,220,000	37,000
Estimated cost for the construction of staff / chokidar Quarter	1,146,000	19,100
Compound wall	420,000	7,000
Estimated cost of the furniture and fixture	110,200	1,836
Estimated cost of the equipment / instrument	80,070	1,335
Estimated cost of Pesticides	45,000	750
Total Cost	7,299,270	121,654

Category – III <u>Agriculture Extension Centre (AEC)</u>				
No.	Facilities	Covered Area	Rate Rs./sft	Total
1	Four Rooms	676	2000	1352000
2	One Kitchen	120	2000	240000
3	One Store Room	120	2000	240000
4	Two Baths	64	2000	128000
5	Veranda/Lobby	72	2000	144000
	Total	1052		2,104,000

<u>Agriculture Equipments</u>				
No	Name of Item	No Required	Price Rs.	Total
1	Spray machine Steel body 10 lit	2	4500	9000
2	Pruning Scissors	3	550	550
3	Pruning Saw	3	590	590
4	Grafting & Budding knife	3	550	550
5	Water Sprinkler	2	500	500
6	Spade	3	50	300
7	Showl	3	50	300
8	Measuring Tape	1	200	400
9	Drilling machine	1	8000	8000
10	Trolley	1	800	1600
11	Weighing Balance with weights	1	2000	2000
12	Hoe Long (Pail)	3	500	250
13	Hoe Small (Khurpa)	3	200	100
14	Pick Axe (Ganti)	6	100	300
	Total			24,440

<u>Furniture & Fixture at (AEC)</u>				
No.	Name of Item	No. Required	Price	Total
1	Tables	2	7000	14000
2	Chairs	8	2000	16000
3	Alma rah	2	8000	16000
4	Rack	2	1000	2000
5	Soft Board	1	2000	2000
7	Display Board	1	1500	1500
8	Flip chart board	1	1000	1000
9	Stationary	1	3000	3000
	Total			55,500

<u>Agricultural Inputs</u>		
No.	Pesticides	Price Rs.
1	Insecticides	5000
2	Funjicites	5000
3	Rodenticites	5000
	Total	15,000

<u>Summary</u>		
Category – III <u>Agriculture Extension Centre (AEC)</u>		
Facilities	Cost in Rs.	Cost US \$
Estimated cost for construction of (AEC)	2,104,000	35,066
Compound wall	300,000	5,000
Estimated cost of the furniture and fixture	55,500	925
Estimated cost of the equipment/instrument	24,440	407
Estimated cost of Pesticides	15,000	250
Total Cost	2,498,940	41,648

Unit Wise estimated Cost

<u>Facilities</u>	<u>Cost in Rs</u>	<u>Cost in US \$</u>
Cost for one Tehsil Agriculture Office (TAO)	8,088,070	134,801
Cost for one Agriculture Circle Office (ACO)	7,299,270	121,654
Cost for one Agri. Extension Centre (AEC)	2,498,940	41,649

**Detailed List of Damaged / Destroyed Infrastructure of Departments of
Agriculture Government of AJK & NWFP**

State Level Facilities and Farms in AJK & NWFP					
Damages AJ&K					
No.	Facility	Location	Union Council	Damaged	Destroyed
1	Directorate General Agriculture (Agriculture Complex/Agriculture Resource Center and Labs)	Shaukat Lines	Shaukat Lines		69,188,000
	Directorate of Agriculture Extension, Training & Adoptive Research	"	"		"
	Directorate of Agriculture Research & Technical Support Services				"
	Director Parks & Horticulture				"
	Agronomist				"
2	Agriculture Labs				30,000,000
	Soil Fertility lab				"
	Integrated Pest Management lab				"
	Plant Pathology lab				"
	Mushroom culture Lab				"
	Seed Quality Control Lab				"
	Agriculture Farms & Nurseries				22,000,000
3	Adaptive Research Unit Garhi Dopata				"
4	Maize Research Farm Garhi Dopatta				"
5	Maize Research Farm Danna				"
6	Fruit Plant Nursery Harrama				"
7	Vegetable Farm Jalaabad				"
8	Fruit Plant Nursery Chikkar				"
9	Adm. Office, Garages and Godowns	"	"	√	
10	Deputy Director, Fruit & Vegetable	Jalalabad.	Jalalabad.		15,000,000
	Assistant F & V Specialist	"	"		√
11	Godown	Shaukat Lines	Shaukat Lines		√
12	Irrigation Buildings	"	"		√
13	Agriculture Engineer	"	"	√	
14	Ten Residences & Servant Quarters.	"	"		15,000,000
15	Rest House	"	"	√	
16	Mosque	"	"	√	
17	Garages	"	"	√	
18	Fertilizer Store	Dana		√	
19	Fertilizer Store	Hatian Bala			3,500,000
20	Fertilizer Store	Dhani Noseri	Panjgran		3,500,000
21	Fertilizer Store	Kahori	Kahori		3,500,000
22	Fertilizer Store	Dhani Sidaan	Dhani Saydian	√	
23	Agri Godown	Saisar	Sailan Sasar		3,500,000
24	Agri Godown	Arja	Malot	√	
25	Agri Godown	Gujdar	Badhal		3,500,000
26	Store Keeper Res.	Arja	Malot	√	
27	Agri Godown	Kahuta			3,500,000

28	Agri Godown	Dheerkot	DheerkotTown		3,500,000
29	Agriculture Farm/Fruit Plant Nursery/ Agriculture Nursery	Chamiati	Chamiati		1,500,000
30	Maize Research Farm/Assistant Agronomist Off. & Res.	Paddar	Bagh		7,299,270
31	Potato Research Farm/Agriculture Farm	Sudhan Galli	Sudhan Galli		3,400,000
32	Assistant Research Officer/Fruit Plant Nursery	Trar	Town		2,698,940
	Agriculture Farm/Fruit Plant Nursery/Shed Agriculture Engineering & Farm	Devi Gali	Town		
Damages NWFP					
33	Potato Research Farm Sharan				10,000,000
1	Hostel	Sharan	Sharan		
2	Store	"	"		
3	Office & Lab.	"	"		
4	Garages	"	"		
5	Machinery Shed	"	"		
34	Potato Research Farm Battakundi				
1	Hostel	Battakundi	Battakundi	√	
2	Store	"	"	√	
3	Office & Lab.	"	"	√	
4	Garages	"	"	√	
5	Machinery Shed	"	"	√	
35	Hazara Agriculture Research Station Abbottabad				13,826,000
1	Farm Manager Office	Abbottabad	Abbottabad	√	
2	Additional Rooms	"	"	√	
3	Green house	"	"	√	
4	Sheds	"	"	√	
5	Overhead Water Tank	"	"	√	
6	Batchelor hostel	"	"	√	
7	Residential quarter Cat. B O3 Nos.	"	"	√	
8	Residential quarter Cat. C O2 Nos.	"	"	√	
9	Residential quarter Cat. E O2 Nos.	"	"	√	
10	Residential quarter Cat. G O1 Nos.	"	"	√	
11	Road work	"	"	√	
12	Boundary Wall	"	"	√	
13	Boundary Fencing	"	"	√	
14	Main Gate	"	"	√	
15	Residences Agriculture 4 No.	Abbottabad		√	
36	Agriculture Farm Baffa				
	Buildings & Residences	Baffa	Baffa	√	
	Total	105			231,412,210

Note: The office Facilities at State/Province, district and field level in AJK and NWFP are different as for as building structure and accommodation is concerned. It all depends upon the strength and establishment, topography and available space. The estimates and building plan should be drawn to reconstruct / repair of these structures as per need.

<u>Field Facilities of Departments of Agriculture Govt. of AJK & NWFP</u>					
<u>Field Facilities AJ&K</u>					
<u>District Muzaffarabad</u>					
No.	Facility	Location	Union Council	Damaged	Destroyed
<u>Category- I Tehsil Agriculture Office (TAO)</u>					
1	Tehsil Agriculture Office	Muzaffarabad	city		8,088,070
2	Tehsil Agriculture Office	Hatian Bala	Town		8,088,070
3	Tehsil Agriculture Office	Pattika	Pattika		8,088,070
<u>Category - II Agriculture Circle office (ACO)</u>					
1	Agriculture Circle Office	Domel	city		7,299,270
2	Agriculture Circle Office	Ghari Dupata.	Town		7,299,270
3	Agriculture Circle Office	Chakar	Town		7,299,270
4	Agriculture Circle Office	Lamnian	Lamnian		7,299,270
5	Agriculture Circle Office	Danna.	Danna	√	
6	Agriculture Circle Office	Kumi Kot.	Komikkot		7,299,270
7	Agriculture Circle Office	Chattar Class	Chattar Class		7,299,270
8	Agriculture Circle Office	Kahori.	Kahori.		7,299,270
9	Agriculture Circle Office	Dhani / Pangran	Pangran		7,299,270
<u>Category - III Agriculture Extension Centre (AEC)</u>					
1	Agriculture Extension Centre	Balan	Kachili.		2,498,940
2	Agriculture Extension Centre	Kot Taraila	"		2,498,940
3	Agriculture Extension Centre	Kachili.	"		2,498,940
4	Agriculture Extension Centre	Charakpura	Charakpura		2,498,940
5	Agriculture Extension Centre	Anwar Sharif	"		2,498,940
6	Agriculture Extension Centre	Kamar bandi	"		2,498,940
7	Agriculture Extension Centre	Dhani Bakalan	Hattian Balla		2,498,940
8	Agriculture Extension Centre	Saran	"		2,498,940
9	Agriculture Extension Centre	Gujar Bandi	Gujar Bandi		2,498,940
10	Agriculture Extension Centre	Jhand Garan	Jhand Gran		2,498,940
11	Agriculture Extension Centre	Timbi	"		2,498,940
12	Agriculture Extension Centre	Jeeswah Bazar	Komi Kot		2,498,940
13	Agriculture Extension Centre	Kot	"		2,498,940
14	Agriculture Extension Centre	Ghail	"	√	
15	Agriculture Extension Centre	Chattar Class	Chattar Class		2,498,940
16	Agriculture Extension Centre	Barsala	"		2,498,940
17	Agriculture Extension Centre	Rara	"		2,498,940
18	Agriculture Extension Centre	Dolai.	"		2,498,940
19	Agriculture Extension Centre	Khunbanway	Chattar Domel		2,498,940
20	Agriculture Extension Centre	Majoie.	"		2,498,940
21	Agriculture Extension Centre	Subri	"		2,498,940
22	Agriculture Extension Centre	Tandali	"		2,498,940

23	Agriculture Extension Centre	Mera Khurd.	Mera Kalan		2,498,940
24	Agriculture Extension Centre	Mushtamba	"		2,498,940
25	Agriculture Extension Centre	Naghni Khairkot	Chikar		2,498,940
26	Agriculture Extension Centre	Chikar	"		2,498,940
27	Agriculture Extension Centre	Noseri.	Panjkot		2,498,940
28	Agriculture Extension Centre	Katkair	Katkair		2,498,940
29	Agriculture Extension Centre	Rahim Kot	"		2,498,940
30	Agriculture Extension Centre	Salmia.	Silmia		2,498,940
31	Agriculture Extension Centre	Indra Seri	"		2,498,940
32	Agriculture Extension Centre	Noon Babla	"		2,498,940
33	Agriculture Extension Centre	Chakothi	Chanari		2,498,940
34	Agriculture Extension Centre	Chanari	"		2,498,940
35	Agriculture Extension Centre	Bani Hafiz	Sena Daman		2,498,940
36	Agriculture Extension Centre	Sena Daman	"		2,498,940
37	Agriculture Extension Centre	Chanal Bang	Chanal Bang		2,498,940
38	Agriculture Extension Centre	Nuran	"		2,498,940
39	Agriculture Extension Centre	Khalana	Khalana		2,498,940
40	Agriculture Extension Centre	Leepa	Leepa		2,498,940
41	Agriculture Extension Centre	Danna	Danna	√	
42	Agriculture Extension Centre	Rajputhi	"		2,498,940
43	Agriculture Extension Centre	Pothian	"	√	
	Total				182,615,970
	*New Proposed Buildings				
44	Agriculture Extension Centre	Bararkot	Bararkot		2,498,940
45	Agriculture Extension Centre	Kardala	Mzd		2,498,940
46	Agriculture Extension Centre	Balandkot	Barsala		2,498,940
47	Agriculture Extension Centre	Kaimanja	Kaimanja		2,498,940
48	Agriculture Extension Centre	Rajpian	Talgran		2,498,940
49	Agriculture Extension Centre	Saidpur	Saidpur		2,498,940
50	Agriculture Extension Centre	Batdara	Bheri		2,498,940
51	Agriculture Extension Centre	Heerkotli	Heerkotli		2,498,940
52	Agriculture Extension Centre	Gheenj	Gheenj		2,498,940
53	Agriculture Extension Centre	Dhani Noseri	Noseri		2,498,940
54	Agriculture Extension Centre	Balgran	Balgran		2,498,940
55	Agriculture Extension Centre	Langla	Langla		2,498,940
56	Agriculture Extension Centre	Banamula(Gai P)	Banamula		2,498,940
	Total				32,486,220
	Grand Total				215,101,990

<u>District Neelum</u>					
No.	Facility	Location	Union Council	Damaged	Destroyed
<u>Category - I Tehsil Agriculture Office (TAO)</u>					
1	Tehsil Agriculture Office	Authmoqam	Town		8,088,070
<u>Category - III Agriculture Extension Centre (AEC)</u>					
1	Agri. Ext. Centre	Sharda	Sharda		2,498,940
Total					10,587,010
*New Proposed Buildings					
2	Agriculture Extension Centre	Barian	Barian		2,498,940
3	Agriculture Extension Centre	Jura	Ashkot		2,498,940
4	Agriculture Extension Centre	Kundal shahi	Kundal shahi		2,498,940
5	Agriculture Extension Centre	Lawat	Lawat		2,498,940
6	Agriculture Extension Centre	Dudnial	Dudnial		2,498,940
Total					12,494,700
Grand Total					23,081,710

<u>District Bagh</u>					
S.No.	Facility	Location	Union Council	Damaged	Destroyed
<u>Category - I Tehsil Agriculture Office (TAO)</u>					
1	Tehsil Agriculture Office	Bagh	City		8,088,070
2	Tehsil Agriculture Office	Dheerkot	Dheerkot Town	√	
3	Tehsil Agriculture Office	Kahuta	Kahuta Town		8,088,070
<u>Category - II Agriculture Circle Office (ACO)</u>					
1	Agriculture Circle Office	Chattar	Dharray		7,299,270
2	Agriculture Circle Office	Mallot	Mallot		7,299,270
3	Agriculture Circle Office	Saisar	Salian Saser		7,299,270
4	Agriculture Circle Office	Rangla	Rangla		7,299,270
<u>Category - III Agriculture Extension Centre (AEC)</u>					
1	Agriculture Extension Centre	Bagh	City		2,498,940
2	Agriculture Extension Centre	Sudhan Gali	Birpani		2,498,940
3	Agriculture Extension Centre	Birpani	Birpani		2,498,940
4	Agriculture Extension Centre	Chattar No. 1	Bani Pasari	√	
5	Agriculture Extension Centre	Paddar	Bagh		2,498,940
6	Agriculture Extension Centre	Mahaldara	Birpani		2,498,940
7	Agriculture Extension Centre	Ratnoi	Birpani		2,498,940
8	Agriculture Extension Centre	Rarban	Thub		2,498,940
9	Agriculture Extension Centre	Rawali	Rawali	√	
10	Agriculture Extension Centre	Chitra Topi	Topi		2,498,940
11	Agriculture Extension Centre	Bagloor	Bagh		2,498,940
12	Agriculture Extension Centre	Chattar No.2	Dharray		2,498,940
13	Agriculture Extension Centre	Rara	Dharray		2,498,940
14	Agriculture Extension Centre	Dhuli	Nar S. A. Khan		2,498,940

15	Agriculture Extension Centre	Nar Sher Ali	Nar S. A. Khan		2,498,940
16	Agriculture Extension Centre	Swanj	Swanj		2,498,940
17	Agriculture Extension Centre	Kharal Maldialan	Bhoont Bhaian		2,498,940
18	Agriculture Extension Centre	Kharal Ghayalan	Bhoont Bhaian		2,498,940
19	Agriculture Extension Centre	Bhoont Bhaian	Bhoont Bhaian	√	
20	Agriculture Extension Centre	Choki	Bagh		2,498,940
21	Agriculture Extension Centre	Nomanpura	Banipasari	√	
22	Agriculture Extension Centre	Hari Gahel	Juglari		2,498,940
23	Agriculture Extension Centre	Juglari	Juglari		2,498,940
24	Agriculture Extension Centre	Mallot	Mallot		2,498,940
25	Agriculture Extension Centre	Panyali	Bani Pasari		2,498,940
26	Agriculture Extension Centre	Pail	Mallot		2,498,940
27	Agriculture Extension Centre	Meetgali	Thub	√	
28	Agriculture Extension Centre	Thub	Thub	√	
29	Agriculture Extension Centre	Jheer	Thub		2,498,940
30	Agriculture Extension Centre	Gugdar	Badhal		2,498,940
31	Agriculture Extension Centre	Agri. Godown	Bagh		2,498,940
32	Agriculture Extension Centre	Baheedi	Baheedi		2,498,940
33	Agriculture Extension Centre	Chirikot	Sangal		2,498,940
34	Agriculture Extension Centre	Khurshidabad	Khurshidabad	√	
35	Agriculture Extension Centre	Kahuta	Kalali	√	
36	Agriculture Extension Centre	Chanjal	Cahnjal	√	
37	Agriculture Extension Centre	Daigwar	Daigwar		2,498,940
38	Agriculture Extension Centre	Chamiati	Chamiati	√	
39	Agriculture Extension Centre	Chamankot	Chamiati	√	
40	Agriculture Extension Centre	Munhasa	Hillsurang		2,498,940
41	Agriculture Extension Centre	Sangar Pathara	Hillsurang	√	
42	Agriculture Extension Centre	Kotli	Chumiati	√	
43	Agriculture Extension Centre	Neelabutt	Dheirkot		2,498,940
44	Agriculture Extension Centre	Makhiala	Makhiala		2,498,940
45	Agriculture Extension Centre	Ghaziabad	Makhiala		2,498,940
46	Agriculture Extension Centre	Arja	Malot	√	
47	Agriculture Extension Centre	Salian	Salian Saser		2,498,940
48	Agriculture Extension Centre	Saisar	Salian Saser		2,498,940
49	Agriculture Extension Centre	Chirala	Chirala		2,498,940
50	Agriculture Extension Centre	Sohawa Sharif	Chirala	√	
51	Agriculture Extension Centre	Narakot	Saisar	√	
52	Agriculture Extension Centre	Hans Choki	Rangla		2,498,940
53	Agriculture Extension Centre	Beesbagla	Rangla		2,498,940
54	Agriculture Extension Centre	Rangla	Rangla		2,498,940
	Total				125,734,400

<u>District Poonch</u>					
No.	Facility	Location	Union Council	Damaged	Destroyed
<u>Category - I Tehsil Agriculture Office (TAO)</u>					
1	Tehsil Agriculture Office	Rawalakot	City	√	
2	Tehsil Agriculture Office	Abbaspur	Town	√	
3	Tehsil Agriculture Office	Hajeera	Town	√	
<u>Category - II Agriculture Circle Office (ACO)</u>					
1	Agriculture Circle Office	Tarar		√	
2	Agriculture Circle Office	Datote		√	
<u>Category - III Agriculture Extension Centre (AEC)</u>					
1	Agriculture Extension Centre	Bangoin	Bangoin		2,498,940
2	Agriculture Extension Centre	Thorar	Thorar		2,498,940
3	Agriculture Extension Centre	Singola	Singola	√	
4	Agriculture Extension Centre	Shokatabad	Pachirt		2,498,940
5	Agriculture Extension Centre	Namjar	Khali Draman		2,498,940
6	Agriculture Extension Centre	Davigali	Bantani		2,498,940
7	Agriculture Extension Centre	Rarbun	Pakhar		2,498,940
	Total				14,993,640

<u>Field Facilities NWFP</u>					
<u>District Abbotabad</u>					
No.	Facility	Location	Union Council	Damaged	Destroyed
	<u>Category - II Agriculture Circle Office (ACO)</u>				
1	Agriculture Circle Office I & II		Abbotabad		7,299,270
					7,299,270

<u>District Mansehra</u>					
No.	Facility	Location	Union Council	Damaged	Destroyed
	<u>Category - I Tehsil Agriculture Office (TAO)</u>				
1	Tehsil Agriculture Office	Mansehra	City	√	
	<u>Category - II Agriculture Circle Office (ACO)</u>				
1	Agriculture Circle Officer	Mansehra	City	√	
2	Agriculture Circle Officer	Ballakot	Ballakot		7,299,270
3	Agriculture Circle Officer	Baffa	Baffa		7,299,270
	Total				14,598,540

<u>District Battagram</u>					
		-			
No.	Facility	Location	Union Council	Damaged	Destroyed
	<u>Category - I Tehsil Agriculture Office (TAO)</u>				
1	Tehsil Agriculture Office	Battagram	City		8,088,070
2	Tehsil Agriculture Office	Allai	Town		8,088,070
	<u>*New Proposed Buildings</u>				
	<u>Category - III Agriculture Extension Centre (AEC)</u>				
1	Agriculture Extension Centre	Bamian	Bamian		2,498,940
2	Agriculture Extension Centre	Khozabanda	Khozabanda		2,498,940
3	Agriculture Extension Centre	Battamori	Battamori		2,498,940
4	Agriculture Extension Centre	Thakot	Thakot		2,498,940
5	Agriculture Extension Centre	Palmal	Palmal		2,498,940
6	Agriculture Extension Centre	Hotel Batkol	Hotel Batkol		2,498,940
7	Agriculture Extension Centre	Rashang	Rashang		2,498,940
8	Agriculture Extension Centre	Shakargal	Shakargal		2,498,940
9	Agriculture Extension Centre	Pashto	Pashto		2,498,940
	Total				38,666,600

<u>District Kohistan</u>					
No.	Facility	Location	Union Council	Damaged	Destroyed
<u>Category - I Tehsil Agriculture Office (TAO)</u>					
1	Tehsil Agriculture Office	Pattan	Town		8,088,070
2	Agri. Ext. Centre & Nursery	Pattan Khas	Pattan	√	
<u>*New Proposed Buildings</u>					
<u>Category - I Tehsil Agriculture Office (TAO)</u>					
1	Tehsil Agriculture Office	Dassu	Town		8,088,070
2	Tehsil Agriculture Office	Palas	Town		8,088,070
<u>Category - III Agriculture Extension Centre (AEC)</u>					
1	Agriculture Extension Centre	Seer Ghaziabad	Shalkanabad		2,498,940
2	Agriculture Extension Centre	Shorakot	Shorakot		2,498,940
3	Agriculture Extension Centre	Dubair (Village)	Dubair Balla		2,498,940
4	Agriculture Extension Centre	Karang	Karang		2,498,940
5	Agriculture Extension Centre	Shatia	Harban		2,498,940
Total					36,758,910

<u>District Shangla</u>					
No.	Facility	Location	Union Council	Damaged	Destroyed
Government building does not exist					
<u>*New Proposed Buildings</u>					
<u>Category - I Tehsil Agriculture Office (TAO)</u>					
1	Tehsil Agriculture Office	Alpuri	Town		8,088,070
2	Tehsil Agriculture Office	Puran	Town		8,088,070
<u>Category - III Agriculture Extension Centre (AEC)</u>					
1	Agriculture Extension Centre	Kotkay	Malak Khel		2,498,940
2	Agriculture Extension Centre	Lilownai	Lilownai		2,498,940
3	Agriculture Extension Centre	Chakisar	Chakisar		2,498,940
4	Agriculture Extension Centre	Shahpur	Shahpur		2,498,940
5	Agriculture Extension Centre	Olandar	Olandar		2,498,940
6	Agriculture Extension Centre	Besham	Besham		2,498,940
7	Agriculture Extension Centre	Sanila	B Puran		2,498,940
8	Agriculture Extension Centre	Chowga	Chowga		2,498,940
9	Agriculture Extension Centre	Martung	Martung Khas		2,498,940
Total					38,666,600

*The new proposed buildings in Kohistan, Shangla, Battagram, Muzaffarabad and Neelum districts are included in the document on the proposal of the Departments of Agriculture AJ&K and NWFP, however construction would only be possible / done on the provision of land by their respective Governments.

<u>summary</u>	
<u>Azad Jammu & Kashmir (AJ&K)</u>	<u>Cost</u>
Muzaffarabad (Additional New Proposed)	215,101,990
Neelum (Additional New Proposed)	23,081,710
Bagh	125,734,400
Poonch	14,993,640
Total	378,911,740
<u>North Westren Frontier Province (NWFP)</u>	
Mansehra	14,598,540
Kohistan (Additional New Proposed)	36,758,910
Batagram (Additional New Proposed)	38,666,600
Abbottabad	7,299,270
Shangla (Additional New Proposed)	38,666,600
Total	135,989,920
<u>Total AJK & NWFP</u>	514,901,660
State Level & Farm Facilities in AJK & NWFP	231,412,210
Training	10,576,000
Total	756,889,870
Ground Leveling @ 1%	7,568,899
Contingency @ 2.5%	19,111,470
Total Estimated Cost	783,570,239
Total Estimated Cost US \$	<u>* 13,059,504</u>
<u>* This amount shows the total estimated expenditure on the reconstruction of the facilities that have been destroyed and need to be reconstructed anew. The assessment of retrofitting / repairing the damaged buildings may vary for each place and not estimated here.</u>	

The people met during the preparation of the document

- 1) Ahmad Raza Sarwar, Director General Planning-I ERRA
- 2) Tim Vaessen, Sr. Emergency Coordinator FAO Pakistan & Afghanistan
- 3) Christopher F. Baker, Consultant Project Planning & Management FAO (Rural Development)
- 4) Shahrukh Arbab, Secretary Agriculture, Livestock & Cooperatives, NWFP
- 5) Akram Sohail, Secretary Agriculture and Animal Husbandry, AJK
- 6) Chaudhary Haq Nawaz Khan, DG, Agriculture, AJK
- 7) Allah Dad Khan, D.G Agriculture (Acting) NWFP
- 8) Prof. Sadaqat Hayat Hanjra, UAF
- 9) Chaudhary Abdul Shakoor, Director Agriculture Extension, AJK
- 10) Muhammad Bashir Butt, Director Research, Agriculture, AJK
- 11) Sh. Nisar Ahmed, Deputy Director Fruit & Vegetable AJ&K
- 12) Ch. Safdar, Deputy Director Agriculture extension, Muzaffarabad, AJK
- 13) Sartaj Khan, Senior Scientific Officer, Crop Sciences, NARC
- 14) Dr. Tanveer, NARC, Islamabad
- 15) Farhatullah Khan, Programme Coordinator, Agri Extension, AIOU, Islamabad
- 16) Syed Nazar Shah, Programme Manager DRU Abbotabad
- 17) Dr. Rashid, Veterinary Officer, Livestock Department, Abbotabad
- 18) Dr. Akhter Hussain, District Officer Livestock, Abbotabad
- 19) Sardar Younis, District Agriculture Officer, Abbotabad
- 20) Jehanzeb Khan, Director Barani Project, Abbotabad
- 21) Mukhtar-ul-Rehman, Agriculture Officer, Abbotabad
- 22) Muhammad Tariq, Agriculture Officer, Nathia Gali, Abbotabad
- 23) Mr. Ahsan-ul-Haq, Vegetable Breeder, Hazara Research Station
- 24) Mr. Nayyer Iqbal Khan, Rearch Officer, Hazara Research Station
- 25) Sayed Riaz Ahmad Shah, District Agriculture Officer, Mansehra
- 26) Aurangzeb, Agriculture Officer, Mansehra
- 27) Wajid Ahmad, Agriculture Officer, Mansehra
- 28) Dr. Muhammad Rafique Mughal, Livestock Officer, mansehra
- 29) Ali Akber Khan, District Livestock Officer, Mansehra
- 30) Hadyat Ali Shah, Leaf Officer, Pakistan Tobacco Company
- 31) Dr. Ghufuran Ullah, Director, Livestock Research Farm, Jabba
- 32) Dr. Ibrar-ul-Hassan, Veternary Officer, Livestock Research Farm, Jabba
- 33) Muhammad Ashraf, District Coordinor, Mansehra
- 34) Mr. Fareed Programme Manager, DRU, Battagram
- 35) Ayaz Gul, District Planning Officer, DRU, Battagram
- 36) Mr. Muhammad afzal, District Officer, Water Management
- 37) Muhammad Zair Khan, EDO Agriculture Battagram
- 38) Sher Bahadur Khan, Programme Manager, DRU, Dassu
- 39) Noor-ul-Hadi, Senior M&E Officer, DRU, Dassu
- 40) Muhammad Tariq Shah, Programme Engineer, DRU, Dassu
- 41) Saeed ullah, District Director, Area Development Project , Phase II

Literature Cited

- Ahamad, M., & Ali, T. (2003). Strengthening Education Research Extension Linkages for Effective Agriculture Extension Services. Experience of Pakistan. Paper Presented to the International APO Seminar on Enhancement of Extension System, University of Agriculture, Faisalabad, Pakistan.
- Anderson, J. R., Feeder, G. (2003). Rural Extension Services. The World Bank, Policy Research Working Paper, 2976. Washington DC.
- Chaudhari, M. Y. (2005). A Report on Restructuring Agricultural Extension in Punjab, Government of Pakistan, Ministry of Food, Agriculture & Livestock, Islamabad.
- Government of Pakistan (2000). Agricultural Strategies for the First Decade of New Millennium. Ministry of Food, Agriculture and Livestock. Pakistan Agriculture. Research Council, Planning and Development Division. Islamabad.
- Khan, A. I. (2003). Strengthening Education -Research -Extension Linkages for Effective Agriculture Extension Services, Experience of Pakistan. Paper Presented to the International APO Seminar on Enhancement of Extension System, University of Agriculture Faisalabad, Pakistan.
- Malik, W. and Prawl, W. (1993). Reforming Agricultural Extension in Pakistan, Proceedings of National Workshop on Reforming Agricultural Extension in Pakistan, 24-26 October. Pakistan Agricultural Research Council (PARC), Islamabad.
- Radhakrishana R. B., & Bowen, B. E. (1991). Agricultural Extension Problems: Perceptions of Extension Directors. *Int. J. of Ext. Edu.*, 27(3-4):7-15.
- Rivera, M. M. K. Qamar & Van Crowder, L. (2000). Agricultural and Rural Extension Worldwide Options for Institution Reform in the Developing Countries. Food and Agricultural Organization of the United Nations (FAO). Rome.
- Vijayaragavan, K. and Singh, Y. P. (1992). Managing Human Resources Within Extension, Human Resource Planning for Extension job. Accessed from: <http://www.fao.org/docrep/W5830E/w5830e0h.htm>.
- World Bank (2002). Decentralization of Agricultural Extension: Lessons and Good Practices. World Bank, Washington DC.
- Oakley, P. & Garforth, C. (1989). Guide to Extension Training. Food and Agricultural Organization of the United Nations (FAO), Rome.

Oakley and Garforth (1989) described that
(Vijayaragavan & Singh, 1992)
(Radhakrishna and Bowen, 1991).

According to Rivera & Qamar (2003)
(Khan, 2003a), Decentralization is often an important aspect of extension reforms (World Bank,
2002)., (Anderson and Feder, 2003), (Malik and Prawl, 1993).

(Axinn, 1988)., (Ahmad and Ali, 2003), (Govt. of Pakistan, 2000