



*Evaluation of FAO interventions  
carried out under  
the Central Emergency Response Fund (CERF)  
in Pakistan*

**Final Report**

By

Bahadar Nawab, PhD  
Paigham Shah, PhD  
Shagufta Jeelani

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## 1. Projects description

### 1.1 Overview

Due to its geophysical and geopolitical situation, Pakistan is prone to frequent natural and man-made disasters and crises that continuously engage the humanitarian and relief agencies. Along with other donors support, Pakistan is therefore one of the major recipients of the CERF. The following five CERF projects have been implemented by FAO since 2006 in the country (Table 1).

**Table 1: CERF-funded, FAO-implemented projects in Pakistan**

CERF file reference	FAO Symbol	Title	Amount Approved (US\$)	Start date	End date
07-FAO-025	703	Support for the restoration of crop production and food availability [after Cyclone Yemyin in Balochistan and Sindh]	417,300	13 Jul 07	12 Oct 07
08-FAO-006	801	Emergency assistance to crop production and livestock protection and strengthening to rapidly restore agricultural based livelihoods in flood-affected areas of Balochistan and Sindh [underfunded window]	1,500,000	07 Mar 08	31 Dec 08
08-FAO-026	802	Emergency food and agriculture production support for food insecure groups affected by unprecedented surges in food prices	1,200,406	19 Sep 08	18 Dec 08
08-FAO-041	803	Emergency food and livelihoods assistance for flood-affected persons in Peshawar district of NWFP	399,994	22 Sep 08	22 Dec 08
08-FAO-062	805	Agriculture and livestock intervention for affected population of Balochistan earthquake	101,436	30 Nov 08	01 Mar 09
<b>Total</b>			<b>3,619,136</b>		

The present evaluation, undertaken as part of a broader evaluation of FAO CERF-funded projects worldwide, was designed to concentrate on the most recent projects implemented towards the end of 2008 – early 2009 that includes projects 802, 803 and 805. These projects were expected to be comparatively easier to evaluate as farmers were more likely to remember the intervention than for older projects. There were also travel limitations in place for the two projects addressing Cyclone Yemyin in Balochistan and Sindh (Projects 703 and 801), and evaluating these two projects could therefore have posed logistical difficulties as well as security risks.

The details of the three evaluated projects are given in Table 2 overleaf.

**Table 2: Overview of evaluated projects**

Project code	OSRO/PAK/802/CHA 08-FAO-026	OSRO/PAK/803/CHA 08-FAO-041	OSRO/PAK/805/CHA 08-FAO-062
Project title	Emergency food and agriculture production support for food insecure groups affected by unprecedented surge in food prices	Emergency food and livelihood assistance for flood affected persons in Peshawar District of North West Frontier Province (NWFP)	Agriculture and livestock intervention for affected population of Ziarat in Balochistan earthquake
Budget US\$	1,200,406	399,994	101,436
Crisis the project intended to address	Soaring food prices, June 2008, in Buner- Shangla	Floods in August, 2008, in Peshawar, NWFP	Earthquake in Oct 2008 in Balochistan
Overall objectives	To assist at least 8,000 food insecure farming household (48,000 people) cope better with food crises which has emerged as a result of declining agriculture production and unprecedented surge in food prices	To assist 1,850 households most vulnerable flood victims in prompt resumption of their agriculture based livelihoods by restocking lost poultry, supporting surviving livestock and distribution of inputs critical to local agriculture production.	To enable at least 1,000 needy and vulnerable earthquake affected households in Balochistan to restore agriculture-based livelihoods in a situation of otherwise increasing long-term hunger and destitution
Main activities under taken and deliverable	Delivered 400 tones of wheat seed, 400 tones of DAP, 400 tones of urea, 80 tones of lentil seed, 8,000 sachets of vegetable seeds to 8,000 households. Additionally 100 tones of urea to 2,000 farming households. <sup>1</sup> Extension material for 8000 households.	Delivered 84,400 poultry birds, 3,450 bags of poultry feed, 138.75 tones of compound animal feed, 46.25 tones of wheat seed, 46.25 tones of DAP, 46.25 tones of Urea, 3.7 tones of berseem seed, 1850 sachets of winter vegetable seeds.	Delivered 100 tones of compound animal feed, 300 doses of antibiotics and 575 litres of de-wormers for an estimated 30,000 animals. Constructed 100 animal shelters for 1000 small or 300-500 large ruminants. Extension material for 1,000 households.
Estimate number of beneficiaries	Approximately 85,000 persons in 10,000 households	Approximately 60,775 persons in 7,150 farming households	Approximately 9,300 persons in 1,000 households
Location / geographical coverage	Buner and Shangla Districts of NWFP	Peshawar District of NWFP	Ziarat District of Balochistan
Project duration	3 months	3 months	3 months
Date and length of project final report	Un-dated 9 pages	Un-dated 9 pages	Un-dated 6 pages
Households affected by crisis	156,000	25,000	7,600
Persons per household	8.5	8.5	9.3
Share of affected households benefiting	5.13%	28.6%	13.16%

<sup>1</sup> WFP delivered 1,600 tones of wheat to the same 8000 households.

## 1.2 Soaring food prices in Buner and Shangla (802)

The poor people in Pakistan were severely affected by increase in food prices that started in 2007. In mid 2008, at the request of the Ministry of Food, Agriculture and Livestock (MINFAL), the UN system in Pakistan fielded an interagency assessment mission to explore the effect of increasing food prices and food shortage on livelihood and general welfare of households in Pakistan. The mission found that rising prices and food shortages severely affected the livelihoods, purchasing power for food, human nutrition particularly of infants, women and children, health and capacity to work of many households in different parts of the country<sup>2</sup>. The proportion of households unable to afford medical assistance when sick had risen from 6 percent to 30 percent and large numbers of school- age children stopped their education due to urgent necessity for earning to support themselves and their families. People of the NWFP were more affected by rising prices because of remoteness of some areas, militancy intervention, and terrorism and because of inter-provincial restriction on trade of wheat and wheat flour. Within NWFP, the districts of Buner and Shangla were found to be the most affected by the crisis created by soaring food prices<sup>3</sup> due in part to their geographic isolation.

## 1.3 Flood in Peshawar (803)

On 3-4 August 2008, torrential rains in the vicinity of Peshawar resulted in flash floods that caused 41 deaths, 50 missing people, and many person including children and women injured. More than 100 villages were affected by rain and flood waters; about 25,000 households lost houses, stored food grains, assets, crops and livestock, and more than 200,000 people were displaced. Standing crops on approximately 75,000 acres were destroyed by floods. Poultry, small ruminants, and larger ruminants were badly affected. Agriculture is the main source for food security and livelihood in the flood affected rural areas. About 1,500 families, with widows as head and minor/younger children were without shelter and were on high risk of hunger and malnutrition. Combined with rising food prices, thousands of families plunged into extreme poverty and without intervention by the government, UN and other agencies, they were not in a position to bring their livelihood to normal pre-flood level.

## 1.4 Earthquake in Ziarat (805)

On 28 October 2008, an earthquake reaching 6.4 on the Richter scale jolted Ziarat, Pishin and adjoining districts of Balochistan, causing extensive damages to houses, human population, livestock, crops, cattle sheds, fruit orchards and irrigation structures<sup>4</sup>. Livestock contributes 40 percent of household income in the affected areas. Half of the cattle sheds were damaged. About 35-40,000 domestic animals were affected either directly (killed / injured) or indirectly (loss of shelter, increased health and nutrition risks). Therefore, there was an urgent need to provide feed, health treatments and shelter for the surviving animals especially in the coming harsh winter in this mountainous area.

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<sup>2</sup> High food prices in Pakistan: impact assessment and the way forward. The UN Inter Agency Assessment Mission FAO, UNDP, UNESCO, UNICEF, WFP WHO Prepared at the request of MINFAL, GOP, Islamabad, July 2008.

<sup>3</sup> Ibid

<sup>4</sup> Annual Report of the Humanitarian/Resident Coordinator on the use of CERF Grants - Pakistan. Reporting period January 1 to December 31, 2008.

A needs assessment undertaken following the Multi-Cluster Rapid Assessment Mechanism (McRAM<sup>5</sup>) reported that approximately 3,500 houses were completely destroyed and 4,100 houses were severely damaged. Some 68,000 people were left in need of immediate humanitarian assistance. The McRAM acknowledged that agriculture and livestock were the main sources of livelihood for inhabitants of the area affected by the earthquake<sup>6</sup>.

## **2. Objectives and methodology of the evaluation**

### **2.1 Objective of the evaluation**

The objectives of this evaluation were to:

- Assess the relevance, efficiency, effectiveness, impact and sustainability of FAO-implemented, CERF projects in Pakistan, as well as their connectiveness with longer-term activities (program approach).
- Assess the nature of coordination and partnership of FAO with the partners and relevant UN agencies and government line departments
- Identify the strength and weaknesses of FAO in the implementation of CERF projects and proposed realistic recommendations to improve it.

### **2.2 Methodology**

The team members had a detailed briefing from the FAO evaluation officer. All the projects, the ToR and report outline were discussed in detail. The expectation, potentials hurdles and challenges in conducting the study as well as the importance of the study were discussed.

The team had detail meetings with the officials of relevant UN agencies, government ministries and departments and Implementing Partners (IPs). Series of individual and group interviews and focus group discussions were held with male and female beneficiaries, non-beneficiaries, local politicians, elders and activists in selected villages and union councils of the projects areas. The districts of Peshawar, Buner and Shangla in NWFP and Ziarat in Balochistan were visited by the mission.

Project documentations, need assessments and monitoring reports were thoroughly studied, as well as background information about the objectives of the CERF.

The study was not without limitations. The majority of farmers and even sometime the IPs either forgot the quantity, quality and timings of the inputs they received or were mixing the inputs from FAO with that of other NGOs. They also could not easily recall the detailed process of selection of beneficiaries, the detail of inputs and contribution of the intervention in term of livelihoods improvement and food security. The respondents took considerable time to answer questions and developing consensus. Some times, the team members had to link the aid provided by FAO through IPs and intervention timings with some event to let the farmers recall their memories about FAO assistance. These difficulties could slightly impact

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<sup>5</sup> The McRAM is post-disaster assessment tool based upon a questionnaire designed by the Inter-Agency Standing Committee (IASC) Clusters in Pakistan. The questionnaire is administered by multi-agency field teams using Personal Digital Assistants (PDA) technology.

<sup>6</sup> McRAM 2008. UN joint assessment of earthquake affected areas in Balochistan 1-5 November 2008

the authenticity of information provided by the respondents about FAO assistance and its distribution process.

The people in the affected areas consider any visitor or staff of an aid agency to provide assistance to them. The team therefore had to spend a good deal of time explaining the purpose of the visit. Once the purpose was explained, some village people were less interested in discussions because according to them many other visitors in the past had conducted need assessments but never return for the implementation of the projects they pledged.

There was a general tendency by the farmers to highlight weaknesses and to describe the weaknesses in greater detail while the opposite was true for IPs. More focus was given by farmers on what was not delivered compared to what was delivered in tough conditions as argued by the IPs and FAO. It is however, understandable in circumstances when people lost assets in addition to losses of human lives to exhibit such behaviour. Therefore an attempt was made to document both the weaknesses and strengths of the FAO programme in order to improve weaknesses and to build on successes in future projects.

### **3. Relevance**

#### **3.1 Interventions and peoples' needs**

As majority of the rural population in Pakistan depends upon agriculture for their livelihood, providing agricultural inputs was useful for the restoration of livelihoods for people affected by high prices, flood and earthquake. For example, some poor farmers in Buner and Shangla were unable to purchase quality seed and fertilizers for crop production, and without some support from government, UN agencies and NGOs they would have been unable to produce food for their families. The response of some poor farmers to a question of what was the alternative options if FAO would have not provided seeds and fertilizers was that they would purchased low quality seeds after taking loan or would have gone for tobacco. In both cases the grain production would have been much lower compared to after the FAO interventions.

The flood in Peshawar destroyed household assets including seed, food, feed, poultry and other belongings. Household heads were using whatever resources they had left to rebuild their houses destroyed by the floods. In the absence of FAO assistance, the affected population would not have been able to buy seed, fertilizers, feed and poultry to re-start their farm-based livelihood activities as no significant assistance was provided by the government by that time. Similarly, earthquake-affected households in Ziarat had some surviving animals which needed shelter, feed and health care during the severe up-coming winter months. In the absence of shelter and animal feeds, livestock which is a critical source of livelihood for communities in the area was prone to die. Therefore, the provision of agricultural inputs and support to livestock were critically needed for immediate survival and restoration of agricultural-based livelihood. These interventions not only provided immediate relief in terms of buying agriculture inputs, they also filled a food security gap in subsequent months which could have not developed in the absence of FAO interventions.

### 3.2 Interventions and vulnerable peoples

Generally, the most vulnerable households such as widows and female headed households and poorest segments of communities who met the beneficiary selection criteria were targeted in affected districts of Buner, Shangla, Peshawar and Ziarat. The IPs with the support of FAO and help of local activist and line departments reached the most deserving farmers. In all targeted districts, Pathans are dominating and due to their strict cultural norms, women involved in agriculture are not easily accessible. Therefore, some deserving women were left out in the selection process, which was carried out by men and thus their vulnerability stay for longer period of time.

### 3.3. FAO interventions in the context of CERF grants

The UN Humanitarian Coordinator in Pakistan considers livelihoods protection as an important humanitarian issue and has included flood, high food prices and other disasters affecting crops and livestock as high humanitarian priorities. Both the rapid response and the under-funded windows of CERF were consequently called upon to support livelihoods protection interventions implemented by FAO and in some cases by FAO and WFP working together.

However, the Government of Pakistan – the NDMA in particular – as well as some humanitarian agencies are still reluctant to accept the distribution of agricultural inputs as a relevant emergency and relief activity. FAO needs to use stronger arguments to plead its case and promote itself as both a development and relief organization. During our interaction with farmers and other relevant actors, it was found that, if there is no support to agriculture during an emergency, food insecurity would remain high and people would be kept in a state of emergency and dependency for a longer period than if support was provided to rural livelihoods. The priorities of humanitarian agencies, government and affected people change with time. During the first few days of an emergency, agriculture may not be the priority. For example after the flood and earthquake in Peshawar and Ziarat respectively, the first interventions immediately needed were water, food, shelter and health. However, a week or two later, agriculture must be revived so that people affected by a disaster are able to restart their normal livelihood activities and avoid food shortage in longer run. Therefore, by the time FAO initiated them, the two projects responding to a natural disaster were most relevant.

The relevance of the intervention in Buner and Shangla in response to high food prices, however, is somehow debatable, because the high food prices affected the entire country but only those two districts were supported. However, considering the limited funding, the FAO stated rationale for selecting the two districts was based on their remoteness from food and input supply markets, mountainous nature, and the fact that the area was strongly impacted by militancy.

## **4. Partnership and coordination**

### 4.1 Main partners of FAO

Two local and one international NGO have implemented the three projects funded by the Rapid Response Window. FAO has claimed coordination with various emergency forums like NDMA, PDMA and other UN agencies like UNICEF, UNDP and WFP. However,

during field visits and meetings with various stakeholders, reasonably good coordination of FAO was found only with WFP, both at design and implementation stages. This coordination with WFP has been ongoing in the country since the response to the northern Pakistan earthquake, and reflects the nature of the work and the close linkages between food distribution and food production as the two elements of food security.

The coordination of FAO with other UN humanitarian agencies such as UNICEF, UNHCR, UNHABITAT in emergency was found weak. They were not well informed about FAO work in the field. Similarly, OCHA was not impressed with FAO coordination at various levels and urged FAO to strengthen the agriculture cluster and play a more active role in various coordination forums. This gap in coordination between FAO and other UN agencies also affected recognition of FAO's work in emergency and early recovery.

One of the reasons for this weakness may be the absence of an FAO Emergency Coordinator for some months in 2009. Another one may be that in 2009 the agriculture cluster found itself unable to hold its regular meetings in Peshawar due to security reasons. The cluster meetings shifted to Islamabad, and hence were not well attended by stakeholders who worked in NWFP. FAO has now a permanent cluster coordinator and is working hard to strengthen the agriculture cluster since the beginning of 2010. The mission observed well attended monthly cluster meetings in Peshawar. Today, the agriculture cluster is one of the active and effective clusters. This will definitely improve the FAO coordination with OCHA, UN agencies, relevant government departments and I/NGOs.

On the governmental side, FAO has some technical contacts with the line ministries and departments, but the main relief and rehabilitation authority in Pakistan, the National Disaster Management Authority (NDMA), appeared not to be fully aware of FAO's role in the field of humanitarian assistance before they met with this evaluation mission (except some awareness about the animal shelter project in earthquake-affected Ziarat). At the provincial level, the coordination seems much better with PDMA and PARSAs. However, the NDMA wants more interaction with FAO so that they know what FAO is doing; this is important for the NDMA to prevent duplication in crises and disasters.

The implementing partners – mostly NGOs – were selected based on proven track record of management, technical and logistic capacity, presence and acceptance in the area. No major issue of non-delivering partners was found in the three CERF projects implemented by FAO in Pakistan during 2008, although in some UCs in Peshawar, Shangla and Ziarat, the cases of favouritism in selection and mismanagement including the late delivery of inputs was found. Among the three implementation partnerships, the coordination between Taraqi Foundation and FAO was not as strong as the others, with both partners not completely satisfied by one other's performance. However, by and large all partnerships achieved their targets.

Developing collaboration spirits among partners in design and implementing projects is an area where FAO needs to work more. It needs to highlight its role at all forums and promote close coordination during emergencies, through active participation in joint need assessment, coordination meetings and implementation of projects on the ground.

A list of various UN and government organisations are mentioned in all CERF projects, but during the implementation process, no example of strong collaboration was found with these, except with WFP. The collaboration between FAO and WFP was good, except some problems highlighted by Taraqi foundation (IP in Balochistan earthquake response) related to

their initial ignorance of the fact that WFP would provide food for work in the construction of animal shelters, and some late supply of the food as well. The nature of the emergency responses from other UN agencies may be quite different from FAO's work, which might be the reason for weak collaboration with FAO.

Needs assessment was found to be another weak area of coordination. FAO can do much better if carry out or participate in joint need assessment with other like minded organisation like WFP or IOM.

The collaboration with IPs was found satisfactory in two cases (802 and 803) but lacking in the third project (805). The IP in Balochistan (Taraqi Foundation) was not happy with FAO dealing and correspondence. This IP felt that it had been pressured by FAO to complete the project without considering their feedback about animal shelter design and delays in the implementation. A delay in funds disbursement occurred and in some cases the IP used its own money to continue implementation according to their plan and promises with communities. Close monitoring by FAO in collaboration with the local livestock department was another source of frustration for the Taraqi Foundation. While this close monitoring is appreciated and supported by the evaluation mission, the IP considered it an unwarranted involvement of FAO and Government in their work. For example, the IP complained that the government line departments rejected their selected beneficiaries list and asked them for a new list in consultation with the local community and village elders. The other two IPs (RI and BEST) were quite comfortable with FAO correspondence and technical assistance and vice versa.

However, the IPs expressed some concern that they could not perform the timely intervention because of the frequently changing instructions from FAO. NGOs were of the impression that sometime FAO was asking for too much and too quickly.

#### 4.2 Allocation of project funds

FAO and NGOs were the main actors in the three projects. The roles of government and line departments were sometimes consultative and facilitative but often passive. Therefore, largest part of project funds goes to beneficiaries, followed by the FAO and IPs. The distribution of CERF money among the relative actors is given below.

**Table 3: Repartition of projects budget between FAO, IPs and beneficiaries**

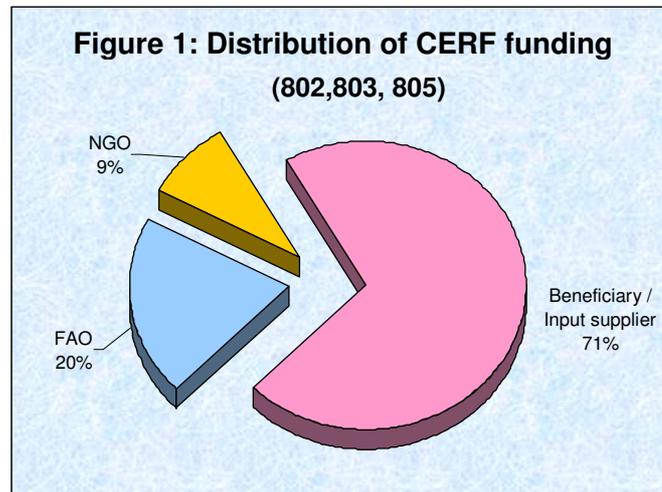
Stakeholders	Project 802		Project 803		Project 805		Total	
	UD \$	%	UD \$	%	UD \$	%	UD \$	%
Beneficiary/supplier	907,698	75.62	244,955	61.24	54,616	53.84	1,207,269	70.94
FAO †	187,957	15.66	120,244	30.06	36,031	35.52	344,232	20.23
NGO	104,751	8.73	34,795	8.70	10,789	10.64	150,335	8.83
Total funded	1,200,406	100.00	399,994	100.00	101,436	100.00	1,701,836	100.00

† It is assumed that (total project budget) – (funds paid to NGO) – (funds spent on purchase of inputs) = (funds used by FAO).

The amount spent on purchases and paid to input suppliers with minor allowance for transportation reached the beneficiaries in the form of inputs. The project funds reaching beneficiaries ranged from 53.84 to 75.62 % of the total. From this point of view, project 802 was the most efficient with 75% of the funds going to beneficiaries in the form of inputs and

project 805 was the least efficient with about 54 % of the funds reaching beneficiaries in the form of inputs. According to NDMA, under the ideal situation, two-thirds of the funds should reach beneficiaries. On average, the share of project funds going to beneficiaries almost reaches 71%, a satisfactory performance.

The following figure shows the overall distribution of three CERF grants (802, 803, and 805) among FAO, IP and beneficiaries.



## 5. Efficiency and timeliness

In theory, a timely arrival of funds makes the response to time-critical needs more effective and avoids a worsening of the situation. Furthermore, FAO also works in agriculture, a sector that is strongly marked by seasonality. Sometimes, one month or even weeks delay in agricultural inputs delivery like seed or DAP may delay their use for up to one year, because if the sowing season is over, the farmers will wait for the next year planting season to use the inputs.

With this in mind, the evaluation mission analysed the timeline of project submission, approval, funding and implementation. Table 4 below show the information related to efficiency and timeliness of the project preparation and Table 5 is about implementation timelines.

### 5.1 Timeliness of funds arrival and project implementation

With one exception, no big issues were found regarding funds disbursement from OCHA to FAO. The overall assessment of the promptness of the provision of CERF funds in case of the three projects in Pakistan is that it took a little longer than expected. The period from project initial submission to disbursement date ranged from 21 to 107 days. If one measure this time from the date of the disaster or crisis escalation, project 805 took almost one month (33 days), project 803 took about one and a half month (49 days), and project 802 took almost 4 month (116 days) from disaster/crisis to disbursement date. The latter case is therefore weak while the two former projects were approved and disbursed in a reasonable time. The ideal of one week time for provision of CERF funds after a crisis is simply not

realistic. One month to one month and a half appears a reasonable performance to conduct needs assessments, design a project, submit it through the HC/RC system and get it approved, signed and funded.

The case of project 802 is a bit muddled because the food price surge was being built since 2007, so no exact date can be given for the start of the crisis. For the purpose of evaluating the length of project preparation, submission and approval, the date of the UN needs assessment in Pakistan was considered as the crisis date.

It appears that all the CERF projects for soaring food prices worldwide took some time to approve. A process similar to the one used in deciding on allocations for the under-funded emergencies window was followed, whereby agencies suggested priority countries and the CERF Secretariat allocated country budgets. Only after this country allocation process was complete, submissions could be assessed and approved. This explains why it took 4 months to approve and fund project 802.

Some procurement orders for 803 were given very early, immediately after the LoU was signed by FAO and OCHA and money was disbursed to FAO. Other procurement orders due to some reasons were given later. The lesson from these rapid procurements under 803 is that FAO can reduce the time for contracting, purchasing, delivery and distribution if they contact the potential IPs and supplier well before the CERF money is granted and keep them in the loop of approval process.

As far as project 805 is concerned, the shelters in Ziarat could only be built in January, quite late for protecting animals from the severe cold in early winter. FAO was probably over-optimistic in thinking that a project submitted on 10 November (i.e. quite fast after the 29 October earthquake) could be approved and implemented before the winter, especially as the shelters required a variety of construction material and skills. The feed distribution under the same project constituted a simpler deliverable, more realistic for a short term project, and it apparently made a difference while the shelters did not.

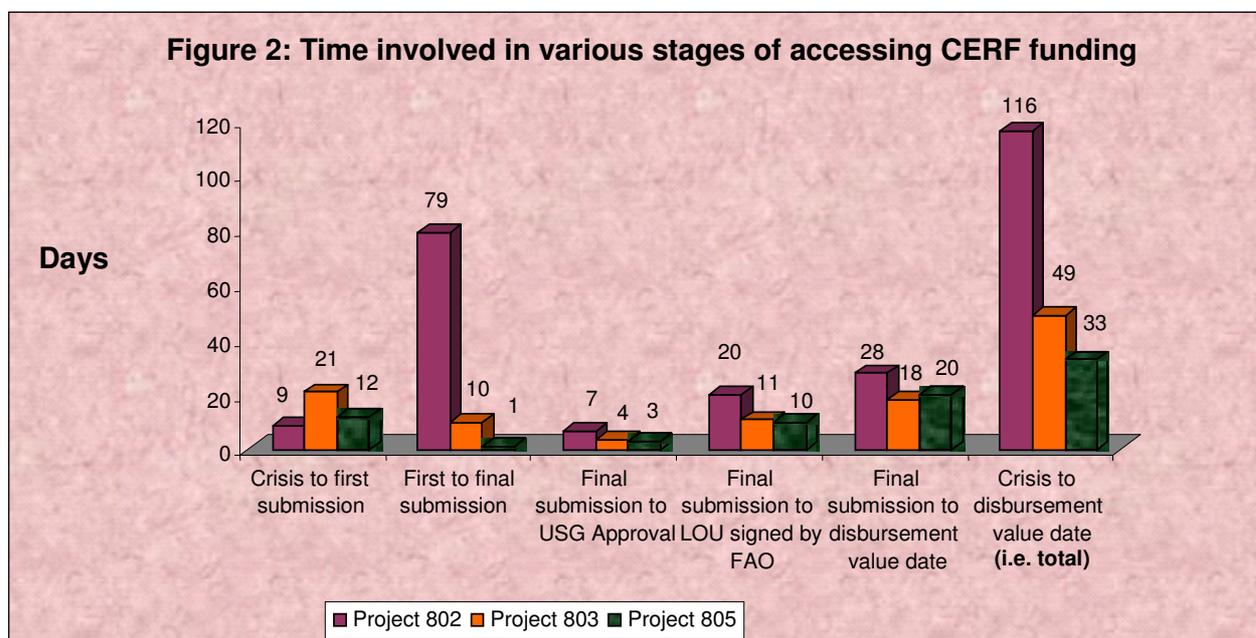
## 5.2 Changes in project activities related to the time lapsed

The team did not find any case of change in project objectives due to time lapsed during approval, though some changes were sometimes desirable like in case of poultry birds distribution in Peshawar: more time should have been invested in getting eggs of the right, adapted breed, hatching them and getting chicks of an older age and larger size. This would have delayed the birds distribution by a few months, hence avoiding the winter months and reducing mortality.

**Table 4. Timelines of project submission, approval and funding**

S. No	Useful Information / Important dates and periods	Project 802	Project 803	Project 805
1	Disaster / crisis	Souring food prices	Floods in NWFP	Earthquake in Balochistan
2	Disaster date	2007 through 2008 (9 Jun & 13 Jul 08)†	3 – 4 Aug 2008	29 Oct 2008
3	First submission of proposal	18-Jun-08	25-Aug-08	10-Nov-08
4	Final submission date	05-Sep-08	04-Sep-08	11-Nov-08
5	Approval of Under Secretary General for Humanitarian Affairs and Emergency Relief Coordinator	12-Sep-08	08-Sep-08	14-Nov-08
6	LoU signed by FAO	25-Sep-08	15-Sep-08	21-Nov-08
7	LoU signed by OCHA	26-Sep-08	16-Sep-08	21-Nov-08
8	Disbursement by OCHA	03-Oct-08	19-Sep-08	25-Nov-08
9	Disbursement value date	03-Oct-08	22-Sep-08	01-Dec-08
10	End of 3 months period	01-Jan-09	21-Dec-08	01-Mar-09

† The price surge was being built since 2007, so no exact date can be given: the date of impact assessment of price spiral and food shortage, by UN system in Pakistan, given in parenthesis, can be considered for evaluation of process of submission and approval.



### 5.3 Delivery of time critical assistance

All projects were implemented more or less in time except project 805 in earthquake-affected Ziarat district. The two other projects are successful examples of time critical assistance which could be presented in various forums like the clusters to other UN organisations, OCHA and the Government to prove that FAO response in emergency is crucial at certain stages. However, it would have been better if the inputs for the wheat crop had been distributed 10 to 15 days earlier in Peshawar, Buner and Shangla districts (projects 803 and 802). The farmers told that the seed was given in *Maghar*<sup>7</sup> (mid November to mid December), the wheat seed and DAP should have been distributed in *Katak* (mid October to mid November). Berseem (Egyptian clover) was also delivered late in Peshawar district, and lentil was delivered a bit late in Buner and Shangla districts. The inputs were delivered during the planting season when some farmers had planted wheat while others were busy in land preparation and purchasing inputs for the targeted crops. It would have been better to distribute *before* the planting season rather than *during* it.

#### *Project 802*

Generally and in spite of the late start of the project (3 October 2008), FAO and its implementing partners tried to distribute inputs in time to catch the planting season of wheat, vegetables and lentils. However, the majority of farmers expressed that it would have far better if the inputs were distributed at least two weeks earlier, as some of them missed the most appropriate sowing season by one or two weeks time. For example, around 23 selected households in Bunerwal could not wait for the FAO seeds as the sowing season was getting over/the farmers wanted to avail the soil moisture from early season showers. Therefore, they managed to get seeds from some other source and planted wheat before they received seed from FAO and thus kept the FAO seeds for the subsequent year. The IPs handed over the seeds to those farmers but not the first instalment of wheat from WFP, as they had “violated” their agreement with FAO. After consultation with the village elders, the IP decided to distribute their share of the first wheat instalment among other poor households with small land-holding.

A procurement order for supplemental urea to 2000 additional households in Buner and Shangla was given at a later date, about two months after the date the CERF LoU was signed by FAO for project 802, the reason may be that it was decided later to give support to more households in the form of urea only. Security risks and military operation in the two districts could be another reason. Urea, however, can be used over a longer period after planting (Figure 3).

#### *Project 803*

FAO showed great efficiency in giving procurement orders for the supply of vegetable seeds and fertilizers in case of project 803 within two days of the CERF LoU signature by FAO. The purchase order for wheat seed was given after 7 days, however, FAO took what seems to be an unnecessarily longer time, 23 days, to place a procurement order for berseem seed for project 803. The acquisition of berseem seed should have been done earlier or at least

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<sup>7</sup> *Maghar* is a month in the local solar calendar (also called Bikrami Calendar) used in Punjab and adjoining areas. Most farmers use this calendar to describe and schedule operations related to crop production, such as planting and harvesting seasons. Wheat is planted in Katak-Maghar and harvested in Visak (mid-April to mid-May).

together with the acquisition of wheat seed because the optimum sowing date for berseem is earlier than the optimum sowing date for wheat in Peshawar (Table 5, Figure 3).

However, some poultry birds were delivered in Peshawar from October 20 to November 26. The young chicks delivered after 10th November were affected by cold and that is why there was a lot of mortality as reported by the beneficiaries. November 20 is approximately the first frost date in Peshawar.

#### *Project 805*

The materials for shelters in Ziarat were distributed during the early winter months and the construction started in January, too late for protecting animals from the severe cold in early winter, though the shelters were quite beneficial in the following cold season. The IP was also not very happy with the late disbursement of funds from FAO to them. According to IP there was a lack of coordination between various departments within FAO especially between the technical and financial sections of the FAO.

**Table 5. Timeliness of inputs procurements and distribution**

Benchmarks	Project 802	Project 803	Project 805
Disaster / crisis the project was to address	Soaring food prices	Floods in NWFP	Earthquake in Balochistan
Disaster date	2007 through 2008 (9 Jun & 13 Jul 08)†	3 – 4 Aug 2008	29 Oct 2008
FAO signed LoA with IP	Sep 23, 2008 for needs assessments and selection of household - Oct 15, 2008 for distribution of inputs - Dec 23 for additional urea	Sep 23 for seeds fertilizers, poultry and feed distribution Dec 23/25 for poultry, feed and impact assessment	No date given on LoA – duration 15 Dec to 15 Feb
Invitation of bids for seeds and fertilizers	Date is missing	Sep 9, 2008 (W) Sep 22, 2008 (B) <i>Aug 18, 2008 (V)†</i> <i>Jul 16, 2008 (F)</i>	NA (not applicable as no crop inputs were distributed in Ziarat)
Closing date for bid for seeds and fertilizers	Date is missing	Sep 15, 2008 (W) Sep 27, 2008 (B) <i>Aug 28, 2008 (V)</i> <i>Jul 30, 2008 (F)</i>	NA
Suppliers given local procurement order for crop inputs	Nov 28, 50 t additional urea for Shangla, and 50 t urea for Buner	Sep 22, 2008 (W) Oct 08 (B) Sep 17 (V) Sep 17 urea 46t. DAP 41t	NA
Periods from LoU signature to issuance of procurement orders	63 days for urea	7 days for Wheat seed 23 days for Bers. seed 2 days for Vegt. Seeds 2 days for fertilizers	NA
Seed and fertilizers delivered to IP	Nov 01, 2008	Sep 30, 2008 (W) Oct 16, 2008 (B) Sep 25, 2008 (V) Sep 25, 2008 (U & D) (**)	NA
Seed and fertilizers given to farmers	Nov 13-20, 2008	Oct 4, 2008 (W) Oct 20, 2008 (B) Sep 29, 2008 (V) Sep 29, 2008 (U & D) (**)	NA
Optimum sowing time for wheat seed	Oct 15 – Nov 30 (Best Oct 25 – Nov 20)	Oct 15 – Dec 5 ( Best Nov 1 - 20)	No crop production inputs distributed
Optimum sowing time for berseem and lentils seed distributed	Sep 15 – Oct 30 (Best Oct 1 to 25) for lentil	Sep 20 to Oct 15 for Berseem	No crop production inputs distributed
Suppliers given procurement order for poultry birds and feed	NA (Not applicable as no poultry birds were distributed in the project)	Sep 17 2008 (birds) Sep 22 2008 (feed) Nov 24 2008 (birds) Nov 24 2008 (feed)	
Poultry birds and feed delivered to IP	Oct 20- Nov 26, 2008	Oct 20 to Nov 26 (birds)	
Poultry birds and feed given to farmers	Oct 20- Nov 26, 2008		
Procurement order by FAO for animal feed	NA	Sep 17 2008, animal compound feed	Jan 26, 2009, animal compound feed
Animal feed delivered to IP	NA (not applicable as no animal feed was distributed)	Oct 2008	Feb 2009
Animal feed delivered to farmers	NA	Mid Oct 2008	Mid Feb 2009
Procurement order for shelters (materials)	NA no animal shelters made in the project	NA no animal shelters made in the project	Dec 16 2008

†The *italic* dates are for the bids called earlier by FAO for inputs supply for other than CERF projects (\*\*\*) we assume that vendor took eight days after procurement order in delivering inputs to IP which further took eight days to deliver it to farmers

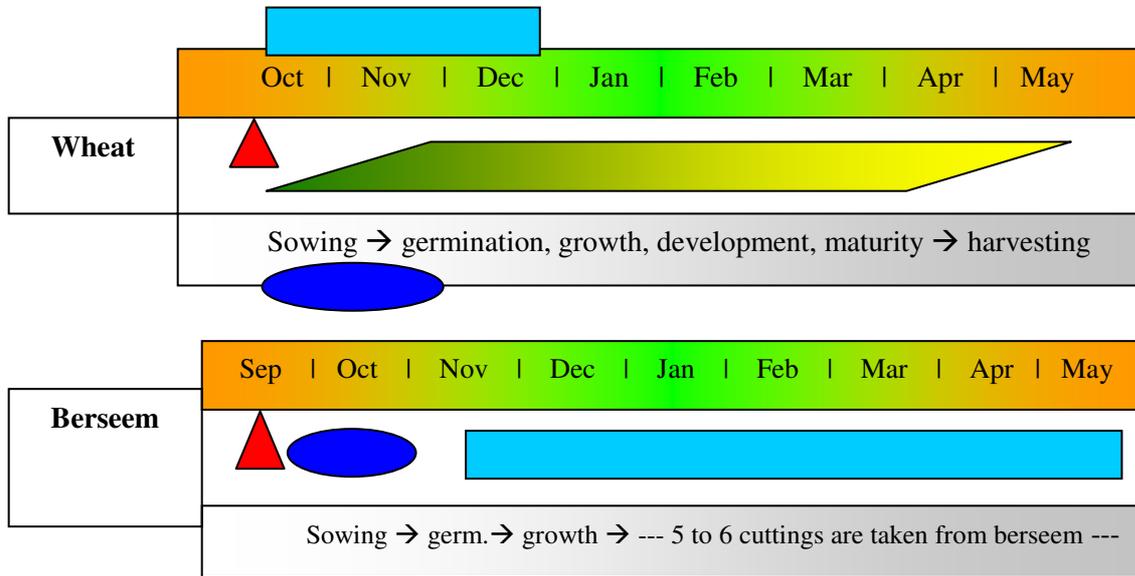
# dates as per the IP statement

V: vegetable seed; W: wheat seed; B: berseem seed; F: feed; U & D: urea and DAP

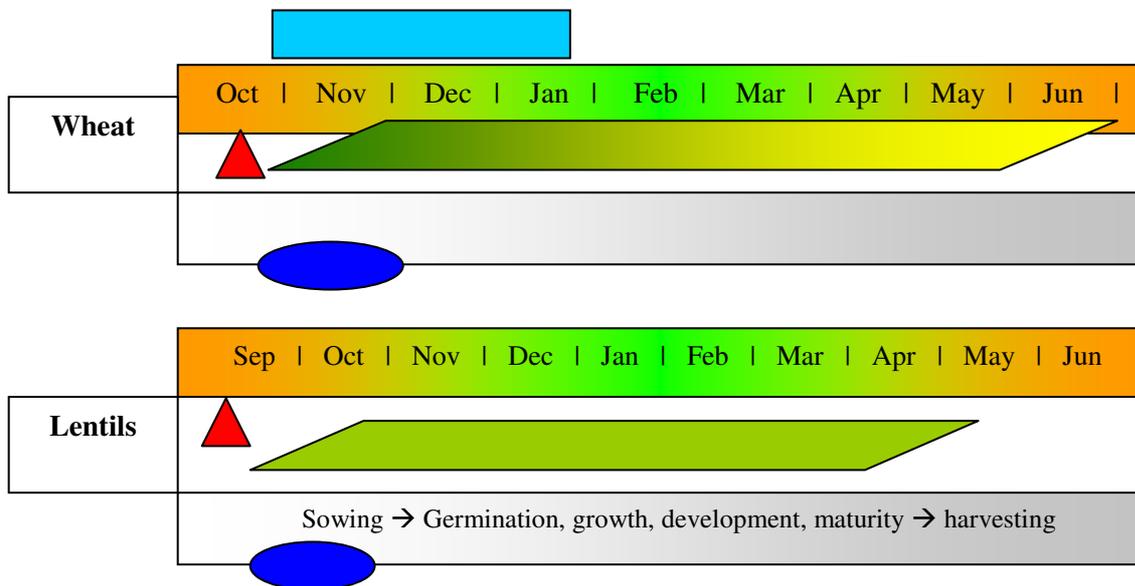
**Figure 3. Cropping calendars**

Triangle indicates the time inputs are needed by the farmers, oval indicates the time seed is used and DAP is applied, and rectangle indicates times when urea is applied (half with sowing and half with first or second irrigation)

**Peshawar valley, NWFP, Pakistan:**



**Buner and Shangla, NWFP, Pakistan:**



## 5.4 Monitoring of the projects and lessons learned

FAO tried their best to perform regular monitoring and evaluation of all interventions of the CERF projects, including through post-distribution surveys conducted by IPs using an FAO questionnaire. These surveys, conducted at the end of every project, provided some data to support an assessment of project impact (see section 6) and identified a number of implementation issues and lessons, such as:

- Inputs should be procured and distributed before the sowing season for which timely planning is important.
- Quality of inputs is important for farmers and enhances the reputation of IP and FAO.
- Some other agricultural interventions like distribution of poultry chicken are season sensitive for other reasons (survival of chicks) and must be carefully planned and delivered at the adequate time. Some chicks could have been quarantined to avoid damages and mortality.
- In some cases involvement of local politicians and activists created problems in preparing lists of target households and in distribution of inputs. In areas with no interference from local governments and political persons, there was much fair distribution and people of the area were satisfied.

Monitoring during project implementation has helped correct some of those issues. The IPs stated that FAO team regularly monitored the project activities in the field; verifying beneficiary selection against defined criteria, monitoring the quality of the inputs and their distribution. However, they suggested that FAO should improve their monitoring process. In each project an average of 2 visits were carried out by FAO staff. There needs to be more of these as projects need continuous monitoring from FAO with technical supervision as well as monitoring the coordination process among IPs and other stakeholders. Effective monitoring and evaluation would avoid and/or minimized further some of this mismanagement at various levels of the projects that were reported by the farmers. Therefore it is important that FAO pay regular visits at crucial stages to verify beneficiary process and list, distribution timing and venues, quality and quantity of inputs.

## 6. Effectiveness, impact and sustainability

### 6.1 Beneficiary selection

All three implementing partners were required to apply beneficiary criteria in target areas. However, due to cultural constraints, the nature of interventions and time limitations in some areas the selection criteria could not be followed properly. For example in the project areas there is a clear division of labour between men and women concerning livestock rearing and crop production. Men is usually responsible for arranging agriculture inputs, cultivation and general management of the livestock (including transhumance) while women help in crop harvesting, fodder collection and in-house management of animals. Women are active inside or near the household and usually avoid meeting with strangers. Therefore interaction with women to assess their agriculture and livelihood needs as well as their participation in the beneficiaries selection and input distribution process were quite difficult if not impossible to arrange. In flood affected areas where a poultry package was included, about 40% women were targeted as rearing poultry is usually women responsibility. It was realised that IPs

should engage some female field workers to have easy access to the target women and to ensure their participation in such project since its inception to completion.

Limited, incomplete lists of beneficiaries were provided to the mission by FAO. An analysis of the available lists of beneficiaries showed that there seem to be duplications of some beneficiaries. The same name and same father name in the same village was frequently found several times in the lists. In general, ID cards number were missing and thus there is no way of telling whether these were the same persons getting more than one package or different homonymous beneficiaries. In a few cases where ID card numbers were given, the mission could find some beneficiaries getting two packages.

Most inputs went to the target farmers. However, irregularities occurred in almost all districts and projects interventions. The overall performance in targeting poor farmers was therefore acceptable, but not excellent. However, it is worth noting that FAO and IPs worked in a tough environment with high security risks in all project areas, and their performance in selecting beneficiaries needs to be assessed with this in mind. Following is the brief beneficiary process being adopted in the project 802, 803 and 805.

#### *Project 802*

With few exceptions the selection process in Buner and Shangla was quite fair, although there were a few mismanagement cases in some UCs. A team of IP would visit each village in the selected union councils. After necessary social mobilization they would visit each Hujra with the help of locals and prepared list of the deserving and eligible farmers as per the mutually-agreed criteria between IP and FAO in consultation of the local agriculture departments. The women could not come to the *Hujra*, however, the community was asked to enlist widows and female-headed household. Although young deserving women could not join the community meeting, most of the deserving and eligible women were included in the list of beneficiaries since the process was most transparent and it was hard to ignore them when all the village community were there and they know each other so closely. To ensure transparency the final list of the beneficiaries was announced through loudspeaker from the village mosques. There were, however, some villages in Buner and Shangla where this process was not properly followed and also there was slight interference from the local politicians which resulted in deviation from criteria and favour to some non-targeted farmers. However, the overall selection process was much better in Buner and Shangla than for projects 803 and 805. It is worth mentioning that the IP staff kept the local politicians informed but did not involve them in the decision-making process.

#### *Project 803*

The FAO and IP in consultation with the agriculture department formulated the beneficiaries' selection criteria. In almost each UC the local politicians (Nazim and Deputy Nazim) and in some cases even the member of the provincial assembly were heavily involved in the selection of beneficiaries and distribution of inputs.

This came as a result of military operations against militants, which started in targeted UCs at the same time when the FAO project was being implemented. The IP and FAO stopped the beneficiary selection and inputs distribution process for a week to 10 days as curfew was declared in target UCs. At that time FAO was faced with two options i) drop the project due to security reasons or ii) find an alternative strategy to facilitate the distribution. In

consultation with the IP and FAO management, it was agreed that beneficiaries' identification and distribution of inputs will be facilitated by local elders (to some extent and in some areas only). The IP took a lot of risks in visiting the target areas at night time to verify beneficiaries and distribute inputs. The FAO field teams also monitored the distribution process as and where possible. A lot of corrections were made in beneficiaries lists in response to the feedback received from FAO field teams. However, strict monitoring was not possible due to security reasons.

As a result, irregularities and mismanagement were observed both in beneficiaries selection and in inputs distribution. The politicians would sometime insist to favour their voters irrespective of vulnerability or need, and left the poor and targeted farmers and widow out of the lists if they were in the opposite political camp. Perhaps as a result, buying and selling of FAO inputs was quite common in the local market soon after the distribution.

### *Project 805*

The IP (Taraqi Foundation) had been working in the areas since long and they prepared a list of beneficiaries. The local livestock and agriculture department, however, showed reservation on the beneficiaries list and ask the IP to make a new list together with the community. This new list was comparatively more transparent as they engaged the local elders. The Livestock department and FAO keep a close check on the selection and distribution of package to the targeted farmers in Ziarat. Therefore, over all, most of the targeted farmers including women got the animal shelter, animal feeds and de-worming packages.

## 6.2 Agricultural inputs distributed

FAO distributed seed, fertilizers, animal feed, poultry birds and feed, animal shelter material, animal health medicine under the three projects. The details are given in Table 6 for the three CERF projects, based on project documentation from FAO and IPs. Losses during transport were apparently not factored in these data. In particular, there was significant mortality of poultry birds during transport to Peshawar. In addition, some trucks carrying fertilizers for distribution among farmers in Shangla under the project were looted in lower Swat on the way to Shangla because the transporters did not follow the instructions of FAO for transportation of goods using the Bisham route.

**Table 6. Agriculture inputs distributed by FAO through IP under the CERF projects in 2008-09**

Agricultural inputs	Project 802		Project 803	
	Quantity	Households	Quantity	Households
Wheat seed	400 T	8000	46.25 T	1850
Berseem seed			3.7 T	1850
Lentil seed	80 T	8000		
DAP	400 T	8000	46.25 T	1850
Urea	400T	8000	46.25 T	1850
Vegetable seed	8000 S	8000	1850 S	1850
Additional Urea	100 T	2000		
Wheat flour	1600 T	8000		
Animal feed			138.75 T	1850
Poultry birds			84400 C	1850
Poultry feed			69 T 3,450 bags	1850
Total Households		10000		7150

Agricultural inputs	Project 805	
	Quantity	Number of household / animals
Material for animal shelter	100 shelters	300 to 500 large animals Or 1000 small animals
Compound animal feed	100 tones	1000 household 10,000 animals
Antibiotics	300 Bottles	1000 households, 10,000 animals
De-wormers	575 litres	1000 households, 10,000 animals

### 6.3 Quality of the inputs

The farmers, although generally satisfied with the inputs, complained about the quality and relevance of some of them, in all the projects. For example, the majority of farmers were unhappy about the quality of the berseem<sup>8</sup> seeds, compound animal feeds and chicks in Peshawar, the lentil in Buner and Shangla and the design of animal shelters in Ziarat. Quality of the inputs thus emerged as a significant issue in this evaluation, particularly in the project implemented in Peshawar, and the evaluation recommends continuous monitoring of quantity and quality of deliverables to make sure that FAO emergency interventions make real, significant contributions.

Generally, the quality of the wheat seed and fertilizer was good, though representative of the IP in Buner told that a few lots of wheat seed that arrived late were of a different variety than the earlier lots. The IP district representative mentioned that the difference was noticeable in the field at different stages of crop growth.

Quality of the compound feed of the early lots for distribution in Peshawar district was not according to the specifications given in the procurement order. This point was brought to the

<sup>8</sup> Egyptian clover (*Trifolium alexandrinum*).

notice of FAO and confirmed by analyses from independent laboratories<sup>9</sup>. The supplier had provided substandard feed, a fact that apparently escaped the superintendents. An improved feed was later distributed, but some time was lost as a result and even then, the majority of farmers were not happy with it since their animals were not fond of eating it. The FAO, however, confirmed that the animal feed was twice lab tested in Islamabad and Peshawar and distribution took place only after receiving satisfactory reports from both labs. The reason may be, as mentioned by the farmers, that free grazing is a common practice in these areas and animals are not used to stall feeding.

Feedback from beneficiaries and non-beneficiaries during field visits indicated that the quality of animal feeds was poor in Peshawar. They complained that their animals were not used to that kind of compound feed distributed by the IP.

The farmers in Peshawar also complained about the quality of berseem seed, the crop produced from the seed given by the FAO produced less number of cuttings. The farmers told that such seeds are cheaper in the market because they are not adapted to Peshawar valley conditions. In some villages in Peshawar district, the beneficiaries complained about the poultry birds that were distributed: There was a lot of mortality as about 60 to 70 % of the birds died within a month and later on when some survived and grew, the beneficiaries told that they found much differences in the birds and the ratio of males to females was also not the same as had been told by the IP.

Maybe as a result of birds mortality, the IPs reduced the number of chicks given to beneficiaries in Peshawar. The majority of farmers got from 17 to 22 chicks rather than the full intended package of 24 chicks. More generally, in Peshawar many farmers did not get the full amount of intended deliverables, e.g. in terms of animal feeds and chicks.

Farmers in Balochistan said that FAO rightly identified the need of animal shelter and feed, but that the design of shelter (developed and used successfully by FAO in AJK and NWFP during the response to the earthquake that struck Northern Pakistan in October 2005) needed to be modified according to Ziarat climatic needs and local availability of materials, which were not taken into account.

#### 6.4 Impact of the interventions

The impact assessment study of project 803 highlighted that FAO input support has contributed to 22.4 percent increase in wheat production for beneficiaries. Distribution of poultry birds and vegetable seeds has added to the food basket of the benefiting households. About 91 percent of beneficiaries used poultry birds for egg lying purposes. Beneficiaries of FAO interventions were able to harvest 23 percent more fodder while with the help of animal compound feed, the milk production reportedly increased by 75 percent for small ruminants and 13.2 percent for large ruminants<sup>10</sup>. However, the mission could not verify and substantiated the above statistic in the field. Due to time lapsed, it was difficult for farmers to remember and give us realistic information. There was, however, consensus among the farmers that the contribution of poultry birds, berseem and animal feed to livelihoods protection was not that significant because of the quality issues reported above.

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<sup>9</sup> Samples were analyzed by the Pakistan Council of Scientific and Industrial Research (PCSIR) and the National Agricultural Research Centre (NARC).

<sup>10</sup> Ibid, pp 19.

Lentils are not traditionally cropped in Buner, Shangla and Peshawar and therefore the lentil seed was not fully used by all the beneficiaries. According to interviewed farmers, its contribution to livelihoods rehabilitation was negligible.

The feed distributed in Ziarat did help protect the livelihood of the beneficiaries' households by preventing distress sales<sup>11</sup> and reducing the life threatening starvation and malnutrition of the animals and ultimately of their owners. The majority of farmers in Ziarat, however, could not see any major improvement in the health of their livestock due to de-worming and the animal shelters came quite late to help protect animals during the 2008-2009 winter.

The evaluation mission findings in terms of wheat production coincide with the results of impact study and annual CERF report. The farmers in most cases found that the variety of wheat was good. Not surprisingly, the use of DAP and urea increased wheat production. Without FAO interventions the poor farmers usually could not afford to apply DAP to wheat. The impact study on the project 802 highlighted that the wheat production of recipients was much higher (2585 kg/ha) than that of non-recipients (1100 kg/ha). The difference is significantly different at 95 percent confidence interval. Major portion of the production (90 percent) from the distributed wheat, lentils and vegetables seed was retained for domestic consumption, while a small amount of produce was sold in the market<sup>12</sup>. In Buner and Shangla it was found that some farmers planted more land to wheat and did replace some tobacco fields with wheat crops.

However, the seed and fertilizer should have been distributed two weeks earlier in Buner and Shangla. The consequences of untimely distribution were evidenced in one village of UC Bunerwal in district Shangla, where the farmers had planted dry land (rain-fed) wheat before the distribution of seed by IP, and when this was discovered by the community mobilizer during the post distribution survey. The farmers told that they had planted wheat before distribution of seed by IP for fear that the moisture in the fields will be lost resulting in poor germination if they delayed planting of wheat; the farmers told the mobilizer that they will plant the seed next year.

## 6.5 Cost-benefits analysis

The yield improvement reported by FAO for beneficiaries (2585 kg/ha) and last year published wheat yield data for Buner and Shangla as estimate of the yield obtained by non beneficiaries (1100 kg/ha) were used to calculate the additional income accruing to beneficiaries from wheat seed and fertilizers distributed under the CERF grants by FAO (Annex 3). The estimates of net income showed that beneficiaries obtained US\$ 434 per ha (174 \$ per households) more than the non-beneficiaries from the used of inputs supplied by FAO in the two districts. It can be concluded that distribution of wheat seed and fertilizer was highly beneficial and cost effective in the poor food-insecure districts of Buner and Shangla, in addition to helping farmers in reviving crop production livelihood for food security. The total additional benefit to all the 8000 household was estimated to be 1,389,374 US \$ from the inputs for wheat crop only; this amount is more than the total project sanctioned amount. The benefits from additional urea to 2000 households and lentils to 8000 households will surely be over and above what was calculated for wheat. As most farmers stored the seed of

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<sup>11</sup> In the absence of the FAO assistance, many household were thinking to sell their livestock at a very low price as they were not able to provide feed and shelter to their animals (distress sales).

<sup>12</sup> Annual Report of the Humanitarian/Resident Coordinator on the Use of CERF Grants Country Pakistan. Reporting period January 1 to December 31, 2008. pp 18.

improved varieties supplied by FAO for planting in the coming season, the benefits from that distribution are likely to continue to accrue over the years.

This analysis cannot be extrapolated to other deliverables. Seed and fertiliser distributions were more successful than the distributions of other inputs, and may have more sustainable effect on food production and livelihood restoration than the distribution of other types of inputs because the seed can be used again in subsequent years.

A comparison with the cost of food aid was attempted in the case of project 802 because WFP had distributed food aid in the same area together with FAO's seed and fertiliser<sup>13</sup>. The cost and benefits of the WFP project (1,600 MT of food delivered at the cost of US\$999,588) shows that the delivery of food aid in the area costs \$625/MT. The estimated additional production induced by the FAO input distribution is 4,752 MT, which would cost approximately US\$3 million if it had to be delivered as food aid.

The economic analysis of the wheat seed and fertilizers distribution in the flood affected areas near Peshawar, showed that the interventions resulted in 487 US \$ per ha more income to the beneficiaries (95.6 \$ per household) as compared to the non-beneficiaries. Hence it is concluded that in Peshawar, too, distribution of wheat seed and fertilizer was also most beneficial and cost effective. The estimates of the monetary benefits of other interventions, though difficult to estimate in some cases due to unavailability of the estimates for quantitative improvement from the interventions, may also have positive contributions in addition to reviving agriculture and livelihood of affected farmers.

## 6.6 Livelihood protection and reduction of life-threatening behaviour

The majority of target beneficiaries were poor and vulnerable. Agriculture is the main source for their livelihood. The 2008 disasters affected a crucial source of food and income and made them vulnerable and prone to get trapped on external support (loan, credit).

### *Project 802*

The mountain communities in Buner and Shangla already hit by militancy were finding it difficult to meet their family needs due to high food prices. Purchasing quality inputs for sowing and fertilizing farms was difficult for small farmers as the prices of seeds and fertilizers also increased during 2007 and 2008. Provision of food for work fulfilled their immediate food needs while the agriculture inputs helped them revive their agriculture practices and provided, to some extent, food security for another year. Otherwise many farmers were thinking to migrate to near by cities and find wage labour. Due to food shortage there were reported cases of fighting for one sack of flour. This situation could have grown worst if FAO and WFP had not initiated this intervention.

Further, the inputs distributed in Buner and Shangla districts did revive crop production and motivated farmers to put more efforts in reviving agriculture. In Buner, a visible change of more wheat than tobacco was observed due the FAO intervention.

### *Project 803*

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<sup>13</sup> This comparison was conducted for the sake of *benchmarking cost effectiveness* rather than to imply that food aid should always be replaced by seed and fertilizer aid. In fact, the combination of food aid and seed aid allowed by the collaboration with WFP in Buner and Shangla was found much useful.

The farmers in Peshawar district revived agriculture related livelihood activities through the use of inputs provided under project 803. The farmers' response to FAO-CERF project interventions was very encouraging as the beneficiaries farmers fully adopted the appropriate technologies and best crop production practices for increasing agriculture production. Since the whole area was struck by flood, therefore, the farmers narrated that without FAO inputs they would not have revived their livelihood, as they would not have been able to get loans for inputs from their friends and relatives, as the latter were also affected.

When asked what would be her situation in the absence of FAO assistance Gul Bibi in village Pathwar Payan near Peshawar said the following: "We lost all stock of seeds and there was no hope of cultivating our lands again. If we had not been given seeds and fertilizer in time we would have been forced to borrow money at high interest rate to buy agriculture input as agriculture is the only source of our livelihood".

### *Project 805*

In Ziarat, farmer communities depend on livestock in winter when there is no crop or fruits season. Shelters were damaged by the earthquake and most organisations were focusing on saving human lives. Livestock was thus neglected. FAO provided assistance in terms of animal feed, shelter and vaccination that helped to keep livestock alive in such a harsh time. The feed did help protect the livelihood of the beneficiaries' households by preventing distress sales<sup>14</sup> and reducing the life threatening starvation and malnutrition of the animals and ultimately of their owners, but as explained above, the animal shelters came quite late to make a big difference.

## 6.7 Operational alternatives

The current approaches were practical and appropriate. However, there is always room for improvement in operational mechanism and approaches and in exploring best alternatives based on proven success in the country.

There are few other NGO specialised in humanitarian response specifically livelihood recovery. FAO needs to coordinate with these NGO and learn from their experiences as well. For example, the voucher system used by other organisations when markets are working adequately can be one option. Locally available solutions need to be explored during need assessments, for example locally adopted designs for animal shelters. The IPs also needs to be more aggressive in social mobilization and involving the village elders instead of allowing politicians and influential villagers to drive the process. Another point is that no experimentation should be done in interventions for emergency and early recovery, as they may some times fail and may damage the reputation of those involved; only time-tested interventions should be done.

## 6.8 Sustainability and environmental impacts

To some extent, sustainability was considered in each project, especially in the soaring food prices project where efforts were made to revive subsistent agriculture of small farmers in

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<sup>14</sup> In the absence of the FAO assistance, many household were thinking to sell their livestock at a very low price as they were not able to provide feed and shelter to their animals (distress sales).

poor districts. Similarly, the distribution of good quality seed of high yielding varieties and to some extent the distribution of fertilizers will have sustainable effects on agriculture development because good seed multiply and spread in the locality. Fertilizers are not usually available and used by farmers in Buner and Shangla districts, and their distribution may pave the way for sustainable use in the coming seasons as the effects of fertilizer use on crop production are demonstrated and felt by farmers.

However, sustainability could be improved in all projects. For example the construction of earthquake-resistant animal shelter in earthquake affected areas of Balochistan, a real need for communities, should have been implemented in such a way that other households would learn to build their earthquake-resistant shelters by using the improved design. Similarly, there should be a strong focus in project design on social mobilisation at early stage (identification and selection of beneficiaries, explaining the purpose of project in village meetings, as successfully done in project 802) so that the communities understand the project, its objective and possible impacts well and can participate in a transparent beneficiary selection process, thereby limiting conflicts and improving impact.

## **7. Connectedness and program approach**

### **7.1 Integration of CERF projects into larger FAO response**

The CERF projects are mostly focusing on emergencies response meant for short term protection of livelihoods. However, if one carefully considers the timelines and amounts spent on various emergencies in Pakistan (see Programme Map in Annex 5), it becomes evident that CERF funding, quickly available to meet the most urgent needs, can fill a gap in early response and be later relayed by more durable programmes. Quick intervention funded by the CERF can lead to bigger interventions and long-term projects from other donors. In the sample, this is particularly true for project 802 addressing soaring food prices, which was followed by a much larger EU-funded project on the same issue. The new EU-funded project is partially built on the 802 CERF project and will contribute towards sustainability of this CERF intervention.

### **7.2 CERF and capacity for preparedness**

The short duration CERF project requires quick estimation of damages from crises and disasters, immediate assessment of the most pressing needs, quick project proposal preparation, approval and funding, and prompt implementation. In such a short period of time, the projects cannot primarily be geared towards improving the emergency preparedness of other actors such as communities, Government bodies or NGOs. Certainly, these three projects may have enriched the experience of the Pakistan FAO office and may have enhanced the capacity of the FAO to react better under such circumstances in the future. The earthquake-resistant animal shelters built in Balochistan could also improve communities preparedness to earthquakes, at least if the design is replicated by a large number of households.

### **7.3 Small initial investment effect on later costly interventions**

Agriculture, whether crop production or animal production, deals with the growth and production of biological organisms; small interventions for developing or restoring

agriculture production capacity often have additive or multiplicative effects. Distribution of good quality seeds of improved varieties has multiplicative effects as high yielding varieties progressively spread from beneficiaries to non-beneficiaries in addition to the use of seed on a larger area by the beneficiaries themselves in the coming years. The interview with farmers in the field visits confirmed that most farmers have kept seed for the next year planting in Peshawar, Buner and Shangla. The de-worming and antibiotic may have similarly improved the health of animals in Ziarat, Balochistan, reducing the costly health problems at later stages (although this effect would be more temporary in nature and was not realised by the farmers). The small CERF grants for agriculture did help protect and rehabilitate agriculture production capacity, thus avoiding costlier intervention at later times, for instance in the form of food distributions by WFP.

## 8. Conclusions

The FAO interventions under the CERF grants were very relevant. Most of the flood affected households in Peshawar and food insecure poor household in Buner and Shangla were small subsistent farmers in urgent need of reviving agriculture activities for their livelihood. The construction of animal shelter and distribution of animal feed, antibiotics and de-wormers were also appropriate to farmers in the earthquake affected district of Ziarat because many households rear animals for self-consumption and sale of milk and other products. Protection and care for their livestock was not a priority for other humanitarian agencies but a top priority for poor farmers faced with the prospect of distress sales.

The inputs were generally effective in protecting and/or reviving the respective agriculture-based livelihoods and bringing poor farmers back into a normal life. The quality of the wheat seed was good and the varieties distributed were adapted to the local environment.

Insufficient quality of deliverables sometimes affected results. Farmers complained about the seed/variety of berseem, the high mortality in chicks, the quality of animal feeds and the design of animal shelters. There were also some complaints about favouritism in Peshawar, where some of the local politician used their power unduly to influence beneficiary selection, while in Shangla the Taliban looted a few fertilizer trucks.

With some exception and lapses, the inputs were delivered in time. Agriculture is a sector strongly marked by seasonality, and a timely arrival of funds and delivery of assistance are critical to the response's effectiveness. The evaluation shows that project approval and disbursement of funds from OCHA to FAO were rapid, although not as fast as expected. One month to one month and a half appears a reasonable performance to conduct needs assessments, design a project, and submit it through the HC/RC system and get it approved, signed and funded. However, in the case of the soaring food prices project, this period extended over nearly 4 months. As a consequence and in spite of very fast implementation, the seed and DAP were delivered a bit late, at a time when some farmers had already planted their land.

All projects were implemented more or less in time except project 805 in earthquake-affected Balochistan districts. The materials for shelters in Ziarat district were distributed during the winter months and the construction started in January, quite late for protecting animals from the severe cold in early winter. FAO was probably too optimistic in thinking that a project submitted on 10 November could be approved and implemented before the winter, especially

as the shelters required a variety of construction material and skills. However, it seems that the feed delivered under the same project came at an opportune time and helped save some livestock from distress sales.

Some procurement orders for 803 were given very early, immediately after the LoU was signed by FAO and OCHA and money was disbursed to FAO. Other procurement orders were given later. The lesson from these rapid procurements under 803 is that FAO can reduce the time for contracting, purchasing, delivery and distribution if they contact the potential IPs and supplier well before the CERF money is granted and keep them in the loop of the approval process.

FAO is doing important work in the agriculture sector in Pakistan, including in emergencies. However, the humanitarian agencies, NDMA and Government departments and farmers perceive FAO as development organization. The relief and humanitarian roles of FAO are not properly understood and recognised by some relevant actors, including NDMA. This is because of the absence for some time of both an FAO Representative and an Emergency Coordinator in the country<sup>15</sup>, the relatively weak coordination of FAO with humanitarian relief agencies and Government (the agriculture cluster, however, has been revived since early 2010 and is more active now), and because FAO started to work in emergencies in the country only after the Northern Pakistan earthquake (October 2005), i.e. relatively recently.

## **9. Recommendations**

FAO must continue to strengthen the agriculture cluster and lobby the donor community, UN agencies, NGOs and the Government on the importance of agriculture interventions in livelihood protection and rehabilitation, in order to bring farming communities out of an emergency and back into a more normal life. It should also keep the NDMA regularly informed about its interventions.

FAO needs to re-assess its role, improve internal management and coordination and equip itself with more experienced and specialised emergency staff. In doing so, FAO can build on the experience of other relief agencies and NGOs in Pakistan. A full-time FAO Representative in Pakistan would also help redress the deficit in visibility that the Organization currently suffers from in the country.

Food, agriculture, nutrition and health are interrelated and FAO needs to coordinate better with relevant UN agencies during emergencies. The collaboration with WFP was a good example of what can be achieved when two UN agencies work in concert.

FAO should also map out various local and international NGOs working in disaster prone areas and emergency in order to select the best IPs in case of any emergency.

Closer links with trusted IPs and inputs suppliers would help expedite interventions and improve their sustainability.

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<sup>15</sup> Fortunately, a new FAO Emergency Coordinator started to work in December 2009. The FAO Representative function is still vacant.

FAO should re-enforce mechanisms to check more thoroughly the quality of the inputs it procures. Superintendents used to check conformity with the specifications given in the bids and procurement orders are not error-proof (e.g. in the case of the feed distributed in Peshawar). FAO should thus strengthen superintendence and make it more effective. Physical purity, proper size, freedom from pests and their attack, and viability/germination are important for seed and if in doubt, the seed must be tested independently from the superintendents. Similarly, the type and quality of fertilizers, composition and quality of feed, proper breed, age, size and vaccination for poultry birds are important. One way to limit problems is to avoid procuring mixed products (such as compound animal feed) and rather opt for simpler products (like grain) that can easily be inspected visually.

Considering the strict cultural norms in some project areas, FAO and its Implementing Partners may need to hire female field workers to assess women-related livelihood needs in emergencies, being aware that this approach may not work everywhere (in some areas, even the idea of a women meeting with a female facilitator is not acceptable) and may expose these female field workers to risks in the most conservative areas.

FAO should improve monitoring and better track the delivery of inputs from supplier to FAO to IP to end users (beneficiaries), taking better account of losses during delivery so as to report more accurate data on project deliverables. More broadly speaking, FAO must do more to monitor its own and IP activities, with a positive attitude towards future improvement but also as a way to prevent or control possible malpractice.

A group of sincere and trusted village elders in each village (*da kali mishiran*) should be contacted to help IP in making realistic lists of most deserving beneficiaries for inputs distribution and then facilitating the job of fair distribution of the inputs under the projects. For better transparency and fairness, the village people should be assembled in neutral places like mosques as they did in some UCs in Shangla and the names in list prepared should be announced in front of the gathering, so that non-farmers and non-targeted households are pinpointed and deleted from the list.

FAO should include a clause in the LoA that no person without a National Identity Card will be eligible for the input distribution and that the IP must prepare and submit a list of beneficiaries with complete information for each beneficiary including name, father name, National Identity Card number, village, UC and cultivated land. In order to ensure transparency and avoid distributing twice to the same person, the IP must ask to see the National Identity Card from each beneficiary.

Finally, FAO can reduce the time for contracting, purchasing, delivery and distribution if they contact the potential IPs and supplier well before the CERF money is granted and keep them in the loop of the approval process. As soon as a CERF project is approved by the UN Emergency Relief Coordinator, it should be immediately communicated to FAO in the field so that they start implementing the project because they (FAO, OCHA) know that, after some formalities, funds will be coming for the concerned project.

## **Annexes**

**Annex - 1     Map of Project Areas**

**Annex - 2     Terms of Reference**

**Annex - 3     Costs – Benefits of the projects**

**Annex - 4     Lists of Abbreviations and Acronyms**

**Annex – 5     Programme Map**



## Annex - 2 Terms of Reference

### Evaluation of FAO interventions carried out under The Central Emergency Response Fund (CERF)

#### Consultants for country case studies

##### *Background*

1. The Central Emergency Response Fund (CERF), created in December 2005, provides loans and grants to United Nations (UN) agencies to support rapid reaction and response to alleviate the human consequences of emergencies, disasters and crises around the world. The UN Food and Agriculture Agency (FAO) is the fourth largest recipient of the fund and the CERF represents the third largest source of funding for FAO emergency projects.
2. The FAO's Office of Evaluation is planning to conduct an in-depth evaluation of FAO CERF-funded interventions in 2009-2010, focusing on project results and on impact at country level. The evaluation will include a series of eight country case studies, of which Afghanistan is one.
3. In each case study country, the FAO's Office of Evaluation identifies and recruits one or two consultants to conduct the country case study. Selected consultants have to attend a briefing session by the FAO Evaluation Manager, either during a scoping mission by the Evaluation Manager or, in case that would be unpracticable, by way of a video or telephone conference.
4. The case studies will later be summarized and synthesised to identify recurring themes, extract findings of global relevance and report on same to FAO Management and the CERF Secretariat.
5. In Pakistan, five CERF projects have been implemented since 2006, as follows:

CERF file reference	FAO Symbol <sup>16</sup>	Title	Amount Approved (US\$)	Start date	End date
07-FAO-025	703	Support for the restoration of crop production and food availability [after Cyclone Yemyin in Balochistan and Sindh]	417,300	13 Jul 07	12 Oct 07
08-FAO-006	801	Emergency assistance to crop production and livestock protection and strengthening to rapidly restore agricultural based livelihoods in flood-affected areas of Balochistan and Sindh [underfunded window]	1,500,000	07 Mar 08	31 Dec 08
08-FAO-026	802	Emergency food and agriculture production support for food insecure groups affected by unprecedented surges in food prices	1,200,406	19 Sep 08	18 Dec 08
08-FAO-041	803	Emergency food and livelihoods assistance for flood-affected persons in Peshawar district of NWFP	399,994	22 Sep 08	22 Dec 08
08-FAO-062	805	Agriculture and livestock intervention for affected population of Balochistan earthquake	101,436	30 Nov 08	01 Mar 09
<b>Total</b>			<b>3,619,136</b>		

<sup>16</sup> 703 = OSRP/PAK/703/CHA, etc.

6. All these are from the “rapid response” window of CERF, except project 801 which was funded from the “underfunded crises” window. Four projects respond to natural disasters, and one (802) tries to address the more economic issue of soaring food prices.
7. The evaluation will concentrate on the most recent projects implemented towards the end of 2008 – early 2009: 802, 803 and 805. These projects will be easier to evaluate as farmers will more likely remember the intervention than for older projects. There are also travel limitations in place for the two projects addressing Cyclone Yemyin in Baluchistan and Sindh (703 and 801), and evaluating these two projects could therefore pose logistical difficulties, as well as security risks.
8. In project 802 implemented in Buner and Shangla, WFP and FAO received the funds jointly and implemented combined operations targeted to the same beneficiaries during the rabi (fall) season of 2008, FAO providing seed and fertilizer and WFP providing food aid. Therefore this project will be a good occasion to compare the cost-effectiveness of food aid and seed aid, and to test whether the 2 types of aid can co-exist.<sup>17</sup> Project 803 targets vulnerable households, female-headed households and women affected by flash flood, to whom chicks and poultry feed were donated. The small project 805 was the only funding FAO obtained to respond to the Balochistan earthquake on 29 October 2008; it provided 100 animal shelters, as well as animal feed and medicines.

### ***Duties and responsibilities***

9. These Terms of Reference (TORs) are an integral part of the overall TORs for the Evaluation of FAO interventions carried out under the CERF, which provide the background, objectives, scope and methodology of the evaluation. The overall TORs also include key questions to be answered by each and every case study, related to relevance; efficiency, coordination and partnerships; effectiveness, impact and sustainability; and connectedness with longer-term activities. These questions are listed again in the report outline.
10. In Pakistan, the consultants will work in a team of three: one Team Leader, one Sociologist / Gender specialist, and one Agronomist. The team will have overall responsibility for the technical content of the evaluation including management of individual interviews and focus group discussions, data analysis and preparation of the final report. The consultants will have to attend the briefing session by the FAO Evaluation Manager during his/her scoping mission to the selected countries, this being an absolute requirement for the recruitment.
11. Under close supervision by the FAO’s Office of Evaluation, and following the guidelines and methodological approach which will be provided in-country during an initial orientation session, the team of consultants in each sampled country will have following duties and responsibilities:
  - a. Participate in the initial briefing and to all meetings as planned in these ToRs and as required by the Evaluation Manager
  - b. Establish a workplan for the consultancy, including field missions and meetings in the capital, to be approved by the FAO Evaluation Manager;
  - c. Collect and review all projects related documentation, including documents available at the FAO Representation and/or at the FAO Project Coordination Unit.
  - d. Review, complement and fine-tune the project timelines drawn by the desk-study, to document the main steps in the design and implementation of the response: insert dates for needs assessment, preparation and submission of proposals to CERF, funding, procurement and contracting, delivery and reporting.

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<sup>17</sup> One could argue that seed aid should go to landowners while food aid should go to the landless – on the other hand food aid can “protect” seed aid from being eaten.

- e. Assemble a map of project locations and a typology of interventions; purposively selecting 5 to 10 locations for field work;
- f. Travel to the following project locations: Shangla and/or Bunner districts of NWFP, Peshawar, and Balochistan (Quetta + Ziarat and/or Pishin).
- g. Select the participants, organise, and facilitate focus group sessions in selected communities to discuss the strengths, the weaknesses and the impact of the projects, if any;
- h. Conduct interviews with key FAO implementing partners (NGOs, decentralised administrations and line ministry representatives at national level); and
- i. Analyse the results and present them (in preliminary form) for discussion, validation and/or fine-tuning in a series of meetings with all stakeholders, including FAO staff in country, government representatives, the members of the agriculture / food security cluster, and the FAO Evaluation Manager (either by telephone or in country if the Evaluation Manager can travel for debriefing).
- j. Draft a final country case study report, following the report outline provided by the Evaluation Manager and including main findings and conclusions.

### ***Duration***

12. The assignment in Pakistan will take place from March to May 2010. The number of working days varies according to the consultants (since the team leader will have to put together the report and not all consultants will travel to all locations), as follows:

Team leader	78 days
Sociologist and Gender specialist	64 days
Agronomist	50 days

### ***Report***

13. The final report of the country case study should answer the questions related to relevance, effectiveness, efficiency and sustainability as included in the report outline. The team leader has overall responsibility for the technical content of the report.

### ***Fees***

14. Consultants will be hired under WAE (When Actually Employed) contracts for the above mentioned paid days over a three months period. Fees will be paid upon final clearance of the case study final report by the FAO Evaluation Manager. DSA will be paid according to the modalities applied in each country. The FAO Representation and/or the Emergency Coordination Unit in the country will assist with transport and logistic support to the national team to carry out its work.

### ***Required skills and experience***

15. Candidates must not have been involved in the design or implementation case study of any FAO project funded by CERF in the respective country. The selected consultants will possess:
  - a. A university degree in social studies, agriculture or related disciplines;
  - b. Significant experience in social studies, surveys or evaluations in rural areas;
  - c. Excellent listening skills and an aptitude to pay due respect and attention to poor illiterate people in rural settings and to decision makers at national level alike;

- d. Fluency in the major local languages spoken in the survey area, and in French, English or Spanish according to the country; and
- e. Qualitative data analysis and report writing skills.

16. Desirable qualifications include:

- f. Previous experience conducting/taking part in independent evaluations (mandatory requirement for the team leader);
- g. Previous experience in the field of agriculture and rural development;
- h. Work experience in emergency settings; and
- i. Knowledge of FAO structure and its organizational/institutional mechanisms.

## Annex - 3 Costs – Benefits of the projects

### **Economic analysis of crop inputs distributed by FAO under CERF project 802 and project 803 Costs – Benefits – Net Income**

A package of 50 kg wheat seed, 50 kg DAP, 50 kg urea, 10 kg lentils and pack of vegetable seeds were given to 8000 households in Buner and Shangla districts for the 08-09 winter crops season. In flood affected areas of Peshawar, 25 kg wheat seed, 25 kg DAP, 25 kg urea, and 2 kg seed of berseem were given to 1800 households. The individual and group discussion with farmers in Peshawar indicated that beneficiaries obtained 4000 to 5000 kg with an average of 4500 kg per ha of wheat yield as compared to 3000 kg per obtained by non-beneficiaries. The affected area has irrigation facilities and is very productive. Here we are making certain assumptions and calculation for economic analysis or cost and benefits analysis of wheat seed and fertilizers distributed under CERF grants by FAO in Buner and Shangla and Peshawar districts. For assessing the benefit, the following assumptions were made:

- All the inputs received by the beneficiaries were used. Non-beneficiaries applied one bag of urea and one bag of SSP in Peshawar.
- Transportation cost from distribution point to field and application charges were not included in calculation, it was not much in all districts.
- Harvesting and threshing charges were not included, at the rate of 10 % of the produce
- Straw was considered in benefit calculations as it is very important ingredient of animal feed, whether it is sold or it is used by beneficiaries, in which case opportunity cost was used in the calculations.

#### *Cost effectiveness of Project 802*

The yield improvement reported by FAO for beneficiaries (2585 kg/ha) and last year published wheat yield data for Buner and Shangla an estimate of the yield obtained by non beneficiaries (1100 kg/ha) were used to calculate additional income to beneficiaries from the wheat seed and fertilizers distributed under the CERF grants by FAO. The estimates of net income showed that beneficiaries obtained US\$ 434 per ha (174 \$ per households) more from the used of inputs supplied by FAO under CERF projects in the two districts. It can be concluded that distribution of wheat seed and fertilizer was most beneficial and cost effective in the poor food-insecure districts of Buner and Shangla, in addition to helping farmers in reviving crop production livelihood for food security. The total additional benefit to all the 8000 household was estimated to be 1389374 US \$ from the inputs for wheat only. This amount is close to the total project sanctioned amount. As most farmers kept the seed of improved varieties supplied by FAO for planting in the coming season, the seed distribution has sustainable effect on food production and livelihood restoration.

#### *Cost effectiveness of Project 803*

The economic analysis of the wheat seed and fertilizers distribution in the flood affected areas near Peshawar, showed that the interventions resulted in 478 \$ more income per ha to the beneficiaries (95.6 \$ per household) as compared to the non-beneficiaries. Hence it is concluded that in Peshawar, too, distribution of wheat seed and fertilizer was most beneficial

and cost effective. The total additional benefit to all the 1800 household was estimated to be 180313 US \$ from the inputs for wheat only. The estimates of the monetary benefits of other interventions, though difficult in some cases due to unavailability of the estimates for quantitative improvement from the interventions, may also be cost effective in addition to reviving agriculture as the livelihood of the population affected by crises.

Estimates benefits/income to the beneficiaries in comparison to non-beneficiaries from wheat seed and fertilizer distributed by FAO under CERF project 802 in districts of Buner and Shangla in 2008

<b>Quantity and Costs of inputs for calculation of variable costs</b>							
Type of Farmer	Seed		DAP/SSP		Urea		Total Variable Cost Rs
	kg/ha	Cost Rs.	kg/ha	Cost Rs.	kg/ha	Cost Rs.	
Beneficiaries	125	4375	125	8325	125	2575	15275
No-beneficiaries†	125	3125			62	1277	4402

† Non-beneficiaries did not apply DAP or SSP and applied half bag of urea per ha

<b>Yield and income form grain and straw and net income</b>							
Type of Farmer	Grain yield		Straw yield		Income		
	kg/ha	Income Rs	Kg/ha	Income Rs	Gross	Net Rs.	Net \$
Beneficiaries	2585	58162.5	3877.5	17448.75	75611.25	60336.25	804
No-beneficiaries	1100	24750	1650	7425	32175	27772.8	370
Difference						32563.45	434
Total additional benefits to beneficiaries form 3200 ha						104203040	1389374
Total gross benefits to beneficiaries form 3200 ha wheat planted with FAO inputs						241956000	3226080

Net benefit derived from the inputs, per hectare 434 US\$ or 32,563 Rupees

Total area planted by beneficiaries 32,000 hectares

Total benefits to beneficiaries 1,389,374 US \$

Estimates of benefits/income to the beneficiaries in comparison to non-beneficiaries from wheat seed and fertilizer distributed by FAO under CERF project 803 in flood affected areas of Peshawar in 2008

<b>Quantity and Costs of inputs for calculation of variable costs</b>							
Type of Farmer	Seed		DAP/SSP		Urea		Total Variable Cost Rs
	kg/ha	Cost Rs.	Kg/ha	Cost Rs.	kg/ha	Cost Rs.	
Beneficiaries	125	4375	125	8325	125	2575	15275
No-beneficiaries †	125	3125	250	2250	125	2575	7950

† Non-beneficiaries apply 5 bags per ha SSP which is cheaper instead of two and a half bags DAP

<b>Yield and income form grain and straw and net income</b>							
Type of Farmer	Grain yield		Straw yield		Income/Benefit		
	kg/ha	Income Rs.	kg/ha	Income Rs.	Gross	Net Rs.	Net \$
Beneficiaries	4500	101250	6750	30375	131625	116350	1551
No-beneficiaries	3000	67500	4500	20250	87750	79800	1064
Difference						36550	487
Total additional benefits to beneficiaries form 370 ha						13523500	180313
Total gross benefits to beneficiaries form 370 ha wheat planted with FAO inputs						48701250	649350

- Net benefit derived from the inputs, per hectare 487 US\$ 36,550 Rupees
- Total area planted by beneficiaries 370,000 hectares
- Total benefits to beneficiaries 180,313 US \$

Conversion rate: 75 rupees per dollar was used because the rate ranged from 70 to 80 rupees per \$ during the crop growing season

- FAO seed price: 466.6 \$ per MT; Grain market price (= farmer seed price): Rs. 25/kg or 333.3 \$ per MT;
- DAP price: 888 \$ per MT or 44.4\$ per bag;
- SSP 120 \$ per MT or 6 \$ per bag
- Urea price: 275 \$ per MT; 10.85\$ per bag.

#### **Annex – 4 List of Acronyms and Abbreviations used**

CO	Community Organization
CERF	Central Emergency Response Fund
DAP	Diammonium Phosphate
DOA	Government Department of Agriculture
EDO	Executive District Officer
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
GOP	Government of Pakistan
HH	Household(s)
IASC:	Inter-Agency Standing Committee
IP	Implementing Partner(s)
LOA	Letter of Agreement
LOU	Letter of Understanding
McRAM	Multi-Cluster Rapid Assessment Mechanism
MINFAL	Ministry of Food, Agriculture and Livestock
NDMA	National Disaster Management Authority
NGO	Non Governmental Organisation
NWFP	North West Frontier Province
OCHA	Office for the Coordination of Humanitarian Affairs
PDMA	Provincial Disaster Management Authority
PHRP	Pakistan Humanitarian Response Plan
PKR	Pakistani Rupees
PaRRSA	Provincial Reconstruction, Rehabilitation and Settlement Authority
TOR	Terms of Reference
UNDP	United Nations Development Programme
UC	Union Council
US \$	United States Dollars
WFP	World Food Programme

## Annex – 5 Programme Sketch

