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**FOOD AND AGRICULTURE
ORGANIZATION JO # 05
DEVELOPMENT OF RURAL
POULTRY PRODUCTION
FINAL REPORT**

Report for RAMP-CLIN 0002-JO# 05-FAO

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RAMP Job Order # 5 - 0004

**"Development of Rural Poultry Production"
GCP/AFG/030/USA**

Final report

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LIST OF ABBREVIATIONS

ABNA	Agency for Building a New Afghanistan
DEGRA	Dost Engineering Group for Rehabilitation of Afghanistan
DOC	Day Old Chicks
DRSA	Darwaz Rehabilitation & Services Association
FAO	Food and Agriculture Organization of the United Nations
FARA	Fixed Amount Reimbursement Agreement
FHHs	Female Headed Households
FPTs	Female Poultry Trainers
GL	Group Leader of the VPPPG
GoA	Government of Afghanistan
HPAI	Highly Pathogenic Avian Influenza
IP	Implementing Partner
KHIO	Khahan Improvement Organization
KNF	Koh-i-Noor Foundation
MAAHF	Ministry of Agriculture, Animal Husbandry and Food
MoU	Memorandum of Understanding
ND	Newcastle Disease
NGO	Non Governmental Organization
NOW	National Welfare Organization
NPA	National Poultry Advisor
PFA	Poultry Farmers' Association
PPFAs	Provincial Poultry Farmers Associations (PPFAs)
RAMP	Rebuilding Agricultural Markets in Afghanistan
STA	Senior Technical Adviser
USAID	United States Agency for International Development
VGL	Village Group Leader
VPPG	Village Poultry Producer Group

Basic Information

1. Job Order Number	#5 - 0004
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3. Contract Line Item Number (CLIN)	0004: Agricultural Technology and Market Development
4. Reporting Period	16 October 2003 – 30 June 2006
5. Total Project Budget	3,504,239 US\$

6. Summary of Project Activities and Impact

6.1 Objectives of the project

The project goal was to provide economic opportunities for women, to improve food security and increase rural incomes by introducing new methods of village poultry production to rural women. At the project-level the immediate objectives were as follows:

Immediate Objective 1 Training of 28,000 village women in improved methods of poultry management and feeding.

- Technical staff have been recruited and trained and operate from the seven provincial centres.
- The situation of village poultry production and technical knowledge of women in the selected districts of the Baghlan, Bamyán, Ghazni, Herat, Kunduz, Nangarhar and Parwan Provinces are identified through a baseline study.
- 28,000 village women have received training in all aspects of poultry management, feeding and marketing.
- Vaccination programmes against Newcastle Disease are carried out for poultry in all target villages.
- The selected village women have received 15 pullets, feed and poultry equipment.
- The results and impact of the training programme have been investigated and analyzed.

Immediate Objective 2 Organizing rural poultry farmers, especially women farmers in 500 Village Poultry Producer Groups.

- The idea of Village Poultry Producer Groups (VPPG) is discussed and introduced in the target villages.
- A Group Leader (GL) for the VPPGs is selected, trained and provided with the necessary inputs to provide services to village poultry farmers.
- A revolving fund is established to allow for the operation of the VPPGs.
- The GLs are providing regular services to poultry owners in their villages.
- Poultry losses in the target villages are reduced by at least 50% through vaccination campaigns and poultry health care by the GLs.

Immediate Objective 3 Establishing a system for input supply especially for feeds and poultry health care and the marketing of poultry products from rural to urban areas.

- Small feed processing units are established which prepare mixed feed for village poultry farmers in each of the five target provinces.
- A supply and storage system for vaccines and poultry medicines is established and operational in the provincial centres.
- Marketing of eggs is organized through the VPPGs.
- The organizational structure of the VPPGs at the provincial level is developed.

6.2 Project results and conclusions

The objectives and activities of the Project were a result of the experiences from implementing rural poultry development activities in previous FAO Projects, notably GCP/AFG/021/GER and GCP/AFG/032/GER. A Senior Technical Officer ad-interim (OIC) guaranteed the effective management of the initial phase of the Project, from March to October 2004¹. The Senior Technical Officer (STA) joined the Project on 6 November 2004. National staff, according to Project design, was recruited in March 2004. The technical staff has already collaborated with FAO in implementing rural poultry activities in the two abovementioned projects. Staff professional capacity and continuity have been key elements for the successful implementation of the Project.

Regulations set by the UN security system in Afghanistan for international and national FAO staff had a significant influence on the locations of operation. The original design of the Project was to implement rural poultry development activities in five provinces of Afghanistan: Nangarhar, Parwan, Ghazni, Helmand and Kunduz. However due to raising insecurity in Helmand province, RAMP/Chemonics authorized to shift planned Project activities from Helmand province to Baghlan province. In addition, also for security reasons, Project activities were delayed in Ghazni province. On 1st January 2005, Project activities officially started in Baghlan and Ghazni provinces.

In September 2005, RAMP/Chemonics authorized FAO to expand rural poultry development activities in two new provinces of Herat and Bamyan, bringing the total number of provinces to seven. Accordingly, the total number of women beneficiaries increased for 25,000 to 28,000. The Herat and Bamyan Provinces were chosen as new locations considering their development potential for poultry production, and possibilities for further post-project support through two FAO Projects, respectively GCP/AFG/029/UK (Development of Sustainable Agriculture Livelihood in Eastern Hazarajat) and GCP/AFG/036/UK (Alternative Agriculture Livelihood Programme).

In details, Project activities were implemented in the following province and districts of Afghanistan:

- Parwan: Jabul Saraj, Saidkhail, Qara Bagh, Bagram, Kalakan, Charikar, Hofian;
- Kunduz; Khan Abad, Chardara, Ali Abad;
- Nangharar; Surkh Roud, Kama, Bati Kot, Dar-e-Noor, Mohmand Dara;
- Ghazni: Khwaja Omari, Jaghatu, Nani;
- Baghlan: Dahanai-Ghori, Doshi, Old Baghlan, New Baghlan, Pole Khumri;
- Herat: Gozara, Enjil;
- Bamyan: Bamyan center, Yakawlang.

6.2.1 Project strategy

The Project strategy results from FAO experience in developing rural poultry development activity during the last decade, and it is based on module implemented in cycles of 5-6 months. The total project period of three years was thus originally divided into six cycles of 6 months. In reality, due to late start, rural poultry activities were implemented in four complete cycles.

¹ At no cost for the Project.

During each cycle a new group of trainees has been included into the poultry development programme and the following steps have been taken:

- Baseline surveys of the target villages to select the right beneficiaries, based on given criteria, have been carried out. Priority for the selection has been for poor families and widows. (Criteria for the selection of beneficiaries are given in Annex I).
- Intensive training of village women through individual and group training have been implemented. The group training is based on active participation of the trainees. A training package has been developed which included 46 lessons, covering all essential subjects in the fields of chicken housing, feeding, breeding, management and health. The training programme has been designed for a total duration of 5-6 months and has been carried out for the village women exclusively by female trainers.
- Introduction and implementation of regular vaccination against Newcastle Disease for all poultry in the village with the development programme has been implemented. As a consequence of the outbreak of Highly Pathogenic Avian Influenza (HPAI) in Afghanistan, specific training and awareness activities, together with vaccination of pullets distributed during the 2006 distribution campaign, have been carried out in all seven targeted provinces.
- Construction of new appropriate chicken coops by the village women as part of the training programme has been undertaken. Supply of mixed feed, drinkers, feeders and wire mesh to equip the coops and of 15 crossbred pullets² by the programme as a starter kit. Regular participation in the training was a condition for receiving these inputs. The main objective of this distribution was to assist the families to implement the already learned ideas and to introduce some new ideas.
- Organization of the trainees in Village Poultry Producers Groups (VPPGs) and selection of a Group Leader. The main objective of these groups is to maintain regular chicken vaccination, assist with supply of feed and other poultry services, simple disease treatments and marketing of eggs.
- 10 % financial contribution of the trainees to the supply of pullets and utilization of the collected amounts to create a revolving fund for the VPPGs which will be used to purchase inputs.
- Follow up of the work to strengthen the sustainability and management of the VPPGs and the revolving fund for at least another year.

The implementation of the village poultry programme has been arranged with the collaboration of seven local NGOs as Implementing Partners (IPs). They were engaged mainly to recruit and deal with administrative matters of the technical staff based in the target provinces (Poultry Coordinators, Poultry Monitors Poultry Trainers, and other Support Staff), to organize the transport and operation of the Poultry Trainer in the villages and the supply and assistance of the Poultry Producer Groups. In some cases, the IP has also been instrumental in organize the production of mixed feed and supervise and monitor the financial issues of the VPPGs. The complete list of IPs and their location is as follows:

- Agency for Building a New Afghanistan (ABNA) in Parwan Province;
- Koh-i-Noor Foundation (KNF) in Ghazni Province;

² The original project design planned for the distribution of 12 pullets. RAMP/Chemonics representatives requested to increase the number to 15 pullets.

- Dost Engineering Group for Rehabilitation of Afghanistan (DEGRA) in Nangarhar Province;
- The Green Leaf Organization (OBS) in Herat province;
- Darwaz Rehabilitation & Services Association (DRSA) in Baghlan province;
- Khahan Improvement Organization (KHIO) in Kunduz province;
- National Welfare Organization (NWO) in Bamyán province.

The STA regularly assessed the quality of services provide by IPs, together with their technical and financial reports, providing instructions and recommendations aiming at improving their delivery capacity. The selection of pro-active and truthful IPs has been a key element for the successful implementation of the project.

6.2.2 Training of village women in improved methods of poultry management and feeding training for Village Poultry Production

Village poultry are almost exclusively kept by women and the social and cultural conditions imply that any development activity with rural women in Afghanistan can only be done through female staff. The adopted training approach followed the proven concept for village poultry production, earlier developed by the FAO Programme. It included a combination of formal training and practical implementation of the learned messages at the same time. The training involved classroom instructions by female staff for groups of women and practical training in the houses of the individuals with one theoretical and practical session each week during the initial 3 months. The subjects of training included Basics about Poultry Production (5 lessons), Feeding and Watering (10 lessons), The Chicken Coop and Equipment (4 lessons), Breeding Management (15 lessons) and Poultry Health (12 lessons).

A total of 182 Female Poultry Trainers (FPTs) have been trained over the project lifespan according to the number of beneficiaries involved in Project activities in the seven target provinces (see table 1). The training has been provided through 789 technical classes and lectures delivered to FPTs by the senior provincial project staff (Project Poultry Trainers under the supervision/assistance of National Poultry Advisors (NPAs) based in Kabul, Jalalabad and Kunduz and Poultry Coordinators based in Ghazni, Baghlan, Bamyán and Herat). The STA and the NPA based in Kabul have carried out regular assessments to evaluate the quality of training provided to FPTs. At the end of the project, 141 women technicians have been working for the Project in 654 villages. To improve technical background of FPTs, beside the main training course, on the job-training and weekly technical classes were organized for a total of 713 meetings. They also received English language classes (3 hours a week).

Training of Staff:	PWN	JLD	KNZ	BLN	GZI	HRT	BYN	Total
Total staff trained	31	31	37	20	29	21	13	182
In-service classes for FPTs	113	184	209	24	121	42	96	776
Villages worked in	156	177	81	70	105	40	25	654
Staff meetings organized	192	175	113	65	75	45	48	713

Table 1. Training of women project staff

The initial step to begin poultry training activities with women beneficiaries was to establish a team of four women trainers, led by a Group Leader (GL) and to held meetings, assisted by

NPA/Poultry Coordinators with village elders in order to explain objective and purpose of the Project. This activity was essential to receive village authorities' support to the programme and provision of the necessary security for the staff during their stay in the village. The reputation of high professionalism and moral integrity of FPTs which has been gained with previous FAO project helped in rapidly establishing a relationship of mutual trust and respect. To select the right beneficiaries for the project and assess the type of the training needed, the project technicians have done 20 baseline village poultry assessments and have interviewed 52,392 rural women in their households assessing the main characteristics and constraints of their poultry production systems.

Field operation of the training programme and criteria for selecting villages and trainees followed the same pattern as during previous FAO rural poultry development projects in which to achieve a higher acceptability of the programme in the villages, the criteria for selecting the trainees were focusing on resource poor households especially Female Headed Households (FHHs) (mostly widows). All potential trainees had to accept, as practiced before, the conditions of the programme, which included willingness to contribute with the construction of a new chicken coop, the payment of a small contribution for the supplied pullets and the participation in group training.

A total of 28,101 selected village women in seven targeted provinces have been trained in all aspects of poultry production, management and diseases. For this purpose, FPTs have organized 22,236 classes (approx. one hour each). All selected village women have received the necessary inputs through the project, except for 750 women in Nangarhar province who have not received pullets as a result of the ban on birds' movement enforced by the Afghan Veterinary Services in the attempts to control HPAI. Beyond the planned number of beneficiaries, 24,436 interested village women who were interested in the training also participated in the technical training, even though no supply of inputs was possible for them. Besides the class training, the village women have received practical training/advises at their houses and FPTs have made a total of 419,924 visits to the beneficiaries' houses. The total number of village women trained per province from these two categories and the number of classes organized by province is shown in the table below:

Training of village women:	PWN	JLD	KNZ	BLN	GZI	HRT	BYN	Total
Classes organized for beneficiaries	4,657	2,925	5,493	2,584	2,846	2,650	1,018	22,236
Selected women attended and completed training	6,141	5,450	5,340	4,403	3,767	2,000	1,000	28,101
Interested women attended	5,084	1,200	9,425	2,898	1,609	3,679	541	24,436
Trainers' visits to households (#)	76,318	79,994	97,689	75,908	53,798	22,312	13,905	419,924
New Families surveyed	8,261	10,973	12,535	3,672	7,653	7,788	1,510	52,392
Old families re surveyed	1,588	1,880	1,179	205	395	0	0	5,247

Table 2. Details on village women training

The construction of the new chicken coop was an important initial step of the programme and has been recognized as one of the indicator of Project effectiveness. In total, 36,005 improved model coops, designed by the project staff, have been constructed using exclusively local materials. Project women beneficiaries, who had successfully completed the coop and regularly attended the training received a drinker, a feeder, 1.5 m of wire mesh, 15 crossbred pullets (of

which one cockerel) and 25 kg of balanced feed³. The village women contributed with 10 percent to the cost of the pullets, an amount that was used to establish a revolving fund for later operations. Each woman thus received a package with a value of approximately 40-42 US\$.

Inputs for distribution were largely arranged through local suppliers, except for the poultry drinkers and poultry medicines which were purchased in Pakistan. The pullets for the villages were supplied by local producers under the umbrella of the Kabul Poultry Farmers' Association according to FAO procurement rules. The minimum age of pullets for distribution by the Project was six weeks, but depending on the season and availability some of the distributed pullets were older. The mixed feed for distribution was prepared by the five Feed Processing Units established in Guzergah (Kabul). At the end of the Project a total of 354,392 pullets, 30,854 feeders, 31,110 drinkers, 603,165 Kg of mixed poultry ration and 63,092 meters of wire mesh have been distributed to the direct beneficiaries of the project.

Distribution of materials (inputs):	PWN	JLD	KNZ	BLN	GZI	HRT	BYN	Total
Chicken coops completed	9,009	8,884	5,771	5,574	3,767	2,000	1,000	36,005
Pullets (No)	88,261	58,020	64,644	56,185	53,800	18,482	15,000	354,392
Feeders (No)	7,434	5,450	5,802	5,401	3,767	2,000	1,000	30,854
Drinkers (No)	7,434	5,706	5,802	5,401	3,767	2,000	1,000	31,110
Feed (Kg)	121,976	78,432	128,000	107,848	91,907	50,000	25,002	603,165
Wire Mesh (meters)	12,032	16,537	11,973	9,058	5,652	6,230	1,610	63,092

Table 3. Distribution of inputs to the beneficiaries

A detailed evaluation (see annex III) was carried out based on survey data covering 30,947 households covered by FPTs in five provinces (Parwan, Kunduz, Jalalabad, Baghlan and Ghazni)⁴, before training and 3,631 households (about 12 percent of the original households) after at least a 12 months period following training and distribution of chicks training. The results reflect the combined effects of the training programme and the influence of the VPPGs' services. The results have shown that households practicing the traditional system had an average flock size of 2.5 local hens (max. 5.7 hens) which lay approximately 125 eggs per year and family (max. 309 eggs). With very little or no direct financial investment for inputs this system produces an average family income per year from poultry of about 12-13 US\$ (max. about 30 US\$) from eggs production, and an estimated 10-12 US\$ (max. about 30US\$) from bird production (pullets for restocking or cockerels, which can be sold, consumed or given as a gift). After the introduction of the Project module training and the improved management of the flocks, surveyed families had an average flock size of 15.4 hens and an estimated average total yearly production of 2,410 eggs (max. 2,830 eggs). Direct investments by the selected families for supplementary feed and animal health care of about 98.4 US\$ resulted in products for sale or home consumption with an average net profit of approximately 144 US\$ (max. about 250 US\$) only from eggs production. Key factors for the significantly increased income were the improved breed, better technical knowledge and husbandry practices used, better health status & survival rate of the birds and the use of supplementary inputs. Under the present economic conditions the improved system clearly produced higher incomes than the traditional system.

³ RAMP/Chemonics representatives recommended increasing the quantity of balanced feed to 50 kg. During the third cycle in 2005, the Project was able to delivery an average of 40 kg per woman beneficiary. However, due to budget cut, in 2006 the project had to revert to the original distribution of 25 kg of balanced feed.

⁴ Data on Bamyan and Herat were not included since the Project started later than the other provinces.

According to the same survey, 93% of surveyed households experienced an increase in their poultry flock (1.76% decreased; 4.86% unchanged). From an average of 0.5/0.6 cock and 2.6 hens per households, project beneficiaries had an average of about 2 cocks and 17.9 hens (including pullets). The main source of stocking birds was from the project (50 %), from self-production by hatching eggs (41 %) and through purchase from other beneficiaries/VGLs (10%). 95.8% of beneficiaries experienced a reduction of poultry mortality (1.47% decreased; 2.68% unchanged). According to Project senior management staff's surveys and observations, the average poultry mortality has significantly decreased down from 60-65% in flock kept under traditional village conditions to 10-15% under improved management systems. More specifically, 69.6% of family experienced less than 10% mortality in their flocks, 26.4% reported a mortality rate comprised form 10 and 25%, while the remaining 4% report mortality rate greater than 25% (it includes mainly predation and disasters like flooding). The practice of vaccinating poultry increase from 0.7% of surveyed villagers before training to 95.8 % of beneficiaries (5.3% of beneficiaries do not regularly vaccinate their birds, while 0.2 do not vaccinate at all). 96.26% of the inspected coops were regularly treated against external parasites by VGLs and 85.41% had clean litter at the time of the survey.

3.8% of surveyed villagers before training had a suitable coop for poultry keeping (although 47.5% had in any case a shelter for poultry for the night). After training, 88.5% had a suitable coop with the remaining 11.5 of survey household needed to repair or improve their coops. 98.3 % and 97.8% of surveyed households after training had at least respectively a feeder and a drinker in the coop (96.5% had water in the drinker at the moment of the survey), while before training only 15.7 had an appropriate feeder and 23.5 had a drinker. Respectively 93.6 and 94.8 of coops after training had perches and appropriate nesting boxes. Finally, after training, 70% of the household make partial use of balanced poultry feed, 61% mix it with kitchen wastes while 0.57% do not provide any feed supplementation.

97.8 % of surveyed households' beneficiaries reported a significant increase of eggs production and 91% said that families' eggs consumption had increased (6.7% decreased, 2.3 not changed). 95.9% experienced an increase in egg selling. The consumption of chicken meat had increased in 73.5 of the surveyed household. 50.76% of beneficiaries declared that they dedicated more time for poultry activities, 43.2% less time while about 1% said that there were no changes. However, 95.8% stated that difficulties in managing their poultry flock had decreased. The interest for keeping more chicken is present in 96.1% of survey households. A summary per province of the above-mentioned data is given in Annex IV.

The Project carried out random survey in order to estimate the number of eggs produced by women beneficiaries. The estimation covers 18,858 beneficiaries with on-going egg production. It is estimated that according to the stage of poultry flock production, they produced about 39,766,000 eggs during the last 18 months (Jan 2005-June 2006) (4,000 producers @ 3,254.2 eggs per month; 2,000 producers @ 2,949.2 eggs; 7,411 producers @ 1,852.2 eggs; 2100 producers @ 1,579.2 eggs and 3,347 producers @ 1131.2 eggs). The total value, considering the price fluctuation of eggs during the abovementioned period, has been estimated 3,985,458US\$.

6.2.3 Organizing rural poultry farmers in Village Poultry Producer Groups

Village Poultry Producer Groups (VPPGs) are women-led, community-based bodies organized for the mutual benefit of the members. The main activities carried out by these groups were (1) to organize Newcastle Disease (ND) vaccination and other animal health services, (2) to organize supply of mixed feed and other small poultry equipment, and (3) to assist with

marketing of products (mainly eggs). Project staff organized frequent village meetings to disseminate and provide details on purpose and functions of the VPPGs to the villagers. A total of 1,020 VPPGs were established⁵ in all villages where rural poultry development training had been completed in order to facilitate project's operations and to sustain project's achievements in the future. The total number of member beneficiaries is 41,202 women. Project results confirmed FAO's experience over the past decade that the VPPGs provide a strong base from which to develop other community and social strengthening activities.

Each VPPG selected a woman Village Group Leader (VGL) in close collaboration with FPTs according to criteria such as willingness to cooperate with trainers, high interest and commitment to develop poultry at village level, reputation for honesty and respect in the village, permission from families to move within and out the village for training or marketing purposes, etc. The selection process included a first phase in which candidates were identified. Afterwards, the elders of the village were consulted for the final selection process and VPPG's members voted for the final candidate. These women were providing essential services at village level such as maintaining regular poultry vaccination, selling of the feed and other inputs and marketing the surplus eggs produced by the group members. VGLs' services were all against commission and full cost recovery of supplies. The clients were also charged with a small amount of money necessary for the growth of the revolving fund (see below). To improve the technical knowledge and the efficiencies of the VGLs, Project Poultry Trainers provided specific training to a total of 499 VGLs. In addition, VGLs have been equipped with the necessary facilities for storing the feed, disinfect the coops, treat sick birds, market the surplus eggs produced by other villagers, keep appropriate accounting of the revolving funds' money and in a safe location, and to work under difficult weather conditions. Details on VPPGs and VGLs figures are provided in the table hereby:

Organizational works:	PRW	JLD	KNZ	BLN	GNI	HRT	BYN	Total
VPPGs established	225	431	117	54	98	70	25	1,020
No of VPPGs members	13,749	12,427	7,509	550	2,267	3,700	1,000	41,202
VPPGs meetings organized	748	404	705	480	1,047	418	33	3,835
Women participated the meetings	14,384	9,665	23,658	15,748	19,773	6,377	1,555	91,160
Visits the VGLs made	33,852	8,238	70,377	43,930	15,889	4,680	1,050	178,016

Table 4. Details on Village Poultry Producer groups

The direct project's beneficiaries have contributed a sum equivalent to 10% of the value of the pullets they received to establish revolving funds in each targeted province for VPPGs' operations. A total of 773 revolving funds have been established in six provinces⁶. The total value of the revolving funds in five provinces is 3.81m Afs (76,000 US\$). VGLs showed strong interest for establishing saving accounts under a microfinance system for the groups and individual women in order to increase have greater opportunity to access and in a timely manner for the purchases of poultry inputs such as restocking pullets, feed etc. Establishing such a savings system within this Project period was not possible but could be an interesting option for a follow-up programme. The total value of revolving funds per province is provided hereby:

⁵ Out of 1,020 village groups, 470 groups have been recognized as the subgroups

⁶ Bamyan staff is in the process of establishing VPPGs, while Herat should increase the number by the en of the project.

Revolving Funds (Afs)	PRW	JLD	KNZ	BLN	GNI	Total
Total	1,160,000	595,600	661,000	750,000	563550	3,810,000

Table 5. Total value of revolving funds

Project results have shown that the service delivery provided by VGLs significantly contributed to village poultry development and generated a significant income for them. VGLs have performed the following activities in their respective villages⁷:

- Vaccinated 1,757,603 chickens;
- Treated 262,230 chickens against some current diseases and vitamin deficiencies;
- Sold 571,400 Kg of poultry ration;
- Marketed 2,688,419 eggs to the urban markets;
- Organized 3,139 village meetings in which more than 76,334 women had attended;
- Made 148,643 visits to the producers' households.

An overview of the number and activities carried out by VPPGs per targeted provinces is given in the table below:

Poultry Development Works by the VGLs/families:	PRW	JLD	KNZ	BLN	GNI	HRT	BYN	Total
Birds vaccinated	540,608	338,310	484,028	218,247	152,404	23,019	987	1,757,603
Birds treated (#)	76,455	26,350	19,547	101,554	37,436	637	251	262,230
Feed sold (Kg)	285,280	101,385	115,441	29,679	39,615	0	0	571,400
Drinkers sold (#)	2	8	75	5	9	0	0	96
Feeders sold (#)	11	89	73	2	9	0	0	184
Wire mesh sold (m)	0	6	124	0	13	0	0	143
Eggs sold (#)	493,617	143,037	1,726,618	99,008	226,139	0	0	2,688,419

Table 6. Activities carried out by Village Poultry Producer Groups

A survey has been carried out through the Project implementation period. The results have shown that the average monthly income of VGLs from providing services was estimated at 28.5 US\$ with a range for the individual VGLs from 23 US\$ to 39.5 US\$. The contribution of the different services to the income, apart from income generated by rearing their own poultry (57.5% of the total income) was 5.4 % for feed selling, 19.9% for vaccinations, 12.9 % for egg marketing and 4.3 % for treatment of birds.⁸

⁷ Data updated to 30 May 2006.

⁸ More substantial additional income could be generated by the VGLs through selling day-old chicks/pullets. This activity will be developed under the follow-up phase funded by the WB. Under the present project no funds were allocated for developing day-old production.

A detailed summary of the result of the survey is given below:

Province		PRW	KNZ	GNI	JLD	BLN	Avg. Total
Months (#)		16	17	5	16	5	
Number of the Active VGLs		133	117	35	62	54	401
Avg. benefit from VGLs' own chickens (Afs)		996.1	1,227.9	768.0	406.4	701.5	820.0
Feed Sold	Avg. Feed sold/month (kg)	16,188.5	5,780.6	4,518.8	5,364.0	6,994.2	34,971.0
	Avg. Net benefit/month Afs)	12,950.8	4,624.5	3,615.0	4,291.2	5,595.4	27,976.8
	Avg. Net benefit/VGL (Afs)	112.2	47.3	103.3	75.0	76.8	384.0
Birds Treated	Avg.# poultry treated/month	4,021.1	803.4	1,097.8	1,872.1	3,720.3	18,601.7
	Avg. Net benefit/month (Afs)	4,021.1	803.4	1,097.8	1,872.1	3,720.3	18,601.7
	Avg. Net benefit/VGL (Afs)	32.4	10.0	31.4	34.0	61.6	307.9
Vaccination	Avg # birds vaccinated/month	9,503.0	41,139.9	14,368.0	17,528.1	20,386.5	101,932.4
	Total net benefit obtained (Afs)	8,552.7	37,025.9	12,931.2	15,775.3	18,347.8	91,739.2
	Avg. Net benefit/VGL (Afs)	73.5	373.0	369.5	278.3	283.5	1,417.5
Eggs Sold	Avg. Eggs sold/month	19,146.9	109,219.8	17,290.8	6,096.1	32,262.1	161,310.5
	Avg. Net benefit/month (Afs)	5,744.1	21,844.0	5,187.2	20,320.4	11,192.6	55,962.8
	Avg. Net benefit/VGL (Afs)	47.1	315.4	148.2	358.6	184.5	922.4
Avg Net monthly income/VGL (Afs)		1,261.3	1,973.6	1,420.4	1,152.2	1,324.1	1,426.3

Table 7. Results of the survey

6.2.4 Establishing a system for input supply especially for feeds and poultry health care and the marketing of poultry products from rural to urban areas.

The Project established six poultry feed processing centers in Jalalabad, Guzergah (Kabul), Pul-e-Khumri (Baghlan), Ghazni, Kunduz and Herat. Each center was equipped with a grinder with a production capacity of 1 MT per day. All main operations (feed mix, bagging etc.) were done manually by hired personnel. The average poultry feed formula developed to cover the needs of layers under Project scavenging system is provided below:

Ingredients	Percentage
Maize	46.4
Wheat	17.4
Rice Broken	7.9
Wheat Bran	6.0
Rice polish	5.0
Flux Seed meal	7.9
Vetch (Mung Bean) bran	3.0
Bone meal	2.0
Limestone	2.5
Milk Powder	1.9
Vitamins and mineral mix	0.1
Total	100.0

Table 8. Poultry feed formula

The project did not install a processing unit in Bamyan because it is virtually impossible to find the necessary feed components and the cost of production is higher than processing feed in Kabul and transport it to Bamyan. Also, the feed processing center in Herat just started its operations. As a consequence of increasing demand for poultry feed (mainly NGOs, International Organizations and some private poultry farmers) the Project management decided to expand the feed processing capacity in Kabul from 1 MT to 10 MT per day. A new feed production center has been established

for this purpose in Darulaman area. The total feed produced over a period of about twenty months was more than 1, 175 MT, of which about 572 MT have been sold through VGLs while 603 MT has been distributed to beneficiaries as part of the initial technical package.

The feed processing centers are part of supply centers established by the Project in each targeted province. The purpose was to establish a reliable system for delivering poultry supplies (poultry feed, medicines and vaccines, and small poultry equipment) mainly to VGLs and centralize the marketing of eggs. In addition, each center served as training center for FPTs and VGLs. The responsibility for the management of the supply delivery system was with Logistic Officers under the supervision of the local NPA or Poultry Coordinator. A simple but effective system for recording feed production and delivery, procurement and distribution of vaccines, medicines and other poultry supplies has been established. The centers were equipped with freezers for the appropriate preservation of poultry vaccines. A part from the distribution of supplies as part of the initial technical package, all poultry supplies distributed to VGLs are sold with a profit margin to cover the cost of personnel (i.e. poultry feed workers) and other operational costs. While in Kabul, and partially Kunduz and Jalalabad, the volume of supplies is such that the economical viability of operations is foreseeable, in small centers such as Ghazni, Baghlan and Bamyán this will be difficult to achieve. Therefore, it will be essential in the second phase of the project to invest for the further development to poultry supply centers (i.e. including hatcheries and day-old chick supply) located in the main cities of Afghanistan (Kabul, Jalalabad, Kunduz, Mazar, Herat and possibly, Kandahar) in order to generate sufficient profit to cover their own costs and partially those of smaller or more isolated centers.

The poultry supply centers, especially those located in Kabul, Kunduz and Jalalabad have supported the marketing of eggs. More than half of eggs produced by Project beneficiaries are directly self-consumed in the households, while the rest is generally sold by women beneficiaries assisted by other male representatives of the households. However, in some cases widows or VGLs far from markets cannot easily sell their eggs. In this case poultry supplies center provided support by collecting those eggs and selling them on city markets, or through specific contracts with egg collectors from town. The example of Kunduz is emblematic: 90% of eggs sold in window shops and local bazaars were produced by Project beneficiaries and marketed through the local poultry supply center (eggs on the market are identified as “Chardara’s eggs” or “Khan Abad’s eggs” according to the name of the Project districts where eggs were produced). Moreover, the STA has been informed by the NPA located in Kunduz that eggs are also exported to the neighboring provinces of Badakhshan and Takhar. In addition, The Project supplied 5,000 fertile eggs to Mercy Corps to undertake their programme of DOCs’ production with small incubators. It is estimated that Project cover the following percentage of the other provincial eggs markets: 40-45% in Ghazni; 60% in Baghlan; 70-75% in Parwan and 5% in Jalalabad, where most of the eggs are imported by the neighboring Pakistan and the price is much lower than other province of Afghanistan (average Afs 4.00 versus Afs 5.00).

The Project made efforts to develop appropriate organizational structures of VPPGs at provincial level. Several meetings took place between Project management staff and VPPGs to identify in a participatory manner objectives, priorities and activities of Rural Poultry Development Associations (RPDAs) and the umbrella organization “Afghanistan Rural Poultry Development Federation (ARPDF)” located in Kabul. Unfortunately, the Project experienced a great deal of difficulties to have these organizations officially registered with the GoA. The authorization from MAAHF authorities was granted only during the second half of May and the finalization registration process is still on-going at the time of this report writing. It would be important that faster procedure would be established for registering farmers associations who are going to be the

backbone of the privatization efforts that the GoA is attempting to promote. It is expected that the follow-up phase of the poultry development project will specifically address the consolidation of the process initiated for developing appropriate organizational structures of VPPGs in the context of the design and implementation of a comprehensive institutional framework for the whole poultry sector in Afghanistan.

6.2.5 The outbreak of Highly Pathogenic Avian Influenza and its impact on project activities.

Since the outbreaks of Highly Pathogenic Avian Influenza (HPAI) in several countries in East and Southeast started in late 2003 and early 2004, the disease has spread rapidly to other countries in Europe and the Middle East. Afghanistan has officially announced the presence of H5N1 virus in mid-March 2006 in four provinces: Kabul, Logar, Nangarhar, and Kapisa. Once domestic birds are infected, avian influenza outbreaks can be difficult to control and often cause major economic impacts for poultry sub-sector stakeholders in affected countries, since mortality rate is high and infected poultry generally must be culled in order to prevent the spread of the disease. The Veterinary Services started disinfection and culling operations in all areas reporting HPAI outbreaks, excluding areas not accessible for security reasons. None of Project beneficiaries' flocks have been infected by the virus H5N1. However, 30 households in Rodat district (Nangarhar province) suffered a total loss of 2,500 birds from government culling operations⁹. The last case observed was on 2 April 2006 in Paktya area. Despite HPAI outbreaks ceased, the national response system need to be strengthened in order to increase the capacity to prevent new outbreaks and spreading of the disease. The principal issues to be addressed at this stage include: (a) strengthening surveillance and diagnostic capacity for the early detection of HPAI in domestic and wild birds, (c) developing an appropriate early response system; (c) promote a rehabilitation system to ensure that poultry farmers will enhance bio-security measures and will adopt safe management practices.

The Project has significantly contributed to develop strategy for controlling HPAI in Afghanistan in collaboration with MAAHF. In particular:

- The Project organized a training workshop on control of HPAI from 27th to 28th November in Darulaman (Kabul) with the participation of His Excellency the Minister of Agriculture, Animal Husbandry and Food, Mr. Obaidullah Ramin; his Excellency the Minister of Public Health, Mr. Sayed Mohd Amin Fatimi and Mr. Serge Verniau, FAO Representative.
- Project staff participated to a number of meetings on HPAI following the requests of the FAOR and MAAHF authorities.
- The Project supported the logistic aspects of the mission of Dr. Sam Yingst, Veterinarian with NAMRU 3 in Cairo (Egypt) from 9-16 March to Kabul. Using PCR technology, he was able to identify HPAI infection for the first time in Afghanistan.
- Project staff organized the shipment of laboratory samples to the FAO reference laboratory in Padova – Italy, where the presence of the virus H5 N1 was officially confirmed.
- Seven (7) specific training courses focusing on increased bio-safety measure at farm level were implemented in the project targeted provinces. Special agreements were set with local poultry farmers associations for producing day-old –chicks and pullets for restocking under sever bio-safety measures. Regular monitoring/surveillance for identifying HPAI outbreak has been undertaken by project women poultry trainers.

⁹ Official figures indicate a total of 27,000 birds culled.

- Team member of the World Bank Mission of international experts for the development of the National Plan for Avian Influenza.
- The STA prepared together with Ms. E. Guerne-Bleich (AGAP) and Dr. Giancarlo Ferrari (AGAH) a project proposal for poultry restocking with HPAI affected poor household. DFID showed an interest in funding the proposal.
- The STA finalized together with Ms. E. Guerne-Bleich, Dr. Giancarlo Ferrari and Mr. Etienne Careme (FAO Emergency Coordinator) the project proposal: “Early Detection, Prevention and Control of Avian Influenza in Afghanistan”. The project proposal has been integrated in a comprehensive « Avian and Human Influenza Control and Preparedness Project » in collaboration with USAID and the WB. The STA has been part of the project appraisal team of experts.
- Pilot teams with FPTs have been established for HPAI surveillance activities. The results indicated the female trainers have full access to women beneficiaries and the data collected are reliable. Surveillance team cannot include men since they would not be entitled to enter households’ premises and talk directly to women poultry producers.

The outbreak of HPAI virus in Afghanistan caused mayor delays in the delivery of pullets as part of the technical package to women beneficiaries:

- On 24/04 Dr. Azizullah Osmani, Head of the Veterinary and Animal Production in the MAAHF authorized the distribution of 30,000 birds in Herat province (non-HPAI infect area) from Farah province (non-HPAI infect area). Unfortunately, further delays were experienced because of security reasons and high temperature not suitable for pullets transport.
- On 16/05 Dr. Osmani authorized the distribution of 94,000 birds in Bamyan, Ghazni, Baghlan and Kunduz provinces (non-HPAI infect areas) on the basis of the absence during 6 weeks of HPAI cases in Kabul (and in Afghanistan). Special protocol has been developed together with Dr. Ferrari and Dr. Yingt addressing poultry distribution procedures (see annex III). It is important to note that all birds distributed have been vaccinated with vaccine H5N2 (Intervet);
- Dr. Osmani did not authorize the distribution of pullets in the Nangarhar province (HPAI infected area). Therefore, 678 women beneficiaries who received training could not receive pullets.

The Project assisted the Poultry Farmers’ Association in rehabilitating poultry hatchery facilities established years ago in Kabul area by private firms which have never been operational. A technical re-training course has been organized and the project provided 100,000 fertile eggs produced by women beneficiaries in area never infected by HPAI virus and keeping their flock respecting bio-safety measures. The results have been extremely positive with hatching rate superior to 85% and negligible DOC’s mortality rate. The pullets produced have been distributed as part of the initial package for women trainees. The Project demonstrated the possibility to produce good quality restocking birds in Afghanistan, avoiding the risks to import infected birds from neighboring country, particularly from Pakistan.

7 Lessons Learned and Recommendations for Future Activities

This Project was implemented to further develop and consolidate the integrated model developed by FAO with support from the German Government and RAMP/USAID, defined as Afghan Rural Poultry Development model, for village poultry production. The main emphasis of this Project was on further expanding and consolidating the organizational structure and a networked system for the supply of poultry inputs and marketing of products. It has proved to be appropriate, accepted and highly beneficial. It targeted rural women and had major economic and social impacts. Project results re-emphasized that smallholder poultry production is a valuable asset to local population contributing to poverty alleviation, food security and ecologically sound management of natural resources especially in disadvantaged groups and less-favored areas.

The additional information established through the implementation of the Project confirmed previous results which show that the development approach for rural poultry production significantly increases the amount of consumable and saleable products from poultry. It represents a significant source of income for poor-resources women. Moreover, the constant growing demand for vulnerable households to join the programme and thus to benefit from the organizational structures and the input supply and marketing system are a proof that the Project successfully contributed to the development of livestock production as a planned economic activity. In addition to the direct effects on production and household income, the Project has enabled a large numbers of village women to come together, discuss various issues and find a way of learning and communicating with each other which does not currently exist for women in many locations of Afghanistan. This helped increasing self-confidence and esteem of many village women who have never had any kind of formal training before in their lives.

The GoA is committed to private sector-led development, which is considered a key to Afghanistan's longer-term economic development and poverty reduction. Developing, implementing and administering the privatization process in Afghanistan are crucial for clarifying the roles of the state and private sector, freeing of productive resources and better usage of resources. FAO clearly has a major contribution to make in ensuring the process within the poultry sector. In line with GoA policies steps were made to develop the private sector, by establishing associative structures at village level (VPPGs) and a central level. Continued training activities for both Government and Non Government staff have made the development concepts of the Project known to a wider group of technical people. The growing interest and plans of other organizations (national and international) to initiate development activities for poultry production and their request to learn from the experiences of the Project are a clear signal that the Project had a significant impact beyond the immediate target groups.

A mid-term Workshop on Village "Assessment of Rural Poultry Development Program in Afghanistan" was held in mid 2006 in Kabul as part of project activities. Technical experts, poultry sector's stakeholders and Government representatives and technicians strongly recommended to support the development of the Afghan Rural Poultry Development Model through a new phase should focus at consolidating rural poultry development activities by consolidating and strengthening private structures at provincial level able to further increase the capacity to supply services and facilitate access i.) to inputs: feed, pullets, day old chicks, medicines and vaccines, poultry equipment, ii.) to micro-credit in collaboration with local micro-credit institutions, iii.) to markets and iv.) to technical extension and training through an economically viable nationwide network which will include member rural poultry farmers, existing local poultry farmers' associations and other sub-sectoral stakeholders, to continue

improving local poultry production and marketing. Through income generated, the newly established structures will be gradually financially self-sustained and be able to absorb project technical staff and provide them viable income opportunities with poor resource women in a sustainable way and independent from external funding resources.

This follow-up proposal from poultry sector's stakeholders together with the results from Project activities lead to the following recommendations which are important for further follow-up of poultry activities and the development of sustainable organizational structures:

- Any extension of the project has to have a strong institutional component which also encourages the government to embrace a more enabling environment for the establishment of producer associations. The policy of involving private sector service providers should be continued as one on the main exit strategy.
- Provide a mechanism for the decentralization of the National/Provincial Poultry Producer Association to better serve the needs of producers at district and village level. Supply and distribution mechanism in the poultry production and marketing chain in the provinces is one of the sensitive areas to sustain but is a key in the long term strategy and need to be addressed specifically;
- The networks and the private mechanisms developed will have to be sustainable not only near urban centres but linked to producers in the more remote and difficult to access.
- The Provincial Poultry Associations (especially in Kabul and Mazar) and their members should be encouraged and supported to increase their own hatchery operation and chick production in order to become independent from the regular need for importations. Establishment of flock of parent stock of a suitable breed(s) to supply hatcheries in Kabul and the provinces with healthy fertile eggs.
- Strengthening of the capacity of the feed mills in Kabul and in the provinces to meet the demand for poultry feed effectively and without subsidy.
- Develop a larger collaboration with the Afghan Veterinary Association for the effective supply of veterinary service and animal health products to the small-scale producer
- A clear strategy for maintaining and improving poultry genetic resources in the country needs to be developed to a) maintain and improve indigenous breeds and b) to ensure there is no loss of genetic potential of the “Rangin” hybrid through indiscriminate cross-breeding;
- Develop comprehensive protocols with rural micro-finance institutions operating in Afghanistan for facilitating the access to credit and saving systems for rural farmers, particularly women;
- Continue building technical capacity within the MAAHF to plan, monitor and evaluate activities within the Afghan poultry sector.
- Include clear exit strategies into the follow-up phase building upon the involvement of the private-sector and producer associations. At the same time the programme needs to deliver necessary inputs with quality delivery but also to take steps toward sustainable patterns.

The proposed follow-up phase of the FAO poultry programme has been favorably considered for funding by the World Bank under the newly approved project: “Horticulture and Livestock Productivity Project” in the Western provinces of Afghanistan (2006-2009). This project is expected to come on-stream toward the end of the year and FAO has been selected as Implementing Agency. The work-plan developed for this project intends to make operational

the above mentioned recommendations. More specifically, at the end of the project, the following outputs are expected:

- Continue training of additional village women by increasing the number of beneficiaries in the provinces and selected new provinces.
- About 25,000 selected village women in 25 districts of ten provinces will have received a thorough six-months training and support to improve their own poultry production;
- The trained village women will have been organized in 500 Poultry Production Groups (PPGs);
- The PPGs will have been organized in Village Poultry Producers Associations (VPPAs), together with groups created under the USAID/RAMP programme, and five Poultry Production Unions (PPUs) will have been created and training carried out at provincial level to manage follow-up services to the VPPAs regarding the provision of birds and the supply of vaccines, medicines, poultry feed and poultry equipment and the supervision of surveillance activities on poultry diseases, with particular attention to Highly Pathogenic Avian Influenza (HPAI);
- A National Poultry Board will have been created and established in Kabul which will reinforce sustainability of the industry as the main organization for policy decision on matters regarding the development of the poultry sector in Afghanistan and will have allowed for the creation of an enabling environment.
- A Road map for a national poultry production sustainable strategy has been developed and engaged through the involvement of poultry associations/union and local private companies that have been identified to fill specific supply and distribution mechanism in the poultry production and marketing chain
- Services providers have been identified and contracted in the frame of the programme to support the provision and distribution of some of the inputs
- Five(5) regional centres will have been installed on a permanent basis and will have the capacity to provide all required inputs and services to the PPGs and their village members and to ensure marketing of their additional production;
- Three (3) hatcheries fed with “selected parent stock” eggs and chicks growing facilities will be operational in Kabul, Herat and Kunduz; and
- Parent stock units providing fertile eggs from an improved breed, in capacity to cover the need of the project beneficiaries;
- Regular vaccination are undertaken to protect the flock (Avian Influenza, Newcastle Disease, Gumboro Disease and Fowl Pox);
- Development of peri-urban commercial intensification, through contracts that will have been passed with a network of marketing outlets in provincial centres and the main urban centres regularly supplied with the production of eggs and chickens channeled through the PPU.s.
- Introducing new knowledge on practical methods of increasing livestock productivity in ten (10) provinces will have improved food security and increased income generation opportunities in rural areas;

- Increasing poultry sector competitiveness by developing an appropriate legislative and institutional framework and implementing interventions will have improved technology, strengthened and expanded markets and facilitated rural access to financial services;
- The project activities will have encompassed the whole poultry marketing chain, with a particular view to developing and strengthening private sector activity in poultry and egg production and sale;
- Specific policy and regulation framework will have been developed through close coordination and interaction between the Government services and the National Poultry Federation;
- Creating an enabling environment that empowers rural women and local communities through awareness, skills and technologies improvement in poultry production systems, in particular, the PPGs will have created a functioning focal point for the education of adult women in a range of economic and socially productive activities.

8. Summary of Projects Relationship and Coordination with the Transitional Islamic State of Afghanistan and Appropriate Ministries during the Course of this Project.

The Government of Afghanistan (GoA) recognizes the important role that agriculture, livestock and natural resources sectors play for the livelihoods of the rural Afghan people and the opportunities they offer in the alternative livelihoods strategies. It is widely recognized that the agricultural and livestock sectors offer the best possibility for short-run economic growth in the country and rapid development in the sector serve as the engine for growth in other economic sectors. The GoA is actively pursuing its commitment to the World Food Summit Plan of action and the UN Millennium Development Goals particularly in the areas of poverty reduction and environmental protection by translating these goals into nationally achievable targets and incorporating them into appropriate development plans.

The FAO Programme for Afghanistan has been implemented in close coordination with the Ministry of Agriculture, Animal Husbandry and Food (MAAHF), the Departments of Animal Health and Production and its provincial institutions. Despite, at present MAAHF has a limited number of qualified staff for poultry production, the joint implementation with Government staff has offered the opportunity to introduce the concept and knowledge of village poultry development into the Ministry. MAAHF staff actively participated in field missions, workshop and one-day seminar organised by the Project. More importantly, it is drawing the relevant officers of the MAAHF and provincial Departments of Agriculture (DoAs) into the task of raising the productivity and further development of the poultry industries with particular emphasis on improving the economic and social opportunities for women.

The GoA is committed to enhance private sector-led development, which is considered as key to Afghanistan's longer-term economic development and poverty reduction. Developing, implementing and administering the privatisation process in Afghanistan is crucial for clarifying the roles of the state and private sector, freeing of productive resources and better usage of resources (in particular land). The project has continuously assisted the GoA in its significant efforts in policy advice, capacity building and restructuring. In this sense, Project staff has assisted the MAAHF in finalizing a Policy Framework for the livestock sub-sector and the Agricultural Sector Master Plan which will provide clear indications on future development strategies. Project staff have been invited to participate to the monthly meetings of the Ministry of Agriculture/Donors Joint Steering Committee for the Livestock Sector.

The project has been instrumental in assisting the GoA in designing, developing and implementing an effective strategy to identify and control outbreaks of Highly Pathogenic Avian Influenza (HPAI). Project staff has been involved in the development of the “National AI Pandemic Preparedness and Response Plan” which led to the formulation of the project « Avian and Human Influenza Control and Preparedness Project » in collaboration with USAID and the WB. Project staff trained Government staff and veterinarians on HPAI detection, surveillance and control techniques in collaboration with other specific FAO projects (GTFS/INT/907/ITA project “Controlling Transboundary Animal Diseases in Central Asian countries”), and they are technical reference experts in various provinces for Government authorities, International and National institutions and private producers.

9. Photographs, Human Interest and Beneficiary Stories

A CD with all pictures taken during the project lifespan is annexed to the report.

Annex I: Criteria for selection of the beneficiaries for the poultry programme

The following criteria should be considered in selecting beneficiaries (families) for the poultry village programs:

1. The beneficiaries should be interested in poultry raising.
2. The beneficiaries should also fulfill the following criteria:
 - Have permission from her husband/family leader to attend the training.
 - Be willing to spare enough time to attend the training and to look after the chicks.
 - Have enough previous knowledge and talent to follow the lessons.
 - Be willing to spend time and discuss poultry production with other trainees or neighbors.
 - Be willing to invest own funds in rearing of their chicks up to laying stage.
 - Have suitable space for the construction of a coop (acceptable to the responsible trainer)
 - Be ready to construct a modified coop according to the given layout.
3. The age limit for the beneficiaries is 20-50 years.
4. The beneficiaries should be candidates proposed by their village elders (Malik or Shura).
5. Priority should be given to those, which appear to be poor, are widows, disabled or have recently returned to their villages.
6. The families should be selected from the whole village. No families living in the same yard or neighbors should be selected.
7. The families should agree and sign that they will not sell the inputs directly provided by the project.
8. The selected families should be locals of the village where the programme is being implemented.
9. The selected families should agree to contribute the price of five eggs to the village producers' groups. This amount will remain as revolving fund with the group leader.
10. The selected families should be willing to follow instructions of their trainers.

Annex II: Final results survey

Province	No of the sample families		NO of cockerels/ per family		No of hens/ per family		Av. Flock size/Family		Availability of the coops		Coops Condition		Management system					Vaccination														
	Before training (BT)	After training(AT)	Av. Cocks/family (BT)	Av. Cocks/family (AT)	% Increased	Av. Hens/family(BT)	Av. Hens/family(AT)	% Increased	Av. (BT)	AV.(AT)	% Increased	% Available(BT)	% available (AT)	% Increased	% Suitable (BT)	% Suitable (AT)	% Improved	% Feeders available (BT)	% Feeders available (AT)	% Improved	% Drinkers available (BT)	% drinkers available(AT)	%Improved	% Regular(BT)	% Regular (AT)	% Improved	%NOT regular(BT)	% Not regular(AT)	% Improved	% Not vaccinated(BT)	% Not vaccinated(AT)	
Parwan	3987.0	534.0	0.2	1.7	756.5	1.1	11.0	1010.1	1.3	12.8	965.9	23.3	98.9	75.6	7.8	82.4	74.7	24.8	97.0	72.2	24.4	97.8	73.3	1.9	89.9	88.0	21.9	9.7	12.2	76.2	0.4	75.8% Improved
Baghlan	3188.0	181.0	0.8	3.9	481.3	2.6	17.8	697.6	3.4	21.6	646.0	55.4	100.0	44.6	1.0	92.3	91.3	7.2	98.9	91.7	10.3	100.0	89.8	0.1	98.9	98.8	3.3	1.1	2.2	96.9	0.0	96.9
Kunduz	4816.0	489.0	0.8	2.1	257.8	3.0	33.1	1089.8	3.9	35.3	911.4	70.5	100.0	29.5	1.6	98.6	96.9	12.4	96.3	83.9	49.5	93.3	43.8	0.4	99.2	98.8	2.9	0.8	2.1	96.1	0.0	96.1
Nangarhar	11064.0	2007.0	0.8	2.6	339.0	2.8	14.6	523.7	3.6	17.2	483.7	37.5	99.6	62.2	4.5	69.8	65.3	7.2	99.1	91.9	7.0	99.0	92.0	0.9	92.8	91.9	10.9	6.8	4.2	88.2	0.5	87.7
Ghazni	7892.0	420.0	0.2	2.9	1381.0	0.8	12.8	1616.5	1.0	15.7	1567.0	50.7	100.0	49.3	4.2	99.3	95.1	26.9	100.0	73.1	26.2	99.3	73.1	0.0	98.1	98.1	7.5	1.9	5.6	92.5	0.0	92.5
Total	30947.0	3631.0	2.8	13.2	3215.5	10.3	89.3	4937.7	13.1	102.5	4573.9	237.4	498.5	261.2	19.1	442.4	423.2	78.5	491.3	412.8	117.3	489.2	372.0	3.3	478.8	475.6	46.6	20.3	26.3	449.8	0.8	449.0
Average	6189.4	726.2	0.6	2.6	643.1	2.1	17.9	987.5	2.6	20.5	914.8	47.5	99.7	52.2	3.8	88.5	84.6	15.7	98.3	82.6	23.5	97.8	74.4	0.7	95.8	95.1	9.3	4.1	5.3	90.0	0.2	89.8

BT: Before Training

AT: After Training

Annex III: Summary of Project results

Summary of surveys results	PRW	KNZ	JAL	BLN	GZN	Grand Total	Average
1. Received services from the Village Group Leaders							
No. of families	534.0	489.0	2,007.0	181.0	420.0	3,631.0	
Received services by %:	95.7	99.8	98.9	100.0	100.0	494.3	98.87
Not receiving services by %:	4.3	0.2	1.2	0.0	0.0	5.7	1.13
2. Details about the families' flocks and the source they obtained their chickens:							
A. Existing mature birds (improved breed):							
Total No of hens available with families:	5,104.0	14,172.0	17,792.0	2,749.0	5,244.0	45,061.0	
Total No of cockerels available with families:	767.0	1,033.0	2,905.0	606.0	1,003.0	6,314.0	
Average No hens/family:	9.6	31.1	8.9	15.4	12.5	77.4	15.49
Average No of cockerels/family:	1.4	2.1	1.5	3.4	2.4	10.8	2.15
Average flock size (improved breed) /family	11.0	33.2	10.3	18.8	14.9	88.2	17.6
Average flock size (improved + local breed)/family	12.8	35.3	17.2	21.6	15.2	102.1	20.4
B. Sources the families received their existing improved breed birds:							
Total No received through the project:	4,475.0	3,926.0	13,167.0	1,489.0	5,433.0	28,490.0	
Average received through project/family:	8.3	8.0	6.6	8.2	12.9	44.1	8.82
Total No obtained by hatching:	796.0	11,348.0	2,694.0	1,802.0	51.0	16,691.0	
Average No/family obtained by hatching:	1.5	23.2	1.3	10.0	0.1	36.1	7.22
Total No purchased:	678.0	150.0	3,295.0	30.0	759.0	4,912.0	
Average No/family obtained by purchasing:	0.6	0.3	1.6	0.9	1.8	5.3	1.05
C. About the existing local chickens:							
Total No of hens:	773.0	998.0	11,462.0	425.0	118.0	13,776.0	
Average hens/family:	1.5	2.0	5.7	2.4	0.3	11.8	2.36
Total No of cockerels:	159.0	13.0	2,322.0	64.0	19.0	2,577.0	
Average cocks/family	0.3	0.0	1.2	0.5	0.1	2.0	0.41
Average flock size (local breed) /family :	1.8	2.1	6.9	2.9	0.3	13.9	2.8
How obtained the local chickens?							
Total hatched by families:	486.0	388.0	1,485.0	312.0	12.0	2,683.0	
Average No/family obtained by hatching:	0.9	0.8	0.7	1.7	0.0	4.2	0.84
Total No purchased by the families:	324.0	24.0	508.0	104.0	178.0	1,138.0	
Average No/family purchased:	0.6	0.1	0.3	0.6	0.4	1.9	0.38
Total No of the birds purchased from Group Leaders:	68.0	21.0	29.0	16.0	13.0	147.0	
Average No/family purchased from GL:	0.1	0.0	0.0	0.1	0.0	0.3	0.06
% the families obtained their purchased birds through GL	75.2	4.3	4.2		7.1	90.8	22.69
No purchased from village:	129.0	7.0	680.0	61.0	115.0	992.0	
Average No/family purchased from village:	0.2	0.0	0.3	0.3	0.3	1.2	0.24
% the families obtained their purchased birds from villagers	13.4	1.4	62.0		62.5	139.4	34.84
No purchased from city:	24.0	0.0	370.0	4.0	56.0	454.0	
Average No/family purchased from city:	0.1	0.0	0.2		0.1	0.4	0.09
% the families obtained their purchased birds from city	11.4	0.0	33.8	5.9	30.4	81.5	16.30

3. Evaluation of the poultry management statuses with the families:

A. The coops and their conditions:

Total No of the coops in good condition:	441.0	479.0	1,399.0	167.0	417.0	2,903.0	
% the coops were in good condition:	82.4	98.6	69.8	92.3	99.3	442.4	88.47
Total No of the coops that needed repair:	88.0	7.0	597.0	14.0	3.0	709.0	
% the coops needed repairing:	16.5	1.4	29.8	7.7	0.2	55.6	11.12
Total No of the families did not had improved coops:	6.0	0.0	7.0	0.0	0.0	13.0	
% the families did not had improved coops:	1.1	0.0	0.4	0.0	0.0	1.5	0.29
No of families not reported:	5.0	3.0	4.0	0.0	0.0	12.0	

B. Availability of the improved feeders with the families:

Total No of the families were using the improved feeders:	518.0	471.0	1,975.0	179.0	420.0	3,563.0	
% the families were using the improved feeders:	97.0	96.3	99.1	98.9	100.0	491.3	98.25
Total No of families were not using the improved feeders:	16.0	15.0	19.0	2.0	0.0	52.0	
% the families were not using the improved feeders:	3.0	3.1	1.0	1.1	0.0	8.1	1.62
Total No of families that were not reported:	0.0	3.0	13.0	0.0	0.0	16.0	

C. Availability of the improved drinkers with the families:

Total No of families were using the improved drinkers:	521.0	456.0	1,976.0	181.0	417.0	3,551.0	
% the families were using the improved drinkers:	97.8	93.3	99.0	100.0	99.3	489.2	97.85
Total No of families were not using improved drinkers:	12.0	30.0	21.0	0.0	3.0	66.0	
% the families were not using the improved drinkers:	2.3	6.1	1.1	0.0	0.7	10.1	2.03
Total No of families that were not reported:	1.0	3.0	10.0	0.0	0.0	14.0	

D. Availability of feed in the feeders:

Total No of families had feed available in the feeders:	441.0	481.0	1,868.0	177.0	371.0	3,338.0	
% the families had feed in the feeders:	82.6	98.4	95.2	97.8	88.3	462.3	92.45
Total No of families had no feed available in the feeders:	93.0	8.0	94.0	4.0	49.0	248.0	
% the families had no feed in the feeders:	17.4	1.6	4.8	2.2	11.7	37.7	7.54
Total No of families that were not reported:	0.0	8.0	45.0	0.0	0.0	53.0	

E. Feed quality:

No of families used the mixed poultry ration:	377.0	473.0	1,619.0	120.0	367.0	2,956.0	
% the families used mixed poultry ration some how:	43.2	96.7	56.9	66.3	87.4	350.5	70.10
No of the families used kitchen wastes:	486.0	394.0	1,208.0	59.0	394.0	2,541.0	
% the families used the mixed feed/kitchen wastes:	55.7	80.8	42.5	32.6	93.8	305.3	61.06
No of families gave no any supplementation:	10.0	0.0	17.0	2.0	0.0	29.0	
% the families gave no supplement:	1.2	0.0	0.6	1.1	0.0	2.8	0.57
No of the families not reported:	18.0	3.0	14.0	0.0	0.0	35.0	

F. Availability of water in the drinkers:

Total No of families had water available in the drinkers:	491.0	474.0	1,838.0	181.0	413.0	3,397.0	
% the families had water in the drinkers:	92.6	96.9	94.8	100.0	98.3	482.7	96.55
Total No of families had no water in the drinkers:	39.0	15.0	100.0	0.0	7.0	161.0	
% the families had no water in the drinkers:	7.3	3.1	5.2	0.0	1.7	17.2	3.45
Total No of families that were not reported:	4.0	0.0	69.0	0.0	0.0	73.0	

G. Availability and condition of the litter:

No of the families with the improved coops	529.0	486.0	1,996.0	181.0	420.0	3,612.0	
% the families with the improved coops	98.9	100.0	99.6	100.0	100.0	498.5	99.70

<i>No of the families without the improved coops</i>	6.0	0.0	7.0	0.0	0.0	13.0	
<i>% the families without the improved coops</i>	1.1	0.0	0.4	0.0	0.0	1.5	0.30
<i>No of families not reported</i>	5.0	3.0	4.0	0.0	0.0	12.0	
Total No of coops with the clean litter:	377.0	489.0	1,709.0	172.0	320.0	3,067.0	
% the coops with the clean litter:	70.6	100.0	85.2	95.0	76.2	427.1	85.41
Total No of coops with the unclean litter:	105.0	0.0	232.0	2.0	97.0	436.0	
% the coops with the unclean litter:	19.7	0.0	11.6	1.1	23.1	55.4	11.08
Total No of coops without the litter:	52.0	0.0	64.0	7.0	3.0	126.0	
% the coops without the litter:	9.7	0.0	3.2	3.9	0.7	17.5	3.50
Total No of families that were not reported:	0.0	0.0	2.0	0.0	0.0	2.0	
H. Availability of the perches in the coops:							
Total No of coops with the perches:	414.0	489.0	1,825.0	180.0	412.0	3,320.0	
% the coops with the perches:	78.3	100.0	92.1	99.5	98.1	467.9	93.58
Total No of coops without the perches:	115.0	0.0	157.0	1.0	8.0	281.0	
% the coops without the perches:	21.7	0.0	7.9	0.6	1.9	32.1	6.42
Total No of families that were not reported:	5.0	0.0	25.0	0.0	0.0	30.0	
I. Availability of the nesting boxes in the coops:							
Total No of coops with the nesting boxes:	448.0	489.0	1,780.0	180.0	398.0	3,295.0	
% the coops with the nesting boxes:	84.2	100.0	92.0	99.5	94.8	470.4	94.08
Total No of coops without the nesting boxes:	84.0	0.0	155.0	1.0	22.0	262.0	
% the coops without the nesting boxes:	15.8	0.0	8.0	0.6	5.2	29.6	5.92
Total No of families that were not reported:	2.0	0.0	72.0	0.0	0.0	74.0	
J. Sanitation:							
Total No of coops with the good sanitation:	333.0	475.0	1,287.0	171.0	205.0	2,471.0	
% the coops with the good sanitation:	63.3	97.1	64.1	94.5	48.8	367.9	73.57
Total No of coops with the fair sanitation:	183.0	14.0	653.0	9.0	212.0	1,071.0	
% the coops with the fair sanitation:	34.8	2.9	32.5	5.0	50.5	125.6	25.13
Total No of coops with the bad sanitation:	10.0	0.0	67.0	1.0	3.0	81.0	
% the coops with the bad sanitation:	1.9	0.0	3.3	0.6	0.7	6.5	1.30
Total No of families that were not reported:	8.0	0.0	0.0	0.0	0.0	8.0	
K. Vaccination:							
Total No of families with regular vaccination program:	473.0	485.0	1,862.0	179.0	412.0	3,411.0	
% the families with regular vaccination program:	89.9	99.2	92.8	98.9	98.1	478.9	95.77
Total No of families without regular vaccination program:	51.0	4.0	136.0	2.0	8.0	201.0	
% the families without regular vaccination program:	9.7	0.8	6.8	1.1	1.9	20.3	4.06
Total No of families not vaccinating:	2.0	0.0	9.0	0.0	0.0	11.0	
% the families not doing vaccination:	0.4	0.0	0.5	0.0	0.0	0.8	0.17
Total No of families that were not reported:	8.0	0.0	10.0	0.0	0.0	18.0	
L. External parasites infestation with in the coops:							
Total No of coops without infestation:	504.0	474.0	1,823.0	179.0	415.0	3,395.0	
% the coops with no infestation:	95.8	96.9	90.9	98.9	98.8	481.3	96.26
Total No of infested coops:	22.0	15.0	183.0	2.0	5.0	227.0	
% the infested coops:	4.2	3.1	9.1	1.1	1.2	18.7	3.73
Total No of families that were not reported:	8.0	0.0	37.0	0.0	0.0	45.0	
M. Egg production levels with the families:							
Total No of families below 50 % egg production:	70.0	0.0	259.0	4.0	53.0	386.0	

% the families below 50 % egg production:	13.1	0.0	12.9	2.2	12.6	40.8	8.17
Total No of families between 50-70% egg productions:	307.0	25.0	1,407.0	61.0	264.0	2,064.0	
% the families between 50-70 % egg production:	57.5	5.1	70.1	33.7	62.9	229.3	45.86
Total No of families above 70 % egg production:	157.0	464.0	336.0	116.0	103.0	1,176.0	
% the families above 75 % egg production:	34.8	94.9	17.0	64.1	24.5	235.2	47.05
Total No of families that were not reported:	0.0	0.0	0.0	0.0	0.0	0.0	

N. Chicken mortality:

Total No of families below 10 % mortality:	344.0	383.0	1,597.0	117.0	256.0	2,697.0	
% the families below 10% mortality:	64.4	78.3	79.7	64.6	61.0	348.0	69.60
Total No of families between 10-25 % mortality:	171.0	67.0	347.0	63.0	144.0	792.0	
% the families between 10-25 % mortality:	32.0	13.7	17.3	34.8	34.3	132.1	26.42
Total No of families above 25-50 % mortality:	23.0	40.0	52.0	1.0	14.0	130.0	
% families above25-50% mortality:	4.3	8.2	2.6	0.6	3.3	19.0	3.79
Total No of families 50-75 mortality:	4.0	0.0	3.0	0.0	2.0	9.0	
% families 50-75% mortality:	0.8	0.0	0.2	0.0	0.5	1.4	0.28
Total No of families with more then 75%:	1.0	0.0	6.0	0.0	4.0	11.0	
% families with more then 75%:	0.2	0.0	0.3	0.0	1.0	1.4	0.29
Total No of families that were not reported:	0.0	0.0	2.0	0.0	0.0	2.0	

4. What changes do you observe in your chicken production since this project is started?

A. Number of your chickens?

Total No of families said "it was increased":	508.0	489.0	1,890.0	170.0	347.0	3,404.0	
% the families said "it was increased":	95.9	100.0	94.5	93.9	82.6	466.9	93.38
Total No of families said "it was decreased":	7.0	0.0	50.0	9.0	0.0	66.0	
% the families said "it was decreased":	1.3	0.0	2.5	5.0	0.0	8.8	1.76
Total No of the families said "not changed":	15.0	0.0	60.0	2.0	73.0	150.0	
% the families said "not changed":	2.8	0.0	3.0	1.1	17.4	24.3	4.86
Total No of families that were not reported:	4.0	0.0	7.0	0.0	0.0	11.0	

B. Mortality with your chickens?

Total No of families said "it was increased":	5.0	16.0	14.0	4.0	1.0	40.0	
% the families said "it was increased":	0.9	3.3	0.7	2.2	0.2	7.4	1.47
Total No of families said "it was decreased":	494.0	473.0	1,931.0	177.0	399.0	3,474.0	
% the families said "it was decreased":	93.0	96.7	96.7	97.8	95.0	479.3	95.85
Total No of the families said "not changed":	32.0	0.0	52.0	0.0	20.0	104.0	
% the families said "not changed":	6.0	0.0	2.6	0.0	4.8	13.4	2.68
Total No of families that were not reported:	3.0	0.0	10.0	0.0	0.0	13.0	

C. Egg production with your chickens?

Total No of families said "it was increased":	504.0	487.0	1,920.0	181.0	420.0	3,512.0	
% the families said "it was increased":	94.6	99.6	95.0	100.0	100.0	489.1	97.82
Total No of families said "it was decreased":	3.0	0.0	55.0	0.0	0.0	58.0	
% the families said "it was decreased":	0.6	0.0	2.7	0.0	0.0	3.3	0.65
Total No of the families said "not changed":	26.0	2.0	47.0	0.0	0.0	75.0	
% the families said "not changed":	4.9	0.4	2.4	0.0	0.0	7.6	1.53
Total No of families that were not reported:	1.0	0.0	0.0	0.0	0.0	1.0	

D. Families' egg consumption?

Total No of families said "it was increased":	402.0	417.0	1,873.0	178.0	415.0	3,285.0	
% the families said "it was increased":	78.1	85.3	93.8	98.3	98.8	454.3	90.86
Total No of families said "it was decreased":	62.0	72.0	80.0	3.0	5.0	222.0	

% the families said “it was decreased”:	12.0	14.7	4.0	1.7	1.2	33.6	6.73
Total No of the families said “not changed”:	51.0	0.0	43.0	0.0	0.0	94.0	
% the families said “not changed”:	9.9	0.0	2.2	0.0	0.0	12.1	2.41
Total No of families that were not reported:	19.0	0.0	11.0	0.0	0.0	30.0	

E. Families chicken meat consumption?

Total No of families said “it was increased”:	271.0	419.0	1,559.0	165.0	113.0	2,527.0	
% the families said “it was increased”:	51.5	85.7	78.3	91.2	26.9	333.6	66.71
Total No of families said “it was decreased”:	56.0	70.0	209.0	10.0	283.0	628.0	
% the families said “it was decreased”:	10.7	14.3	10.5	5.5	67.4	108.4	21.67
Total No of the families said “not changed”:	199.0	1.0	224.0	6.0	24.0	454.0	
% the families said “not changed”:	37.8	0.2	11.3	3.3	5.7	58.3	11.66
Total No of families that were not reported:	8.0	0.0	15.0	0.0	0.0	23.0	

F. Hatch ability of your fertile eggs by your broody?

Total No of families said “it was increased”:	382.0	488.0	1,915.0	176.0	12.0	2,973.0	
% the families said “it was increased”:	72.1	99.8	95.6	97.2	2.9	367.5	73.51
Total No of families said “it was decreased”:	6.0	0.0	35.0	3.0	0.0	44.0	
% the families said “it was decreased”:	1.1	0.0	1.8	1.7	0.0	4.5	0.91
Total No of the families said “not changed”:	142.0	1.0	54.0	2.0	0.0	199.0	
% the families said “not changed”:	26.8	0.2	2.7	1.1	0.0	30.8	6.16
Total No of families that were not reported:	4.0	0.0	3.0	0.0	0.0	7.0	

G. Selling your chickens’ eggs?

Total No of families said “it was increased”:	476.0	488.0	1,889.0	174.0	420.0	3,447.0	
% the families said “it was increased”:	89.5	99.8	94.1	96.1	100.0	479.5	95.89
Total No of families said “it was decreased”:	14.0	0.0	56.0	1.0	0.0	71.0	
% the families said “it was decreased”:	2.6	0.0	2.8	0.6	0.0	6.0	1.19
Total No of the families said “not changed”:	42.0	1.0	63.0	6.0	0.0	112.0	
% the families said “not changed”:	7.9	0.2	3.1	3.3	0.0	14.6	2.91
Total No of families that were not reported:	2.0	0.0	59.0	0.0	0.0	61.0	

H. Profitability of your chickens?

Total No of families said “it was increased”:	474.0	488.0	1,929.0	179.0	420.0	3,490.0	
% the families said “it was increased”:	88.8	99.8	96.5	98.9	100.0	483.9	96.78
Total No of families said “it was decreased”:	14.0	0.0	30.0	1.0	0.0	45.0	
% the families said “it was decreased”:	2.6	0.0	1.5	0.6	0.0	4.7	0.93
Total No of the families said “not changed”:	46.0	1.0	41.0	1.0	0.0	89.0	
% the families said “not changed”:	8.6	0.2	2.1	0.6	0.0	11.4	2.28
Total No of families that were not reported:	0.0	0.0	7.0	0.0	0.0	7.0	

I. Time needed to look after your chickens?

Total No of families said “it was increased”:	81.0	428.0	1,010.0	2.0	419.0	1,940.0	
% the families said “it was increased”:	15.2	87.5	50.2	1.1	99.8	253.8	50.76
Total No of families said “it was decreased”:	424.0	44.0	571.0	179.0	1.0	1,219.0	
% the families said “it was decreased”:	79.7	9.0	28.4	98.9	0.2	216.2	43.24
Total No of the families said “not changed”:	27.0	0.0	432.0	0.0	0.0	459.0	
% the families said “not changed”:	5.1	0.0	21.5	0.0	0.0	26.5	5.31
Total No of families that were not reported:	2.0	17.0	0.0	0.0	0.0	19.0	

J. Difficulties in managing your chickens?

Total No of families said “it was increased”:	21.0	2.0	146.0	1.0	3.0	173.0	
% the families said “it was increased”:	4.0	0.4	7.4	0.6	0.2	12.5	2.50

Total No of families said “it was decreased”:	484.0	487.0	1,778.0	180.0	412.0	3,341.0	
% the families said “it was decreased”:	92.0	99.6	89.7	99.5	98.1	478.9	95.77
Total No of the families said “not changed”:	21.0	0.0	58.0	0.0	5.0	84.0	
% the families said “not changed”:	4.0	0.0	2.9	0.0	1.2	8.1	1.62
Total No of families that were not reported:	8.0	0.0	25.0	0.0	0.0	33.0	

K. Families interest to keep more chickens?

Total No of families said “it was increased”:	511.0	473.0	1,845.0	181.0	396.0	3,406.0	
% the families said “it was increased”:	96.7	96.7	92.9	100.0	94.3	480.6	96.12
Total No of families said “it was decreased”:	7.0	15.0	87.0	0.0	15.0	124.0	
% the families said “it was decreased”:	1.3	3.1	4.4	0.0	3.6	12.3	2.47
Total No of the families said “not changed”:	10.0	0.0	54.0	0.0	9.0	73.0	
% the families said “not changed”:	2.0	0.0	2.7	0.0	2.1	6.8	1.37
Total No of families that were not reported:	6.0	1.0	21.0	0.0	0.0	28.0	

Annex IV: Minimum requirements to allow birds to be delivered

Procedure

The birds to be delivered under the GCP/AFG030/USA project are located in 5 different farms. Before delivering animals will be vaccinated against AI with an inactivated H5N2 vaccine. The booster injection will be performed after 2-3 weeks at the premises of destination.

The following steps will be followed in order to ensure that no direct and indirect evidence of Avian Influenza H5 subtype is detected in the farms where animals are kept before delivering.

Birds will be monitored daily for the presence of clinical cases or episodes of mortality. Any unusual clinical event should be notified to the Veterinary Department and appropriate samples collected and submitted to the Central Veterinary Laboratories (CVL). In case of death, carcasses of dead birds should be submitted to the CVL for investigations without delay.

The condition for the animals to be vaccinated is that no evidence of any disease is found before the delivering period.

At the day of the administration of vaccine in each one of the 5 farms n. 20 tracheal swabs and n. 30 blood samples will be collected individually.

The birds can be moved from the single farms provided that:

1. No evidence of any clinical disease is detected in the farm of origin;
2. At least 10 days have passed since the administration of the vaccine and the delivery of the birds;
3. Laboratory results on swabs and blood samples confirm that no evidence of H5 has been detected.

Annex V Performance Indicator Report

Location and description				
Provinces: Parwan, Kunduz, Nangarhar, Baghlan, Ghazni, Herat, Bamyan Districts: Jabul Saraj, Saidkhail, Qara Bagh, Bagram, Kalakan, Charikar, Hofian, Khan Abad, Chardara, Ali Abad, Surkh Roud, Kama, Bati Kot, Dar-e-Noor, Mohmand Dara, Khwaja Omari, Jaghatu, Nani, Dahanai-Ghori, Doshi, Old Baghlan, New Baghlan, Gozara, Enjil, Bamyan center, Yakawlang			Project Description: <i>Agriculture, Livestock, Women</i>	
Work Progress				
Activity/Performance Indicators	Performance Targets	Accomplishments		
		Previous	Current Month	Cumulative To-date
• Baseline Village Poultry Assessment ¹	23	20	0	20
• No of Chickens distributed	380,261	266,271	88,121	354,392
• No of women trained in poultry management	28,000	28,101	*753	28,101
• No. of producer groups established	800	995	25	**1,020
• No. of PG revolving funds established	800	773	0	773
• Vaccination programs implemented (Newcastle) ²	1,000,000	1,634,267	123,336	1,757,603
• Feed processing units Established	7	6	0	6
Project Cost (\$US)	US\$ 3,504,239	\$ 3,124,378	\$335,785	\$ 3,460,163
Intermediate Results				
<i>Eggs/month</i>				
• Ave # produced/recipient	1,800	3,008.2	246	3,254.2
• Ave # sold/recipient	900	1,651	180	1,831
<i>Chickens</i>				
• Ave # maintained/ recipient	12	16.3	16.3	16.3
• Ave # lost/recipient	3	1.18	0.0	1.18
• Ave # sold/recipient	7	1	0	1
• Ave additional # purchased/ recipient	6	10	0	10
<i>Inputs/month (\$)</i>				
• Ave feed costs/recipient	2	50.1	3.1	53.2
• Ave vaccination costs/recipient	0.01	0.31	0.0	0.31
Impacts (Estimated)				
• Increased household income (all beneficiaries excluding those not receiving direct inputs)	Total \$ 1,200,000/year @ \$4/month/beneficiary after 5 months of chick distribution	3,563,731	421,727	3,985,458
Increased sales of inputs and vaccinations (all beneficiaries excluding those not receiving direct inputs)	\$30,000/year @ \$ 0.1/month/beneficiary	34,090	2,810	36,900

* Training for 753 village women was continued and been completed.

** Out of 1,020 village groups, 470 have been recognized as the subgroups.

¹ Information for a few months of the starting was provided on a village base. Data are given by training cycle and region (Province) after wards.

* Increase of the household income covers 18,858 families for egg production, only. This is because the chickens of rest of the families have not started producing eggs, yet. The amount US\$ 3,985,458 shown here includes the sum of the price of 6,827 culls sold by the whole number of the selected families and the price of about 39,766,000 eggs produced by 18,858 village producers (4,000 producers @ 3,254.2 eggs, 2,000 producers @ 2,949.2 eggs, 7,411 producers @ 1,852 eggs, 2,100 producers @ 1,579.2 eggs and 3,347 producers @ 1,131.2 eggs). The total egg production of the mentioned number of the families is being estimated about 4,639,000 eggs during the month (4,639,000 x Afs. 4.5 @ \$49.5=\$ 421,727). So, \$ 3,563,731 + \$ 421,727 = \$ 3,985,458. This estimation has been on the bases of the birds distributed by the project. The actual amount will be tremendously high as the families have other sources of incomes e.g. chick selling, selling the old stocks, etc.

² Most vaccines are either imported/produced in Pakistan, but thermo-stable vaccines from DCA-Kabul have also been used.

Development of Rural Poultry Production Grant Completion Certificate

Grant No.: *RAMP Job Order Number: #5 - 0004* Grant Title: *Development of Rural Poultry Production*

Grantee Name: *Food and Agriculture of the United Nations (FAO)*

With reference to Grant Agreement that was entered into with *PROJECT*, in my capacity as the Grantee Agent (see Grant Item No. RAMP Job Order Number: #5 - 0004), I hereby certify that:

Technical Completion—With reference to all material aspects of our technical proposal, and any subsequent jointly agreed-upon modification(s), my organization has achieved the stated grant objective and verifiable results as presented in our Grant Application (see Items Nos. RAMP Job Order Number: #5 - 0004), with the exception of the following:

- *Nil*

Financial Plan—With reference to our Grant Financial Summary Plan (see Grant Agreement Item No. RAMP Job Order Number: #5 - 0004), the final reconciliation is as follows:

FOR STANDARD AND SIMPLIFIED GRANTS:

Total Approved	Total Advanced/ Reimbursed	Total Liquidated/ Spent	Variance	Action Required or Resolution Agreement
\$ 3,504,239	\$ 3,380,341 (including interest)	\$ 3,460,162	\$ 79,821	RAMP/Chemonics to reimburse the variance to FAO

FOR FIXED OBLIGATION GRANTS

Total Approved	Total Reimbursed	Variance	Action Required or Resolution Agreement

INCLUDE AS APPLICABLE

- **Grant Activity Completion Report**—With reference to Grant Item No. RAMP Job Order Number: #5 - 0004, the subject report has been submitted and accepted by the *PROJECT* Grants Manager.
- **Foreign Tax Reporting**—With reference to Annex X of the Grant Manual, the subject report has been submitted and accepted by the *PROJECT* Grant Manager.

Thus, it is hereby agreed by the Grantee and *PROJECT* that all technical, administrative, and financial aspects of the referenced *PROJECT* Grant Agreement, with the exception of Grant Item No. RAMP Job Order Number: #5 - 0004, have been brought to a condition of completion, and as such, neither the Grantee nor *PROJECT* has any further obligations of any nature with regard to the Grant Agreement.

On Behalf of the Grantee:

On Behalf of *PROJECT*:

Grantee Agent

Grant Manager

Dated: _____

PROJECT Internal Closure

Grant Manager Close-out	Yes	No	Initial
<i>Grantee Activity Completion Report</i> received, reviewed, and accepted (if applicable)	X		
<i>Foreign Tax Report</i> received, reviewed, and accepted (if applicable)	N/A		
<i>Equipment Disposition Plan</i> received, reviewed, and accepted (if applicable) <i>Being used for continuing the poultry activities by same team which are funded by other sources/projects of FAO.</i>	X		
Site monitoring and evaluation reports are on file.	X		
Grant file is complete, accurate, and ready for closure.	X		
Grant financial records reconciled no outstanding issues.	Reimbursement of \$ 79,821 to FAO required		

Financial Reconciliation Close-out Clearance _____ Financial Manager

Technical Close-out Clearance _____ Technical Director

Administrative Close-out Clearance _____ Grants Manager