**GOVERNMENT OF PAKISTAN**

**PLANNING COMMISSION**

# **PC-1**

**INTRODUCTION OF ENVIRONMENTALLY CONTROLLED POULTRY HOUSING SYSTEM IN MERGED AREAS**

**ADP. No. 133 (2021-22)**

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**Project Cost Rs. 944.003 Million**

**DIRECTORATE OF LIVESTOCK AND DAIRY DEVELOPMENT DEPARTMENT, MERGED AREAS,**

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**(Phone # 091-9210272 Fax # 091-9212136)**

**Year 2021-22**

**GOVERNMENT OF PAKISTAN**

**PLANNING COMMISSION**

**PC-I FORM**

**(PRODUCTION SECTORS)**

1. **Name of the Project:**

Introduction of Environmentally Controlled Poultry Housing System in Merged Areas ADP. No.133

1. **Location of the Project:**
* **Provide name of districts and province:**

All tribal districts and sub-divisions of Merged Areas, Khyber Pakhtunkhwa

1. **Authorities responsible for:**
* **Indicate name of the agency responsible for sponsoring, execution, operation and maintenance:**
1. **Sponsoring:**

Govt: of Pakistan through Annual / Ten Year Development Plan (TYDP)

Secretary to Government of Khyber Pakhtunkhwa, Agriculture, Livestock and Cooperatives

1. **Implementation & Execution**
	* 1. Director Livestock and Dairy Development Department Merged Areas Peshawar.
		2. Project Director / In-charge, Livestock and Dairy Development Department Merged Areas Warsak Road Peshawar
		3. District Head of Livestock of concerned tribal districts/sub-divisions Merged Areas.
2. **Operation and maintenance:**
3. Project Director / In-charge will operate project activities through project (field) staff and Assistant Directors of concerned tribal districts / sub-division under the overall supervision of Director Livestock Merged Areas
* **In case of more than one agency, give their component wise responsibility. For provincial projects, name of the concerned federal ministry be provided:**
	1. Director Livestock and Dairy Development Department Merged Areas will be responsible for overall supervision of the project implementation, monitoring and to procure all the project inputs.
	2. Project In-charge/ Project Director will be responsible to plan, execute, operate and monitor all the activities of the project.
	3. Project staff together with Assistant Directors merged areas will be responsible for implementation and monitoring of the project activities at field level in the targeted areas of their respective tribal districts / sub-divisions.
1. **(a) Plan provision:**
* **If the project is included in the medium term/Five Year Plan, specify actual allocation.**

The project is in line with Khyber Pakhtunkhwa Livestock Policy 2018, Tribal Decade Strategy and Sustainable Development Goals (SDGs).

* **If not included in the current Plan, what warrants its inclusion and how is it now proposed to be accommodated.**

Not Applicable.

* **If the project is proposed to be financed out of block provision; indicate:**

|  |  |  |  |
| --- | --- | --- | --- |
| Total Block Provision. | Amount Already Committed. | Amount Proposed for this Project. | Balance Available |

Not Applicable.

**(b). Provision in the current year PSDP/ADP (2021-22).**

 Project will be executed through Annual /Ten Year Development Plan (AIP) for Ex-FATA.

1. **Project Objectives:**
* **Indicate objectives of the project and linkage between the proposed project and the Sectoral objective.**

**Objectives of the Livestock Policy (2018):**

1. To ensure efficient delivery of services in the livestock sector in order to improve health, efficiency and productivity of livestock with sustainable use of natural resources **(In line with the project)**
2. To conserve, improve and develop local livestock breeds **(In line with the project)**
3. To promote the production of safe and healthy food **(In line with the project)**

**Objectives of the Project:**

* To establish thirty enterprises on large scale in Merged Areas
* To provide in kind support to 330 farming community for a sustainable business
* To build confidence of the people in the militancy hit area and restore their livelihood
* To ensure food security and full fill nutritional requirements

**In case of revised project, indicate objective of the project if different from original PC-I.**

Not Applicable.

1. **Description and Justification of Project:**
* **Describe the project back ground, indicate existing facilities in the area and justify the establishment of the project.**

Agriculture is the largest sector of the economy of Pakistan in terms of labour participation and as such livelihood of the majority of the population directly or indirectly depends on it. However, during the last few decades, its contribution to GDP has gradually decreased to 19.3 percent but still there is a lot of potential in the sector to increase its share in GDP through increased productivity utilization of latest agricultural technologies. Being the sector engaging the largest workforce and providing raw material to most manufacturing sector, its development not only contributes towards achieving poverty alleviation but can also uplift socio-economic structure of a major segment of the population. During FY2020, the performance of agriculture sector improved over the last year and it also performed better than other sectors.

Realizing the potential of agriculture and taking cognizance of the challenges/issues related to agriculture, the present government has introduced “Prime Minister Agriculture Emergency Programme” worth Rs.277.000 billion to revolutionize the agriculture and livestock sectors. The objectives of the Programme include improvements in water availability, soil conservation and shrimp farming. In addition, the programme also includes establishing new agriculture markets which will protect farmers from the exploitation of middlemen. The programme’s vision is “food secure Pakistan, based on modern and efficient food production and distribution systems, can best contribute towards global stability and peace”. The recent pandemic COVID-19 poses extraordinary challenges for almost all sectors of the economy of Pakistan. The need for maintaining food security and livelihoods has also gained more importance. The cereal markets are expected to remain balanced and comfortable despite uncertainties over the impact of COVID-19. As logistical issues may pose challenges to food supply it is important to take measures for boosting agriculture production which will contribute in mitigating the socio-economic impact of COVID-19 *(Pakistan Economic Survey 2019-20).*

**Overview of the Poultry Sector;**

Poultry sector is one of the most dynamic and coruscating segments of agriculture in Pakistan with a significant contribution in national GDP. Poultry industry stabilized properly in late 1990s by entering of big investors with modern technologies and gaining profit margins on poultry products. Now the poultry industry has become the 2nd largest industry in Pakistan. The current investment in Poultry Industry is more than Rs 700 billion. This industry is progressing at an impressive growth rate of 8 percent per annum over last few years. Pakistan has become the 11th largest poultry producer in the world with the production of 1,163 million broilers annually. This sector provides employment (direct/indirect) to over 1.5 million people.

Poultry today has been a balancing force to keep a check on the prices of mutton and beef. Poultry meat contributes 35 percent to 1,657 thousand tonnes of the total meat production of 4,708 thousand tonnes in the country. Poultry meat production showed a growth rate of 9.1 percent whereas egg production showed a growth of 5.6 percent to 20.0 billion Nos. during 2019-20 as compared to previous year. The transformation of poultry production in the controlled shed system is making a tremendous difference of quantity and quality of poultry production. There are now over 6,500 controlled environment poultry sheds in the country which indicates that poultry sector is moving in the direction of modernization and using advance technology.

The Poultry Development Strategy revolves around disease control; hi-tech poultry production in intensive poultry; processing and value addition; improving poultry husbandry practices and development. Government of Pakistan has always been supportive to poultry industry in providing the most enabling environment for its growth. Poultry Development Policy visions sustainable supply of wholesome poultry meat; eggs and value added products to the local and international markets. It aimed at facilitating private sector-led development for sustainable poultry production. The strategy revolves around supporting the private sector through regulatory measures *(Pakistan Economic survey 2019-20).*

In spite of the potential benefits of the poultry industry different challenges are faced by this industry which includes lack of government support, high cost of feed and veterinary services, lack of proper infra structure, lack of access to reliable markets, predators, diseases and housing. In poultry production proper housing is another important factor. Proper house/shed is essential to protect the chickens against rough or harsh environment; predators, thieves and it provide shelter to broody hens and safe place for egg laying.

Poultry produced in Pakistan is being developed through two management systems i.e. commercial farming and rural poultry farming. Commercial farming is run through two different ways of farming i.e., open shed house and Environmentally Controlled houses. In Pakistan, the environmentally controlled poultry sheds are increasing rapidly as compared to open shed poultry farms which are decreasing rapidly because in controlled shed houses the incentive for profit is more as compared to open shed houses (Ullah et al., 2019). The trend is more common in Punjab province as compared to Khyber Pakhtunkhwa.

**Industry Current Structure**;

 The generation line of broiler comes from pure line (Strains) that make the Great Grand Parents (GGP), which are imported. These great grandparents produce grandparents which are available in Pakistan. These grandparents produce parent stocks (Breeders) and parent stock end up in producing the final product which is broiler. Pakistan’s poultry industry is importing 100,000 Grandparents (GP) chicks annually from Australia, Holland, Germany and USA with the cost of US$100 per day-old female chick. The farmers get day old broiler from hatcheries. These hatcheries maintain their breeder farms, or in some cases, purchase their hatching eggs from breeder farms. These breeder farms depend on producers of parent stock. Poultry feed mills are the major player in the poultry industry, which produce a specific formula feed mix. Poultry feed consists of rich protein elements like soyabean meal, canola meal, rapeseed meal, sunflower meal, feather meal and rich energy elements like grains, gluten, etc. When feed efficiency matters most you can gain the right weight of your bird. The major component of cost of production of  chicken meat accounts for feed cost.

**Sector Information**

* Presently turnover of Pakistan Poultry Industry is about 1,082 Billion rupees.
* Poultry sector generates employment and income for about 1.5 million people.
* Poultry sector is one of the most organized branches of the agro based sector of Pakistan. Its growth rate is 10-12% per annum.
* There are over 15000 poultry farms spread deep into the rural areas across the country from Karachi to Peshawar. Capacity of farms range from 5,000 to 500,000 broilers.
* 40-45% of the total meat consumption is being procured from poultry products.
* Poultry Slaughterhouses, Processing/Value Addition in organized sector is 5-6%
* Annually we are producing 17,500 million table eggs.
* Annually we are producing 1,322 million kilo grams chicken meat.
* In our country per capita consumption of meat is only 6.61 kilo grams and 88 eggs annually. Whereas developed world is consuming about 40 kilo grams meat and over 300 eggs per capita per year.
* As per standard of World Health Organization, daily requirement of animal protein for a person is 27 grams whereas public is consuming 17 grams only. Therefore, we are already consuming less animal protein as per required standards.

*Source: Pakistan Poultry Association 2019-20*

In this way, poultry sector is contributing its major share to provide animal protein to the masses and is striving hard to fulfill the gap of animal protein in the country.

**Problems faced by Poultry Industry;**

This important sector is facing a great problem in the form of heat stress. Pakistan is a tropical country and during summer the temperature reaches over 40°C. Even the average temperature remains well beyond the higher side of thermo neutral zone for the greater part of the year. Hot and humid weather conditions coupled with manual and poor management practices increases the mortality in flocks, depresses their growth and makes poultry production an unmanageable and uneconomical pursuit. Business is also adversely affected for four long months due to severe environment. During this period owner has to either continue his flock compromising with poor performance in feed intake, growth rate, weight gain, FCR (Feed Conversion Ratio) in broilers along with mortality or he has to totally close his business to avoid all these risks. This situation creates severe shortage of poultry meat which is the cheapest and easily available source of animal protein.

Environment controlled houses can overcome this critical situation, which counteracts the adverse effects of heat stress providing tunnel ventilation and enhancing the wind chill effect. These houses when equipped with highly mechanized system of automatic chain feeding and nipple drinking makes the environment quite conducive for poultry production.

**Comparative Efficiency of Environment Control House (ECH) and Conventional Open-Side House (COH)**

The modern trend of environment control houses (ECH) in poultry production has brought a great revolution in poultry industry of Pakistan in the recent years. This has solved a great hurdle of heat stress in the way economical commercial poultry production. The ECH with evaporative cooling system, providing tunnel ventilation, giving the wind chill effect has markedly improved the broiler production system. The technology of ECH is rapidly becoming popular among broiler producers due to its following significant advantages:

1. The ECH brings down the temperature by 10°C to 15°C as compared to the COH and makes it comfortable like colder regions.

2. ECH maintains the uniform temperature round the clock providing very conducive environment to the broilers avoiding fluctuation in the day and night temperature.

3. Due to severe heat stress during four long summer months the broiler production is stopped in COH, resultantly only 4-5 flocks are possible in such houses in a year. However, in ECH 7 flocks are marketed without any break.

4. ECH being complete closed system has minimized the incidence of diseases, cutting down the cost of vaccine and medication of Rs. 2-3 per bird as compared to COH.

5. Mortality in ECH has been decreased to 2 to 3 percent as compared to 10 percent in COH.

6. Installation of highly mechanized automatic feeding and nipple drinking system in ECH has provided the solution of manual and poor management practices. 2 housemen at daytime and 2 at night time are sufficient to look after a flock of  60,000 birds. In COH nearly 8-12 housemen are required to manage such a flock.

7. Equal distribution of feed and water to broilers through automatic system in ECH has markedly improved the uniformity up to 95% as compared to 75% in COH.

8. In ECH a broiler flock is ready for market in 37 days as compared to 45 days in COH.

9. An individual broiler in COH usually consumes 3 to 3.3 kg feed to gain 1.5 kg weight reflecting its Feed Conversion Ratio (FCR) = 2 to 2.2. Whereas, this figure of FCR is improved to 1.8 in ECH.

All these significant features in ECH have reduced the cost of production of broiler to Rs. 7 to 8 Per Bird as compared to COH.

**Farm Requirements and Management**;

In Controlled Environment Farm, inputs including farm equipment like drinkers, feed trays, brooders, and feeders and other items like feed, vaccines & medicines, rice-husk or saw-dust, water and electricity etc. are required. To achieve good production following practices would be required to perform under the supervision of an expert starting from arrival of the chicks to marketing of broilers.

1. Diesel heaters can control the low temperature. The high temperature should be controlled with evaporative cooling system.

2. Automatic nipple drinking system.

3. Automatic feeding system.

4. Diseases can be controlled by scheduled vaccination and medication.

5. Sanitation and disinfections program should be strictly followed during and after the completion of one flock.

6. Feed intake, body weight, FCR and mortality should be recorded carefully. 8. Proper channels are recommended for Marketing of final products (broilers).

**Poultry farming in Merged Areas;**

Broiler farming is practiced in different part of Merged Areas. The intensity is not as common as other parts of the country. Birds are reared in open housing system with 3000-4000 birds per flock. The business had badly affected in the past decade where most of the sheds were damaged due to war against terror. Now, after normalization of the situation, the farmers are striving to revitalize their businesses but due to lack of proper know-how and lack of resources, they could not improve their housing systems and still running their business in open houses. Farmers usually face managemental issues which results in disease out breaks and thus bare financial losses. They are not fully aware of costs and net revenues producing broiler. They are facing various constraints in the way of optimal profit margin. Neither the environmentally controlled housing system exist in Merged Districts and Sub-Divisions nor the farmers of the areas are familiar with the idea.

It has been reported from various sources that in merged areas on average 70-80% of poultry demand are fulfilled from Rawalpindi, Talagang, and Sargodha Districts of the Punjab province. One of the poultry dealers in District Khyber Confirms that 80% of farmers left their businesses due to high feed rates, Monopoly of big investors by cutting down the prices when production in merged districts is in peak. Moreover, mortality rate due to open houses management also one of the reason. In district Mohmand only 60 to 80 poultry houses are remaining out of 350 poultry sheds same is the case with district Bajaur 50% farms are out of business which greatly increase the dependency on Punjab markets and consumers are overburdened due to high price rates.

Environment in Merged Areas is feasible for poultry farming both in production and export point of view. Introduction of the environmentally controlled housing system in the Area will augment the business. Though poultry sector is producing the lucrative output but still there is room to enhance the productivity and profitability of this sector specially in Merged Districts. The instant proposal is aimed to introduce Environmentally Controlled Housing System for poultry birds rearing in Merged Areas to help farmers to maximize profit by reducing cost of production and increasing gross revenue.

**Reasons to support poultry business in Province and Merged Areas in current scenario;**

During financial year 2019-20, poultry sector suffered historical losses, because the cost of production of chicken meat and eggs increased, due to devaluation of Pakistani rupee up to 35%, enhancement of the duties and sale tax on imported items of poultry feed and significant increase in markup rates on all kind of business financings. Electricity tariff has been increased many times as well, adding more to poultry cost of production. Needless to mention here that poultry and poultry products are perishable items and their sale price is purely governed by demand and supply in the market. Being a biological process, the production cannot be controlled / stopped, when market hits with slump. Sale price is determined by the markets forces and its demand cannot be increased in short span of time. Due to this reason poultry farmers were unable to pass on their higher cost of production to their customers and suffered huge losses. In the recent past selling price of almost every commodity have been increased to a huge margin, except chicken meat and eggs. Presently the farmers despite of very high cost of production are still producing high quality protein on low cost, but the same would not be possible for longer time. Besides above, the present COVID-19 Pandemic has further devastated the situation due to current lock down in the country, which on one hand has disrupted the supply and demand chain i.e. supply of Day old Chicks, Feed, Medicines etc. and on the other hand there has been an abrupt drop in the demand for chicken and prices had been declined by more than 50% after the spread of coronavirus in the country due to closing of all relevant business activities. Broiler chicken prices had fallen to Rs.100/kg from around Rs.150 before the pandemic. The consumption has fallen and prices have crashed, as such, no broiler farmer is prepared to place day old chicks at their farms, even for free, as a result of which hatcheries have stopped setting eggs for chick production. Likewise, egg layers have also been culled, which shows signs of a short supply of eggs and poultry industry is affecting. Furthermore, due to the closure of hatcheries, the day-old chick production has also been affected and the rates of day-old chicks have risen suddenly. In this regard, data was collected from the field through District Directors Livestock in the province. The data so collected was analyzed and is given as under:

Data in respect of Broiler Farms shows that Total No. of Broiler Farms Broiler Farms in the province were 3222 out of which Operation Broiler Farms are 1600 while closed Farms are 1622 which makes 50.4 2% of the total farms.

Similarly total number of Environmentally Controlled Sheds in the province is 130 out of which 83 are operational and 47 are non-operational.

Main reasons for closing are High production cost and low return, closure of social gatherings, restaurants and tourist places due to current situation

Besides above, in Merged Areas, during last decades, most poultry farms established on commercial basis have been affected due war and terror.

The instant project will play a vital role to introduce the concept of environmentally controlled /semi-controlled poultry houses and to revitalize poultry businesses through in kind and technical support in the area on commercial basis. This will generate economic activities in Merged Areas, improving the socio-economic condition of farming communities. Such activities help to reduce poverty in the area through industrial revolution which lead to high economic growth and eliminated mass poverty.

It is proposed that 30 environmentally controlled / semi-controlled poultry houses (farms) will be constructed in in all tribal districts and sub-divisions. The number of these farms may not be equal for each district, rather it would be based on the demand / potential of the district and subject to the fulfillment of the criteria by the beneficiaries. Out of these thirty farms, five (5) will have capacity of 30,000 birds (per farm) and twenty (25) farms will have capacity of 15,000 birds (per farm). The activity will be on joint venture basis i.e., cost sharing basis. Farmers will have to provide land, construct the buildings (shed, store etc.), labor, birds, electricity, water etc. The government will provide feed (one time for one flock), all kind of machinery required for ECH and installation of solar system (25-35 KW). Besides, two consultants (one electrical engineer and one poultry specialist) will be hired to install the machinery and provide technical services during operation of the flocks. Furthermore, the farmer along with two labors will be given training on the operation of ECH to make them able to run the business successfully under the supervision of the consultant (poultry specialist).

Similarly, 300 poultry farmers (existing), rearing 3,000 birds in conventional open-side houses (either operational or non-functional due to militancy / affected due to war and terror) will be supported through provision of feed to encourage the farmers to run their business affected due to war and terror and recent crises due to COV-D-19 and those who are interested to establish as a new business.

The package from the government will be for one time only, both for environmentally controlled poultry houses and conventional open-side houses.

An agreement will be signed between both the parties. The beneficiary will run the business for two consecutive years under the supervision of Livestock Department Merged Areas.

**Modus Operandi;**

Two components i.e. Introduction of environmentally controlled poultry houses and revitalization of existing poultry businesses are proposed under the instant project and would be carried out as per following

* 1. **Introduction of Environmentally Controlled Houses (ECH)**

At present no environmentally Controlled/semi Controlled Houses (ECH) exists in Merged Areas as far as broiler production is concerned. Birds are commonly reared in Conventionally Open-sided Houses. Under this component of the project, 30 ECH will be established in Merged Areas. Out of these five (5) farms will comprise of 30,000 birds / farm while twenty five (25) will comprise of 15,000 birds per farm. These farms will be either fully controlled or semi-controlled houses depending upon the area and electricity availability. However, keeping in view the existing situation of Merged Areas where most of the time load shedding occurs and power supply is available for few hours of the day, therefore, construction of semi-controlled houses would be an appropriate option. The operation will be run through a joint venture by involving private investors on cost share basis. Role and responsibilities of the government and the beneficiaries will be as below;

**Government vs beneficiary’s responsibilities;**

**Responsibilities of Government (one time package);**

* Installation of machinery and equipment
* Installation of required solar system along with backup support (25 KW for shed having 15,000 birds capacity and 35 KW for 30,000 birds capacity)
* Installation of “Set of Generator” in case of electricity failure (*30+60 KV* / *30+100 KV*)
* One time Provision of feed for 15,000 / 30,000 birds, (for one flock only)
* Provision of medicines
* Training of the beneficiaries (two person / farm)
* Hiring of consultants

I.e. Poultry Specialist & Electrical Engineer for technical support of the investors during its operationalization phase

**Responsibilities of the beneficiary;**

* Provision of land
* Construction of poultry house (construction of shed, store, office, etc.)
* Purchase of Day-Old Chicks
* Availability of clean drinking water
* Bear all operational charges (Labor, POL, electricity, etc.)
* Marketing
* Running of business for at least two years

**District / Sub-Division-wise Share;** No fixed share per district / sub-division. Farms will be established on basis of demand, potential and feasibility.

**Selection Criteria for small scale poultry businesses;**

* Application will be invited from Poultry farmers having sufficient land required for construction Environmentally Controlled / Semi-Controlled Poultry Houses with capacity for rearing of 15000 / 30,000 birds.
* The farmers must be financially sound to bear all the expenses mentioned above under the *“Responsibility of the beneficiary”.*
* The farmer’s will construct the farm as per recommendation of the department.
* Selection of farmers will be made through a committee constituted by the Director Livestock Merged Areas / Project Director/ Project In-charge duly approved by the Director General (Ext) L&DD comprising the following;
1. District Director Livestock (Concerned District) Chairman
2. Representative of the Directorate (BS-18 / 17) Member
3. Representative of the District Administration Member
4. Veterinary Officer of the Concerned District Member
* The committee will then submit the list of selected beneficiaries to the Director General (Ext), Livestock and Dairy Development Khyber Pakhtunkhwa for final approval.
* Complete profile of the farmer and coordinates of the site / poultry farm will be obligatory.
* Farmers will provide proof of ownership of his poultry.
* The activity will be jointly operated by the department and farmer. Department will provide incentives in shape of provision medicine, feed for one cycle / flock, machinery and equipment, installation of solar system while the farmers will construct the shed and bear all other operational expenses purchase of day old chicks, labors, electricity, vaccine etc. *(For detail see Govt. vs beneficiary’s responsibilities on page-10 and 11)*.
* The incentives will although for one time (for one flock) only, however, the farmer will be bound to run his business consecutively for three years to generate economic activities in the area and achieve project objectives in true spirit.
* It is not mandatory that the farmer / owner of the farm should belong to / domicile holder of the Merged Areas, rather the farm shall be established within the vicinity of Merged Areas and comply the above-mentioned conditions.
* An agreement between the department and farmer will be signed by the District Director Livestock and the farmer including two witnesses and the same will be countersigned by the Director Livestock Merged Areas / Project Director / Project In-charge.

**Hiring of Consultants;**

Keeping in view complex nature of the environmentally controlled poultry houses, services of consultants would be required to successfully run the intervention in the Merged Areas. Following consultants will be hired to achieve the desired objectives.

* + - 1. **Poultry Specialist**

A well-qualified professional having experience in poultry business specifically in the management of environmentally controlled houses will be hired on need basis once for the whole project for 3months in a year as deemed his services required by the project authorities.

**TORs;**

He shall assist in;

* Site selection / feasibility where required
* Poultry Shed Construction / Design (fully controlled / semi-controlled)
* Management of farm (Feeding, Vaccination etc. from brooding till catching)
* Disease diagnosis and treatment
* He will carry will visit on his own expenses
* Provide feasibility of the machinery and other equipment at the right place in the farm

**Duration;**

His services will be hired for 3 months each in 2nd, 3rd and 4th year of the project.

**Experience / Abilities;**

* He shall have fifteen years of working experience in providing services in Environmentally Controlled Poultry Houses in a reputable firm / company duly verifiable.
* Agree to provide services in all tribal districts and sub-divisions
* DVM preferably MSC/MPhil in Poultry
	+ - 1. **Electrical Engineer**

Advanced technology is used in Environmentally Controlled Houses as compared to Conventional Open-side Houses and therefore, services of electrical engineer having expertise in installation of relevant machinery / equipment.

**TORs;**

He shall;

* Install all kind of Machinery / Equipment in Environmentally Controlled Poultry Houses
* Supervise all machinery during operation of the farms
* Repair all kind of work in case of any fault in machinery during operation
* Training of one electrician at each Controlled Poultry House
* He will carry will visit on his own expenses

**Duration;**

His services will be hired for 3 months each in 2nd, 3rd and 4th year of the project.

**Experience / Abilities;**

* He shall have 12-15 years of working experience in providing services in Environmentally Controlled Poultry Houses in a reputable firm / company duly verifiable.
* Agree to provide services in all tribal districts and sub-divisions
* Electrical engineer duly registered with PEC.

* 1. **Support to / revival of Small Scale poultry businesses**
* This component of the project is meant to support small poultry (broiler) farmers who are either interested in new establishment of the business in Conventionally Open-sided Houses OR currently running their business OR stopped /quit their businesses due to war against terror / covid-19 threat or any other reason. A total of 300 poultry farms will be established.
* The instant incentive is to support these farmers and revitalize their business on sustainable basis.
* The Project activities will be executed / implemented in all seven (7) tribal districts and six (6) sub-divisions of Newly Merged Areas and will be headed by the Project Director who will be assisted by technical staff at directorate and District / Assistant Director concerned tribal districts/sub-divisions.

**Selection Criteria for small scale poultry businesses;**

* All Poultry farm businesses in Merged Areas will be given one-time incentives to kick start their businesses. Farmers already involved in poultry business; both functional and non-functional will be included fulfilling the required criteria.
* Application will be invited from Poultry farmers in each target district / sub-division having poultry sheds.
* Selection of farmers will be made through a committee constituted by the Project Director duly approved by the Director General (Ext) L&DD comprising the following;
1. District Director Livestock (Concerned District) Chairman
2. Representative of the Directorate (BS-18 / 17) Member
3. Representative of the District Administration Member
4. Veterinary Officer of the Concerned District Member
* The committee will then submit the list of beneficiaries to the Director Livestock Merged Areas / Project In-charge for final approval.
* Complete profile of the farmer and coordinates of the site / poultry farm will be obligatory.
* Farmers will provide proof of ownership of his poultry farm OR two years lease/Rent agreement of the poultry farm where he is going to start his business.
* The activity will be jointly operated by the department and farmer. Department will provide incentives in shape of provision medicine, feed for one cycle / flock, while the farmers will renovate / construct the shed and bear all other operational expenses purchase of day old chicks, labors, electricity, vaccine etc.
* The incentives will although for one time (for one flock) only, however, the farmer will be bound to run his business consecutively for three years to generate economic activities in the area and achieve project objectives in true spirit.
* It is not mandatory that the farmer / owner of the farm should belong to / domicile holder of the Merged Areas, rather the farm shall be established within the vicinity of Merged Areas and comply the above-mentioned conditions.
* An agreement between the department and farmer will be signed by the District Director Livestock and the farmer including two witnesses and the same will be countersigned by the Director Livestock Merged Areas / Project Director / Project In-charge.

**Monitoring of the activities;**

The intervention is of technical nature and need a regular close watch over the operation of the Environmentally Controlled House as well as the existing farms in Conventionally Open-Side Houses. For the purpose, the activities will be monitored through existing staff / officers of the department and will point out the deficiencies if found during execution of the project. These staff members would be given Project / Deputation Allowance as per government prevailing rules.

Two Monitoring Officers will be deputed for the purpose and the whole Merged Areas would be divided into two parts where each monitoring officer will keep a check over the activities. The Monitoring office along with the District Heads of Livestock will check activities once started i.e. farm location, its feasibility, services provided by consultants (poultry specialist and electrical engineer), quality of work done (machinery and solar system installation) and feed provided by the government, birds rearing etc. He will report to the Project Director / Director Livestock Merged Areas for any deviation if found against the PC-1.

**Capacity building;**

**Training for farmers;**

Environmentally Controlled Houses (ECH) will be established for the first time in Merged Areas with the financial and technical support of the Government. ECH is the advanced type of poultry farming where most of the system is run through machinery. Moreover, the number of birds reared in ECH is many folds than the ordinary Conventional Open sided Houses (COH). It is, therefore, appropriate to build-up the capacity of the selected farmers before starting the operation. For this purpose, the farmer along with two labors will be given training on the operation of ECH to make them able to run the business successfully under the supervision of the consultant (poultry specialist).

**Training for staff;**

As the existing staff will provide services to the farmers in their respective areas and therefore, they will also be trained on the management of ECH.

**Procurement of Feed /Equipment/ other items:**

The birds and other items will be procured through open tender / bidding process under KPPRA rules.

**Marketing Channels;**

A general marketing channel of broilers is as follows;

Farm (Producer) → Middleman (Arti) → Wholesalers → Retailers → End user (Consumer)

The role of middleman (Arti) is to identify a farm and negotiate the price. In some cases he provides Day Old Chicks and other farm inputs (feed, etc.) to the broiler farmers and then agrees to buy back the mature birds from them.

It is worth to mention that local broiler production in Merged Areas is to less to meet the demand of the area and mainly dependent on Punjab. According to an estimate, about 11 million broiler birds are supplied from Punjab to Khyber Pakhtunkhwa on monthly basis. This means that the existing intervention would be successful and there would be no issue in marketing of the product as sufficient gap is there between demand and supply.

**Mobility;**

Huge investment is involved in the project both on the parts of government and beneficiary. Therefore, for regular monitoring, supervision and technical assistance of farmers, logistic would be required for the concerned staff. For the purpose, 1 vehicles 2.7 CC 4\*4 standard for project Director and one vehicle 4\*4 single with conversion for monitoring officers would be procured from the instant project.

* **Provide detail of civil works, equipment, machinery and other physical facilities required for the project.**

**Civil Work**

Civil work is involved in shape of construction of poultry sheds, however this would be done by the beneficiary / farmer himself.

**Equipment, machinery and other physical activities**

The detailed of equipment, machinery & physical activities of the Project cost is shown in Break-Up of Project Cost on Page No 15-18.

* **Indicate governance issues of the sector relevant to the project and strategy to resolve them.**

No governance issue in its true sense is anticipated. However, delay in funds may create issues in the project implementation phase.

* **In addition to above, the following sector specific information be provided.**

Livestock is an important sector in Pakistan’s economy and contributes 11.11 Percent in the overall GDP of the country and 58.92 percent of the Agriculture economy with in annual growth of 3.76% compared to previous 2.99% during corresponding period last year. Livestock share in Merged Areas against the national value added is 4.0 percent compared to Important crops which is 0.2 %, Other crops, 0.5 %,Fisheries, 2.7%, and forestry which is 1.7%.(Source: 1. Economic Survey of Pakistan 2. FATA Ten Years Socio Economic Development Plan (September 2017) The Livestock density is about 253 animals per square kilo meter which is almost double to those of human density in the area. All types of domesticated species are found in Merged Areas. The population of cattle is 1.500436, buffalo 0.096599, sheep 1.681, goat 3.244, equines 0.2 and poultry 6.59 million heads which makes 5.12, 0.34, 6.25, 6.31, 4.2 and 9.00 % respectively of the National livestock resources (BOS Ex-FATA 2016-17).

1. **For livestock projects: Give the livestock situation of the country and mention any problems connected therewith. Present and future Herd size, their species age characteristics and production capacity.**

 See in the introduction, justification and description of the PC1.

1. **Capital Cost Estimates:**
* **Indicate date of estimation of project cost estimates.**

June, 2021 Open Market Survey and reports

* **Basis of determining the capital cost be provided. It includes market survey, schedule rates, estimation on the basis of previous work done etc.**

Current market rates are used in calculating the cost estimates for equipment, consumables and miscellaneous/sundry cost.

| **S. #** | **Component** | **YEARWISE/ COMPONENT WISE PHYSICAL ACTIVITIES** |
| --- | --- | --- |
| **Items** | **Unit** | **2021-22** | **2022-23** | **2023-24** | **2024-25** | **Total** |
| **1.** | Establishment of Environmentally Controlled Houses (30,000 birds / farm) | Construction of ECH by the Investor | No. | 0 | 2 | 3 | 0 | **5** |
| Operation & Execution of farms | No. | 0 | 0 | 2 | 3 | **5** |
| Feed Provision @3.5 kg/bird | Bag (50 Kg) | 0 | 0 | 4200 | 6300 | **10500** |
| Installation of Solar System @35 KW / Farm | Set | 0 | 0 | 2 | 3 | **5** |
| Installation of Machinery and Equipment (Annex-II) | Set | 0 | 0 | 2 | 3 | **5** |
| **2.** |  Establishment of Environmentally Controlled Houses (15,000 birds / farm) | Construction of ECH by the Investor | No. | 0 | 10 | 15 | 0 | **25** |
| Operation & Execution of farms | No. | 0 | 0 | 10 | 15 | **25** |
| Feed Provision @3.5 kg/bird | Bag (50 Kg) | 0 | 0 | 10500 | 15750 | **26250** |
| Installation of Solar System @25 KW / Farm | Set | 0 | 0 | 10 | 15 | **25** |
| Installation of Machinery and Equipment (Annex-II) | Set | 0 | 0 | 10 | 15 | **25** |
| **3.** | **3.** Support to small scale poultry farmers (3,000 birds / farm) | No. of Farms to be supported  | No. | 50 | 100 | 100 | 50 | **300** |
| Feed bags (50 Kg each) @ 3.5 kg/bird | Bag (50 Kg) | 10500 | 21000 | 21000 | 10500 | **63000** |

* **Phasing of capital cost be worked out on the basis of each item of work as stated above and provide as per following:**

| **Item** | **Proposed Cost (Rs. in million)** |
| --- | --- |
| **Unit Cost**  | **Qty** | **2021-22** | **2022-23** | **2023-24** | **2024-25** | **Total Cost**  |
| **A01-EMPLOYEE RELATED EXP;** |
| **A01101-Pay of Officers** |  |  |   |   |   |   |   |
| 01-Project Director, BS-18 | 0.089 | 1 | 0.534 | 1.068 | 1.068 | 1.068 | **3.738** |
| 02-Monitoring Officers, BS-17  | 0.053 | 2 | 0.636 | 1.272 | 1.272 | 1.272 | **4.452** |
| **Sub-total Pay of Officers** |  |  | **1.170** | **2.340** | **2.340** | **2.340** | **8.190** |
| **A011-51-Pay of other Staff**  |  |  |  |  |  |  |  |
| 01-Assistant Director IT BS-17 | 0.041 | **1** | 0.264 | 0.482 | 0.482 | 0.494 | **1.722** |
| **Sub-total Pay of other staff** |  |  | **0.264** | **0.482** | **0.482** | **0.494** | **1.722** |
| **Consultantancy Charges** |  |  |   |   |   |   |  |
| Poultry Specialist (Consultant) | 0.18 | 1 | 0 | 0.550 | 0.550 | 0.562 | **1.662** |
| Electrical Engineer Consultant) | 0.18 | 1 | 0 | 0.550 | 0.550 | 0.562 | **1.662** |
| **Sub-total Consultancy Charges** |  |  | **0** | **1.100** | **1.100** | **1.124** | **3.324** |
| **Total A01201-Other Regular Allowances** |  |  |  |  |  |  |  |
| All Allowances in Lumpsum |  |  | 3.00 | 3.50 | 4.00 | 4.50 | **15.00** |
| **Total Regular Allowances** |   |   | **3.00** | **3.50** | **4.00** | **4.50** | **15.00** |
| **A01271-99 Other Allowances** |  |  |   |   |   |   |  |
| stipend for Internees | 0.025 | 10 | 3.000 | 3.000 | 3.000 | 3.000 | **12.000** |
| **Total A01271-Other Allowances** |  |  | **3.000** | **3.000** | **3.000** | **3.000** | **12.000** |
| **Sub Total-A01 Employee Related Exp:** |  |  | **7.434** | **10.422** | **10.922** | **11.458** | **40.236** |
| **A03-OPERATIONAL EXPENSES** |  |  |  |  |  |  |  |
| **A032- Communication** |  |  |   |   |   |   |   |
| Add01- Postage |  |  | 0.000 | 0.020 | 0.030 | 0.020 | **0.070** |
| A0202 Telephone & Trunk call Charges |  |  | 0.050 | 0.100 | 0.100 | 0.111 | **0.361** |
| **Total A032- Communication** |  |  | **0.050** | **0.120** | **0.130** | **0.131** | **0.431** |
| A038-Travel &Transportation |  |  |   |   |   |   |   |
| A03805-TA/DA to Govt: Servants |  |  | 0.200 | 0.200 | 0.150 | 0.150 | **0.700** |
| A03807-POL Charges |  |  | 0.300 | 0.300 | 0.300 | 0.300 | **1.200** |
| A03821-Study Tour and Training (Annex-I) |  |  | 0.000 | 1.000 | 1.000 | 0.000 | **2.000** |
| **Total of A038-Travel &Transportation** |  |  | **0.500** | **1.500** | **1.450** | **0.450** | **3.900** |
| **A039-General** |  |  |   |   |   |   |   |
| A03901-Stationary |  |  | 0.030 | 0.050 | 0.050 | 0.050 | **0.180** |
| A03907-Advertisement /Publicity Charges |  |  | 0.100 | 0.300 | 0.300 | 0.300 | **1.000** |
| A03927-Purchase of De-wormers/Supplements/Medicine  | Lump sum |  | 4.000 | 5.000 | 5.000 | 4.000 | **18.000** |
| Vehicle registration |   |  | 0.400 | 0.000 | 0.000 | 0.000 | **0.400** |
| A03970-Others(Mics) |  |  | 0.000 | 0.000 | 0.000 | 0.000 | **0.000** |
| **Total A039- General.** |  |  | **4.530** | **5.350** | **5.350** | **4.350** | **19.580** |
| **A03942-Cost of Other Store.** |  |  |   |   |   |   |   |
| Purchase of Feed /Unit @ 3.5kg /bird  |  |  | 42.000 | 90.300 | 160.650 | 156.240 | **449.190** |
| Installation of Solar System @25 -35KW / Farm |  |  | 0.000 | 0.000 | 102.000 | 163.502 | **265.502** |
| **A03942-Total of Cost of Other Store** |  |  | **42.000** | **90.300** | **262.650** | **319.742** | **714.692** |
| **Sub Total A03-Operational Expenses** |  |  | **47.080** | **97.270** | **269.580** | **324.673** | **738.603** |
| **A09-PURCHASE OF PHYSICAL ASSETS** |
| A09601-Machinery & Equip: (Annex-II) |  |  | 0.000 | 0.000 | 56.680 | 93.084 | **149.764** |
| A09501-Transport (Vehicle)  | lumpSum | 2 | 15.000 | 0.000 | 0.000 | 0.000 | **15.000** |
| **A09-Total of Purchase of Physical Assests** |  |  | **15.000** | **0.000** | **56.680** | **93.084** | **164.764** |
| **A13-REPAIR & MAINT;** |
| A13001-Repair of Transport. (Change of tyre, Mobil Oil Change etc.) |  |  | 0.000 | 0.100 | 0.150 | 0.150 | **0.400** |
| **A13-Total of Repair & Maintenance.** |  |  | **0.000** | **0.100** | **0.150** | **0.150** | **0.400** |
| **G: Total**  |  |  | **69.514** | **107.792** | **337.332** | **429.365** | **944.003** |

**Summary Cost**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particular**  | **2021-22** | **2022-23** | **2023-24** | **2024-25** | **Total** |
| **Employee Related Expenses** | **7.434** | **10.422** | **10.922** | **11.458** | **40.236** |
| **Operation Expenses** | **47.080** | **97.270** | **269.580** | **324.673** | **738.603** |
| **Physical Assets** | **15.000** | **0.000** | **56.680** | **93.084** | **164.764** |
| **Repair & Maintenance** | **0.000** | **0.100** | **0.150** | **0.150** | **0.400** |
| **Total**  | **69.514** | **107.792** | **337.332** | **429.365** | **944.003** |

* **In case of revised projects, provide:**
* **Project approved history along-with PSDP allocations, releases and expenditure.**

 Not Applicable.

* **Item-wise, year-wise actual expenditure and physical progress.**

 Not Applicable.

* **Justification for revision of PC-I and variation in scope of project if applicable.**

 Not Applicable

* **Item-wise comparison of revised cost with the approved cost and give reasons for variation.**

 Not Applicable.

* **Exchange rate used to work out FEC in the original and revised PC-I’s.**

Not Applicable.

1. **ANNUAL OPERATING COST AFTER COMPLETION OF PROJECT:**
* **Item-wise annual operating cost based on proposed capacity utilization for five (05) years:**

The cost will be borne by the beneficiary

1. **Demand and Supply Analysis (For Industrial and Agriculture Production Projects):**
* **Description of Product/Services.**

Commercial poultry has a great potential to produce meat and contribute to national economy. Such economic activities help in improving the socio-economic condition of farming communities and reduce poverty in target areas through industrial revolution which lead to high economic growth. On the provision of free technical services will ultimately improve the livelihood of the farmers and will ultimately enhance their per capita income.

* **Demand/Supply for last five (05) years.**

 Not Applicable.

* **Imports/Exports for the last five (05) years along-with unit price (if applicable).**

Not Applicable.

* **Projected Demand/Supply for ten (10) years.**

Not Applicable.

* **Proposed year-wise Production and unit price of the Product.**

Not Applicable.

* **Existing and proposed arrangements for marketing.**

Local markets have great demand in Merged Areas. People are using Punjab Market to bring Broiler and sale it in local market. There is a deficiency of local production so with this project local demand will be reduce and local market will be effective for sale and marketing.

1. **FINANCIAL PLAN:**
* **Source of Financing:**
1. **Equity:**

 Funds will be provided through ADP / AIP 2021-22.

1. **Debt:**

**Indicate the local and foreign debt, interest rate, grace period and payment period for each loan separately. The loan repayment schedule be also annexed.**

Not Applicable.

1. **Grants along-with source:**

Not Applicable

1. **Weighted cost of capital:**

Not Applicable.

1. **BENEFITS OF THE PROJECT AND ANALYSIS:**
* **Financial:**

Financial benefits from the project are assumed to be many folds. 30 ECH will be established each comprising of 30,000/15,000 birds thus a total of 525,000 birds will be raised / flock (from 30 farms). Similarly, about 300 poultry farms will be operationalized containing 3,000 birds / flock/farm. The financial benefits estimated on the basis of above are as below;

|  |
| --- |
| **Financial Benefits of the Project (Year wise)** |
| **S.No.** | **Item** | **2021-22** | **2022-23** | **2023-24** | **2024-25** | **Total** |
| 1 | Birds reared per flock | 150000 | 300000 | 510000 | 465000 | **1425000** |
| 2 | No. of Flocks (Avg / Year) | 3 | 3 | 3 | 3 | **12** |
| 3 | Total Birds reared including previous year  | 450000 | 1350000 | 2880000 | 4275000 | **8955000** |
| 4 | Assuming 7.5% mortality | 33750 | 67500 | 144000 | 213750 | **459000** |
| 5 | Net birds reared | 416250 | 1282500 | 2736000 | 4061250 | **8496000** |
| 6 | Total weight in Kg  | 624375 | 1923750 | 4104000 | 6091875 | **12744000** |
| 7 | Avg. Price per Kg | 185 | 195 | 200 | 210 | **790** |
| 8 | Total Revenue (PKR Million) | 116 | 375 | 821 | 1279 | **2591** |
|   |   |   |   | **Pay Back Period** |   |   |

* **Social:**

The project will assist to create an encouraging environment for interactive development so that positive change could be brought in the social life of the resource-poor farmers. The project will also assist to create self-employment opportunities and local labour force will be engaged in the intervention. Thus decrease the unemployment in the rural areas and ultimately the poverty reduction.

* **Environmental:**

There is no direct or indirect ill effect on the environment; however the socioeconomic effect on environment is likely to be improved. The production of poultry of high genetic worth will lead to optimum utilization of the natural resources.

* **Financial Analysis**
* **Quantifiable output of the project**
* 30 Environmentally Controlled / Semi-Controlled houses established
* 300 small scale poultry farms businesses in conventionally open-sided houses supported
* 8.5 million birds raised during the project period
* 1274 tons meat produced during the project period
* Rs.2591.00 million revenue generated during the project period
* 700 jobs provided
* **Profit and loss account and cash flow statement**

The above table shows the monetary value of the profit accruing due to intervention of the project

* **Unit Cost Analysis**

Investing Rs.1000.0 million in 4 years will return its principle amount in 3rd year of the project.

* **Break Even Point (BEP)**

At The 3rd year of the project the breakeven point started

* **Payback period**

The pay back is the 3rd year of the project

* **Return on Equity (ROE)**

Not Applicable.

**Economic Analysis:**

* **Provide taxes and duties separately in the capital and operating cost**
* **Net Present Value (NPV) (Rs million) and Benefit Cost Ratio (BCR)**
* **Foreign exchange rate of the project (Bruno’s Ratio) for import substitute and export oriented projects**

Not Applicable.

**Employment Analysis:**

* **Employment generation (direct and indirect)**

Apart from Professional and non-professional persons to be employed in the project, 330 rural community’s farms will directly seek self-employment; allied businesses will flourish in the area, thereby providing employment opportunities to hundreds of other people.

* **Sensitivity Analysis:**

To exploit the animal’s potential and protect animal health, the department of livestock and Dairy Development Merged Areas has established a network of 593 veterinary institutions in the merged districts, which are manned with 95 qualified veterinary graduates and 793 Para-vets which provide animal health, artificial insemination, production, extension and communication services to the livestock farmers.

The estimated livestock population of Merged Areas for the year 2019-20 was cattle 1.7, buffaloes 0.109, sheep 1.91, goats 3.6 million heads.

**Impact of delays on project cost and viability.**

**The events that may delay the project are as under:**

* Approval of the project by the competent forum
* Issuance of Administrative Approval/Technical Sanction in due course of time.
* Procurement / bidding process
* Delay in launching of the project will increase its implementation cost because of yearly inflation rate and increased cost of various items to be used to complete the project activities.
* Delay in purchase of durable goods i.e. instruments/equipment, etc. will adversely affect the schedule of implementation of the project.
* Delay and insufficient release of funds and in delivery/provision of machinery, equipment, etc. will slow down the process of implementation of the project.
* Delay in execution at district/field level will slow down the progress of the project.

Therefore, recruitment/ transfer of proper professional/technical staff as well as releases and authentication of approved funds must be made well in time to meet the financial/ physical targets envisaged in the approved PC-I.

1. **Implementation Schedule:**

**(a) Indicate starting and completion date of the project.**

July 2021 to June, 2025

The project activities are planned for 04 years period and will be completed in four years (48 months) after the release of funds.

* **Item-wise/year-wise implementation schedule in line chart co-related with the phasing of physical activities.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ACTIVITIES** | **2021-22** | **2022-23** | **2023-24** | **2024-25** |
| **PHYSICAL ACTIVITIES** |  |  |  |  |
| Nomination of Beneficiaries  |  |  |  |  |
| Construction of Environmentally Controlled House by the Owner |  |  |  |  |
| Purchase of Poultry Birds-day old chicks |  |  |  |  |
| Purchase of Poultry Equipment’s |  |  |  |  |
| Distribution of Poultry Units amongst poultry farmers |  |  |  |  |
| Orientation training of farmer group members / beneficiaries |  |  |  |  |
| Training of Officer’s on Management of ECH |  |  |  |  |
| Hiring of Consultants |  |  |  |  |

**(b) Indicate Result Based Monitoring (RBM) Framework indicators in quantifiable terms:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Input** | **Output** | **Outcome** | **Targeted Impact** |
| Baseline indicator | Targets after completion of project |
| Introduction of Environmentally Controlled Houses (ECH) | 30 Environmentally Controlled Houses Established  | Potential for poultry business, feasible environment | Minimize gap between demand and supply | 30 ECH farms will produce 2,244 tons of meat per annum and Rs.471.00 million revenue generated each year after completion of the project. Direct and indirect jobs opportunities created. |
| Revitalization of Conventional Open-side Houses (COH) | 300 COH farms will be revived | Sheds are available, farmers are trained, need a push  | Made farmer capable to run their businesses  | 300 farms will be operationalized with average birds’ capacity of 3000. An estimated 3,847 tons of meat will be produced and Rs.808.00 million revenue will be generated each year after completion of the project.  |

1. **Management structure and manpower requirements:**
* **Administrative arrangements for implementation of project.**

**Project Plan of Operation:**

The project activities will be implemented and executed by regular staff of the department which is headed by Project in-charge/ Project Director under the overall supervision of the Director Merged Areas, in coordination with District Head Livestock of concerned district.

 **The manpower requirement by skill /profession during execution and operation of the project.**

Following existing staff will be required to run the project activities. They will be given honoraria on monthly basis.

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Nomenclature of Post**  | **Number** | **Status** |
| 1 | Project Director  | 1 | Regular Pool through Deputation |
| 2 | Monitoring officer  | 2 | Regular Pool through Deputation |
| 3 | Assistant Director IT | 1 | Regular pool through transfer |
| 5 | Consultant (Poultry Specialist) | 1 | As per Project Policy |
| 6 | Consultant (Electrical Engineer) | 1 | As per Project Policy |
| 7 | Internees | 10 | Provincial Internship policy |
| **Total** | **12** |  |

* **The job description, qualification and experience of each job may be provided.**

**Project Director:**

* Over All In-charge of the Project to execute .He will be responsible to carry out all necessary decision in consultation with Director Livestock.
* He shall Prepare TORs and methodology for identification, selection of potential poultry farmers
* He will prepare Budget and work plan according to project plan

**Monitoring Officer:** (existing staff)

* Job Description: Monitoring Officer from the existing staff; He shall
	+ 1. Monitor the project activities
		2. Point out the flaws in field work
		3. Report any deviation from PC-1 to Project Director
		4. Any other task assigned to him

**Progress Officer:** (existing staff)

* Job Description:
	+ 1. He shall collect data from the field
		2. Compile all data regarding No. of farms established / revitalized, Birds and feed quantity distributed etc.
		3. He shall submit report to Project Director
1. **Additional projects/decisions required:**

**Indicate additional projects/decisions required to optimize the investment being undertaken on the project.**

Not Applicable.

**15. Certificate**

**The name, designation and phone # of the officer responsible for preparing and checking be provided. It may also be confirmed that PC-I has been prepared as per instructions issued by the Planning Commission for the preparation of PC-I for Production Sector projects.**

**The PC-I along with certificate must be signed by the Principal Accounting Officer to ensure its ownership.**

|  |  |
| --- | --- |
| Prepared by: | **(Dr. Kamran)**Deputy Director (Planning)Directorate of Livestock and Dairy Development Merged Areas SecretariatPh # 091 9210272 |
| Checked by:Counter signed By: | (**Dr. Alam Zeb** )Director Livestock and DairyDevelopment Merged Areas SecretariatPh # 091 9210272**Secretary** Agriculture Livestock &Cooperative Dept: Khyber Pakhtunkhwa |
| Approved By |   PDWP on\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |

|  |
| --- |
| **List of Machinery and Equipment for Environmentally Controlled Poultry Houses (Annex-II)** |
| ***Main Feed Line System*** |
| *1* | *Main Hopper* |
| *2* | *Feed Sensor* |
| *3* | *Drive System* |
| *4* | *Strobe With Three Open* |
| *5* | *Main Feed Line* |
| *6* | *Feed Drop Part* |
| *7* | *Hopper Base Part(double boot)* |
| *8* | *Accessories* |
| ***Feed Pan System*** |
| *1* | *Manual* |
| *2* | *Drive System* |
| *3* | *Controlling Pan* |
| *4* | *Delivery System* |
| *5* | *Feed Pan* |
| *6* | *Winch* |
| *7* | *Winch Shake* |
| *8* | *Hang Pieces* |
| *9* | *Hopper* |
| *10* | *Anti-roost Accessories* |
| *11* | *Steel Wire* |
| ***Nipple Drinking System*** |
| *1* | *Manual* |
| *2* | *Pressure Regulator* |
| *3* | *Connecting Tube For Regulator* |
| *4* | *Nipple Drinking System* |
| *5* | *Winch* |
| *6* | *Winch Shake* |
| *7* | *Hang Pieces (With 8' Distance)* |
| *8* | *Anti-roost Accessories* |
| *9* | *Steel Wire* |
| ***Ventilation System*** |
| *1* | *Butterfly Cone Fan* |
| *2* | *Kooltek Pads* |
| *3* | *Air Inlets* |
| ***Controller*** |
| *1* | *Automation Master*  |
| ***Generator Set*** |
| *1* | *Generator ‘’100KVA’’*  |
| *2* | *Generator’’35KVA’’* |
| ***Copper Cables*** |
| *1* | *Cable Std 4core’’25mm’’*  |
| *2* | *Cable Std 4core’’16mm’* |
| *3* | *CableStd4core’’10mm'* |
| *4* | *Cable Std 3core’’2.5mm’’* |
| *5* | *Cable Flex 2core’’1.5mm’’* |
| *6* | *Cable Std 1core’’2.5mm’’* |
| *7* | *Cable Std 1core’’1.5mm’’* |
| *8* | *Cable Std4core’’2.5mm’’* |
| *9* | *Cable Flex 3core’’1.5mm’’* |
| *10* | *Cable Flex 4core’’2.5mm’’* |
| ***Electric Panels*** |
| *1* | *Main Control Panel’’20’’Points* |
| *2* | *Change Over Panel With 4pc“LS”Breakers etc.* |
| *3* | *Feed Control Panel”5”Points* |

**Observation by Planning Cell of Agriculture, Livestock and Cooperative Department**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Observation** | **Reply** |
| 1 | Project Cost is not as per ADP 2021-22 | Cost is reduced to Rs.1000.00 million and according to the ADP 2021-22 |
| 2 | Objectives of the scheme may be quantified | Needful done |
| 3 | A comparative statement between ECH & COH, regarding Cost, Production, Time Period & Profit earned etc. may be prepared | COHs are conventional farms, manually operated and having low capacity for birds rearing (2000-6000 birds/farm). Birds are more prone to disease outbreak, comparatively less investment is involved and low profit.ECHs are advanced form of the sheds, mainly mechanized and having large capacity for birds (15,000-40,000 birds / farm). Chances of disease outbreak are less, more investment is involved and hence more chances of profit. |
| 4 | Baseline data of Merged Districts regarding COH &ECH may be provided in PC-1 | At present no ECH are present in Merged Areas. On the other hand, about 200 COHs are available both functional or non-functional. |
| 5 | Clarification for cost share basis | To identify potential and interested farmers, the activity is proposed on cost share basis. The Govt. will provide in kind support in shape of feed provision, machinery and equipment etc. while the farmer will have to provide the land for construction of shed, construct the shed, purchase Day-Old-Chicks, and bear all other operational expenses. The investment on part of farmer will be helpful to increase his interest and make the intervention successful. |
| 6 | How much land will be required | 2.5 kanal of land would be required for ECH with capacity of 15,000 birds whereas 5 kanal would be required for ECH with capacity of 30,000 birds  |
| 7 | No map found for the target districts | The interventions are not meant for a particular district rather it would be carried out on demand and potential in all Merged Districts / Sub-Divisions and hence no map of the target districts is provided. |
| 8 | The draft PC-1 may be rectified as per ADP 2021 | Needful done |
| 9 | Proper monitoring mechanism may be incorporated in the PC-1 | Monitoring mechanism is elaborated. See page 12 & 13. |
| 10 | Training of the employees may be rationalized | Needful done |
| 11 | The draft corrected PC-1 may also be up-loaded on PCFMS in consultation with resource center of P&DD and both hard and soft copies be provided to this office. | Needful will be done as pointed out. |