## **Area Development Scheme – Objective**

Agriculture and allied activities are the backbone of our economic policy which provide for livelihood of 65% of our population. It shares 23% in the GDP of the state. Uttar Pradesh is far ahead from other states in the production of milk, fruits and vegetables but lags behind in productivity potential. There are two main reasons for the same – firstly more than required number of people are working in this field and more than 92% farmers are unorganized. Second main reason is small and fragmented land holding. This is supplemented by lack of capital, technology and bank finance for these sectors resulting into low productivity and difficulty in marketing of the produce. Keeping in view these factors, Area Development Schemes has been formulated.

### **Area Development Scheme**

Area Development Scheme means marketing of produce of a particular activity in a particular area by a particular group after processing or value addition by utilizing the technology, inputs and required credit. The produce may be of agriculture or allied activities (dairy, poultry, Sheep/goat/piggery, beekeeping, horticulture etc.) Even nonfarm sector activities may be included. Under the scheme, branches of one bank or branches of all the banks of the area may provide loan for that particular activity which will help in forward and backward linkage and farmers will be able to realise good price for their produce.

Since the scheme will be implemented in a particular area, input cost will lessen because of benefits of technical inputs and other resources to the producers. Products will be sold in an organized manner which will fetch better price resulting in increase in farmers' income. Implementation in a limited area will make monitoring and its implementation better.

For implementation of the scheme, it is required to be adopted by Govt departments, banks and NGOs. Keeping in view these factors, four blocks of Mau district have been identified for implementation of Area Development Scheme on poultry after discussions with banks on the basis of local profile, availability of input and arrangement of marketing. The scheme will be implemented by all the banks of the area. Banks financing this activity in the area can avail refinance facility from NABARD. The scheme will be monitored at the district as well as block level.

### 1-Introduction:

Animal husbandry sector has the potential of providing the much needed hedging risk against the crop loss due to natural calamities in Uttar Pradesh. Live Stock Sector plays pivotal role in rural employment. This Sector has also highest potential for rural self-employment generation at the lowest investment per unit possible. The human population of Mau district is 22.02 lakh as per 2011 decadal census. Livestock population had increased substantially in Uttar Pradesh (14.01%) as per livestock census 2012. Rearing of Poultry Farming is an allied activity for small and marginal farmers in the Mau district. The activity is adopted by some farmers but in a scattered way. Based on analysis of Primary and Secondary data of different potential agricultural activities in the state, Poultry activity had been identified as one of the most potential sector for capital formation in agriculture in the district.

Poultry meat is an important source of high quality proteins, minerals and vitamins to balance the human diet. Specially developed varieties of chicken (broilers) are now available with the traits of quick growth and high feed conversion efficiency. Depending on the farm size, broiler farming can be a main source of family income or can provide subsidiary income and gainful employment to farmers throughout the year. Poultry manure is of high fertilizer value which can be used for increasing yield of all crops.

The broiler chicken production of our country is growing at the rate of nearly 8-10% every year. The consumption of chicken meat has increased significantly during past two decades. Government is promoting this industry by providing subsidy. India is the third largest broiler-chicken producer in the world produces 3.8 million tons of poultry meat a year. The market is estimated to be worth about Rs.90,000 crore. Per capita chicken consumption in India has been on the rise, with changing eating habits. Considering the vast potential of this industry in employment generation we have taken this project as ADS in Mau district. Before starting a Hybrid Broiler farm, the entrepreneurs/farmers are advised to undergo training in any training institute on poultry farming. The entrepreneurs can contact Local Animal Husbandry Department /Veterinary College/Agriculture University/RSETI for training. They should also visit progressive broiler farmers and government/agricultural university poultry farm in the locality to get the experience / exposure.

### 2 - Housing for broiler chicken

**Floor** – Pucca, smooth strong concrete cemented, impervious to moisture rodent proof, and have slope towards door. Plinth should be at least 2ft. higher than ground.

**Walls** - 2ft. high lengthwise brick wall on sides, 4ft wire netting above brick wall supported with angle iron. End wall should be solid made of bricks. Maximum breadth of poultry house should be 27 ft. There should be partition in every 500 sq.ft.

**Doors** –There should be two doors 4ft. wide and 6ft high opposite to each other.

**Roof** – Roof of the poultry house may be of asbestos or tiles. It should be 12-14ft. high at the center and 6ft.-8ft. high on the side wall with 3ft. hang over beyond wall to prevent rain water from entering poultry house and to keep litter dry.

# 3 - Forward and backward linkages:

## Livestock population

The Tehsil-wise, covering all 9 blocks of Mau district, Poultry population, as per 19<sup>th</sup> Livestock census 2012, is as under:

Name of Tehsil	Population of Poultry
Mau Nath Bhanjan	67867
Mohammadabad	43050
Ghosi	37849
Madhuban	45768

Source : District Statistical Book

#### **Selection of Breed**

Entrepreneurs/farmers are adopting both broiler & layer farming. Owing to having demand of chicken, majority of them have adopted broiler farming. District Animal Husbandry Department is also suggested for broiler farming/ unit.

#### Feed and fodder

Owing to the considerable growth in broiler industry, high quality chicks, feed & fodder, equipment, vaccines and medicines, technically and professionally competent guidance are available to the farmers. The management practices have improved and disease and mortality incidences are reduced to a great extent. In Mau, Veterinary Department and RSETI are providing training to the interested entrepreneurs and they can also get exposure to the progressive broiler farmers situated in Ratanpura Block. Veterinary support may be availed from Animal Husbandry department. Broiler farming has been given considerable importance in the national policy and has a good scope for further development in the years to come.

### 4 - Selection of area:

The activity is adopted in 4 blocks (Ratanpura, Ghosi, Pardaha and Mohammdabad) of the district Mau. All entrepreneurs are doing this activity individually and most of them have not availed bank loan for this purpose. In future it may be extended to all the blocks of the district. After discussion with local poultry farmers, it has been observed that the demand of poultry meat and eggs are being fulfilled by nearby District.

### 5 - Selection of beneficiaries:

Implementing banks have the sole discretion for selection of borrowers as per their norms.

### 6 - Capacity building of the beneficiaries

Before starting a Poultry farm the entrepreneurs/farmers shall undergo training on poultry farming. They can contact Local Animal Husbandry Department, RSETI and visit to Progress boiler farmers.

The entrepreneur must check the following points before starting a Broiler farm.

- i. Availability of concentrates, fodder & medicine in that locality. Availability of hybrid broiler chicks in local market
- ii. Availability of Veterinary Hospital, Animal disease diagnostic laboratory
- iii. Marketing facility & demand of Broiler in local market
- iv. Availability of broiler feed & medicine in their locality.

## 7 - Financial assistance available from Banks for broiler farming

The items of investment/finance would include construction of broiler sheds and purchase of equipment, cost of day old chicks, feed, medicine and labour cost for the first cycle. Cost towards land development, fencing, water and electricity, essential servant's quarters, go downs, transport vehicles, broiler dressing, processing and cold storage facilities can also be considered for providing credit. For high value projects, the borrowers can utilise the services of NABARD Consultancy Services (NABCONS) who are having wide experience in preparation of Detailed Project Reports.

## 8 - Project formulation for bank loan

A project can be prepared by the promoter after consulting local technical persons of State Veterinary/Animal Husbandry department, Poultry Corporation or private commercial broiler hatcheries. If possible, they should also visit the progressive broiler farmers in the area and discuss the profitability of farming. Before starting a broiler farm, a good practical training and experience on a broiler farm will be highly desirable.

### 9 - Appraisal of the project

The project so formulated considering the above mentioned aspects should be submitted to the nearest branch of the bank for availing credit facility for establishment of the broiler farm. The bank will then examine the project for its technical feasibility, financial viability and bankability.

## 10 - Sanction of Bank loan and its disbursement

After ensuring technical feasibility and financial viability, the project is sanctioned by the bank. The loan is disbursed mostly in 2 stages viz., construction of sheds/other civil structures, purchase of equipment and machinery, recurring cost on purchase of chicks, feeds, medicines, etc. The end use of the loan is verified and constant follow up/monitoring is done by the bank.

# Physical and financial programme:

(Amt. in lakh)

Sr. No.	Block	Name of the Bank	Unit Cost	No. of Units	TFO	Bank Loan (85%)	Margin (15%)
1	Ratanpura	Union Bnak, Purvanchal Bank, DCCB, SBI, PNB	31.77	10	317.70	270.05	47.65
2	Ghosi	Union Bnak, KGSGB, DCCB, SBI, PNB	31.77	10	317.70	270.05	47.65
3	Pardaha	Union Bnak, KGSGB, DCCB, SBI, PNB	31.77	10	317.70	270.05	47.65
4	Mohammdabad	Union Bnak, KGSGB, DCCB, SBI, PNB	31.77	10	317.70	270.05	47.65
Total				40	1270.80	1080.20	190.60

# 11 - Lending terms - General

### **Outlay:**

Outlay of the project depends on the local conditions, unit size and the investment components included in the project. Prevailing market prices/cost may be considered to arrive at the outlay.

### Margin Money, Interest Rate and Security:

Banks are free to decide the Margine money, Rate of Interest and Security norms as per the loan policy of RBI guidelines. However, for working out financial viability and bankability of model project, the rate of interest is assumed at 11-12% p.a.

# Repayment of loan:

The loan repayment is determined, on the basis of gross surplus generated in the project and as per loan policy. Usually the repayment period of loan for broiler farming is 5 to 8 years.

#### **Insurance:**

The birds and other assets (poultry shed, equipment) may be insured. Wherever necessary Risk/Mortality fund may be considered in lieu of poultry insurance. However companies are not interesting for insurance in Poultry sector.

#### 12 - Economics of Poultry Broiler Farming

A model economics for broiler farming with a unit size of 10000 birds is given below. This is indicative and the applicable input and output costs and the parameters observed at the field level may be incorporated.

Capital Cost			
Construction of shed (10000 SQ.FT @ Rs.150/sft)	1575000		
including electrification			
Feed room - 1000 sft @ Rs.200/sft	200000		
Cost of equipment	262500		
Total 20,37			
Recurring Expenditure			
Cost of day old chicks	231000		

Cost of feed	673200
Medicines, labour, miscellaneous charges	102000
Insurance of birds	31500
Insurance of sheds and equipment	20375
Total	10,58075
Grand Total (A+B)	30,95575
Say	31,77000
Margin (15%)	476550
Bank Loan	2700450

# **Techno Economic Parameters**

Techno Economic 1 at affecters				
Number of birds	10000			
Batch strength	10000			
Birds purchased per batch	10500			
Birds considered for recurring expenditure	10200			
Birds considered for selling	10000			
Floor space per bird (s.ft)	1			
Cost of construction of shed (Rs. per sft)	150			
Cost of equipment (Rs. per bird)	25			
Cost of day old chick (Rs. per bird)	22			
Feed requirement per bird ( Kg)	3.3			
Cost of feed (average price Rs. per kg)	20			
Medicines, vaccines, labour and misc. charges	10			
Insurance per bird (Rs. per bird)	0.5			
Insurance of sheds and equipment (Rs. per	10			
Rs.1,000/-)				
Live weight of bird (Kg per bird)	1.7			
Sale price (Rs. per kg)	70			
Value of manure per bird sold (Rs. per bird)	0.5			
Sale price of gunny bags (Rs. per bag)	10			
Margin (%)	15			
Interest on bank loan (% p.a)	12.50%			
Rearing period	6 weeks			
Cleaning period of shed	2 weeks			

# Flock Chart

Years	1	2 to 8
No. of batches	7	7
Rearing weeks	40	42
Batches sold	6	7

# **Income and Expenditure Statement**

Years	1	2 to 8	8			
Income						
Sale of birds	7140000	8330000	8330000			
Sale of manure	30000	35000	35000			
Sale of gunny bags	2992	3142	3142			
Total	7172992	8368142	8368142			
Expenditure						
Cost of chicks	1617000	1617000	1617000			
Cost of feed	4488000	4712400	4712400			

Cost of medicines &	612000	714000	714000
misc. charges			
Insurance of birds	31500	36750	36750
Insurance of sheds	20375	20375	20375
and equipment			
Total	6768875	7100525	7100525
Surplus	404117	1267617	1267617

# Calculation of NPV, BCR & IRR

Years	1	2 to 7	8	
Capital Cost		3177000		
Recurring Cost	5710800	7100525	7100525	
Total Costs	8887800	7100525	7100525	
Income	7172992	8368142	8368142	
Residual value of she	d	764079		
Total Benefit	7172992	8368142	9132221	
Net Benefit	-1714808	1267617	2031696	
Disc cost at 15% DF		17766249		
Disc benefit at 15% DF		18569485		
NPW at 15% DF		803236		
BC Ratio		1.05		
IRR		51.91%		

# **Repayment Schedule**

Year	Loan	Gross surplus	Interest	Principal	Total repayment	Surplus	Balance outstanding at the end of the year
1	2700450	1462192	337556	337556	675113	787080	2362894
2	2362894	1267617	19869	337556	357425	910191	2025338
3	2025338	1267617	17499	337556	355055	912561	1687781
4	1687781	1267617	14844	337556	352400	915216	1350225
5	1350225	1267617	11871	337556	349427	918189	1012669
6	1012669	1267617	8541	337556	346097	921519	675113
7	675113	1267617	4811	337556	342367	925249	337556
8	337556	1267617	4812	337556	342368	925248	0

# 13 - Implementation and Monitoring

The monitoring of the projects financed may be done as under;

Sr.	Level	Frequency of Review	To be done by
No.			
1	Ground level/	Disbursement based monitoring	Branch Managers
	Branch level	and regular follow up.	
2	Regional Level	Monthly/Quarterly	Regional Managers
3	District Level	Quarterly/half yearly	A Committee involving all
			Stakeholders/DCC/
			DLRC/Banks

# 14 - Conclusion

Poultry (Broiler Farming) is techno-economically viable income generating activity and suited for rural entrepreneurs. ADS on Poultry Farming is going to benefit the farmers in doubling their income, increase in meat availability, increase in formation etc.