

Livelihood Security through Kadaknath Poultry Rearing

KVKs : Burhanpur, Dhar, Jhabua, Gwalior, Khandwa, Sheopur, Datia , Panna, Chhindwara, Dantewada, Bastar, Balrampur, Bijapur, Narayanpur, Rajnandgoan, Dhamtari, Surguja, Kanker, Kawardha, Bhatapara

Description of Technology adopted

- ▶ **Rearing System:** Backyard rearing system
- ▶ **Vaccination:** Vaccine (F1/ B1, Lasota, R2B and Gumboro)
- ▶ **Balance Feed:** Low cost poultry feed comprising of grain, bran, salt, minerals and vitamins.
- ▶ **Unit size-** 100 birds

Indicator	Baseline (Surveyed)	Present Status (Kadaknath)
Poultry shed	Backyard poultry	100 kadaknath birds
Sale rate	500-600 (6-8 month)	600-800 (3-4 month)
Growth rate (1kg)	6-8 month	3-4 month
Mortality %	Up to 50%	Below 12%
Income Rs/year/ 100 birds unit	35,000-40,000	90,000-95,000
Knowledge	Nil	Farmers aware about Vaccination & medicine for conservation & promotion
Marketing	Nil	KVK, Jhabua known for kadaknath Marketing-Rajasthan, Gujrat, Maharastra etc.

Advantages of kadaknath bird rearing

1. Kadaknath chicken meat is textured and flavoured
2. This black meat has good medicinal value
3. Kadaknath chicken meat and their eggs are sold for higher prices in the market
4. This bird meat contain many kinds of amino acids & vitamins
5. Kadaknath black meat is the rich source of vitamins & minerals

Promising characters -

Particulars	Kadaknath bird	Other birds
Protein	25%	18-20%
Fat	0.73-1.03%	13-25%
Cholesterol	184.7 mg/100 g	218.1 mg/100 g
Lenoleic acid	24%	21%
Body weight (4 month)	1.0-1.25 kg	0.8-1.0 kg
Mortality	8-10%	15-20%
Egg laying	90-120	60-80

Convergence –

Central Govt. Schemes	State Govt. Schemes
MGNREGA (Shed Construction)	Department of Animal Husbandry, District Mineral Fund, State Rural Livelihood Mission, Centre for Advance Research & Development, Child fund

Impact :- Economics of rearing 100 birds in one year

Cost (Rs)	Gross return(Rs)	Net return (Rs.)	B:C ratio
50,000-60,000	1,40,000- 1,60,000	90,000- 95,000	2.72

Employment generated, 460 mandays per family in one year

Nutritional quality of Kadaknath Chicken

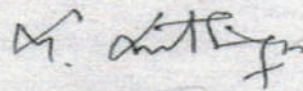
1. Proximate composition:

Composition	Quantity (%)
Moisture	71.5-73.5
Protein	21-24
Fat	1.94-2.6
Ash	1.1-1.4

2. Fatty acid profile

Composition	Quantity (mg/100g)
Myristic acid(14:0)	40-70
Palmitic acid (16:0)	800-1100
Stearic acid (18:0)	210-370
Total saturated fatty acids	1050-1540
Palmitoleic acid (16:1)	220-370
Oleic acid (18:1)	1200-1770
Eicosenoic acid (20:1)	20-30
Total monounsaturated fatty acids	1440-2170
Linoleic acid (18:2)	410-600
Gamma linoleic acid (18:3)	20-40
Arachidonic acid (20:4)	20-40
Docosahexaenoic acid (22:6)	30-50
Total poly un saturated fatty acids	480-730

3. Cholesterol content: 59-60 mg/100g


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Economics of rearing kadaknath poultry birds (200 birds)

No. of units – 03 (Convergence with Zila panchayat)

Particulars	Quantity	Rate (Rs.)	Amount (Rs.)
Poultry Shade (NRC)	400 sqft (@2sqft/bird	125/sqft	50000
Low cost Hatching Machine (NRC)	1 No. (600 egg capacity)	30000/-	30000
Chicks	200 nos	80/nos	16000
Feed	8640 kg (for one year)	32/kg	276480
Labour for watching	360 mandays	250/day	90000
Vaccination, feed pots, Electricity etc.	-	-	20000
Grand Total	-	-	482480

Income

Particulars	Production (in six month)	Rate (Rs.)	Amount (Rs.)
Eggs	2250/ month = 13500		
Chicks production	9450 chicks (70-80%)	80/ chick	756000
Net profit			273520

Technical components for kadaknath rearing

*Partially modified rearing house (10X12 feet)

- ▶ Feeder & drinker
- ▶ Medicine
- ▶ Vaccine (F1/B1, Gumboro ,lasota and R2B)
- ▶ Balance feed – starter(early stage), finisher (growth stage)



Vaccination scheduling

Weeks	Days	Name of vaccination	Method of application
01	07	F1/B1 for Ranikhet	Drop in eyes and nose
02	14	Gumboro	Use with drinking water
03	21	Lasota	Use with drinking water
05	35-45	Gumboro	Use with drinking water
09	60-65	R2B	Inject inside skin or in mussels



Horizontal spread of technology:

Name of KVK	No. of village covered	No. of farmers	No. of units
Burhanpur, Dhar, Jhabua, Gwalior, Khandwa, Sheopur, Datia, Panna, Chhindwada (M.P.)	426	2054	2054
Dantewada, Bastar, Balrampur, Bijapur, Narayanpur, Rajnandgoan, Dhamtari, Surguja, Kanker, Kawardha, Bhatapara (C.G.)	305	914	763
Total	731	2968	2817
Chicks supplied to other states		Nos.	
U.P, Odisha, Karnatka, J & K, Maharashtra, Rajasthan, Gujarat, Delhi, Goa, Tamilnadu		58,500	

Kadaknath rearing at farmers field



Kanker



Rajnandgaon



Dantewada

Hatchery units



Dantewada



Narayanpur



Balrampur

Innovation - Low cost hatchery machine

Animal Scientist of the KVK, Kanker designed low cost hatching machine of 600 egg capacity for the benefit of tribal farmers. The manufacturing cost of the machine is about Rs 30,000/- while in the market same capacity machine are available in Rs 1,00,000/-.

- ▶ Capacity 600 eggs
- ▶ Fully Automatic
- ▶ Cost of Machine is Rs 30000/-
- ▶ Hatchability of machine is 70-75 %
- ▶ Consumption of power is low.

Impact of adopted technology in economic and social terms:

- ▶ Farmers are earning additional income of Rs 90,000-95,000 per year by rearing of 100 birds
- ▶ Employment generated-460 man days per unit/ year
- ▶ Revenue generated - Rs 26,05,72,500 per year from 2817 units
- ▶ Reduced migration from rural areas in off season .
- ▶ Due to rich source of nutrients, it helps in reduction of malnutrition problem in tribal area.
- ▶ Presence of melanin pigment in the body, it is beneficial for heart patients .
- ▶ Kadaknath is working as Bank ATM for rural people



Published By :

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