

# Baseline Assessment Study - Backyard Poultry Rearing

Rama Block, District Jhabua, Madhya Pradesh



*January 2014*

**SOUTH ASIA**  
**Pro Poor Livestock Policy Programme**

A joint initiative of NDDB and FAO



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## **1. Background**

With the objective of demonstrating an integrated approach to strengthen livelihoods dependent on goat and poultry rearing, SA PPLPP is proposing to support pilot initiatives in selected village clusters in Madhya Pradesh, to be implemented by partner NGOs.

In Madhya Pradesh, following appraisal studies undertaken by SA PPLPP and discussions and direction from the SA PPLPP Board, it is proposed to support two pilot initiatives - (i) strengthening goat based livelihoods in a selected village cluster in the Jhirniya block, District Khargone to be implemented by the Aga Khan Rural Support Programme (India) (AKRSP (I)); and (ii) strengthening *desi*/ indigenous poultry based livelihoods in a selected village cluster in the Rama block, District Jhabua to be implemented by Sampark.

Towards developing detailed proposals for the two pilot initiatives (including a specification of objectives, expected outputs and outcomes, activities, timeline and budget), baseline assessment studies were undertaken in the two identified districts, by Sampark in District Jhabua and by AKRSP (I) in District Khargone.

The major findings emerging from the baseline assessment study on backyard poultry rearing in a cluster of 13 villages (10 project villages and 3 ‘control’ villages) in the Rama block, District Jhabua are presented below.

## **2. Methodology followed for the Baseline Assessment Study**

The baseline assessment study was undertaken through a household survey using a questionnaire format (attached as Annexure 1) and focus group discussions with poultry rearers in the identified village cluster. In addition, the data collected through the questionnaire survey was triangulated through participatory rural appraisal techniques and stakeholder discussions. In order to understand the rural poultry value chain, local village *haats* (markets) were visited and discussions convened with traders and poultry rearers. The veterinary hospital at Jhabua and veterinary dispensaries were visited, as also the Krishi Vigyan Kendra, the office of the Ranikhet (Newcastle) disease control programme and local banks.

In addition to the selected cluster of 10 villages, the baseline assessment study was also undertaken in three similar villages identified as ‘control’ villages. This will facilitate subsequent monitoring and assessment of the impact of the pilot initiatives.

The household questionnaire was administered to 430 households in the 13 selected villages (10 project villages and three control villages) comprising 25% of the total of 1,720 households<sup>1</sup>. Information regarding village names and population is provided in Table 1.

## **3. Context**

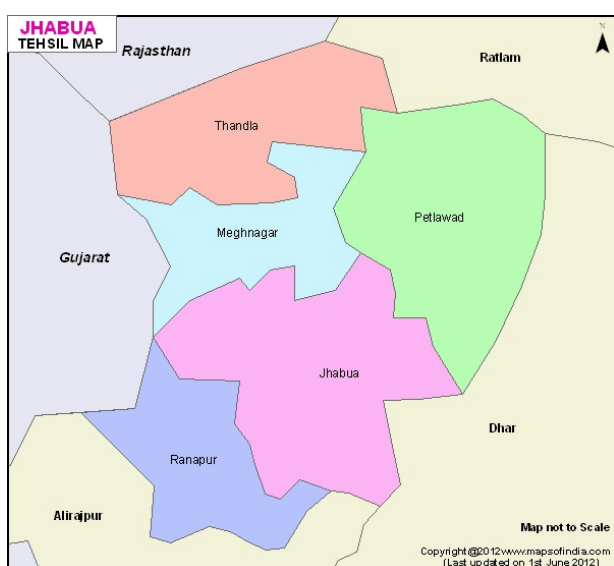
Jhabua district is situated in the western part of the state of Madhya Pradesh. It has the highest population of tribals in the state, comprising 87% of the district population<sup>2</sup>. The literacy level is 44.5%. The district has five development blocks – Ranapur, Jhabua, Thandla, Meghnagar and Petlawad (refer map). A new block, Rama, has recently been carved out of the existing Petlawad and Jhabua blocks. Geographically, the region comprises of plateaus and has undulating stony land. The soil is mainly red/ brown, though black soil is also found

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<sup>1</sup> As per the 2011 census, the total number of households in these 13 villages is 1,356. However, during the PRA exercise, the total number of households as informed by the community were 1,720.

<sup>2</sup> According to the 2011 Census the district has a total population of 1,024,091.

in some areas. The main crops grown in the area are maize, soya bean, cotton, wheat and gram.



With a risky, rain-dependent crop base, and in view of the district's proximity to Gujarat, migration has emerged as the most significant livelihood activity of rural communities in the district.

Most rural households maintain small poultry flocks, primarily to meet household requirements of meat, and for sale at local markets. In view of its wide acceptance in the area, poultry rearing can emerge as a sustainable livelihood activity for resource poor rural households.

#### 4. Proposed Project area

The proposed project area is located in the Rama Block, at a distance of 15 km from the Jhabua district headquarters. On its western periphery is the Jhabua development block, in the north is Petlawad and towards the south and east is Dhar district. The main highway between Indore and Ahmedabad passes through the Rama block. It has a total of 55 panchayats and 122 villages.

All of the 1,720 households in the 13 villages are tribal, largely Bhil and Pateliya, with a few Bhilala households in the Dungrapani village. There are a number of sub-castes and villages are spread across hamlets based on sub-castes.

The project villages have a total of 14 women SHGs formed under various government programmes (notably the Madhya Pradesh Rural Livelihoods Programme), with 147 members. These SHGs have been linked with regional rural banks. For their daily needs, households visit local weekly *haats* in Jhabua, Kalyanpura and Rajgarh (in Dhar district).

**Table 1 - Project and Control villages**

Name of village	Number of households	Total Population	Male	Female
<b>Project Villages</b>				
1 Bhaisa karai	74	471	229	242
2 Sad	307	2,171	1,114	1,057
3 Keljhar	24	211	106	105
4 Bhanvar Pipliya	87	500	253	247
5 Khedli	71	489	235	254
6 Chhapari	222	1,576	803	773
7 Hatyadeli	147	913	451	462
8 Wagnera	68	341	164	177
9 Kokawad	195	1,240	625	615
10 Nawapada	25	185	94	91
<b>Total</b>	<b>1,220</b>	<b>8,097</b>	<b>4,074</b>	<b>4,023</b>
<b>Control villages</b>				
11 Dungrapani	16	102	51	51
12 Ruparel	86	366	173	193
13 Semalkhedhi	34	185	93	92
<b>Total</b>	<b>136</b>	<b>653</b>	<b>317</b>	<b>336</b>

*Source: Census 2011*

*Note: The number of households as emerging during the PRA exercise was higher at a total of 1,720.*

## 5. Findings from the Baseline Assessment Study

### (i) Demographic Profile

There are 1,720 households in the study area (13 villages), with an average family size of 7 members. 55% of households are Below the Poverty (BPL) line, and 9% households are categorised as Antyodaya. 14% of households in the villages do not have a ration card (refer Table 2).

Table 2 – Demographic Profile	
Category	Number of households (percentage)
APL	22 %
BPL	55%
Antyodaya	9%
No card	14%
<b>Total</b>	<b>100%</b>

### (ii) Sources of Livelihood

The two major sources of livelihood are migration and agriculture. For almost 64% of the households, migration is the main livelihood, followed by agriculture (main livelihood for 34% of the households).

Major migration destinations are large towns in the neighbouring states of Gujarat (Godhra, Ahmedabad, Surat and Rajkot) and Rajasthan (Kota, Bhilwara), and Indore, Bhopal and Ujjain in Madhya Pradesh (for harvesting soyabean and for work as construction labourers). Preferred migration months are July to October, followed by December to February and finally the summer months from April to June.

Although most households maintain livestock, livestock rearing is mentioned as a major livelihood source by only 0.2% households.

Table 3 – Sources of Livelihood		
Livelihood source	Major Livelihood	Supplementary Livelihood
Migration	64%	33%
Agriculture	34%	65%
Agriculture Labour	0.2%	0.2%
Non-agriculture labour	0.2%	0.2%
Salaried job	0.7%	0.2%
Livestock rearing	0.2%	0.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The average land-holding is 4 *bighas* (1.6 acres), and primarily comprises rain-fed land. Major crops grown on rain-fed land are maize, soyabean and black gram and sometimes groundnut. Only 37% of the land is irrigated and the major crops are wheat, cotton, maize, and green gram. Major sources of irrigation are individual wells, followed by lifting water from nearby streams and ponds.

### (iii) Livestock Rearing

Livestock rearing in the area is mainly for household consumption and not as a source of income. The main reasons for this are the shortage of water due to recurrent droughts, lack of fodder, increasing migration and modernisation of agriculture.

Table 4 – Livestock Numbers	
Livestock	Numbers
Cows	53,203
Buffaloes	13,560
Sheep	393
Goat	36,963
Poultry	59,642
<i>Source: Animal Husbandry Department, District Jhabua, 2007 statistics</i>	

The Rama Block headquarter has a veterinary hospital which functions from 8 to 11 in the morning and from 4 to 5 in the evening. There is a trained government paramedic (compounder) present who dispenses medicines and also carries out home visits to treat sick animals against a fee. There is also a post for a vaccinator at this hospital. However, vaccination of poultry is carried out only where there are large poultry units established under a government programme or at government run poultry farms.

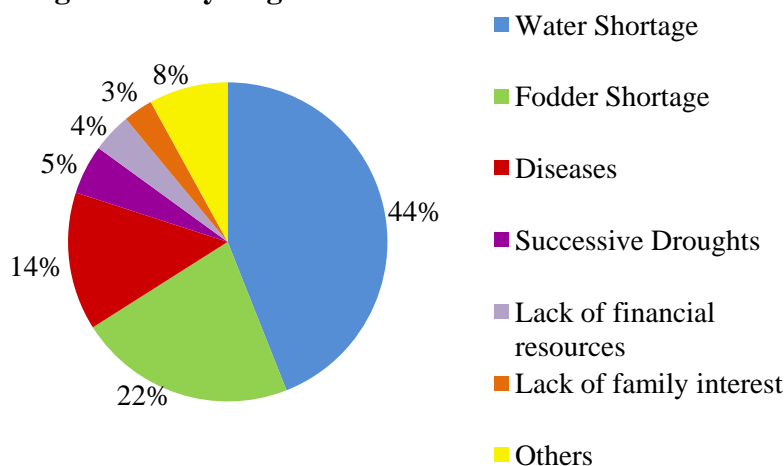
In addition, there are two veterinary dispensaries at Machliya and Sad villages where there is a compounder. Other veterinary services are available only at the district headquarters in Jhabua, which has a District Veterinary Hospital and a Krishi Vigyan Kendra with a Kadaknath hatchery unit. Seven day old vaccinated Kadaknath chicks are sold from the unit at Rs.35/- each. The district also has an office of the Ranikhet (Newcastle) disease control programme. In the proposed project area there are also 44 *ojhas* (local animal healers) who treat cattle and goats.

### (iv) Large Ruminant Rearing

In the study villages, 49% of the households rear large ruminants. Of these households, 73% rear local/*desi* cows and 27% rear buffaloes. On an average each family has at least 2 animals. The milk is mainly used for domestic consumption. However, rearing of large animals has been decreasing steadily over the last 6 to 7 years. The main reasons for this are shortage of

Table 5 - Status of milch animals (in %)		
Animal	Milk producing	Dry
<i>Desi</i> /Local Cow	33	67
Crossbred	0	0
Buffalo	39	61
<b>Total</b>	<b>35</b>	<b>65</b>

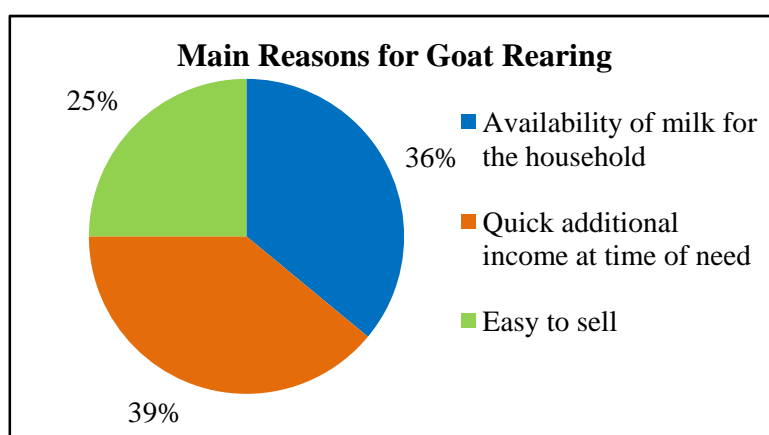
#### Challenges faced by large ruminant rearers



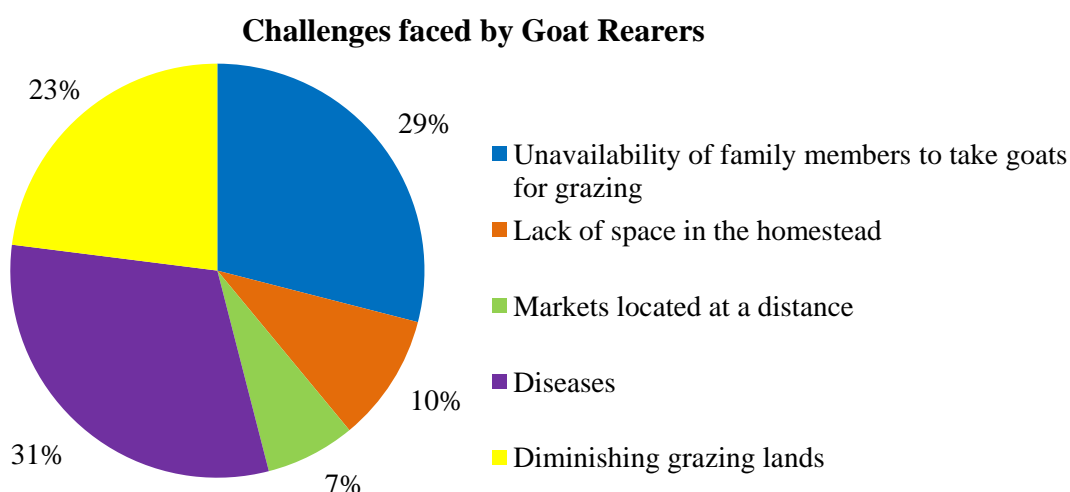
fodder, diseases, successive droughts and a resultant shortage of water. Other reasons include a lack of interest among youth to continue livestock rearing, inadequate income from cattle rearing, and migration which reduces the number of family members available to tend and look after livestock.

#### (v) Goat Rearing

49% of families in the area rear goats. These primarily comprise non-descript/ local breed of goats (99%) and only a very small number of households (1%) have Sirohi or Sirohi-type goats. On an average each household has 3 goats. Major reasons for goat rearing are that goats can be sold easily, provide milk for home consumption, and meet emergency cash requirements.



Some of the constraints voiced by goat rearers are diseases, lack of space within the homestead to house goats, shortage of people in the family to take goats for grazing, and reducing grazing lands. Further, markets to sell goats are not in the immediate vicinity of villages.



#### (vi) Poultry Rearing

Poultry rearing is a traditional activity in the area. Most households have poultry flocks. 54% of the households have been rearing poultry for more than 20 years, while 28% of the households have recently taken up poultry rearing.

Table 6 – Number of Years Rearing Poultry	
Years	Poultry rearing households (in %)
1 – 2	28%
3 – 4	2%
5 – 9	10%
10 – 20	6%
More than 20 years	54%

### (vii) Reasons for Poultry Rearing

The main reasons for rearing poultry mentioned by the community are:

Table 7 – Reasons for Poultry Rearing					
Reasons	Ranking of reason as per preference				
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Total	%
For home consumption	393	28	3	424	99%
Sale of live birds	20	177	6	203	47%
Eggs for home consumption	1	33	20	54	13%
Sale of eggs	2	2	0	4	1%
Regular income	1	156	26	183	43%
Additional income during festivals	5	5	3	13	3%
Quick income in case of emergencies	8	29	371	408	95%
Requiring low inputs	0	0	1	1	0.23%

From the above table it is evident that poultry is reared mainly for home consumption and for quick income during household emergencies. Poultry rearing, as it is currently practiced, is therefore not viewed as a livelihood or income earning activity, but as a traditional activity meeting household requirements of meat. Eggs are rarely consumed within the home or sold, and are largely hatched to increase household poultry flocks.

### (viii) Poultry Housing

In only 2% of the households interviewed, separate mud or bamboo frame cages were used to house the birds. In a majority of households (98%), poultry was housed within the home.



### (ix) Types of Poultry Reared

Almost all households (99%) reared local/ non-descript poultry (*desi* poultry). Very few households (1%) rear the Kadaknath breed and only one household rears broilers.

The extremely low number of households rearing Kadaknath is a concern, since the Jhabua district is the native breeding tract of the Kadaknath poultry breed, and there have been major government programmes (notably the Madhya Pradesh Rural Livelihoods Programme) that have focused on up-scaling Kadaknath rearing in the area.

Among household poultry flocks, 50% comprise chicks, 31% are hens and only 19% of the birds are





cocks, since these are preferred for eating purposes. The average weight of an adult bird ranges from 918 gms to one kg.

While people prefer the taste of the Kadaknath, they continue to raise *desi* birds as these are easier to manage and

the mortality rate is lower. Similarly, broiler rearing is not preferred due to its taste as well as the fact that it does not adapt easily to the surroundings, needs greater care and mortality is high. Further, *desi* birds sell at higher rates than the broiler.



#### (x) Feeding and care of Household Poultry Flocks



Poultry is primarily reared under a scavenging system with respondents mentioning that poultry were allowed to scavenge for up to 10 hours each day.

Supplementary feeding is provided by way of cereals averaging 50 gms per bird per day – 38% households feed the birds with maize and wheat, 32% with only maize and 16% with only wheat. About 9% households provide cracked wheat (*dalia*) while a small number (1%) indicated that

they did not provide any supplementary feed.

While most households mentioned that they fed the birds cereals grown by them, 29% of the poultry rearing households buy wheat and maize from the market to feed their birds at a cost of approximately Rs 43 per month per family. Most households (83%) mentioned that they provided separate drinking water for poultry which is changed daily.



The management and care of poultry flocks is primarily the responsibility of women. This includes letting the flock out for scavenging, providing supplementary feed and water, and cleaning out shelters. However, since most households migrate in search of work in the summer, during this time, the care of poultry flocks is carried out by the elderly and children who are left behind.



(xi) Use of Poultry Litter

96% of the households mentioned that poultry litter was collected and used in agricultural fields.

(xii) Flock Size

94% households have a flock size ranging from one to five birds. Every household has at least 3 birds. Only 2% of households mentioned a flock size greater than 10 birds.

Table 8 – Poultry Flock Size	
No. of birds	Poultry rearing households (%)
0 – 5	94%
6 – 10	4%
11 – 20	1%
21 – 40	1%

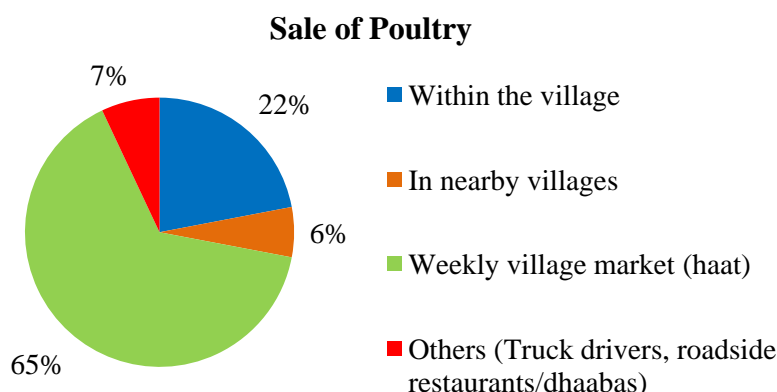
Each hen lays about 15 eggs 3 times a year. Eggs are rarely consumed within the home or sold, and are primarily used for hatching. The hatchability rate is 74% - from each clutch of 15 eggs approximately 11 chicks are hatched.

(xiii) Sale of Poultry

The average price obtained for sale of one *desi* bird ranges from Rs 350 to Rs 400. For Kadaknath, the market rate almost doubles (Rs 800 to Rs 1,000) and is the lowest for broiler (Rs 150 to Rs 200). On an average, six live birds are sold per poultry rearing household annually. Average annual income from *desi* poultry rearing in the area is, therefore, approximately Rs 2,226.



The weekly village *haat* (in either Jhabua, Kalyanpura or Rajgarh) is the preferred place for sale of live birds (65%), whereas 22% of the respondents also mentioned selling live birds within the village.



At these village *haats*, large traders from Gujarat (Dahod and Godhra) and local traders also sell chicks, which are purchased by poultry rearers to increase flock size. The local weekly *haats* therefore serve as places to both sell ready birds, as also to purchase chicks to increase flock size. Smaller traders from Meghnagar and Jhabua sell broiler chicks in the village itself.

(xiv) Disease Occurrence

For poultry rearers in the area, high rates of mortality are considered 'normal'. Diarrhoea (89%), sticky feet (74%) and discharge from the mouth (27%) were disease symptoms mentioned by poultry rearers that led to the highest mortality.

90% of respondents mentioned that most diseases occur during the summer.

**Table 9 – Disease Symptoms that lead to high mortality**

Disease Symptom	Number of respondents mentioning this	Percentage
Diarrhoea	383	89%
Sticky feet	320	74%
Calling out loudly/ squawking	106	25%
Vigorous movement of the head	6	1%
Discharge from the mouth	116	27%
Lowering of the head/ drowsiness	91	21%
Cough	31	7%
Fever	18	4%
Swelling of the head	17	4%
Tremors/ Shivering	1	0.23%
Swelling of the feet	1	0.23%
<i>Note: (The total does not add up to 100% on account of multiple responses)</i>		



On an average, 25 birds die in each household annually. If this is compared to the total number of chicks hatched per year (33), the mortality rate is 76%.

Mortality is the highest among chicks and this is on account of both diseases and predation. Other causes for death among the flock are extreme weather conditions (too hot or cold or wet), and the absence of any disease prevention or cure facilities.

The common practice when disease spreads is to treat the flocks/birds with medicines procured from the local chemist or to use traditional and home remedies.

54% respondents mentioned that they provide some form of treatment when disease occurs. Of these, an overwhelming majority (67%) provided self-medication. 17% sought advice and treatment from the government veterinary hospital and 16% consulted chemists and pharmacies at the block or district level. Often medicines are not available at the veterinary hospital, and these are then procured from the local chemist. On an average poultry rearers mentioned that they spent Rs 10.50 per bird per year for medicines. No vaccination of any kind is carried out.



53% of households mentioned that they used traditional and home remedies to treat their flocks –

Diarrhoea	Feeding chopped onions; Feeding the bark of the <i>Salar (Boswellia Serrata)</i> tree
Swollen face	Feeding the juice of crushed papaya leaves
Sticky feet	Applying a paste of crushed garlic to the feet
Drowsiness	Mixing the milky discharge of cactus leaves in water and feeding this to the birds.
Dribbling (watery discharge from the mouth)	Feeding garlic paste and wild <i>jowar</i> (sorghum)

The PRA's and focus group discussions contributed to the development of a poultry seasonality chart detailing the months of disease occurrence, type of feed provided, months which were more favourable for poultry rearing and times of the year when poultry rearers could get a good price for their birds. This is depicted in Table 10.

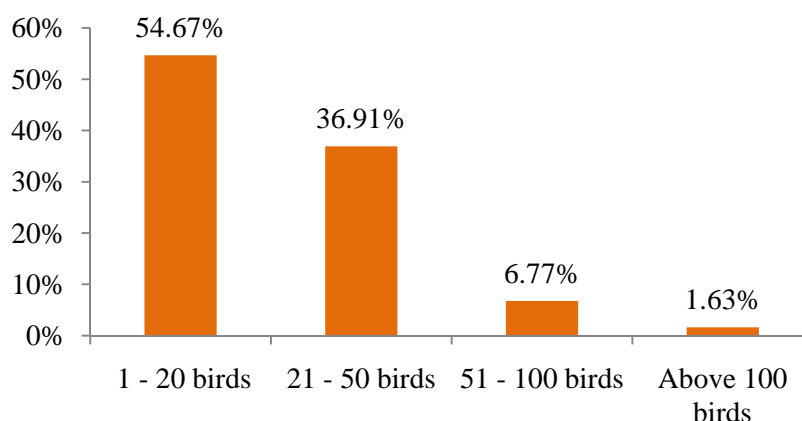
**Table 10 – Poultry Rearing Seasonality Chart**

Month	Month in which sickness occurs	Diseases	Vaccination	Deworming	Feed	Poultry rearing favourable	Best price for the birds
January	✓	-	No Vaccinations undertaken	No Practice of deworming	-	✓	-
February	-	-			-	✓	-
March	-	-			-	-	✓
April	✓	Diarrhoea, Sticky Feet, Swollen head			Wheat	-	-
May	✓					-	-
June	-	-			-	✓	-
July	-	-			-	✓	-
August	✓	Diarrhoea, Cold			-	-	✓
September	-	-			-	✓	-
October	-	-			Maize	✓	-
November	-	-			-	✓	✓
December	✓	-			-	-	-

The best price for poultry birds is around the time of major festivals such as Holi (March), Raksha Bandhan (August) and Diwali (November).

#### (xv) Community Perceptions related to Poultry Rearing

Almost all households (99.5%) wished to increase their poultry flock. 55% indicated an increase up to 20 birds while 37% wished to increase the number to 50 birds. The most preferred flock size was around 25 birds.



Major reasons voiced by the community in favour of poultry rearing were (i) meeting household needs; (ii) cash income during emergencies; and (iii) poultry rearing does not require much investment and technical support.

Major constraints mentioned by the community are predation and high mortality on account of disease occurrence. Other constraints are lack of interest among youth to take up this activity, lack of feed, space constraints to house the birds and absence of credit schemes to promote poultry rearing.

#### Community expectations to promote poultry rearing:

To make poultry rearing a viable livelihood option, the following are perceived as essential by the community:

- Regular vaccination
- Availability of credit/ loans for poultry rearing
- Support for poultry housing/ cages
- Veterinary assistance
- Availability of Kadaknath chicks
- Availability of feed
- Technical assistance and direction

Only 1% of the households in the study area mentioned being associated with the Krishi Vigyan Kendra. A majority of poultry rearing households are not associated with any institution or have not received any assistance for poultry rearing.

#### (xvi) Government Schemes in the area to promote smallholder/ backyard poultry rearing

- Both the Krishi Vigyan Kendra and the Department of Animal Husbandry Poultry Farm in Jhabua focus on the promotion of the Kadaknath poultry breed. The KVK has a Kadaknath hatchery and vaccinated seven day old chicks are sold to rearers from the premises at Rs.35/ chick. The government poultry farm focuses on distribution of chicks to beneficiaries of various government schemes. In view of the high incidence of Newcastle (Ranikhet) disease, the district also has an office of the Ranikhet control programme, that is mandated to undertake regular vaccination against Newcastle disease across the district.
- From 2006 to 2011, with the objective of promoting poultry rearing, about 200 beneficiaries were supported for poultry rearing under the Madhya Pradesh Rural Livelihoods Mission. However, only half of these beneficiaries continue poultry rearing. There are also various loan cum subsidy schemes for the promotion of poultry rearing for BPL families. However, information related to these schemes and uptake is extremely limited in the area.

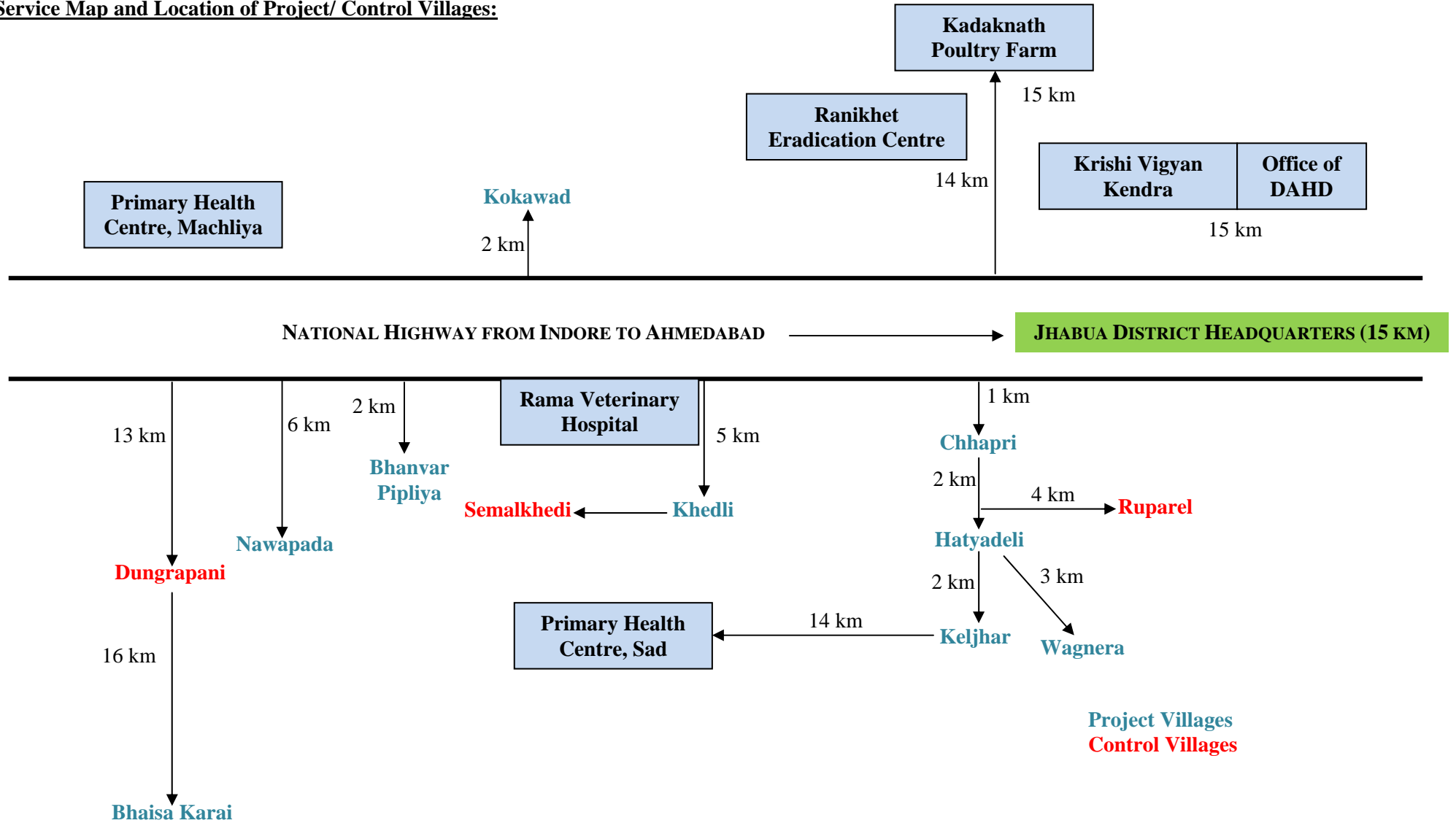
(xvii) Poultry Value Chain

Particulars	Value chain of <i>desi</i> birds (Rs)	
	In/nearby village	Weekly market ( <i>haat</i> )
Eggs	5	10
Chicks	Generally not sold	Generally not sold
Pullet	Generally not sold	100
Hen	300	300 – 350
Cock	400 – 450	450 – 550

Particulars	Value chain of Kadaknath birds (Rs)	
	In/nearby village	Central Poultry Farm
Eggs	Not Available	Not Available
Chicks	Not Available	35 – 40
Pullet	150 – 300	Not Available
Hen	700 – 800	450 – 600
Cock	1,000 – 1,200	450 – 600

Particulars	Value chain of Broilers (Rs)	
	Weekly market ( <i>haat</i> )	
Eggs	5	
Chicks	8 – 10	
Pullet	Not available	
Hen	160 – 200	
Cock	160 – 200	

**Service Map and Location of Project/ Control Villages:**





## Household Schedule for Backyard Poultry Rearing

**State: Madhya Pradesh**

**District: Jhabua**

**Block: Petlawad**

**Date of Survey (DD/ MM/ YYYY)**

**Name of Enumerator:**

**Signature:**

Village Name		Project or Control Village (P/C) P – Project Village; C – Control Village	
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### A. Demographic profile

<b>A1. Name of Head of Household</b>										
<b>A2. Gender (M – Male; F – Female)</b>										
<b>A3. Age of Respondent (approximately)</b>										
<b>A4. Total family members</b>		Males				Females				
		Adult/ Children				Adult/ Children				
<b>A5. Social group (tick)</b>		Gen		SC		ST		OBC		
<b>A6. Economic group (tick)</b>		APL		BPL		Antyodaya				
<b>A7. Main occupation (major source of income) (use code below)</b>										
<b>A8. Secondary occupation (secondary source of income) (use code below)</b>										
<b>Codes Occupation:</b> <ul style="list-style-type: none"> <li>• Agriculture – 1</li> <li>• Agricultural Labourer – 2</li> <li>• Non-agricultural labourer – 3</li> <li>• Migration – 4</li> <li>• Monthly salaried job – 5</li> <li>• Dairying – 5</li> <li>• Goat rearing – 6</li> <li>• Poultry Rearing - 7</li> <li>• Business – 8</li> <li>• Caste occupation (barber, carpenter, cobbler, goldsmith etc.) - 9</li> <li>• Pension/ interest/ rent/ others - 10</li> </ul>										
<b>A9. Total agricultural land owned (<i>in bigha</i>)</b>										
i. Irrigated cultivated										
ii. Crops grown										
i. Dryland cultivated										
ii. Crops grown										
Permanent fallow and private pasture (if any)										
Seasonal fallow										
Has land been leased in? (Y/N)							If Y, how much ( <i>in bigha</i> )			
Has land been leased out (Y/N)							If Y, how much ( <i>in bigha</i> )			

## **B.** Livestock ownership:

<b>B1.</b> Do you own cows and/or buffalo? (tick)	Yes		No	
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**B1.1** If YES in B1, give details of animals (numbers). .

Milch Animals	In milk	Dry	Total	Total Production (litres/ day)	Retention for home use (litres/ day)
1	2	3	4=2+3	5	6
a) Local ( <i>Desi</i> ) Cow					
b) Crossbred Cow					
c) Buffalo					
<b>B1.2</b> If No in B1, did you possess milch animals in the past? (tick)				Yes	No
<b>B1.3</b> If Yes in B1.2, how many years back?					

**B2.**If Yes in B1.2, why did you quit dairying? (tick) (multiple tick possible)

Shortage of feed and fodder		Water shortage	
Labour shortage		Not profitable	
Recurring drought		Family members not interested	
No marketing channels		Others (Please specify)	

**B3.** Goat ownership (Yes/ No)

**B4.** If Yes, complete the following table. If No, move to Section C:

i. Number of Goats	
ii. Improved Breed/ Desi ( <i>indicate breed name if mentioned by respondent</i> )	
iii. Major reason for rearing goats (use codes) (1 – sale of live animal; 2 – milk for home consumption; 3 – provides supplementary income when needed; 4 – any other)	
iv. Major constraints faced in goat rearing (use codes) (1- disease occurrence; 2 – lack of manpower to take goats for grazing; 3 – reduction in grazing lands; 4 - space constraints in housing goats; 5 - difficulty in accessing markets; 6- any other)	

## **C.** Poultry Ownership:

<b>C1.</b> For how many years have you been rearing poultry? (write <b>99</b> if it is more than <b>20 years</b> )	
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**C2.**What are the most important reasons why you keep poultry?  
(Rank the three most important reasons using the codes below)

1. What is the most important reason?	
2. What is the second most important reason?	
3. What is the third most important reason?	
<b>Codes – Reasons for rearing poultry</b>	
1 – Meat for home consumption	
2 – Sale of live birds	

3 – Eggs for home consumption
4 – Eggs for sale
5 – Cash income on a regular basis
6 – Cash income a few times a year to meet regular needs
7 – Cash income for emergencies
8 – Low initial investment for poultry rearing
8 – Recurring expenses are low for rearing poultry
9 – High demand for live birds/ eggs
10 – Socio-cultural reasons
11 – Any other (please specify)

<b>C3</b> Do you have a separate shed/ coop to house your poultry flock? (tick)	Yes		No	
<b>C3.1</b> If Yes in C3, for how many years?				
<b>C3.2</b> If Yes in C3, Type of poultry housing (use <b>codes</b> )				

**Codes:** Enclosed/ fenced space adjacent to homestead=1; Handmade mud chicken house =2; Bamboo basket =3; No specific housing and the birds reside within the home =4.

**C4.**Number of poultry owned and breed wise classification

Breed	Hens	Cocks	Total Poultry	Average Weight
Desi/ local/ Nondescript				
Kadaknath				
Exotic				

**D. Feeding practices followed for poultry (tick relevant box and obtain further information as indicated):**

<b>A</b>	<b>Scavenging</b>	<b>Number of hours in a day</b>	
<b>B</b>	Home grown cereals	Name of home-grown cereal	Amount fed per bird per day (average)
<b>C</b>	Purchased poultry feed	Amount fed per bird per day	Total feed purchased in a month and amount spent.
<b>D</b>	Scavenging supplemented by home grown cereals	Name of home grown cereal	Amount fed per bird per day (average)
<b>E</b>	Scavenging supplemented with purchased poultry feed	Amount fed per bird per day	Total feed purchased in a month and amount spent.

**E.** Do you provide water to your poultry flock? Yes/No

If yes, fill in the following table.

Source of water (river/ stream, village bore well, open well)	Type of drinkers	How frequently do you provide water?	How far is the source of water from the homestead?

**F. 1** Who in the household is responsible for cleaning the poultry shed, feeding and watering the birds?

2 Average time taken per day in tending the poultry flock?

**G. Use of Poultry Droppings:**

<b>G1</b> Are poultry droppings collected while cleaning the poultry shed?	YES/ NO
If Yes above, are poultry droppings used as farm manure?	

**H. 1 Poultry Productivity:**

Total Number of Hens owned at present	
Egg clutches per year per hen (average)	
Eggs laid per clutch	
Eggs consumed within the home per clutch	
Eggs sold per clutch	
Eggs hatched per clutch	
Number of chicks that survive per clutch (average)	

**H 2 Economics of Poultry Enterprise:**

**Sale of Eggs:**

On an average, how many eggs are sold every month?	
What is the sale price per egg?	
Where are these eggs sold?	
Do you prefer to sell eggs or a fully grown live bird? Why?	

**Sale/ consumption of live birds:**

In the last one year, how many birds from your flock were consumed at home?	
In the last one year, how many birds were sold?	
Average weight at the time of sale?	
Where do you sell live birds? (1 – Within village; 2 – neighbouring village; 3 – village trader; 4 – weekly haat; 5- any other)	
Average price obtained per bird	
What is the most preferred sale location? Why?	

## **I. Diseases and Health Care**

<b>I1.1</b> Are diseases common in poultry rearing? (tick)	Yes		No	
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If Yes in I 1.1, what disease symptoms do you commonly observe (state):

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<b>I1.2</b> In which season do poultry get more diseases?	Monsoon		Winter		Summer	
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**I1.3** In the last one year, how many poultry have died in your flock?

Poultry Types	Numbers	Reason (use codes)
Chick		
Pullet (hen less than a year old)		
Hen		
Cock		

*Codes: Disease=1, Natural calamities=2, Predation=3, Don't know=4*

## **I2. Treatment:**

<b>I2.1</b> Do you provide treatment to sick/ ailing poultry	Yes		No		
<b>I2.2</b> If Yes in I 2.1, who provides treatment? (tick) (multiple tick possible)					
Self		Local healers		Private	
NGO		Govt.		Others (specify)	
<b>I2.3</b> Do you vaccinate your poultry? (tick)	Yes		No		
<b>I2.4</b> If Yes in I 2.3, who provides vaccination? (tick) (multiple tick possible)					
Self		Local healers		Private	
NGO		Govt.		Others (specify)	
<b>I2.5</b> Is there a price paid for these vaccinations? If Yes, state amount?					
<b>I2.6</b> Do you practice any ethno-veterinary/ household practices for common ailments. If yes, state these practices.					

## **J.**

<b>J1.</b> Are you interested in increasing the flock size? (tick)	Yes		No	
<b>J2.</b> Indicate the three most important reasons favouring poultry rearing (use <b>codes</b> )				
<i>Codes: Eggs/ meat for home consumption – 1; Good source of supplementary income to meet emergency needs -2; Expenses are low for rearing poultry – 3; No technical support required - 4, Others (specify)- 5.</i>				
<b>J3.</b> Indicate the three most important reasons hindering poultry rearing (use <b>codes</b> )				

**Codes:** *High mortality – 1; Danger of Predation – 2; Insufficient feed – 3; Not having enough space for housing – 4; Lack of funds or credit facility – 5; Lack of Labour – 6; Absence of veterinary facilities- 7; Younger generation do not want to take up this activity- 8; Others (specify)=9*

<b>J4.</b> Are you associated with any institution for poultry rearing?	Yes		No	
Name of the institution				
<b>J5.</b> In your opinion, what help and support is required to facilitate higher incomes from poultry rearing?				



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## South Asia Pro Poor Livestock Policy Programme

A joint initiative of NDDB and FAO

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