



## Policies and Programs for Development of Small Ruminant Based Livelihood *Initiatives by Chhattisgarh*

*Presentation at  
Regional Workshop  
on Small Ruminants  
Bhubaneswar  
24 July 2015*



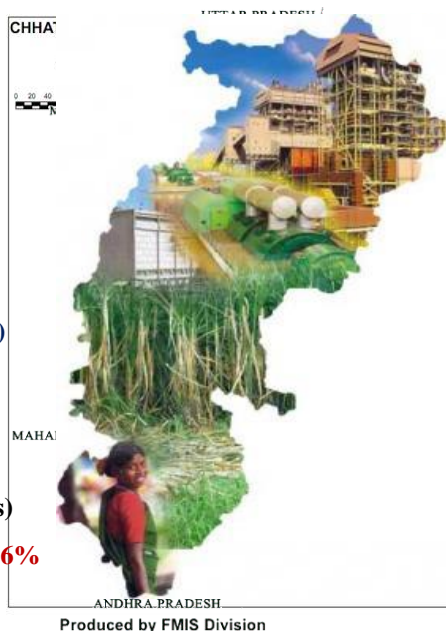
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## **Chhattisgarh : Land and People**

- Carved out of MP on 1 Nov. 2000
- 27 Revenue Districts
- Approx. 20,000 Villages
- Total Area of the State: 137.90 Lakh Ha
- Total Forest Cover: 63.52 Lakh Ha (46%)
- Net Sown Area: 46.77 Lakh Ha (32%)
- Average Annual Rainfall: 1293 mm
- **2.55 Cr.** Human Population (2011 Census)
- Average Annual Population Growth: **2.26%**
- 13% SC and **31%** ST Population



Produced by FMIS Division

## Livestock Demographics - Chhattisgarh 18<sup>th</sup> and 19<sup>th</sup> Livestock Census

Livestock Species	Population (Lakhs Numbers)		
	2007 18 <sup>th</sup> Census	2012 19 <sup>th</sup> Census	% Change
Cattle	94.59	96.35	1.86
Buffalo	15.99	13.90	-13.07
Goat	27.61	32.25	16.81
Sheep	1.40	1.68	20.00
Pig	4.12	4.39	6.55
<b>Total</b>	<b>143.71</b>	<b>148.57</b>	<b>3.38</b>

• 19<sup>th</sup> National Livestock Census 2012, Division of AH Statistics, DADF, Govt. of India

## Livestock Owner's Demographics - Chhattisgarh 18<sup>th</sup> and 19<sup>th</sup> Livestock Census

**56.51 Lakh – Total House Holds in the State (2011 Human Census)**

**29.73 Lakh (52.60 %) – Livestock Owning House Holds**

No. of Sheep and Goat Owning HH	% of Sheep/Goat owning HH out of Livestock owning HH
<b>7.20 Lakhs</b>	<b>20.36 %</b>

- Out of 34.61 Lakh Operational Land Holdings 77 % are Small and Marginal Farmers
- They own only 37 % of Ag. Land but 68 % Small Ruminants

Source : Chhattisgarh – At a Glance, Directorate of Eco. And Statistics, Govt. of Chhattisgarh

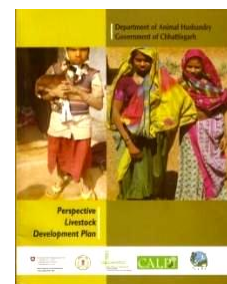
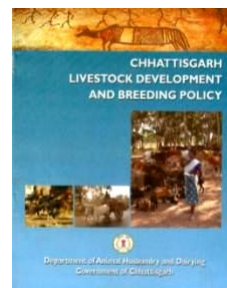
## Livestock Development & Breeding Policy of GoCG

### Sections relevant for Small Ruminants

- On the initiative of GoCG Animal Husbandry Department, CALPI- Swiss Development Corporation funded a 3 year program (2005-08) to formulate the Policy
- Policy Approved by GoCG - September 2008

**Section 3.1 Subsection 1 : Equip and empower the small holder farmers** in small groups with appropriate skills and linkages to maximize returns from market force and reduce poverty

**Section 3.2 Subsection 2 : Develop disease free zones** for diseases that cause heavy losses **through Mass Vaccination** Programs. *Control diseases that particularly affect small ruminants in smallholder situations, such as Peste de petits, ruminants (PPR).*



## Livestock Development & Breeding Policy of GoCG

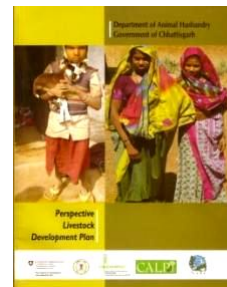
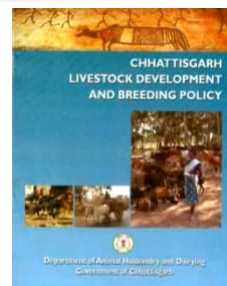
### Sections relevant for Small Ruminants

**Section 3.2 Subsection 13 :** Develop a cadre of **trained para veterinary village workers**, who can further train and assist livestock producers in identification of diseases, their causes of spread and preventive measures to enable them to shed superstitions and participate in disease control programs.

**Section 3.3 Subsection 8 :** Utilize and conserve the sheep and goat genetic resources and effect breed improvement through selective breeding. **Facilitate AI in goat** using semen from superior breeding bucks.

**Section 3.6 Subsection 7:** Encourage livestock owners to form '**Producers' Associations**' at the grassroot level to improve their bargaining power and to enhance their capability in pre- and post production operations.

**Section 3.11 Subsection 6:** Strengthen the state public services with decentralization and private sector and **NGO participation.**





## Initiatives focusing Small Ruminants

### Ongoing Programs

1. State Wide PPR Disease Control Program in the lines of Pulse Polio Campaign (RKVY)
2. Goat Cluster Development Program (NMPS)
3. Distribution of Male Goats for Breed Improvement (State Plan)

### 1. State Wide PPR Disease Control (RKVY)



#### 1. Pre Vaccination Phase:

1. Annual Pre Vaccination Campaign Training (State and District Level)
2. Letters to All Sarpanchs by Agriculture Minister
3. Setting up of Control Rooms State and District.
4. Mass Awareness Campaign by Newspaper and TV advertisement.
5. Procurement of vaccines, ice and consumables
6. Collection of serum samples of about 0.01% of unvaccinated goats 1 month before vaccination.





## 2. Vaccination Phase:

1. Mass Vaccination Campaign – Continuously for 10-12 days.
2. Wall Writing for Labeling Households.
3. Daily monitoring of events through Control Rooms.
4. Vaccination at Check Posts (State Borders).
5. Vaccination at all known goat markets, farms, nomadic units and selling units.
6. Vaccination at Villages missed out during the campaign.



## 3. Post Vaccination Phase:

1. Payment of Honorarium Rs. 3 per vaccination to paravets (Gosevaks / PAIW's) only, who are not under state government employment.
2. Collection of serum samples from districts and analysis for seroconversion by cELISA at IVRI Mukteshwar.
3. Generation of data and dissemination of information.



## Results of Vaccination Campaign – 2010-11 to 2014-15

#	Parameter	2010-11	2011-12	2012-13	2013-14	2014-15
1	Vaccination Campaign	10-17 June 2010	13-20 June 2011 (5 Districts) 15-22 Sept. 2011 (Remaining Districts)	10-19 Dec 2012	18-28 Sept.2013	15-25 Sept.2014
2	<b>No. of Vaccinations</b>	<b>19.44 Lakhs</b>	<b>21.56 Lakhs</b>	<b>26.25 Lakhs</b>	<b>28.89 Lakhs</b>	<b>29.30 Lakhs</b>
3	Population of Sheep and Goats	31.78 Lakhs	32.73 Lakhs	<b>33.91</b> Census 2012	34.72 Lakhs	35.76 Lakhs
4	<b>Vaccination Coverage (%)</b>	<b>61.17</b>	<b>65.87</b>	<b>77.41</b>	<b>83.21</b>	<b>81.94</b>
5	No. of Village Covered	16,738	15,925	16,520	15,862	17,255
6	No. of Vaccination Teams	1752	1787	1770	1577	1576
7	<b>Expenditure under RKVY Rs. Lakhs</b>	<b>137.00</b>	<b>177.00</b>	<b>88.00</b>	<b>169.00</b>	<b>160.67</b> (Tentative)



## Reported Epizootics of PPR Diseases and No. of Annual Vaccinations

	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	2011-12	2012-13	2013-14	2014-15
<b>PPR Epizootics</b>	<b>3</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
No. of Vaccinations done	0	0	0	0	4.9	5.5	1.6	7.0	19.4	21.5	26.2	28.8	29.3

## Results of Samples Collected for PPR Antibody Titre by cELISA at IVRI Mukteshwar

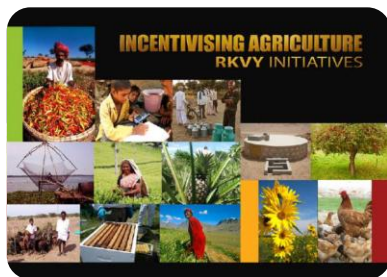
#	Parameters	2010-11		2012-13
		Prevaccination	Postvaccination	Postvaccination
1	No. of Samples Submitted	1652	5954	2454
2	No. of Samples Analysed	1280	5664	1901
3	Samples Strong Positive	00	560	400
4	Samples Positive	512	4432	1067
5	Samples Negative	768	672	434
6	<b>Protection %</b>	<b>40</b>	<b>88</b>	<b>77</b>



## Recognition



The project was one of the 40 Projects selected by Deptt. Of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India out of about 5700 RKVY projects implemented in the 11<sup>th</sup> plan period, crosscutting Agriculture and Allied Sectors across India, as major successful and replicable project



## 2. Goat Cluster Development Program (NMPS)



- Since 2012-13 : Each Year 50 Clusters
- **Goat Scouts** : As Extension Agent (150 Pashudhan Mitra Inducted)
- 3 Day Refresher Course at Govt. Goat Farm Pakaria Bilaspur
- 150 Clusters in the state.
- Approx. 2000 Goats per cluster, about 8-10 Villages in one Cluster
- SC / SC / BPL Beneficiaries.
- Funding under NMPS Program since 2015-16 Stopped Pending Rs. 256 Lakhs from 2014-15 not released.



### 3. Distribution of Male Goats (State Plan)

S.No.	Year	Annual Target		Annual Achievement	
		Financial	Physical	Financial	Physical
1	2001-02	7.344	272	7.26	268
2	2002-03	8.748	324	8.67	320
3	2003-04	9.990	370	9.946	364
4	2004-05	92.60	3429	92.52	3336
5	2005-06	81.00	2700	80.38	2568
6	2006-07	165.00	5500	164.81	5492
7	2007-08	100.00	3333	99.66	3327
8	2008-09	323.95	11172	322.74	11166
9	2009-10	162.00	5996	161.86	533
10	2010-11	322.00	11922	39.41	650
11	2011-12	162.00	6000	161.73	3277
12	2012-13	113.00	12530	113.00	12530



### Distribution of Male Goats (State Plan) Success Story

Name – Shri Mangal Singh Yadav

Village – Samaruma

Block Tamnar

Distt. Raigarh



**Before Intervention** – He owned 5-10 goats for the family sustenance. He had migrated to this village from very remote place in the district a few years back. He was searching for better livelihood option and had procured a Jamunapari goat by his own. He did not have even basic amenities.

**After Intervention** – Due to his keen interest in goat rearing, he was provided with another Buck of Jamunapari breed under RKVY. Due to less generation interval in goats and 2 Jamunapari bucks for breeding, in a comparatively lesser time interval things changed rapidly for him. Now he owns 243 Jamunapari cross bred goats. His average yearly earnings is more than Rs.1.5 Lakhs by selling bucks. Has arranged amenities like – Mobile phone, motorcycle, own house & other modern equipment for his family. Notable feature is that goat rearing is the only source of his income.



## Distribution of Male Goats (State Plan) Success Story

Name – Shri Sukhdev

(belongs to Cherwa Scheduled Tribe)

Village – Maiko

Block – Baikunthpur

Distt.- Koriya



**Before Intervention** – He traditionally kept 5-6 *Desi* goats and used to earn an amount as less as Rs. 2000-2500 monthly by working as unskilled labour in the nearby town about 8 Kms from his home. He owns 1.5 acres of land and agricultural activities is done by other members of the family.

**After Intervention** – He was provided with Buck of Jamunapari breed under RKVY in 2008. He used the buck for breeding not only his own goats but goats of his surrounding households. He is well known in the village since other goat owners take his help regularly for breeding their goats. He generated an income of Rs. 20,500 in the year 2009-10 by selling 08 improved breed bucks. Now, he owns a flock of 28 goats and has started getting a regular income. He has converted his farming system from subsistence agriculture to profitable livestock micro-enterprise.

## Increasing Population of Sheep and Goats (In Lakh Numbers)



#	Livestock Census	Sheep	Goat	Total	Growth %
1	17 <sup>th</sup> Census (1997)	1.95	21.54	23.49	-
2	18 <sup>th</sup> Census (2003)	1.21	23.35	24.56	4.55
3	19 <sup>th</sup> Census (2007)	1.40	26.68	28.08	14.33
4	19 <sup>th</sup> Census (2012)	1.66	32.25	33.91	20.76



## Increasing Meat Production in the State

Estimated by Integrated Sample Survey, Methodology of AHS Division, DADE, Govt. of India

#	Year of Estimation	No. of Goats Slaughtered (In Lakhs)	Goat Meat Production (In Thousand Tons)	Annual Growth %
1	2008-09	4.64	5.29	-
2	2009-10	4.97	5.70	<b>7.75</b>
3	2010-11	5.15	6.10	<b>7.01</b>
4	2011-12	5.80	6.89	<b>12.95</b>
5	2012-13	6.59	8.10	<b>17.56</b>
6	2013-14	6.91	8.96	<b>10.61</b>



## New Initiatives focusing Small Ruminants

### Proposed Programs under National Livestock Mission

1. Cluster Based Mass Deworming and Health Cover Program for Small Ruminants (Sheep and Goats)
1. Propagation of Artificial Insemination Biotechnology Centres for fecundity breeds (Goats)