

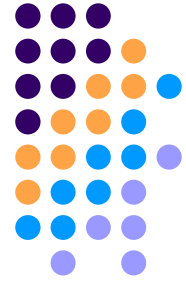
# Community Centric Broiler Farming : Making Poor Participate in Poultry Growth

National Small-Holder Poultry  
Development Trust



# Presentation Outline

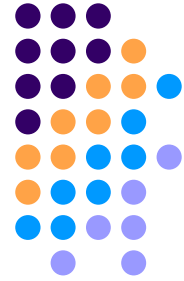
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- **Context : Opportunity for Escaping Poverty**
  - Poultry Sector : Growth & Opportunities
  - Business Concept
- **Small-holder Poultry Model : De-risking Family Poultry**
  - Primary Aggregation as Cooperative
  - Co-creating Growth and Success – the institutional model
- **Our experiences and Plan**

# Business Concept

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- Business Opportunity

- Large domestic mkt - 2.1 m tonnes live weight consumed now, organized poultry sector contributes 70-75% of total output, 95% sold as live chicken
- YoY growth of 12 % (cf < 2% farm sector), fourth largest worldwide, competitive cf. USA, Brazil, high income elasticity – meat of first choice – per capita consumption 1.2kg (11 kg world avg)
- This annual increase in broiler consumption can itself create livelihoods for 60,000 small farmers

- Labour efficiency key to Productivity – ***space for poor***

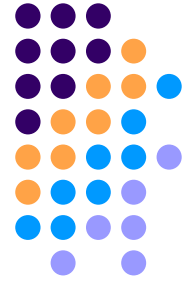
- Key constraints to participation of Poor

- Entry barrier for small farmers – access to technology, scale of operations, and size of investments
- Focus on urban consumption urban/peri-urban markets natural – large firm size
- Public support
  - cf dairy sector
  - Primarily focused on back-yard poultry – ceding space to better organised industrial poultry

# Poultry - the big Opportunity

## *How Poor can Cash-in ?*

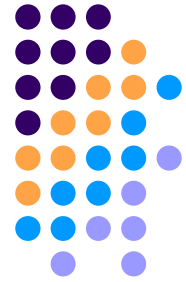
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- By taking up small-holder poultry which is technologically similar to industrial poultry
- And
  - by working to augment the advantages of smaller decentralised units like better efficiency, faster and better disease control
  - by working to reduce the disadvantages of small units in procurement of inputs and sale of birds, bridging the technology and scale imperatives

# Continue...

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## ▪ **Production Technology Advantages for Poor**

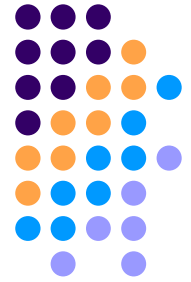
- ✓ **no big difference in big & small farmer**
- ✓ **adaptable to scaling down**
- ✓ **significant labour component**

## ● **Intervention : the institutional model**

- Right sizing the unit in terms of risk, return, investment for a farmer
- Technology : adapting the best for high performance
- Market : focus on under-served
- Faith in Abilities of Poor

# Community Owned Rural Poultry Enterprise Model

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The community poultry model focuses on

- Tribal and Dalit women's induction in the activity
- Organizing them into collectives
- Creating system and processes to attain industry-competitive production and scale efficiencies.

# Poultry Producers: Who are they?



Women with no significant opportunities for livelihoods

# Operations Overview

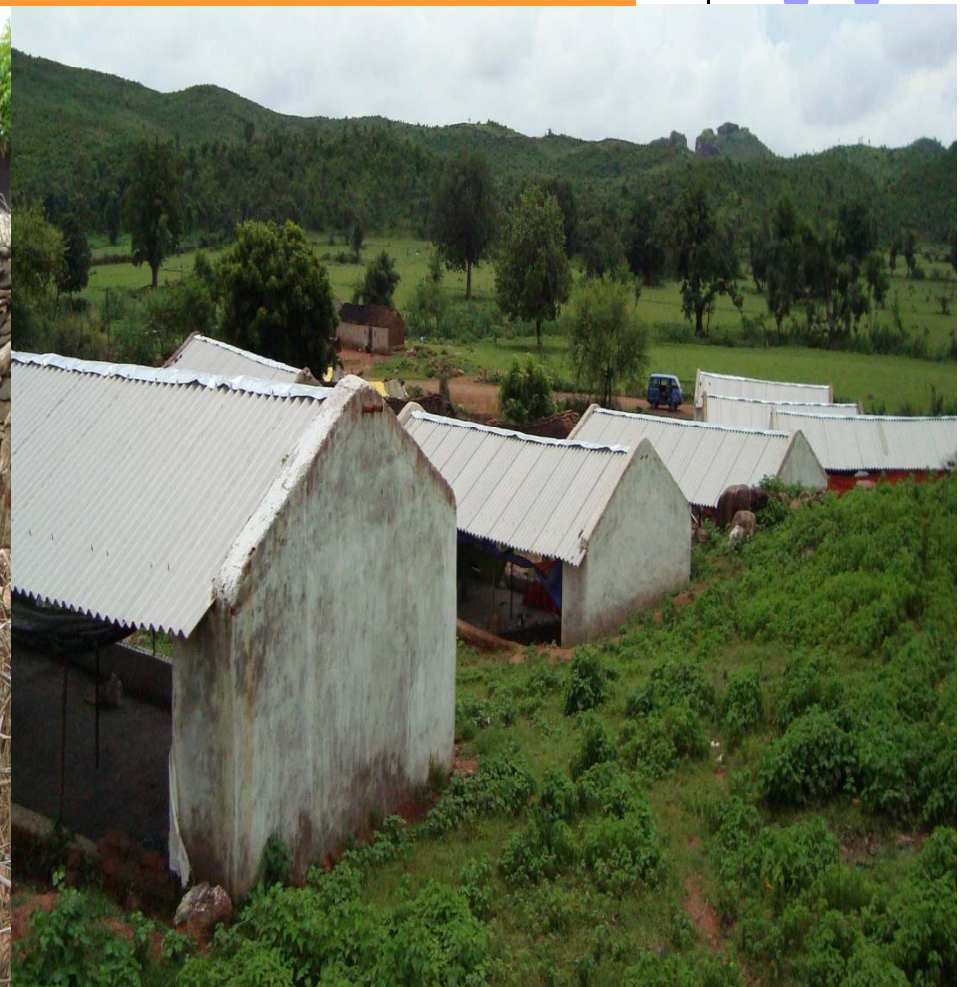
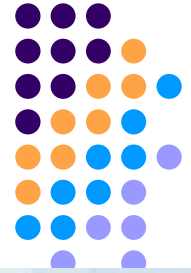


- Demonstrated relevance as income generation programme for resource poor families
  - 93 % SC & ST membership
  - 100 % women membership
- Largest Broiler Production Houses in Madhya Pradesh, Jharkhand
  - Financial viability established in 2 years
  - Recognised for better-than-industry productivity
- **Key Drivers :**
  - (i) **better productivity & cost of production;**
  - (ii) effective tapping of **local small dispersed markets**

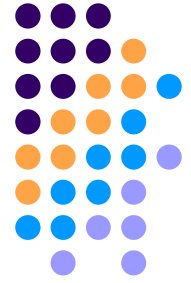




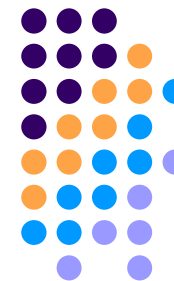
# Small Holder Poultry



# Smallholder Poultry:



Parameters	2007-08	2008-09	2009-10	2010-11 (plan)
Cooperatives	16	16	18	21
Members	4190	5320	5405	6500
Live Bird Sales (MT)	6072	10132	11072	19382
Revenue (m Rs.)	250	603	805	1116
Gross Margin (m Rs.)	26	66	99	129



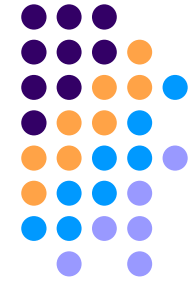
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## Results : Small-holder Poultry Model

- 75 % increase in annual income, family becomes net surplus and starts investing in land, education, health etc.
- Significant drop in distress migration
- Helps women stay back – restoring family/social life – particularly children and their education
- Enhancement of farm livelihoods – buffer, manure etc.
- Each cooperative has created **15-20 sustainable job opportunities** for the rural youth – as technical supervisors, cooperative staff

# Design Features

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## ▪ **Rapid Assessment in a New Area**

### Socio-technical Feasibility

Livelihood Portfolio, Road+Water Access,

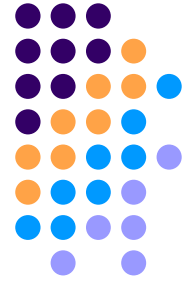
Prevailing wage rate & opportunity – Return Per Day, Member Centrality (proportion in family's livelihood portfolio)

### Market-financial Feasibility

Market - Deficit & Latent, Competition, Input Supply, Margin per bird/kg – Unit size

# ..... Design Features

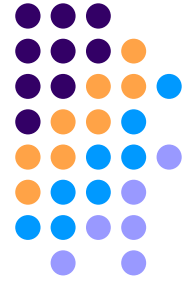
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- **Selecting the ‘right’ Farmers**
  - proxy indicators designed on empirical evidence
    - eye for details, sense of being organised, sense of hygiene, work ethics and family harmony (family support, age, access to water)
- Self-selection during training
- **Training & Skilling-up**
  - No-stipend experiential training
  - Focus on logic and nuances in husbandry
- **Infrastructure**
  - Accessible and individual ownership
  - Decentralised all-in-all out sheds breaking horizontal spread
    - Sheds located at sufficient distance and not allowing multiple flock-age

# ..... Design Features

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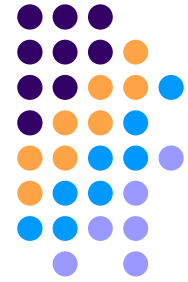


## Production & Technical Support

- Clusters of 25-30 producers
  - Trained para-vet in each cluster chosen from producers
  - Village store in cluster for door step delivery of inputs
  - Para-vet (Supervisor) paid on output
  - Centralized Production Scheduling, DOC Placement, Variance Monitoring, Ready Bird Marketing System
  - Staggered production schedule -optimizes w/k
  - Multi-layer disinfection and bio-security measures
    - Complete disinfection protocol - cleaning, white-wash, fumigation, broad spectrum fungi-bacterial-virucide spray
  - 5-7 batches in a year, with effective working of 3-4 hour/day

# Ensuring Industry Competitive Production Costs : Grower Payment linked to Efficiency

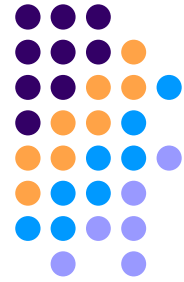
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- Benchmarking with best industry standards
  - Productivity level of large farmers in the area as well as best attained in India
- Round-the-clock para-vet support
- Structured referral veterinary support
- Weekly monitoring of production parameters
- Grower Payment linked to Efficiency

# Continue...

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## Critical Production Parameters in Broiler Farming:

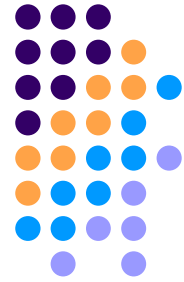
- Feed Conversion Ratio (FCR)
- Avg. Body Wt (kg)
- Livability (%)
- No of Days

$$\text{Efficiency Index} = \frac{\text{Livability}(\%) \times \text{Avg Body Wt}(\text{Kg})}{\text{F.C.R} \times \text{No of Days}} \times 100$$

\*Producer's are paid on Efficiency Index (EI) scored in a batch;  
**“EI system”**



# Linking EI with Producers Remuneration



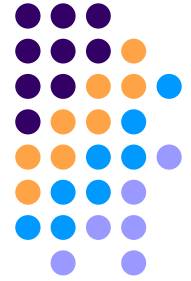
Min EI 160 to achieve break even

Up to 1000	3.3
1001-1100	3.2
1101-1200	3.1
1201-1300	3.05
1301-1400	3.00
1401-1600	2.95
1601-1800	2.90
1801-2000	2.85
2001-2300	2.80
2301-2500	2.75
2500+	2.70

**Above 160 each point carries additional 1 paisa**

# Design Features continue.....

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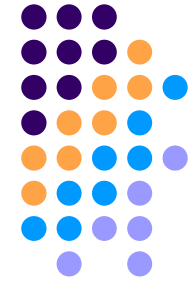


## Risk Mitigation

- **Delinking Production & Enterprise Efficiency**
  - Individual producers insulated from fluctuations of both input & output markets
  - Individual does what she can do best – production and collective pools and hedges risks, attain scale economies
  - Single-point market (both input & output) contact with Cooperative pooling of risks
- **Mechanism to absorb effect of price fluctuations**
  - Cooperative smoothens effects of input & output prices
- **Discriminate between good & bad production performance**

# ..... Design Features

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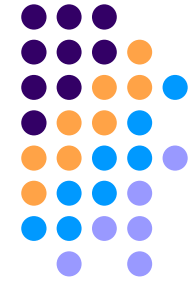


## Marketing

- Single window centralized marketing
  - Birds sold through the cooperative making it influence market price and demand movements
- Target 40-50 % market share within 200 kms
- Focus on smaller rural markets
  - Insulated from urban price shocks like flu
  - Premium mitigated higher cost of servicing

# .....Design Features

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- Finance

- Capital Investments

- Targeted at self-employment – source investments under mainstream programs

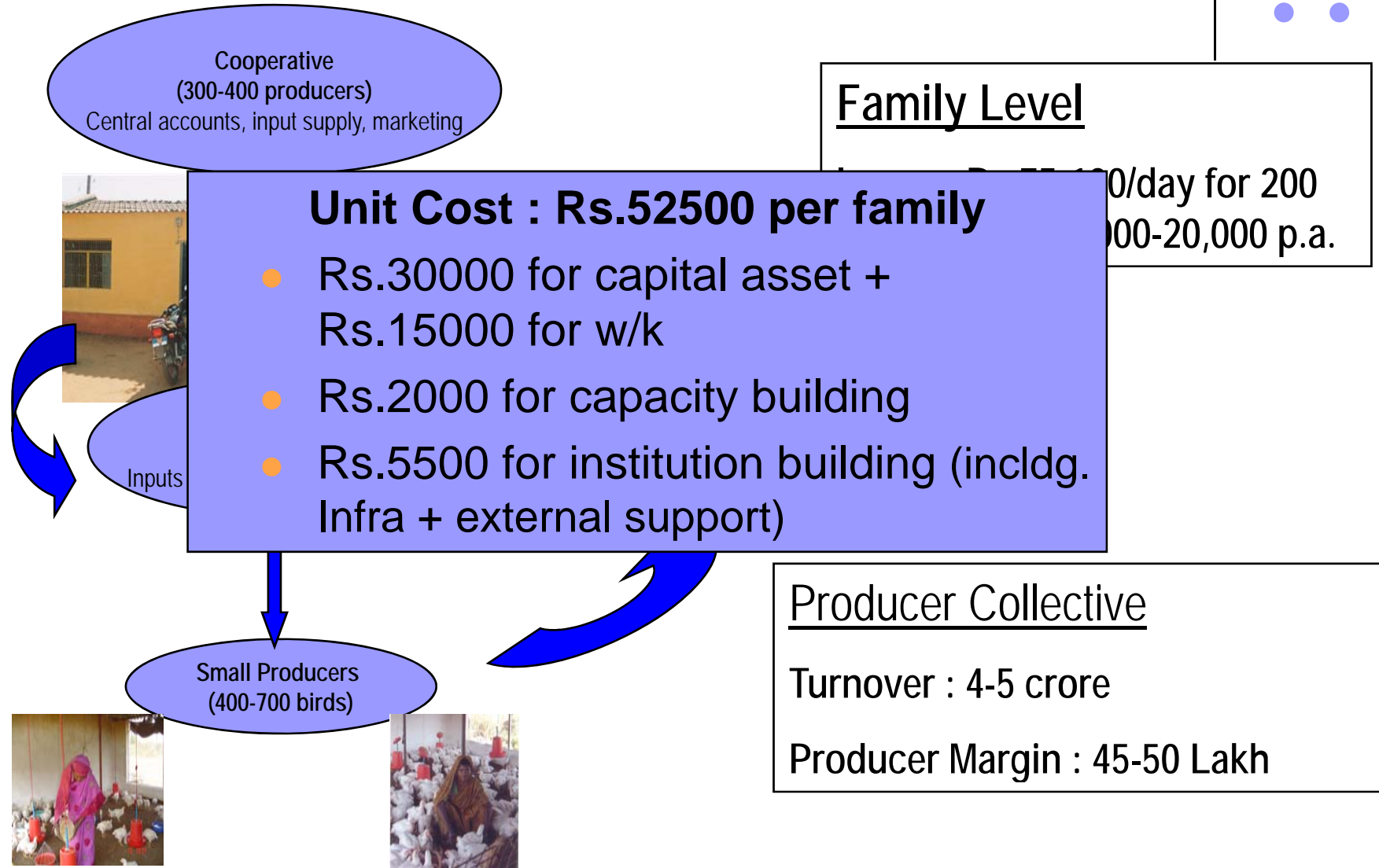
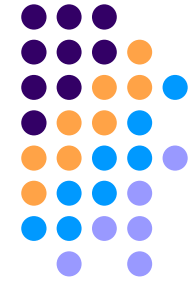
- Working Capital

- Seed fund to collective for initial capitalisation allowing it to leverage bank credit

- Governance

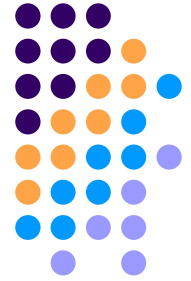
- ✓ Mutually Aided Cooperative
  - ✓ Professional Management
  - ✓ Governing Board

# Small Holder Broiler Farming Model



# Competitiveness of Small Holder Poultry Model

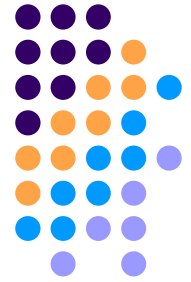
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## Why?

- Scale neutral when opportunity cost of labour is low and access to inputs
- Self employment Vs enterprise returns
- Owner labour Vs employed labour
- Smaller decentralised – better prod efficiency
- Integration : input-output mkt.

# Small-holder Model Vs. Non-integrated Big Farm



## *Cost Comparison*

Material Cost	competitive
Growing Cost	High
Cost of Capital	Low
Entrepreneurship Margin	Nil
Collectivisation Cost	High
Market Access Cost	Neutral-Low
Overall Cost	Competitive



# Kesla Poultry Cooperative

## 1<sup>st</sup> small-holder broiler producers cooperative

### Background

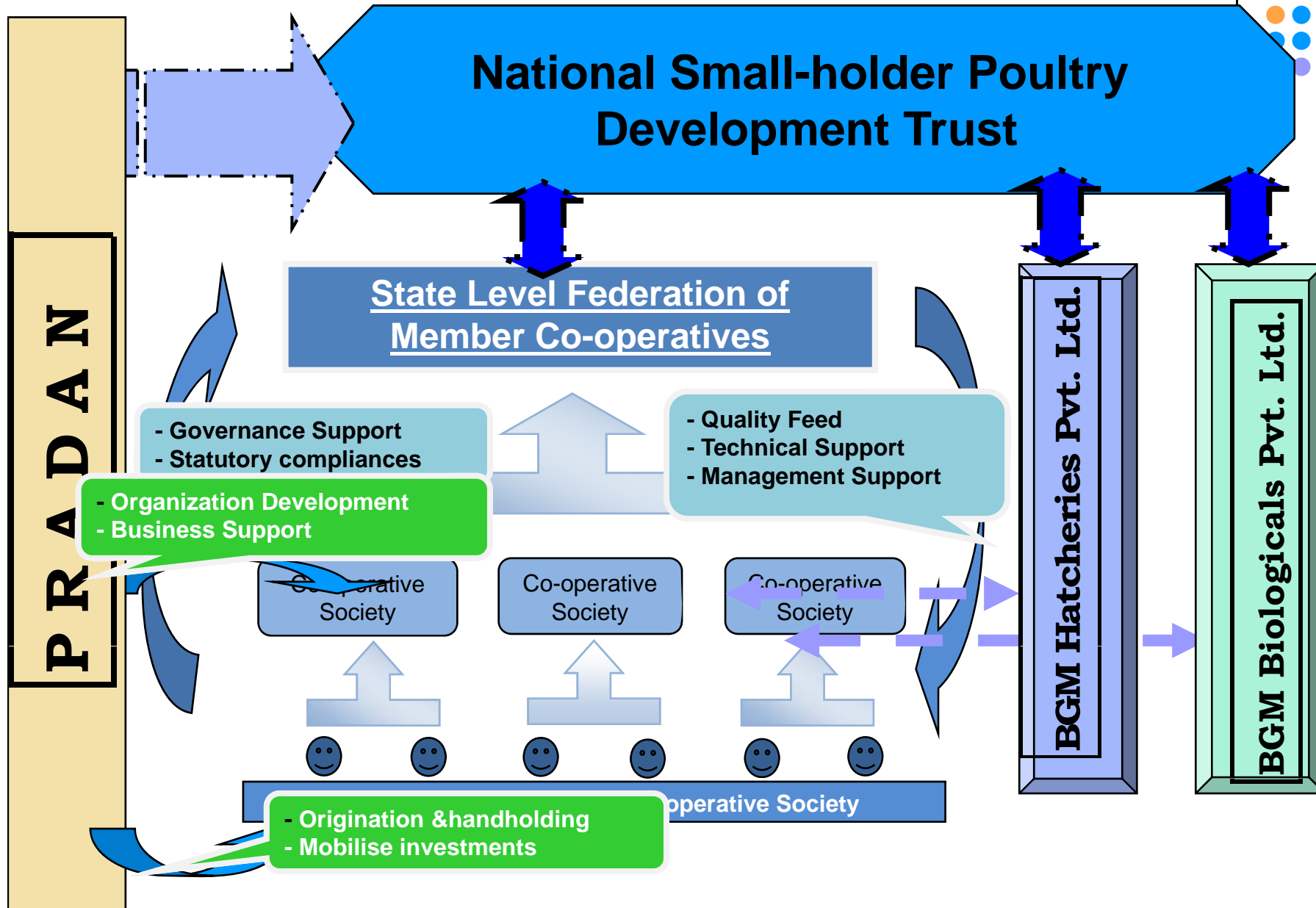
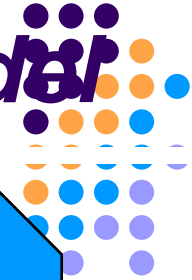
- PRADAN started broiler farming in 1993
- Activity organized on cooperative lines in 1997 and registered in 2001

### Achievements

- 618 tribal/dalit women broiler farmers – 50 % promoted under mainstream poverty alleviation programs
- Cooperative is the commercial largest farm-production house in Madhya Pradesh
- FY 2008-09 - Turnover 10.40 crore
  - Producer payments **Rs.1.40 crore**
- FY 2009-10 – Turnover 13.77 crore
  - Producer payments **Rs.1.55 crore**
- Growth Nucleus : Kesla tribal belt monthly DOC placement increased from 8,000 in 1993 to 4.0 lakh in 2010 is now counted as one of important broiler centres of Central India

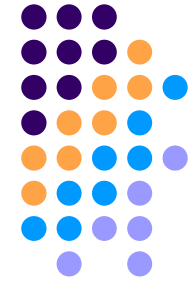


# Community Poultry : Institutional Model



	<b>Primary Organisation</b>	<b>State Fed</b>	<b>National Collective</b>	<b>Business Verticals</b>
<b>Services to Farmer</b>	1. scale for participation – inputs, outputs, technology 2. de-risk temporal and spatial by pooling	1. ensure quality & quantity inputs 2. high performing HR 2. risk management 3.ensure statutory compliance	1. launch new farmers 2. policy advocacy & mobilize public investments 3.ensure member-bias in business	1.best quality at best prices
<b>Basic Orientation</b>	Member Oriented	Member oriented	Sector Oriented	Business oriented
<b>Promoters</b>	Farmers	Primary Prod. Orgn	Coops, PRADAN, Industry	Coops, PE Business leader
<b>Legal Structure</b>	MACS, PC	MACS, PC	Private Trust & Charitable Trust	Private Companies
<b>Revenue Source</b>	1.Collective Business	1.Mfg. margin on feed concentrate 2.Margin on input procurement	1.graded member subscription 2.fee based-implementation	Business
<b>Capital</b>	1.Member equity 2.equity through patronage bonus	1.primary organization 2.internal reserve	Starts with initial corpus and builds it over the years	Equity-coop, private & Debt
<b>Linkage with PRADAN</b>	Operational at team, membership & institution development	Operational at State Unit.	governance	No linkage

# Growth Projections



amount in m INR

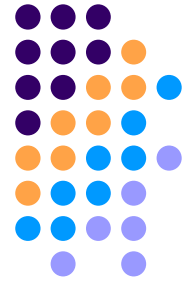
## Next 3-5 years :

- Break into top 10 broilers producers in India – 5 fold growth in 5 years
- Generate income in hands of poor families to the tune of Rs. 20 crore
  - Consolidate and strengthen presence in the existing areas
  - Strengthen institutional architecture (national trust, private businesses), systems & processes which will lead growth
  - Expand to new areas – Bihar, Assam, West Bengal

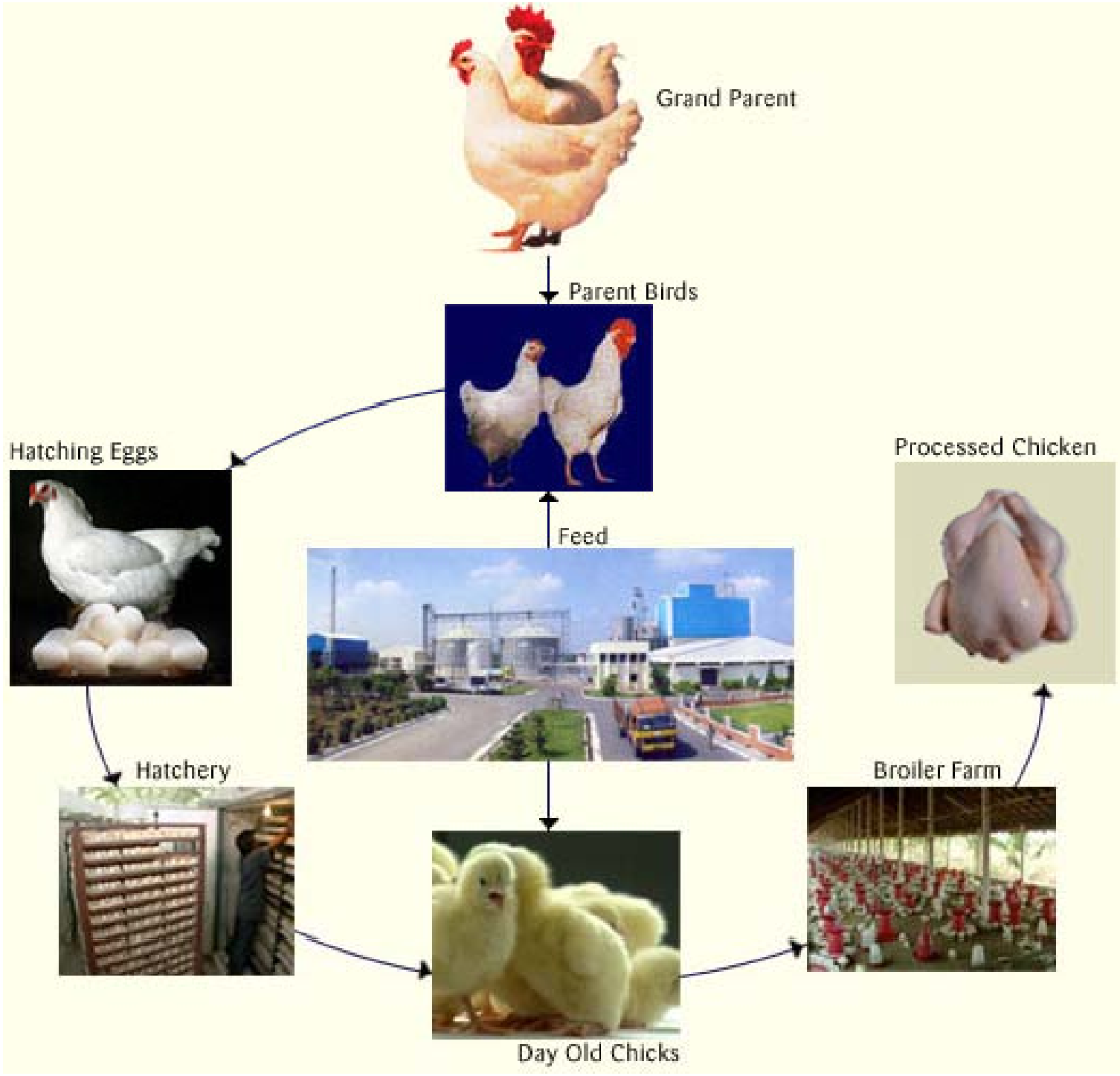
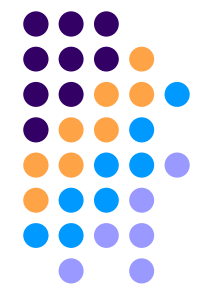
	2009-10	2010-11	2011-12	2012-2013
<b>Producers</b>	5405	6500	9000	12000
<b>Sales Turnover (crore)</b>	80.5	111.6	155	200
<b>Gross Margin (crore)</b>	9.9	12.9	16.2	21.6

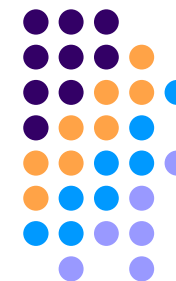
# Community Poultry: Mission & Scope

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**By 2020 “50,000 farmers of an average unit size of 800 sq ft produce annually 200 million live birds valued at Rs. 15 billion (Rs.1500 crore) generating Rs.1 billion (Rs.100 Crore) in the hands of the farmers and Rs.200 million (Rs.20 crore) additional income in the hand of community workers, support and professional staff. These 50,000 farmers are organized in 100 primary producer organizations making it the largest family poultry initiative in the world and in top five broiler producers in India with a gross turnover including of its associates being Rs. 2000 crore”**





**THANKS**