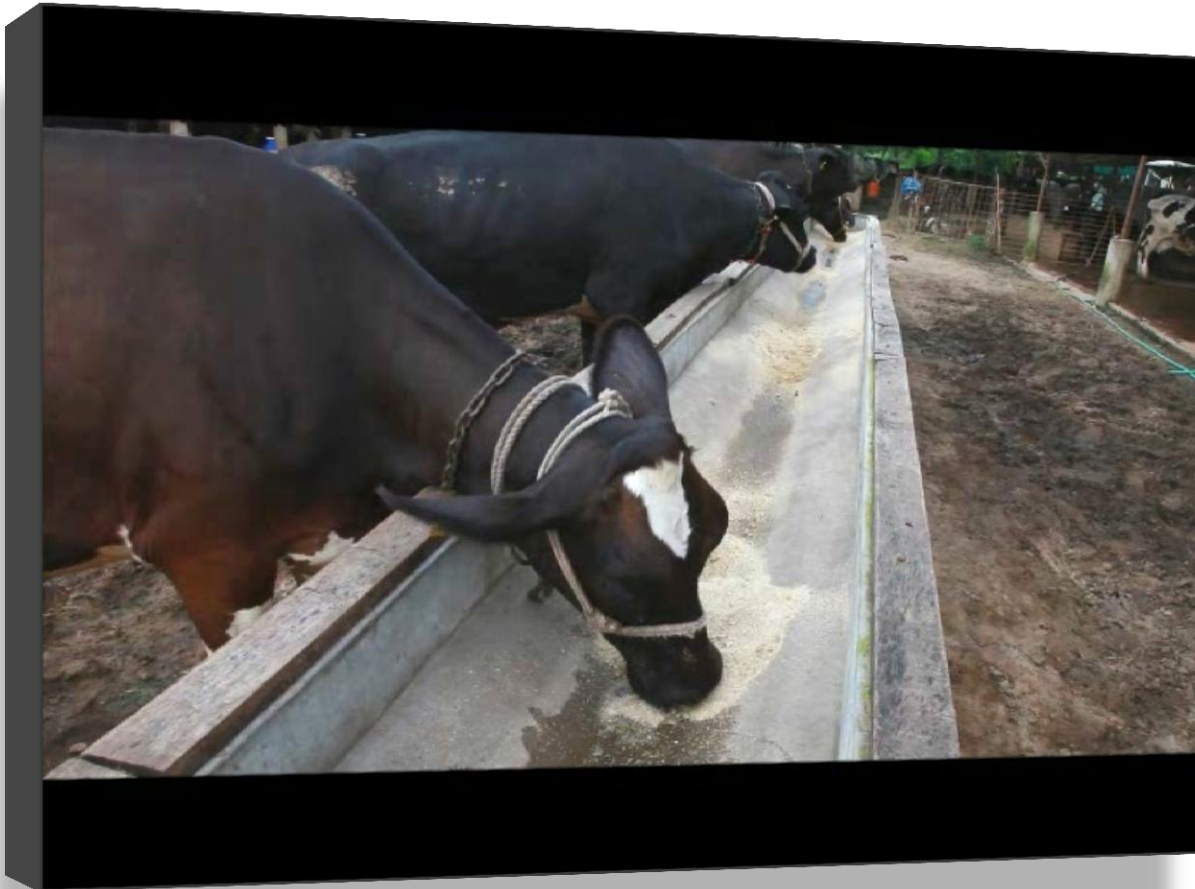


M R Garg
General Manager (Animal Nutrition)



NDDDB

Ration Balancing Programme



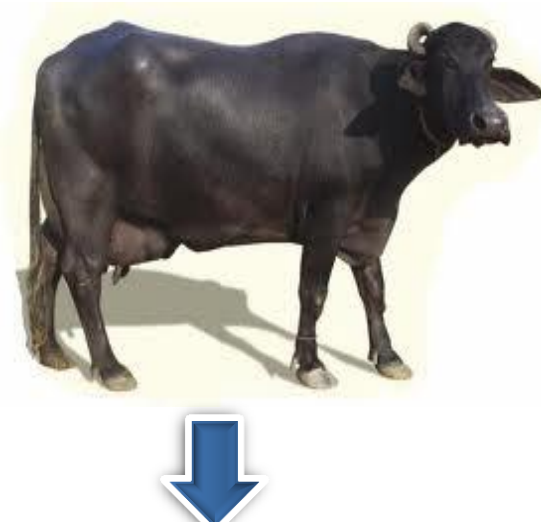
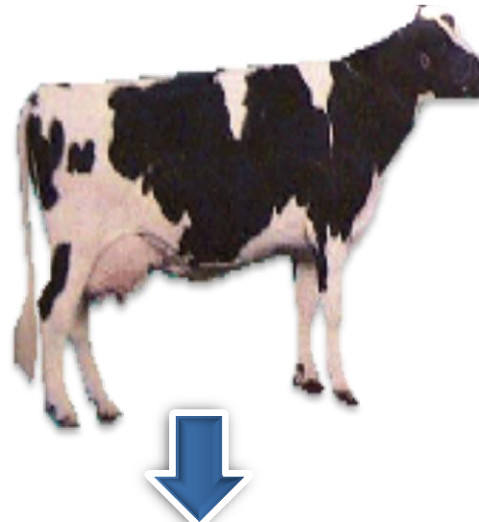
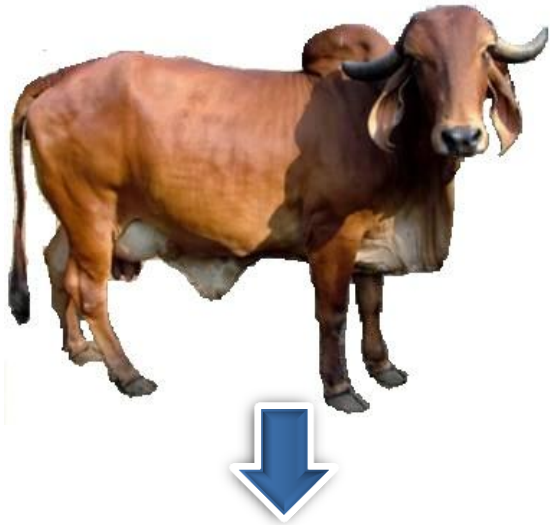
Expanding
coverage
for the
benefit of
farmers

**Why ration balancing
advisory services?**



Average milk production of milch animals in India

RBP



Year	Wet average (kg/d)		
	Indigenous cows	Crossbred cows	Buffaloes
2003-04*	1.92	6.53	4.24
2007-08**	2.11	6.47	4.41
2011-12**	2.27	6.97	4.71

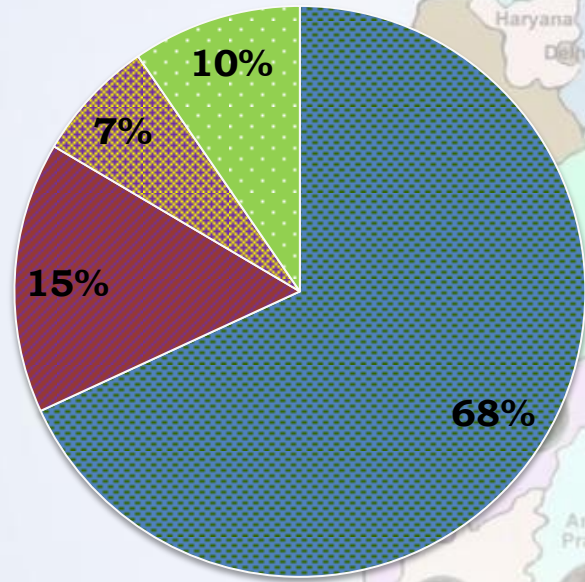
Source:*BAHS 2006; ** BAHS 2013



Present status of feeding in-milk animals in different states (n=1.70 lakh)

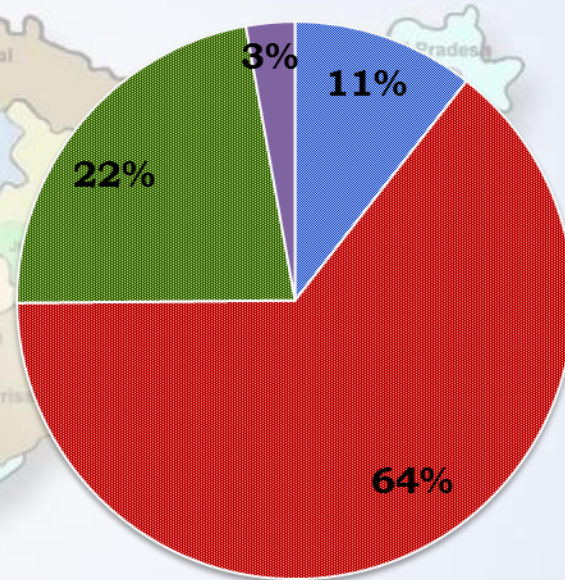
RBP

Nutritional Status for CP and TDN



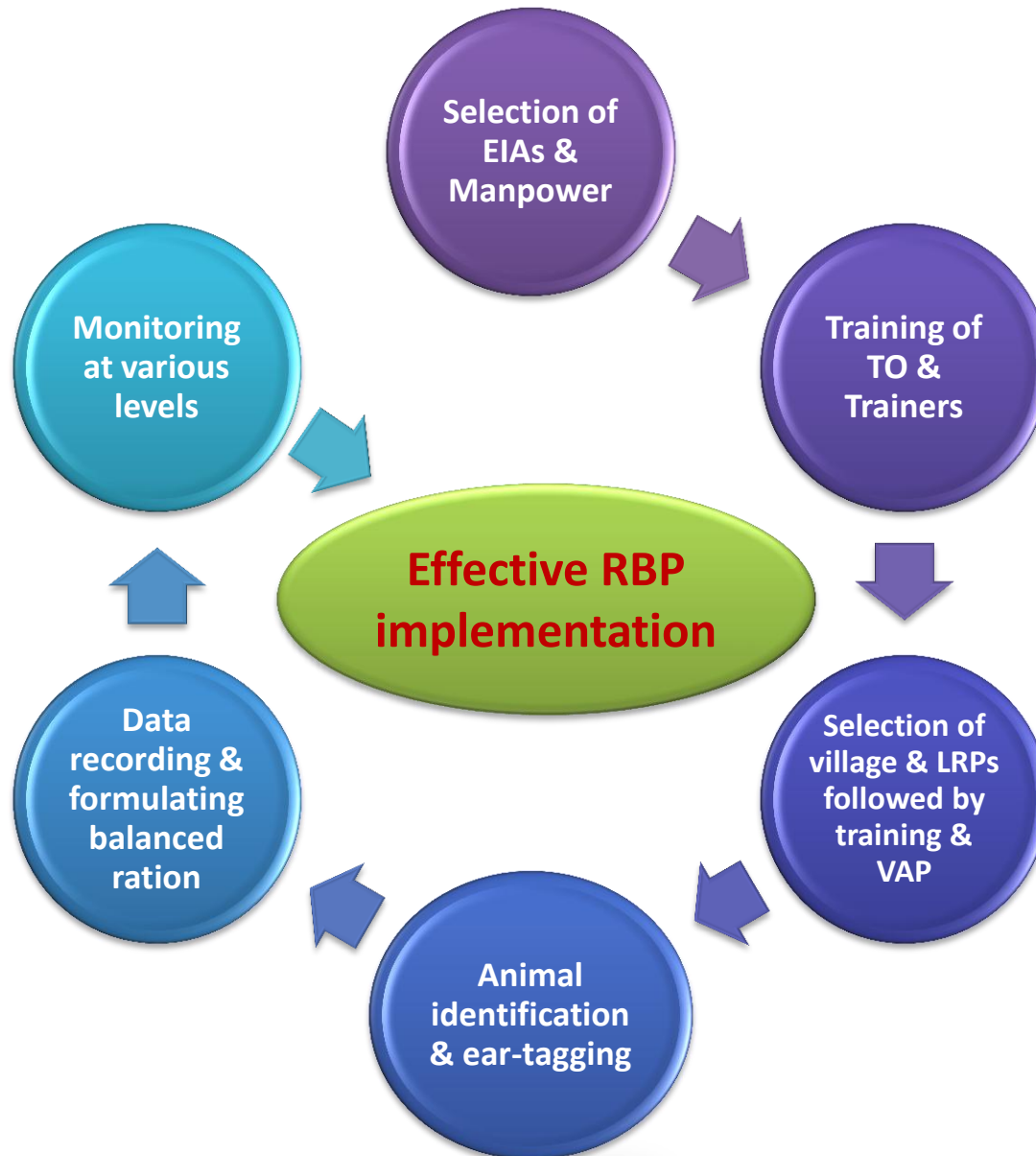
- Excess in both CP and TDN
- Deficit in both CP and TDN
- Excess in CP and Deficit in TDN
- Deficit in CP and excess in TDN

Nutritional Status for Ca and P



- Excess in both Ca and P
- Deficit in both Ca and P
- Excess in Ca and Deficit in P
- Deficit in Ca and excess in P
- Deficit in both Ca and P

RBP: Implementation Plan





- **Economic benefits to milk producers:**
 - Improved milk yield, fat & SNF %,
 - Reduced daily feeding cost ,
 - Increased daily net income of milk producers,
 - Increased lactation length,
 - Improved conception rate,
 - Reduced dry period,
 - Improved immunity,
 - Reduced parasitic load.



Organizational level benefits

RBP

- **At DCS level:**
 - Increased number of pourer members.
 - Increased milk procurement.
- **At union level:**
 - Increased milk procurement .
 - Increased SNF content in milk (saving towards maintaining SNF content at 8.5%),
 - Reduction in cost towards veterinary routes.



- **Environmental benefits:**
 - **Reduced methane emission by 10-15% per litre of milk.**
 - **Less nitrogen excretion in dung & urine, hence, less nitrous oxide emission in environment.**
 - **Improved water use efficiency per litre of milk produced i.e. water foot print.**
- **Social benefits:**
 - **Women empowerment at village level.**
 - **Social recognition of women.**
 - **SC/ST s are benefited from the programme.**

An inspiration named Kanthamma

Dairying has guided the transition of life of a villager associated with poverty to a dignified life of being a Local Resource Person (LRP). The story of Kanthamma of Doddanallurahalli village is a glaring example of such a transition.

NDDB introduced the Ration Balancing Programme (RBP) at Doddanallurahalli Milk Society in 2013. Dairy Board's initiative took charge of her destiny. She now knows that feed contributes about 70% of the total cost of milk production and reducing the cost of feeding would significantly improve the incomes of milk producers. Kanthamma now conducts village meetings to educate dairy farmers on scientific animal feeding for improving the efficiency of utilisation of existing feed resources for enhanced milk production.

Each animal enrolled under RBP is tagged and details relating to the animal's weight and health are captured by the LRP or 'cow dietician' on their laptops and transmitted real-time to the central server at NDDB, Anand. The diet advisory for each animal is generated using NDDB's Information Network for Animal Productivity & Health (INAPH).

Animals covered at Doddanallurahalli Milk Society under RBP stands at 83 and the number recorded under impact is 79. The average milk increase is 0.36 (kg/animal/day) and average rise in fat percentage is 0.08. The average reduction in daily feeding cost is ₹ 5.32 per kg milk. The net gain by the farmer is about ₹ 68 per animal per day.



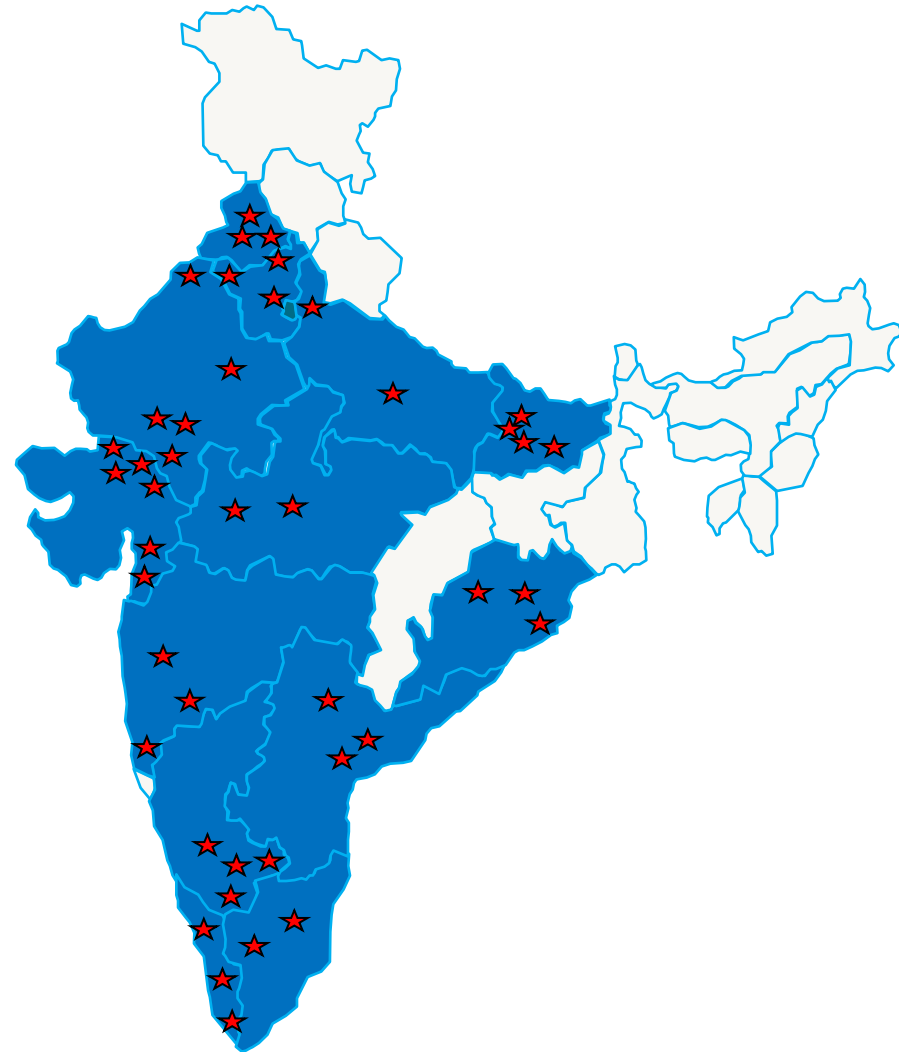
**Success story:
Village based
trained lady
LRP
'A cow dietitian' at
farmers'
doorsteps in
Bangalore milk union.**



RBP implementation under NDP I

RBP

- 46 SPPs have been approved with total grant of Rs. 147.67 crore in 14 states.
- Around 187 officers from 34 EIAs were trained on RBP and 25 IT officers were trained on INAPH at NDDB Anand.
- So far, 32 EIAs have trained 4893 LRPs locally and initiated RBP covering 2.36 lakh animals in 4512 villages.
- EIAs have taken an advance of Rs. 44.43 crore & utilized Rs. 32.19 crore (35% against target).





- **Manpower identified for RBP are not exclusive & are transferred frequently.**
- **EIAs are taking longer time (5-6 months) in project initiation after approval.**
- **Attrition rate of LRPs is high (35-40%) due to their improper selection & orientation.**
- **Repeated /subsequent visits of LRPs are not regular. As a result, number of transactions per LRP per week is less.**
- **Monitoring of RBP implementation at EIA level is not on regular basis.**
- **Sustainability of LRPs is not ensured.**



Likely income of LRP

RBP

Items	Monthly sale (kg)	Commission @ (Rs./kg)	Monthly income (Rs.)
Area specific mineral mixture	240	10	2400
Bypass fat/protein supplement(s)	50	10	500
Neutraceuticals, fodder seeds, dewormer feed pellets, Garbhamin bolus etc.			500
Milk Replacer & Calf Starter	20	10	200
Charging from beneficiaries	(for 80 animals)	Charge @ Rs. 20/ animal/ month	1600
Support from a DCS			500
Support from a union			500

Expected income could be Rs. 3000-5000 per month



Initiatives by some of the EIAs for ensuring sustainability of LRPs

RBP

- **Few EIAs have started providing support to LRPs in the range of Rs. 500 to 1500 per month.**
- **Incentives on mineral mixture, bypass fat & cattle feed are also being provided to LRPs.**
- **Some EIAs have created corpus fund by deducting 1-2 paise per litre of milk procured, to meet LRP expenses.**
- **EIAs like Bhilwara, Lucknow, Ropar, Ludhiana etc., need to take action in this regard.**



RBP Implementation – new initiatives at NDDB level

RBP



Provision for T-shirts/sarees & caps for LRPs has been made for increased visibility of the programme

To increase motivation level of LRPs, an incentive scheme has been devised for good performing LRPs:

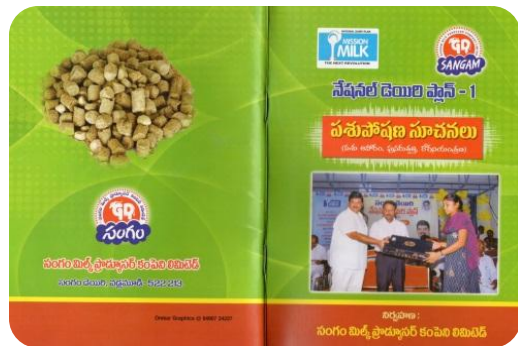
- Coverage of 100 animals: Rs. 3000 per LRP
- Coverage of 80-99 animals: Rs. 2000 per LRP
- Coverage of 60-79 animals: Rs. 1000 per LRP (for 3 years).





RBP – innovations by the EIAs

RBP



RBP booklet in Telugu by Guntur



Large scale orientation of progressive dairy farmers by Banaskantha



RBP promotion in Krishi Mela by Bangalore



RBP promotion on independence day by Bhilwara

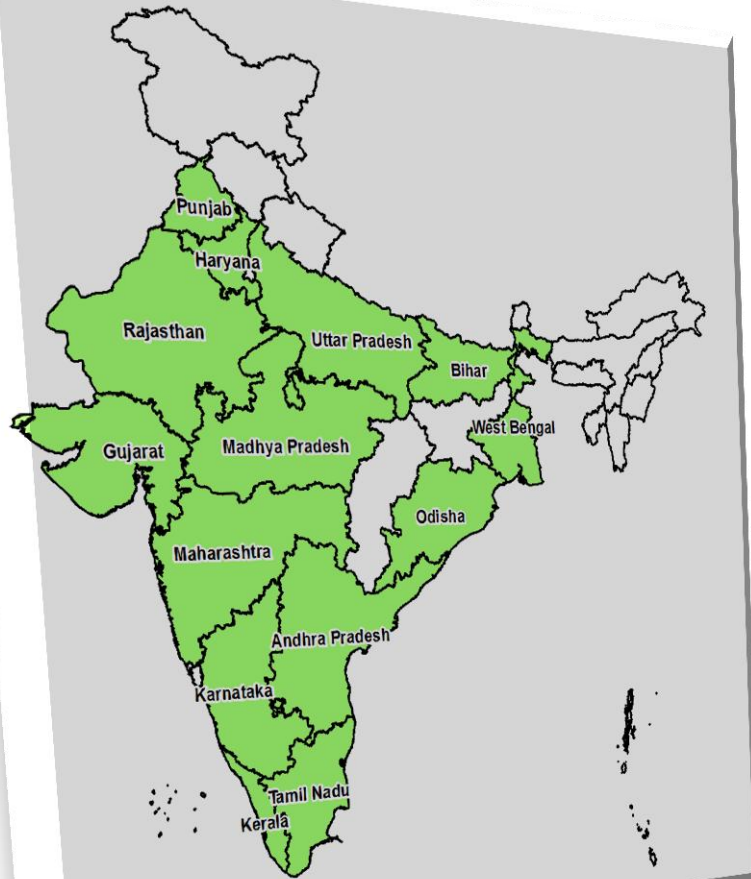


RBP closed group on Facebook by Malabar



Implementation of RBP beyond NDP

RBP



Implementation of RBP is one of the way under NDP-I, but it is not only the way for RBP implementation on a large-scale.

Need to mobilize existing infrastructure & also funding support through various state & central sponsored schemes.



Dairy development and Animal Husbandry schemes:

- **Department of Animal Husbandry Dairying & Fisheries**

- National Programme on Bovine Breeding and Dairy Development (NPBBDD): Funds available under the scheme (total allocation Rs. 309 crore for 2014-15) can be channelized for RBP meeting additional expenses. Trained AI workers can be utilized for RBP implementation.

- **Ministry of Rural Development**

- National Rural Livelihood Mission (NRLM : Rs. 1570 crore): Fund to meet RBP expenses & Pashu Sakhi can be utilized for implementation of ration balancing advisory services.

- **Support to Training & Employment Programme for Women (STEP): Rs. 200 crore**

- A part of the funds can be used for RBP
- Help of trained women could be taken for RBP implementation.



Way Forward

RBP

- **EIAs need to prioritize the programme & extend the desired support for successful implementation of RBP under NDP I.**
- **Explore available funds under various schemes & alternative mechanisms to expand the reach of the programme to large number of dairy farmers.**

THANKS



An
NDDB
Presentation