



OLRDS

Annual Activity Report 2015-16



**Odisha Livestock Resources
Development Society**

Annual Activity Report 2015-16



Odisha Livestock Resources Development Society



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About OLRDS

The Odisha Livestock Resources Development Society (OLRDS) is an autonomous body, which was formed in the year 2000 under the Societies Registration Act to reorganize breeding operations in cattle and buffalo of Odisha. This has been formed vide Government Notification No. 10220-3V (D)-7/99/FARD dt.29.05.1999.

OLRDS is the State Implementing Agency for all bovine breeding activities of the State. OLRDS is committed for the socio-economic development of the people through genetic up-gradation of existing cattle and buffalo. The improvement of local cattle and buffalo through genetic up-gradation under the assistance of Central and State sponsored schemes.

The Commissioner-cum-Secretary to Govt. of Odisha, F & A.R.D. Department is the President and Director of AH & VS, Odisha is the Vice-President of OLRDS. The Chief Executive Officer is the Member-Secretary of the Society.

The objective of OLRDS is as follows

- To promote & develop animal husbandry in the area for increased production of milk.
- To promote quality Artificial Insemination (AI) services at village level and farmer's door step for organised breeding.
- To mobilise resources from various sources to foster the cause of cattle development through breeding & management.
- Utilisation of funds generated by sale of inputs & services for sustainability of breeding activities.
- To undertake appropriate research work & to provide specific extension pertaining to livestock development.

Activities

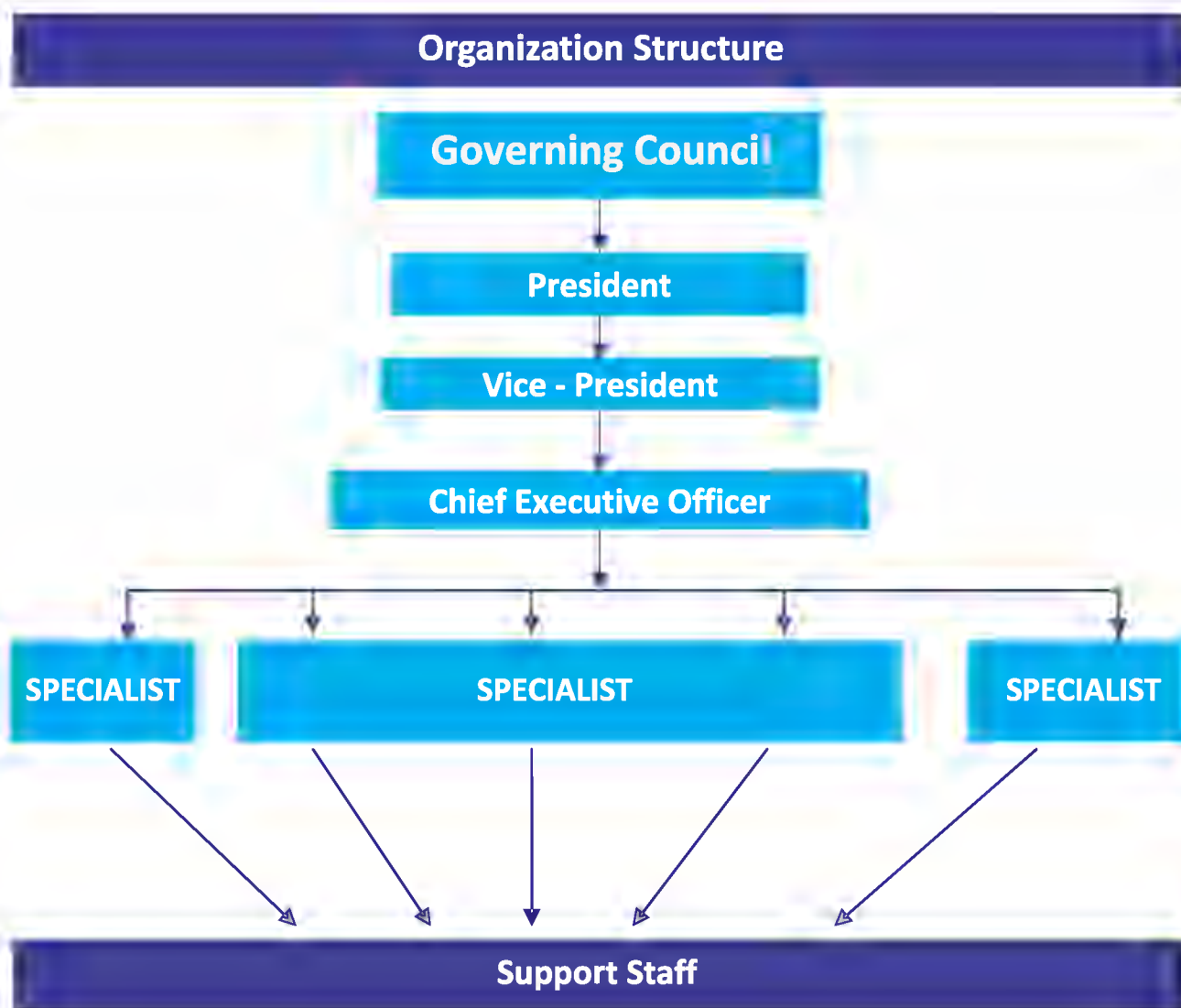
- To promote production, rearing & selection of bulls.
- To facilitate Production of bull semen & distribution
- To facilitate production and supply of quality AI inputs
- To ensure training of staff in artificial insemination & infertility management.
- To promote conservation and improvement of native breeds, progeny testing
- To collaborate with various agencies (OMFED, NGO, Private AI workers and Departmental AI technicians) for covering more breedable cattle under organised breeding

A. Functions of OLRDS

Some of the key functions being performed by the State Implementing Agency (SIA) i.e., OLRDS are as follows;

- ◆ Conversion of non A.I. Centres to A.I. Centres.
- ◆ Provision of mobile A.I. facility for rendering doorstep services.
- ◆ Uninterrupted and timely supply of logistics and other inputs like LN2, Straws, Sheaths etc. to the A.I. Centres and maintenance of cold chain for semen.
- ◆ Strengthening of the Bull Rearing Centres at Frozen Semen Bank.
- ◆ Production of quality bull semen by adopting strict Bio-security measures.
- ◆ Productions of crossbred bulls by inseminating the elite cows with proven bull sire semen.
- ◆ Conduct Progeny Testing Programme in field conditions for evaluation of the breeding Bulls donating semen at Frozen Semen Bank, Cuttack
- ◆ Strengthening of Bull mother farms of State.
- ◆ Physical characterization of Native cattle and buffalo germplasms of Odisha
- ◆ Conservation and improvement of native germplasm through selective breeding.
- ◆ Implementation of Risk Management component under Sub Mission-Livestock Development of National Livestock Mission.(NLM)

Partnering with agencies like BAIF, KLDB, NDDDB and other external agencies for livestock development of the State.



Management

Odisha Livestock Resources Development Society (OLRDS) is having a Governing Council with following statutory members.

(A) Official members

1	Principal Secretary/ Secretary to Govt., Fisheries & Animal Resources Development Department, Govt. of Orissa.	President
2	Director of Animal Husbandry & Veterinary Services, Orissa	Vice – President
3	Addl. Secretary / Joint Secretary to Govt., Fisheries and Animal Resources Development Department	Member
4	Managing Director, OMFED	Member
5	Addl. Secretary / Joint Secretary to Govt., Planning & Coordination Department	Member
6	Addl. Secretary / Joint Secretary to Govt., Finance Department	Member
7	Joint Director (HID), Veterinary Directorate	Member
8	Joint Director – I, Veterinary Directorate	Member
9	Deputy Director, Frozen Semen Bank, Cuttack	Member
10	Accounts Officer, Veterinary Directorate	Member
11	Chief Executive Officer, OLRDS	Member Secretary (Convener)

(B) Non-official Members

12	Joint Honorary Secretary, Utkal Gomangal Samiti	Member
13	Joint Honorary Secretary, Society for Prevention to Cruelty to Animals, Cuttack	Member
14	Person nominated by Governing Council	Member

HIGHLIGHTS OF ACTIVITIES OF OLRDS FOR 2015-16

- 2985 Departmental institutions have been equipped with AI Facility.
- 1413 Private AI workers (Gomitras) have been engaged to render breeding and health related services at farmers' door step in inaccessible areas.
- Two Breeders' Societies namely Chilika Buffalo Promoters' Society (CBPS) and Binjharपुरi Cattle Promoters' and Producers' Society (BCPPS) have been formed and functioning in coordination with Chief District Veterinary Officers' Office of the area, OLRDS and under the guidance of a consultant in Native tract of Chilika buffalo and Binjharपुरi Cattle respectively towards the breed improvement & conservation of the two registered breeds of Odisha.
- Seven Binjharपुरi bull calves were procured from the farmers door step and placed in the Livestock Breeding Farm, Cuttack. These calves will act as breeding bulls in future and are expected to donate semen towards insemination of the cows.
- ISO certified 9001:2008, Grade-'A' Frozen Semen Bank, Cuttack has been modernized & the bull stations have been strengthened.
- Bulk LN2 transportation system for different districts has been strengthened.
- District level Semen depots have been strengthened.
- One Regional Training Center (RTC) for eastern region at Balasore has been established.
- Six training modules namely Conservation of Native breeds, Field Performance Recording System, Feed and Fodder Technology, Assisted Reproductive Technology, Infertility Management, Basic refresher Training Program were developed in collaboration with SMILE, Bhubaneswar.
- Basic AI Training & refresher training are imparted to field AI workers.
- 628 numbers of infertility camps have been organised in 314 blocks (@2 camps per blocks) for Control of infertility among adult female bovines.
- 16.34 lakhs of A.I. have been conducted during 2015-16 and 5.79 lakhs of progenies were born out of Artificial Insemination.
- 10.15 lakhs of frozen semen doses were produced at FSB, Cuttack during the year 2015-16.
- 600 nos. of Artificial Insemination Technicians were imparted with Refresher Training of A.I. Programme.
- 25001 numbers of animals in two operational districts namely Cuttack and Jagatsinghpur have been insured under centrally sponsored Livestock Insurance Scheme.

A. MAJOR ACTIVITIES

I. Increasing the breeding coverage of bovines

I. a. Artificial Insemination

The Odisha Bovine Breeding Policy, 2015 has been notified by the State Government intending to improve socio economic condition of people through genetic up-gradation of cattle and buffaloes through systematic Bovine Breeding.

Odisha is having a good livestock potential, where most of the animals are indigenous. During the year, 16.34 lakh Artificial Insemination (A.I.) in bovines have been conducted. Steps have been taken to make departmental Non-A.I. centers, AI compatible and static AI centers were provided with mobile facility in order to provide breeding services at the doorstep of farmers.

In the current year, micro-planning was made to demarcate the areas for Artificial Insemination Centres of various agencies such as Departmental AI Centres, OMFED Societies, BAIF and JK trust centres. Keeping in view the vacancies of staff in the Departmental AI centres, those operational areas were distributed amongst the other agencies in order to ensure availability of bovine breeding services to the farmers.

I.b. Conversion of Non – AI Centres to AI compatible

To increase the area of AI coverage 100 number of Non – AI Centres have been converted to AI centres during the year 2015-16.

I. c. Provision of mobile AI facility

For provision of AI facility at the doorstep of the farmers the 100 new AI centers were equipped with Mobile AI facilities.

I. d. Door step AI through private AI workers (Gomitra)

1413 Private AI workers (Gomitra) are working in the field. People are able to avail A.I. services for their cattle and buffaloes at their doorstep. The institutional gap is bridged to a great extent by providing service in the areas where department service is not able to reach.



I. e. Extending Breeding services through Milk Producers' Co-operative Society

At present 1300 nos. of Milk Producer's Cooperative Services (MPC5) Secretaries are providing breeding services, where Government AI facility is not available. The Artificial Insemination activity is being taken up in a coordinated manner so that more number of breedable population can be covered under organized breeding. Possible support is being rendered from the department to these AICs managed by the district milk unions for maintaining the optimum reproductive health status of the animals through Infertility Treatment camps.

I.f. Trend in A.I. done

The number of AI achieved and progenies born for the year 2015-16 is 16.34 lakh and 05.79 lakh respectively. The district wise comparative AI and progenies born since 2013-14 to 2015-16 has been placed at appendix A shows that there is an increase in Artificial Insemination done to 16.34 lakhs in 2015-16 from 14.35 lakhs in 2013-14.

I. Quality Control in Livestock Breeding Services

Steps have been taken to maintain the quality of the frozen semen, which is the critical input for livestock breeding. As per the field requirement, the production schedule was planned and the shortfall in the production level was bridged by procuring good quality crossbred and buffalo frozen semen from leading organizations of our country.

II. a. Rearing Donor Bulls

About 71 donor bulls of different breeds like Haryana, Red Sindhi, Pure Jersey and crossbred Jersey are being maintained in the Frozen Semen Station for collection of semen. Moreover, 10 nos. of Jersey donor bulls and 7 Binjharपुरi bull calves were purchased this year.

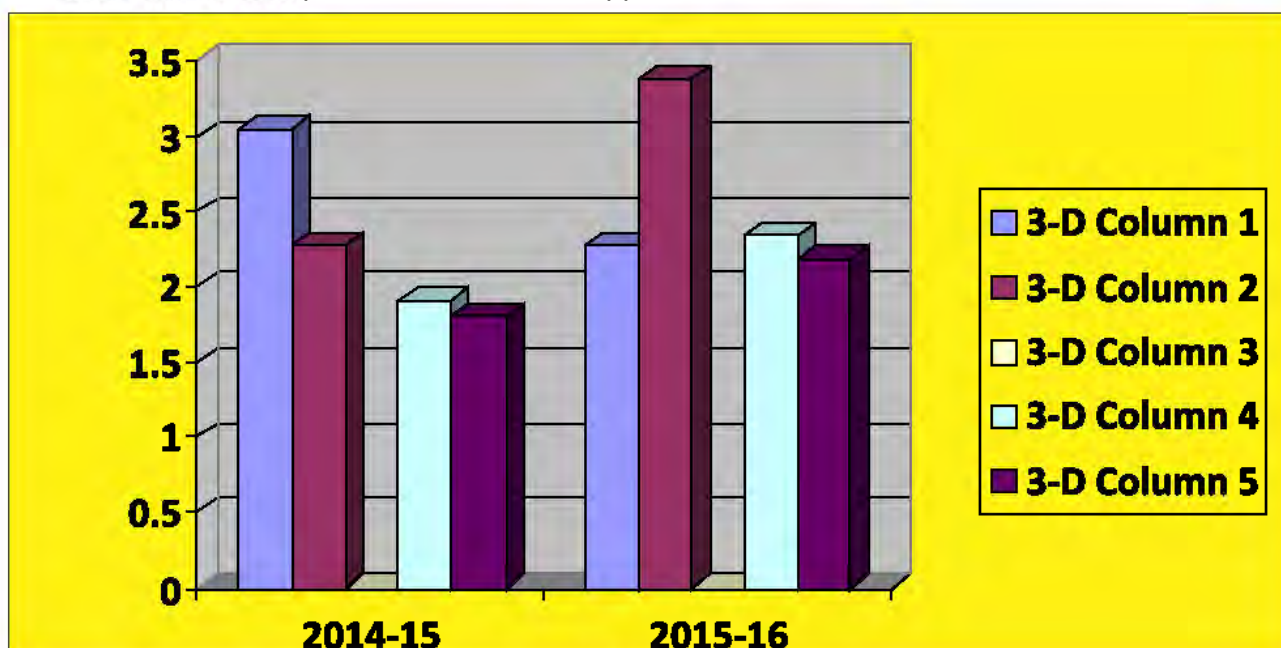


II. b. Strengthening of Frozen Semen Bank Laboratory

The frozen semen-processing laboratory was established in 1978. To cope with the increasing demand of semen straws detailed plan for upgrading the Laboratory has been planned in collaboration with NDDB.



The breed-wise semen production is given in appendix C.



I. c. Process control and certification of FSB, Cuttack

The breeding Jersey/ Cross Breed bulls are procured from CCBF, Chipilima and Sunabeda; and Haryana bulls are procured from Rohtak. The bulls are regularly tested for diseases like Brucellosis, Vibriosis,

Trichomoniasis and Tuberculosis by RDDL, Kolkata and State Laboratory. The bulls are also screened for IBR. Karyotyping of all donating bulls is done by NDDB.

Frozen Semen Bank (FSB), Cuttack has been upgraded to match the Good Management Practice Norms prescribed by Government of India. Strict bio-security measures have been developed. The laboratory rooms like processing and quality control, semen collection centre and sewerage system of the station have been set up as per the

Central Monitoring Unit (CMU) norm. FSB, Cuttack has got ISO 9001:2008 certifications and awarded with "A" grade by Central Monitoring Unit and stood second position in the eastern region and 6th position in the country.

II. d. Liquid Nitrogen Distribution System

Uninterrupted Liquid Nitrogen Distribution System is being taken up by the society through Frozen Semen Station and Chief District Veterinary Officers. Arrangements have been made by providing transport vehicles to different districts for intra-district transportation of LN₂. Procurement of 10 vehicles for 10 districts is under process.

The condition of Liquid Nitrogen containers are being supervised time to time for preservation of semen straws. Containers (Transportation/Storage and Biological) of various capacities were being supplied and replaced time to time, to prevent the cessation of services to farmers.

As per the requirement of districts, 198 numbers of Transport cryo containers has been procured and distributed to the field for Cold Chain Management.

II. a. Information Network for Animal Productivity and Health (INAPH):

For effective monitoring of bovine breeding activities "Information Network for Animal Productivity and Health (INAPH)" developed by National Dairy Development Board (NDDB) was planned to be implemented in the State on Pilot basis in 5 Blocks of Cuttack district (Niall, Kantapoda, Nischinta Kolli, Salipur and Mahanga).

Accordingly a workshop has been organised on 6th and 7th October 2015, involving experts from NDDB, Officials from D AH & Vs Odisha, FSB Cuttack, OLRDS and field Veterinarians.





II. f. Conservation of Native Germplasm

The indigenous cattle breeds and locally adapted lesser known breeds even with relatively large population size are not only declining fast, but are subjected to genetic erosion. Improving the over-all performance of locally adapted breeds with better package of management and breeding practices will often produce more sustained benefits than strategies involving replacement of crossing with exotic breeds. This calls for an immediate action for systematic conservation, genetic improvement and sustainable utilization of locally adapted breeds of cattle.

Four breeds of cattle namely Binjharपुरi, Ghumusari, Khariar & Motu and two breeds of buffalo namely Chilika & Kalahandi of Odisha have been recognized as cattle and buffalo breeds. Two Breeders' Societies namely Chilika Buffalo Promoters' Society (CBPS) and Binjharपुरi Cattle Promoters' and Producers' Society (BCPPS) have been formed. FPR, in 500 Binjharपुरi Cattle and 500 in Chilika Buffalo have been completed. Seven Binjharपुरi bull calves were procured from the farmers door step and reared in the BBR&BM Farm, Cuttack. These calves will serve as future donor bulls.



Binjharपुरi Bull calves



Binjharपुरi Cow



Ghumusari Cow



Chilika Buffalo



Khariar Cow



Motu Cow

II. g. Field Performance Recording System and CB Bull production Programme

To make the State self sufficient in CB bovine semen production, a Participatory Research Activity (PRA) i.e. Field Performance Recording System and CB Bull production Programme involving the farmers of 13 blocks of 4 districts (Cuttack, Puri, Baragarh and Jagatsinghpur) was initiated under State Plan Scheme. During the current year, one State level Workshop was organised involving all stake holders. Further, the activities namely survey and selection of elite cows, block level workshop and identification of cow and Artificial Insemination with HPT semen have been taken up in the operation areas.

27 bull calves were selected basing on mothers' lactational yield and procured. Rearing is being taken up at BBR&BM, Chipilima, Sambalpur.



II. h. Infertility treatment Camp:

To address the problem of infertility and enhance the conception rate, 628 numbers of infertility treatment camps were organised under National programme for Bovine Breeding (NPBB) in 314 blocks (@ 2 camps per block) of 30 districts of the State.



III. Education and Training

- a. **Website:** For educating the farmers, dissemination of information using electronic media was taken up through the website: www.olrds.com. The farmers have access to information in terms of knowledge to increase the production and breeding interventions.

Further up-gradation of existing system (Static) of OLRDS website to responsive website has been done during the year 2015-16. This responsive website can be accessed by all the devices such as Desktop Monitors, Tabs, & Mobile phones.

- b. **Face book page of OLRDS:**

The Face book page (www.facebook.com/olrds) of OLRDS was inaugurated on 2nd September -2015' by Sri Pradeep Maharathy, Honourable Minister Agriculture, Fisheries & Animal Resources Development, Odisha with an aim to create a social network platform for dissemination of information related to recent technology, knowledge and to act as a potential medium to reach a large number of people on a daily basis which includes a scope to (the viewers) post their comments.



- c. **Trainers' Training Programme(TOT)**

100 selected Veterinarians from different districts in batches were trained under Trainers' Training programme organized by Veterinary Officers Training Institute (VOTI).



- d. **Refresher training programme of AI workers**

For refreshing the knowledge on bovine breeding among the field functionaries, 600 nos. of existing A.I. workers like Veterinarians, Para veterinarians and Gomitras were imparted with Refresher Training of A.I. Programme during the year.

IV. Meeting, work shop and Seminar

A seminar on implementation of Bovine Breeding Policy, 2015 was organized during the year-2015-16 at Jayadev Bhawan, Bhubaneswar on 5th December-18. It was inaugurated by Honorable Chief Minister, Odisha.



The Society also participated in State level Krushi Mahotsav organized at Janta Maidan, Bhubaneswar to showcase the bovine breeding activities to the farmers and visitors.



V. Livestock Insurance

During year 2015-16, Livestock Insurance Scheme under Central Plan was being implemented in 2 districts (Cuttack, Jagatsinghpur) in collaboration with MS / United India Insurance Co. Limited. A total number of 25001 animals were insured against the target of 25000. The premium of the insurance is subsidized to the tune of 50%. The entire cost of the subsidy is being borne by the Central Government. As per the guidelines, benefit of subsidy was restricted to 2 animals per beneficiary per household for cows and buffaloes

This component aims:

- ★ To extend a safety net to the Livestock farmers against any eventuality
- ★ To manage risk and uncertainties by providing protection mechanism to the farmers against any eventual loss of their animals due to death.



V. Integrated Livestock Development Program – Kalyani

The overall objective of the programme is to provide gainful self-employment to the rural livestock keepers through dairy and livestock development programmes.

The specific objectives are:

1. Creation of awareness among farmers , about the socio-economic benefits of improving the local cattle and buffaloes;
2. Production of improved cattle and buffaloes out of the local non-descript low productive animals;
3. Generation of employment & income for rural families through milk & Meat production and its marketing;
4. Promotion of nutritional security, through enhanced supply of milk and meat

This project has following 4 main components

1. Cattle Development Programme: Door step livestock services are provided to the rural livestock keepers to breed the local cows by using superior dairy breeds like Jersey, Holstein Friesian & its crosses. Subsequent follow-up and input support (mineral mixture, de-wormers, etc) services are provided to make the progenies born to adult productive animal. Similar services are being provided for upgrading the local buffaloes where ever needed by using Murrah breed of semen. Till date, 100 cattle development centres have been established in 10 districts.

Name of activities	Target	Achievement
Number of AI performed	70000	81624
No of progeny born	11700	11933
No of exposure visits performed	100	105
No of Inferility treatment camps done	263	
No of Estrous synchronization Camp done	164	

2. Fodder Development Programme: Fodder Development activities are being implemented in all 100 cattle breeding centers. To monitor the progress and provide technical guidance for promotion of fodder related activities in 100 CDC's Fodder development centers are established. Under Fodder Development programme fodder demonstration plots, azolla demonstration, urea treated paddy straw demonstration were done at farmer door step. While for developing community co-operation chaff cutter were provided to group of farmers.

Activities	Target	Achievement
No of fodder demonstration done	10000	14030
Azolla demonstration		9774
No of Chaff cutter provided		1500
No of feeding trough provided		21699

3. Comprehensive Goat Development Programme:

The goat development programme have been under taken in districts of Mayurbhanj, Sundergarh, Kendujhargarh, Balangir and Deogarh. Under this programme 250 villages have been covered

involving about 20000 farm families. As per the state livestock breeding policy , Black Bengal for Mayurbhanj, Sundergarh, Deogarh and Keonjhar districts and Ganjam breed of goats for Balangir district are used for breed improvement in the project area. Elite breeding bucks of Black Bengal and Ganjam breed are being procured for breed improvement in the project area.

Activities	Target	Achievement
No of buck services provided		49627
No of kidding	25000	58726
No of vaccination done		
No of castration done		137411

4. Technology–Knowledge and Strategic Partnership for Development of Chipilima Fodder Farm:

Under the component the seed production farm, Chipilima has been strengthened. During this year, breeders fodder seed have been produced which will be multiplied into certified seed in the farmers' field.



Cattle Development Center(CDC)



Calf Rally organised at CDC



Weighing of Goat at GDC



Castration of Goat



Silage making UNDER Fodder Develop programme



Silage

V. RKVY ASSISTED SCHEMES

a. Cattle Breed Improvement Programme(CBIP) through establishment of 64 ILD Centres

The project was implemented under RKVY to provide breeding, feeding and management services at the door steps of the dairy farmers in the project area. These services were provided through 64 'Integrated Livestock Development (ILD) Centres' in Cuttack, Dhenkanal and Nayagarh districts of Odisha.

Each of these ILD centres was operated by a local educated unemployed youth called 'Gopal' who covered about 8-10 villages within a radius of 5-8 Kms. It provided much needed Artificial Insemination & veterinary support services to all the dairy farmers in the project area.

b. Performance based Incentives for Private AI Workers (Gomitra)

Gomitras are unemployed educated rural youths who are engaged primarily for artificial insemination (AI) in addition to first aid treatment of cattle through the State Implementing Agency (SIA), Orissa Livestock Resources Development Society (OLRDS). These 'Go-mitra' are also called as Private AI Workers and are currently working in the non represented areas of A.H. Department and other agencies like OMFED. Performance linked incentive of Rs. 500/- for each progeny born will be paid to Gomitra those who will be able to confirm over and above 3 calves in a month. The Gomitras will receive Rs. 1000/- per month to act as extension agent for conducting at least 10 village meetings. The support in form of incentive will be provided for three years.

It is expected that the total number of AI performed by the Gomitras will increase from 1.14 lakh at the present rate to 1.5 lakhs by 2015. Further the Gomitras will be motivated to perform 10% additional AI per month, which will result approximately 5000 more calves per annum.

c. Establishment of Frozen Semen Training Institute

Artificial Insemination has found to be an effective measure for genetic up gradation of cattle and buffaloes thereby increasing their productive and reproductive performances. The departmental personnel working in AI centers are being imparted with short course training to upgrade their skill and knowledge in animal breeding at FSAI training institute located in the premises of FSB Cuttack.

To achieve the objective of establishment of a separate Frozen Semen training institute a proposal was sanctioned under RKVY with a total project outlay of Rs.200.00 lakhs. During the year site selection, preparation of Detailed Project Report involving engineering personnel from Roads & Building Department of Govt. of Odisha was taken up. However the construction work for FSAI training institute was being kept held up as the matter is under Sub judice for land related issue.

VI. Users Charges

To make the Artificial Insemination programme self driven user charges is being collected at prescribed rate from the farmers. During the year 2015-16, an amount of Rs.14486606/- has been deposited by CDVOs towards user charges at OLRDS.

Comparative Statement of Artificial Insemination from 2014-15 and 2015-16

SL NO	DISTRICT	2014-15			2015-16		
		TARGET	ACH.	PROG. BORN	TARGET	ACH.	PROG. BORN
1	Angul	57836	42058	15877	57834	47478	16664
2	Bolangir	60000	57437	13818	61682	61297	24359
3	Balasore	101000	92767	30892	101807	100194	34363
4	Bargarh	93500	84414	37364	93506	93100	34879
5	Bhadrak	72068	52364	18610	72448	60047	19769
6	Boudh	26288	24866	7088	27194	27463	9151
7	Cuttack	167000	157650	63672	168871	169233	65899
8	Deogarh	16600	11997	4769	16175	12534	4981
9	Dhenkanal	52889	37540	14989	52836	40710	16811
10	Gajapati	13300	6611	2452	13073	8334	2982
11	Ganjam	83156	52737	20241	83027	50975	18899
12	Jagatsinghpur	134643	131469	51863	135473	139195	55530
13	Jajpur	79791	52268	16145	79797	57572	20253
14	Jharsuguda	16299	10089	4649	16031	10960	4047
15	Kalahandi	51000	48965	16402	51897	51389	13162
16	Kandhamal	16631	11532	2112	16426	10992	2104
17	Kendrapara	79171	78073	26411	80266	86985	33206
18	Keonjhar	76525	50850	21410	76528	54663	20527
19	Khurda	66525	49953	19594	66555	52493	19828
20	Koraput	46344	50909	9942	55613	44269	11345
21	Malkanagiri	19603	18717	5316	21465	20382	5551
22	Mayurbhanj	86561	60399	21410	85965	65440	22888
23	Nowrangpur	34405	32086	11897	36566	34487	10072
24	Nayagarh	36147	28736	9693	36146	32525	11562
25	Nuapara	22615	21764	4532	25224	23585	6165
26	Puri	129602	112469	48973	129975	131296	45160
27	Rayagada	28741	27721	6705	32847	29522	7617
28	Sambalpur	49894	38582	15792	49894	39670	15761
29	Sonepur	33941	30450	11263	34249	33845	10071
30	Sundargarh	49894	42070	14973	50468	43204	15413
	TOTAL:	1801969	1517543	548854	1829838	1633839	579019

Graph – Artificial Insemination and Progeny born from 2013-14 to 2015-16**FROZEN SEMEN PRODUCTION**

Year-wise Semen Production during 2015-16 to 2017-18

Breeds	2014-15		2015-16	
	Total Bulls	Production	Total Bulls	Production
Jersey	17	3.04	10	2.26
CB	17	2.27	28	3.38
CBHF	0	0	0	0
Haryana	14	1.90	15	2.34
RS	13	1.79	18	2.17
Total:	61	9.02	71	10.15



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