Vol 6 Issue 9 October 2016

ISSN No : 2230-7850

International Multidisciplinary Research Journal

Indian Streams Research Journal

Welcome to ISRJ

RNI MAHMUL/2011/38595 **ISSN No.2230-7850**

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board.Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.org

ISSN: 2230-7850 Impact Factor :4.1625(UIF) Volume - 6 | Issue - 9 | October - 2016

Indian Streams Research Journal

LIVESTOCK REARING AS AN ALTERNATIVE AGRICULTURAL SYSTEM IN DROUGHT PRONE ANANTAPURAM DISTRICT, ANDHRA PRADESH

J. Gopi[1], M. Karunakara Rao[1], A. Krishna Kumari[1] and T. Penchalaiah[2]

[1]Dept. of Geography, Sri Krishnadevaraya University, Ananthapuramu, Andhra Pradesh .

[2]Reader. Govt. Degree College, Rajampeta.

ABSTRACT

Livestock forms one of the components of the Indian economy and an vital sub division of Agriculture, shaping a necessary piece of product cultivating. Domesticated animals is complicatedly connected with the social, social and customary estimations of the life of India. The chances of business and independent work hurled by the domesticated animals particularly in rustic India is enormous. A sizable quantum of female populace is likewise required all the while. Dispersion of the animals riches is over every one of the sections of pay gatherings and structures an indispensable part in destitution lightening. Aside from giving direct wage and work openings in provincial territories, there are additionally numerous optional and tertiary organizations identified with domesticated animals. Some of them are identified with the creation of protein rich adjusted sustenance as drain, egg, meat, fleece, creature proteins, and crude material for modern utilize and esteem included items. Perceiving the significance of animals, an endeavor is made here to concentrate spatial examples of domesticated animals raising in dry spell inclined Anantapuram area which has turned into an essential option rural framework to the poor ranchers.

KEYWORDS: *Livestock forms , Indian economy , social, cultural and traditional values .*

INTRODUCTION :

Since 1991, the Indian economy has been developing at a rate of around 5 for each penny for every annum. Regardless of this the reality remains that 65 for every penny of the populace is subject to farming for work bolster (Singh and Ram, 1998). More than 2/third of the agriculturists have a place with the peripheral and little classifications (Sharma and Sharma, 2002) and subsequently are seriously compelled in raising wage through harvest development. The significance of animals for these parts and in improving country destitution barely should be overemphasized. The ubiqui-tous part of any town on India is the nearness

of 1-2 milch creatures or a couple of little stocks like goat or poultry in each family unit. Animals are practically necessary and indivisible segment of cultivating framework in the nation and keep on being dynamic accomplice of provincial poor in their attempt to manage themselves in troublesome conditions. Hence, as the responsibility for is all the more uniformly circulated with landless horticultural workers, little and peripheral ranchers, the advance in this area will bring about more adjusted improvement of the provincial economy by giving chances to business and wage era. However, the commitment of horticulture and partnered segments to the National Gross Domestic Product (GDP) has declined amid the most recent couple of decades (55 for every penny in mid 1950's to 39.5 for every penny in 1981 - 82 to 23.9 for each penny into rural GDP (Agricultural GDP is expanded reliably from 18.1 for each penny in 1980-81 to 19.5 for each penny 1990-91 to 25.5 for each penny in 2001-02 (Sharma, 2004). Between 1980-81 to 1997-98 estimation of domesticated animals division has expanded at a rate of 5.2 for each penny for every annum, which is double the development rate in horticultural area (Singh, 2002). The huge commitment that animals area makes to the national economy is an impression of numerous parts that domesticated animals play in the cultivating frameworks in the nation: Livestock advancement programs in India ought to be customized for the blended cultivating and little holding segment, as opposed to substantial scale endeavors. Moreover, the part of ladies in raising domesticated animals ought to be perceived. Around 71 for every penny of workforces occupied with the domesticated animals area in India are ladies (GOI, 2003).

Domesticated animals items are an engaging and advantageous supplement source. Protein and smaller scale supplement insufficiencies stay across the board in India in light of the fact that country individuals subsist on eating regimens that are totally made up to boring staples. The expansion of drain and meat gives protein, calcium, vitamin and different supplements that go ailing in eating methodologies that are only comprised of staples, for example, grains. Domesticated animals are a wellspring of business, vitality, plant supplement, salary for rustic poor, nourishment and outside trade, domesticated animals additionally have some financial or non-showcase benefits, which are essential to the survival and aggressiveness of little holder dairy cattle creation frameworks.

Governments and businesses must plan for the proceeding with development of the animals segment with long-run approaches and speculations that will fulfill shopper request, enhance nourishment, guide wage development chances to the individuals who require them most and ease ecological and general wellbeing stress. In this specific situation, an endeavor is made here to concentrate the examples of domesticated animals populace in Anantapuram locale. The information relating to Cattles, Baffaloes, sheep, Goat, poultry and pigs has been gathered for 2011 enumeration at mandal level and examinations the spatial pattens.

STUDY REGION

Anantapuram area is arranged in the south-western most piece of Andhra Pradesh state and it is one of the locale of Rayalaseema district. It lies between 13° 41' and 15° 15' N scope and 76° 50' and 78° 30' E longitude. It is limited by Kurnool locale on the North, Cuddapah area on the East, Chittoor region on the South – east and Karnataka state on the South and West. The locale is generally oval fit as a fiddle, the more drawn out side running North to South with a bit of Chitradurga area of Karnataka state encroaching into it from west amongst Kundurpi and Amarapuram mandals. The locale spreads over a territory of 19.13 lakh hectares bookkeeping 6.9 percent of the aggregate geological zone of Andhra Pradesh. It is the biggest region of the state as far as geological territory.

DATA & METHODOLOGY

Just auxiliary information is utilized as a part of the present review and insights relating to various Livestock classes has been gathered for 2011 evaluation taking mandal as unit from District arranging office and Hand Book of Statistics, Anantapuram District. Straightforward midpoints and rate investigation is connected to break down the information and mapped a similar utilizing ArcGIS programming.

Analysis

The aggregate animals populace in Anantapuram locale is assessed as 74,40,876 as per 2011 statistics. Of these, the sheep populace possesses in front of the rest of the competition involving around 73.31 percent,

poultry populace with 22.83 percent, trailed by Cattles (12.34%), Goats (12.22%), Buffaloes (7.06%), Pigs (0.32%) and others (1.91%) (Table-1).

Table -1: Total Live Stock Population in Anantapuram District

s.no	Category	Actual Number	% to the total Live stock of the District
1	Sheep	32,22,911	73.31
2	Poultry	1698866	22.83
3	Cattles	918535	12.34
4	Goats	909439	12.22
5	Buffaloes	525229	7.06
6	Pigs	23591	0.32
7	Others	142305	1.91
Total Live Stock		**7440876**	**100.00**

Cattle Population

The aggregate dairy cattle populace in the District is evaluated as 9,18,535 as indicated by 2011 statistics and it records to 12.34 percent to the aggregate Live stock populace of the area holding third position among all the Livestock (Table-1). The male steers (more than 3 years) are assessed as 3,13,140, female cows (more than 3Years) as 2,67,372 and youthful dairy cattle (beneath 3 years) as 3,38,023, their rates as 4.208%, 3.59% and 4.54% individually. To the aggregate cows populace of the area the rates of the above classifications are 34.09%, 29.11% and 36.80% individually (Table-2).

Table-2: Distribution of Cattles in Anantapuram District

s.no	Category	Actual number	Percentage total Live stock of the district	Percentage to the total cattle population of the district
1	Male cattles (over 3 years)	**313140**	**4.208**	**34.09**
2	Female cattles (over 3 years)	**267372**	**3.59**	**29.11**
3	Young cattles (below 3 years)	**338023**	**4.54**	**36.80**

Spatial distribution male Cattle (over 3 year's age)

In Anantapuram area, the aggregate male steers (more than 3 years) are evaluated as 313140 with its rate to the aggregate Livestock as 4.208% spatially, at mandal level, high focus (>10%) is showed up in Kanekal (12.42%), Vidapanakal (10.49%) and Vajrakarur (10.42%) mandals. High fixation (7.5-10%) is surfaced in Bommanahal, Gooty, Pamidi and Beluguppa mandals. In around 11 mandals of the area medium fixation (5-7.5%) is taken note. About the greater part of the mandals developed with low fixation (2.5-5%) of male dairy cattle populace. Low (< 2.5%) fixation is seen in 12 mandals of the review region.

As to rate of male cows (more than 3 years) to the aggregate District male dairy cattle populace, high (>4%) focus is seen in just a single mandal i.e., Kalyandurg with 4.05% took after by Guntakal (3.74%). Medium fixation (2-3%) is found in 15 mandals, while low focus (1-2%) is showed up in 31 mandals and low (<1%) in rest of the 15 mandals of the region.

Spatial distribution of female Cattle (over 3 years of age)

In the review zone, the aggregate female steers (more than 3 years old) are accounted as 2, 67,372 with 3.59% to the aggregate Live load of the locale. Spatially, at mandal level, high fixation (>4%) is seen in 21 mandals with a most extreme in Vidapankal (7.89%) mandal. High fixation (2-3%) in 11 mandals, low focus (1-2%) in 11 mandals and low (<1%) in Yellanur mandal as it were.

With respect to rate of female cows (more than 3 years old) to the aggregate region female cows populace, high (>4%) fixation is found in two mandals, to be specific Kalyandurg (5.27%) and Chilmathur (4.08%) mandals. High (3-4%) fixation is seen in Gorantla (3.07%) mandal. While medium fixation (2-3%) is seen in 13 mandals, low (1-2%) in 34 mandals and low (<1%) in 13 mandals of the review range.

Spatial distribution of young Cattle (below 3 years)

The aggregate number of youthful cows in Anantapuram locale is around 338023 with 4.54 percent to the Livestock of the region. It constituted more than 1/3 of the aggregate cows populace of the review region. At mandal level, high (4%) fixation is found in 30 mandals of the locale with a most extreme rate in Parigi (15.6%) mandal. High (3-4%) fixation is seen in 13 mandals, medium (2-3%) in 10 mandals, low (1-2%) in 8 mandals and low (<1%) in just two mandals.

The grouping of youthful steers to the aggregate region youthful cows displays high fixation (>4%) in Kalyandurg with 4.67 percent. High fixation (3-4%) is appeared in just Gorantla (3.07%), though medium focus (2-3%) in 13 mandals. Low focus (1-2%) in 34 mandals and low fixation (<1%) in 13 mandals of the area.

Buffalo population

In Anantapuram locale, the aggregate Buffalo populace is assessed as 5,25,229 as per 2011 statistics and it records to 7.06% to the aggregate Livestock populace of the region possessing fifth place in rate share. The male wild oxen (more than 3 years) are measured as 9702, female bison (more than 3 years) – 301393, and youthful wild oxen (underneath 3 years) – 214134. Their rates to the aggregate live supply of the locale range ascertained as 0.13%, 4.05% and 2.88% individually. To the aggregate bison populace of the locale, the rates of the above said classes are 1.85%, 57.38% and 40.77% separately. .

Spatial distribution of male Buffaloes (over 3 years)

In Anantapuram region, an aggregate number of 9702 male wild oxen were recorded by statistics with a rate of just 0.13 to the aggregate locale live stock populace. At mandal level, high (>4%) convergence of male Buffaloes has found in 8 mandals with a greatest in Tankal (9.76%) fallowed by Amarapuram (6.73%), Atmakur (6.14%), Narpala (5.46%), Vajrakarur (4.78%), O.D.Cheruvu (4.682%), Penukonda (4.528%) and Anantapuram (4.502%). High fixation (3-4%) is totally missing in the locale.

Table-3: Distribution of Buffaloes in Anantapuram District

s.no	Category	Actual number	Percentage total Live stock of the district	Percentage to the total buffalo population of the district
1	Male Buffaloes (over 3 years)	**9702**	**0.13**	**1.85**
2	Female Buffaloes (over 3 years)	**301393**	**4.05**	**57.38**
3	Young Buffaloes (below 3 years)	**214134**	**2.88**	**40.77**
Total Buffaloes		**525229**	**7.06**	**100.00**

Medium fixation (2-3%) is accounted for in 7 mandals, low focus (1-2%) in 9 mandals and low (<1%) focus the greater part of the mandals. The convergence of male wild oxen is totally truant in 5 mandals, for example, Mudigubba, Nallamada, Rolla, Amadugur and Somandepalle .

The rate of Male Buffaloes to the aggregate male wild oxen of the area uncovers that, in 7 mandals of the region, in 7 mandals of the locale, high (>4%) focus is accounted for and the mandals are Bommanahal (23.7%), Ramagiri (17.58%), Kenekal (10.10%), Brahmasamudram (7.66%), Dharmavaram (6.79%), Tadimari (4.44%) and Beluguppa (4.05%) mandals. High focus (3-4%) is truant totally in the locale and medium fixation (2-3%) is seen in Kalyandurg , Kambadur mandals. Low focus (1-2%) is seen in 7 mandals and low (<1%) in 42 mandals of the region. Male bison are totally missing 5 mandals of the area.

Spatial distribution of female Buffaloes (over 3 years)

Female bison which are a noteworthy hotspot for Milk generation are evaluated as 301393 representing 4.05% to the aggregate live supply of the area and 57.38% to the aggregate Buffalo populace of the locale, spatially at wild oxen to the aggregate mandal live stock demonstrates that, high fixation (>4%) is showed up in 26 mandals with a most extreme in Garladinne (8.74%. high (3-4%) fixation is found in 14 mandals, medium (2-3%) in 17 mandals, low (1-2%) in 6 mandals and low focus is totally missing in the locale.

In the examination of rate of Female Buffaloes to the aggregate female Buffaloes of the area, high (>4%) fixation is found in Guntakal (6.06%) and Dharmavaram (5.08%) mandals. High fixation (3-4%) is showed up in 6 mandals, medium focus (2-3%) in 6 mandals, low fixation (1-2%) in 32 mandals and low (<1%) in 17 mandals of the area.

Spatial circulation of youthful Buffaloes (underneath 3 years)

In the review region, the youthful wild oxen (beneath 3 years old) are evaluated as 214134 with rate of 2.88 to the aggregate Livestock of the area and 40.77% to the aggregate Buffalo populace of the locale. Distributionally, the rate of youthful load of wild oxen tot the aggregate mandal Live stock uncovers that the high (>4%) fixation is seen in 14 mandals of the locale with a greatest in Garladinne (7.66%) mandal. High (3-4%) fixation is seen in 12 mandals medium (2-3%) in 17 mandals, low (1-2%) in 18 mandals and low (<1%) in two mandals in particular Raptadu and Kanaganapalle.

With respect to the rate of youthful bison to the aggregate youthful wild oxen of the region, high (>4%) fixation is showed up in Guntakal (5.07%) mandal, High (3-4%) in 6 mandals, medium (2-3%) in 10 mandals, low (1-2%) in 33 mandals and low (<1%) in 13 mandals of the area.

Spatial distribution of Sheep population

The aggregate sheep populace in Anantapuram area is assessed 3222911 with a rate of 43.31 to the aggregate Livestock populace of the locale, holding ahead of everyone else in the aggregate Livestock populace of the region contrasted with other live stock classifications. Spatially at mandal level, high (>80%) centralization of sheep populace to the comparing mandal add up to Live stock is truant in the region. High fixation (60-80%) of sheep populace is seen in 6 mandals in particular, Kanaganapalle (73.63%), Raptadu (68.97%), Mudigubba (66.71%), Singanamala (64.73%), Kambadur (61.85%) and Atmakur (60.33%). Direct (40-60%) fixation in 24 mandals, low (20-40%) in 28 mandals and low (<20%) in just 5 mandals of the region.

The Analysis of rate of sheep to the aggregate District sheep populace uncovers that, high (>4%) fixation is found in 3 mandals in particular, Mudigubba (5.39%), Kanaganapalle (4.82%) and Raptadu (4.033%). High focus (3-4%) is seen in Atmakur, Singanamala, Kambadur and Ramagiri mandals, direct grouping of 2-3% is seen in 11 mandals, low fixation (1-2%) in 22 mandals and low (1%) in 23 mandals of the area.

Spatial distribution of Goat population

In Anantapuram region, the aggregate Goat populace is assessed as 909439 with 12.22 percent to the aggregate Livestock populace of the region, holding fourth place in the aggregate Livestock. Spatially, at mandal

level, high (.20%) convergence of Goats is connected with 9 mandals of the area, with a greatest in Penukonda (36.63%), trailed by Gandlapenta (29.37%), Talupula (24.75%), Gooty (23.57%), Madakasira (23.49%), Somandepalle (22.55%), Rayadurg (22.43%), D.Hirehal (22.26%) and Parigi (20.57%). High (15-20%) focus is found in 7 mandals, medium fixation (10-15%) in 24 mandals, low focus (5-10%) in 20 mandals and low (<5%) in O.D.cheruvu (4.22%), Guntakal (0.604%) and Tadipatri (0.362%).

The rate examination of Goat populace to the aggregate region Goats uncovered that, high (>4%) fixation is bound to Talupula (4.67%) trailed by High focus (3-4%) in Penukonda (3.718%), Kalyandurg (3.713%, Mudigubha (3.59%) and Gandlapenta (3.41%), medium fixation (2-3%0 is showed up in 11 mandals, low (1-2%) in 35 mandals and low (<1%) in 12 mandals of the locale.

Spatial distribution of Poultry

As indicated by 2011 registration of Livestock, the aggregate poultry un Anantapuram locale is accounted as 16, 98,866 with a rate of 22.83 to the aggregate Live stock populace holding second place (Table 6.1). The rate examination of poultry populace to the aggregate Live stock demonstrates that the high fixation (>40%) is seen in Tadipatri (41.61%), Kadiri (41.32%), Beluguppa (40.49%) and Hindupur (40.13%) mandals. High fixation (30-40%) is seen in 8 mandals, Medium (20-30%) in 28 mandals, low (10-20%) in 20 mandals and low (<10%) grouping of poultry is seen in Brahmasamudram (9.08%0, Kanaganpalle (8.92%) and Sattur (6.21%) mandals.

The investigation of poultry rate to the aggregate District poultry uncovered that the high (>4%) fixation is found in Guntakal (5.59%) and Tadipatri (4.35%), while high focus (3-4%) showed up in Dharmavaram (3.26%) and Kadiri (3.11%) mandals. Direct fixation (2-3%) is seen in 9 mandals, low (1-2%) in 37 mandals, and low (<1%) grouping of poultry to the aggregate locale poultry saw in 13 mandals amid the review time frame.

Spatial distribution of Pigs

Pig raising is likewise one of the occupations in a few segments of the populace. The aggregate pigs assessed in the area amid 2011 Livestock statistics are 23591 with a rate share of 0.32% to the aggregate Live load of the region. The rate examination demonstrates that the High (>2%) grouping of pig populace is not found in the region, while medium (1-2%) focus is found in just Anantapuram (1.16%) mandal and in 51 mandals of the review range the convergence of pigs is low (<1%) and 10 mandals, pigs are totally missing.

As to the rate examination of pigs at mandal level to the aggregate District pigs, High (>4%) focus is seen in Anantapuram (7.77%), Kalayandurg (5.91%), O.D.Cheruvu (5.09%), Tanakal (4.67%) and N.P.Kunta (4.48%) mandals. High (3-4%) fixation is seen in Uravakonda (3.5%), Singanamala (3.26%), Brahmasamudram (3.255%) and Dharmavaram (3.23%) mandals. Direct (2-3%) fixation in 11 mandals, low (1-2%) in 16 mandals and low (<1%) in 17 mandals of the region. In around 10 mandals, pigs are totally truant.

Aside from the Sheep, Poultry, Cattles, Goats, Buffaloes and Pigs, alternate classifications of Livestock in Anantapuram locale as per 2011 registration are Horses, Camels, Dogs, Rabbits which constitute around 142305 with 1.91 percent to the aggregate Live stock. Since they have irrelevant effect on the occupations of region agriculturists, they have not considered for the review.

REFERENCES:

1.Roop Raj, 2015, Relative share of livestock population of Haryana, International Journal of Advanced Research (2015), Volume 3, Issue 4, 790-796.
2.Chander, M. and Rathod, P. (2013). Investment in livestock extension activities by state departments of animal husbandry (SDAH) in India: An appraisal. Indian J. Anim. Sci., 83 (2): 185–189
3.Government of India. (2012). Annual report of department of animal husbandry, dairying and fisheries, New Delhi.
4.Government of India. 2003. Annual Report , Dept. of Dairying and Animal Husbandry, New Delhi
5.Hand Book of Statistics 2010-11, Chief Planning Officer, Anantapuram District, Andhra Pradesh.
6.Singh, K. 2002. Livestock sector in Indian economy: An assessment of performance, prospects and growth. In

Proceedings: 'Livestock in different farming systems in India', National Centre of Agricultural Economics and Policy Research, New Delhi.
7.Singh, K. 2002. Livestock sector in Indian economy: An assessment of performance, prospects and growth. In Proceedings: 'Livestock in different farming systems in India', National Centre of Agricultural Economics and Policy Research, New Delhi.
8.Singh, K. and Ram, K. 1998. Farm non-farm linkages in northern India. Project Report, NDRI (ICAR) and Swiss Centre for International Agriculture, Zurich, Switzerland.
9.Sharma, V.P. 2004. Livestock economy of India: Current status, emerging issues and long-term prospects. Indian Journal of Agricultural Economics. 59(3): 512- 554.

M. Karunakara Rao
Dept. of Geography, Sri Krishnadevaraya University, Ananthapuramu, Andhra Pradesh .

Publish Research Article
International Level Multidisciplinary Research Journal
For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper,Summary of Research Project,Theses,Books and Book Review for publication,you will be pleased to know that our journals are

Associated and Indexed,India

- International Scientific Journal Consortium
- OPEN J-GATE

Associated and Indexed,USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Indian Streams Research Journal
258/34 Raviwar Peth Solapur-413005,Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.isrj.org