

NOW & FUTURE:

Dairy sector in India has demonstrated a significant growth in past 10 years with milk production increasing at the rate of 4.8% CAGR, reaching 163.7 million MT in 2016-17. In the same period, the per capita availability of milk in India has increased from 233 gm. per day to 351 gm. per day. India ranks first in milk production, accounting for 20 % of world production.

There are three key drivers of increasing milk demand: (i) population growth (ii) urbanization and (iii) income growth.

The NAP has two key goals:

- a) To increase the national milk production from 163.7 MMT in 2016-17 to 254.55 MMT by 2021-22 for meeting the increasing milk demand by domestic milk production and also ensuring nutritional security at household level.
- **b)** To endeavor to double milk farmers income at farm level by 2021-22 by providing the milk farmer with greater access to the organized milk processing sector.



About 70 million rural households are engaged in dairying, one of every two rural households with women playing a vital role. According to "Situation Assessment Survey", the livestock sector contributes significantly to rural income- about 26 % in case of the poorest households and about 12% in case of overall rural Income.

The milk production which is envagished to be 254 MT in 2021-22 and 300MT by 2023-24 from the existing production will take growth of 9.2%. This will lead to per capita availability of milk from current level of 352 grams per day to 515 and 592 grams per day in 2021-22 and 2023-24 respectively. To required this growth , average In-milk animal productivity would be required to grow annually at the rate of 4.7% to 6.14% KGPD by 2021-22 and 6.7KGPD by 2023-24.



KAPILA (A FARMER'S CATTLE COMPANY)

History:

Started by my father: A visionary in 1991. I am surprised on his vision, He convinced people to buy feed then when people have not enough money for themselves to feed/for their basic needs (For his time, it was something different product with touch of GenNXT thought.)

He grew to his ability & opened his second factory in Kanpur with 50 tons of daily production & then he never looked back.

Values he had always inculcated in his work was:

- 1. People are the most important key factor in your business.
- 2. Time is money.
- 3. Quality product will never disappoint you.



KAPILA TODAY:

- Kapila today is having 4 factories in two in Kanpur, one in Gorakhpur &one in Punjab(will be operational in November 2018) spread in approx. more than 20 acre of area with 300000 sq. feet storage area.
- Having distributors network of 1000+ divided in 15+ states with more than 15000+ retail shops.

What values we have:

Like our father, we never compromised on his 3 most important values and today I proudly say that 85% dealer network belong to our father's time and we saw them grew with us. And today we call them a big happy "Family").



HOW WE ENJOY WORKING?

Being the GenNXT we have a lot of responsibility to carry our big family with us. To keep them close and to know where our customers are we use lot of technologies which can exactly updates us their goggle coordinates and end point.

Some of them are below:

- 1. Our entire System runs with ERP. To make sure to utilize our full recourses & stop any kind of leakages.
- 2. We have centrally located hi-tech security block which keep tracks on all the on-site/off site movement of man power to make sure they are they are enjoying too with us.
- 3. We have many humble companies who keeps us upgraded on site/off site training programs. And what is running around in terms of R&D.
- 4. We use software like repslay/CRM/Data collector/other graphical Google platform to make sure we are ahead of time/data collection and we don't miss anything.
- 5. Any body can disturb us anytime to make sure that we are ok...HA HA HA



GENNXT: PEOPLE, TECHNOLOGY & INNOVATION

What is this GenNXT? Why do we releated a progress to GenNXT? Technically we all are here GenNXT people. GenNXT comes with the thoughts & the most effective way we do things to make it look different and efficient. We are living in a world with continuous disruption. Changes are what we need to progress. In every area, we see continuous changes and up-gradation. And we also need to update and upgrade ourselves accordingly.

People evolve with the time to change & Sustain & to grow. Of course , our thoughts are restrained so we use things which are way smarter than Human mind. Which is Technology. But when technology meets with innovation: A disruptive scenario comes in places. Which helps us to grow and advanced our industry /knowledge.



When technology joins hands with Dairy farming; to measure physiological, behavioral, and production indicators on individual animals to improve management strategies and farm performance, it is called "Precision Dairy Farming."

In Precision Dairy Farming, technology is used for:

- Daily milk yield recordings
- Milk component monitoring (e.g. fat, protein, and SCC)
- Pedometers
- Automatic temperature recording devices
- Milk conductivity indicators
- Automatic estrus detection monitors and
- Daily body weight measurements.



The main objective of Precision Dairy Farming is to be able to maximize individual animal potential, detect diseases at an early stage, and control the use of medication through preventive health measures.

What are the potential benefits of Precision Dairy Farming?

- Perceived benefits of Precision Dairy Farming technologies include
- Increased efficiency,
- Reduced costs,
- Improved product quality,
- Minimized adverse environmental impacts, and
- Improved animal health and well-being.



These technologies are likely to have the greatest impact in the areas of health, reproduction, and quality control.

But, we already are the no.1 milk producers of the world producing.

Why do we need Precision Dairy Farming?

The answer is simple, even though we are no.1 producers of milk globally; we are barely into export of milk. This is because all the milk produced in our country is consumed within the country itself leaving absolutely no surplus to contribute to export.

Also, we do not produce processed milk products that hold high demands in the international market.



The Indian Dairy industry still holds an underdeveloped stand when compared with its foreign counterparts. There are many shortcomings that need to be corrected to take the industry further forward.

Like;

- Low average per animal productivity,
- High growth in output along with ever increasing demand within the country,
- High interest rates,
- Rapid urbanization,
- Underdeveloped infrastructure,
- Impoverish feeding methods,
- Low interest of younger generation in dairy farming,
- Increasing real estate price leading to loss of farmlands and
- The national policy on dairy is critical for the growth of dairy industry,



The government should encourage R&D within Dairy industry to enhance the quality and quantity of milk produced with the use of technology.

This all comes with proper education/knowledge, I was wondering we if all could run a program called <u>"Kisan shiksha, Pashu Dhan Suraksha".</u>

To initiate this we all have to come together to overall development of our farmers/their education and health of their cattle's.

Why we need such initiative?

- Lack of basic knowledge of cattle & their nutrition.
- Lack of medical facilities, sanitization & safety.
- Lack of knowledge on vaccination & treatments.
- Expensive & costly affair to maintain a cattle.
- Slow yield & return .



UNVEILING THE TRUTH OF INDIAN DAIRY INDUSTRY

Refer following data to implement such policies: As per the reports by Federation of Indian Animal Protection Organizations (FIAPO) As per their researches they found that Uttar Pradesh Is the highest producer contributing 17.6% (23.33 million tones annually), followed by Rajasthan (10.5%), Andhra Pradesh (now Telangana)(9.6%), Gujarat (7.7%), Punjab (7.3%), Madhya Pradesh (6.6%), Maharashtra (6.5%), Haryana (5.03%), Tamil Nadu (5%)2 and NCT of Delhi (2%).

Investigations reports are below which shows some dark face of our industry: 451 Dairies were visited in 10 States with 24,456 Cattle :



Which are following

State	No. of dairies	No. of cattles
Uttar Pradesh	50	2246
Rajasthan	49	1232
Telangana	45	1879
Gujarat	47	2446
Punjab	50	3998
Madhya Pradesh	42	2746
Maharashtra	35	3008
Haryana	48	3108
Tamil Nadu	35	1293
NCT Delhi	50	2500



RED LINES FOR CATTLE DAIRIES

Certain parameters have been called "Red Lines" as they have been identified as basic animal welfare conditions that are non - negotiable for cattle in dairies. These are:-

- **1. Flooring and bedding–** Dairy animals have a strong behavioral need to rest and spend most of their time resting. They must have a comfortable resting space. The bedding areas of all animals must be clean and comfortable with non-slip flooring. Bare concrete is not an acceptable surface especially for resting.
- **2. Tethering of animals–** Dairy cattle must not be chained or tied throughout the day. If required, cattle should only be tethered for a short period of time (on a reasonably long tether so as to allow the animal to sit and stand comfortably) as and when required by a veterinary doctor, for other anomalous conditions or for milking.



- 3. Use of Oxytocin- There must be no use of oxytocin for increasing milk let-down.
- **4. Separation of mother and calf (or weaning age of calves)–** The calves must stay with their mothers for a minimum

of 3 months to 6 months from birth.

- **5. Management of male calves–** Male calves must not be left to die or abandoned or illegally sold.
- **6. Veterinary care** Adequate veterinary care must be provided with regular checkups for cattle.

The nationla terriotry capital of delhi fares the worst amongst all state in terms of dairy cattle management:

- 100% of dairies don't allow free access to cattle.
- None had male calf more than two months of age.
- The diaries are flourishing in illigal establishements.
- Minimal veterinay care & discriminated use of of oxytocin.



<u>Uttar Pradesh</u>: is the largest producer of Milk in India.

Key Findings:

Housing:

56% dairies had brick and cement flooring & 76% diaries didn't't provide any form of bedding to the cattle.

74% cattle were not allowed to roam free without tether.

Milking:

22% diaries use oxytocin during milking & 50% dairies don't allow calves to wean off naturally till the mother allow suckling.

Veterinary care:

92% dairies didn't't have a regular visiting veterinarian & called only in sickness /pregnancy.

Male calf abuse:

18% didn't have nay surviving male calf. 24% sold the calves for slaughter.

Other important parameters:

- 46% diaries don't have proper light.
- 70% don't have proper resting space.
- 48% use sick & ill animals for breeding.
- 70% discard their older and unproductive cattle & 24% sell to slaughter .



Rajasthan: Is the second largest producer of the country.

Key findings are below:

Housing:

51.06% had brick brick & cement flooring & 87.2% tied their cattle on a short tether at all times.

Milking:

14.3% dairies used oxytocin while milking & 2.5 months was average weaning age.

Veterinary care:

57.45% dairy owners only have on call access to vets. & they called only during emergency situation only.

Unwanted animals:

Male calf abuse: 42.9% dairies didn't't have even a single surviving male calf.

Other important parameters:

- 98% don't have proper lighting in their area.
- Lack of adequate resting space.
- 40.8% dairies use sick and ill cattle of milking.



Similarly to UP & Rajasthan every states has these common problems. To eliminate them I think CLFMA should run a program called **"Kisan Shiksha, Pashu dhan suraksha".**

Which can be done as follows: (Just a thought)

- Dividing each states into blocks and per blocks can be taken by some cattle feed company to put educational session & monthly health check ups to increase their knowledge. Because today we have "KISAN & JAWAN" who saved our image to the world. We can contribute little to help them save & improve their lifestyle& livelihood by doing such initiative.
- Intervention of government support can help running the initiative & courage more companies to join.



POTENTIAL RISK & MITIGATION MEASURES IN CATTLE INDUSTRY

Potential Risk	Miti gation Measures
 Increased availability of milk will lead to increased supply of milk in the market decreasing the consumers' price subsequently leading to decrease in producers' price hampering their income. Increase bovine population would put increase pressure on fodder & water resources. Increased bovine population would require input services like animal health care. Artificial insemination, vaccinations facility etc. Increase in bovine population might impact the environment through methane emission. 	 export opportunities for which it would be necessary to create suitable infrastructure & produce dairy products meeting the international standards. Measures would need to taken to increase the productivity of existing in-milk animals and also to increase the ratio of production bovines in the overall bovine populations. Appropriate intervention for conservation of feed & fodder would need to be adopted along with promoting use og high yield fodder.
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Thank you CLFMA...!!

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