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# Digital Footprint in Accelerating the Growth of Livestock Sector

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## Introduction

There is a great role of Animal husbandry sector in the GDP of the country which can be easily seen as it continue to be integral part of the human life since the process of civilization started. It contributed not only to the food basket and draught animal power but also by maintaining ecological balance. Due to conducive climate and topography it played prominent socio-economic role in India. They also play a significant role in generating gainful employment in rural sector, particularly among the landless, small and marginal farmers and women, except presenting reasonably-priced and nutritious meals to the hundreds of thousands of people. It acts as complementary and supplementary enterprise. As per the estimates NSS 68 round (July 2011- June 2012) survey on employment and unemployment, 16.44 million workers as per usual status were engaged in the activities of the farming of animals, mixed farming and fishing. It offers employment to approximately 8.8% of the population. Animal husbandry contributes 4.11% GDP. India has giant farm animals' resources. It is envisioned that greater than 70% of the worlds farm animal's populace is in India and china. Yet they contribute only 25% of the worlds farm produce. To overcome the gap various efforts has been made by the government to improve the productivity and to fulfill the increasing demand of the population. This gap arises due to the several shortcomings like lack of awareness, non availability of timely information etc.

From the old times we are seeing the use of different ICT tools like radio for information gathering and entertainment purposes. This is further improved by the advent of the television. In this launch of computer brought the storm in the communication and technology sector. This is considering one of the best ICT innovations. Nowadays we can see

mobile phone as one of the best ICT tools which provide us a huge opportunity to empower and strengthening the Animal husbandry sector. Seeing the number of active internet users in the rural areas i.e. 339 million. It is realized that there is vast opportunity for utilization of internet for providing the timely information and effective use of information by the farmers. In this virtual age, we've got an possibility to convert lives of humans in methods that changed into difficult to assume simply multiple many years ago. Due to this government launches a flagship programme with a vision to transform India into a digitally empowered society and knowledge economy through several schemes under digital India initiatives. There is explosive boom visible within side the virtual bills in current years. Other digital India initiatives are PAHAL, Digidhan abhiyaan, mygov, smart cities, Aadhaar enabled payment system, targeted public distribution system etc. There are 9 pillars for digital India like

- Mobile Connectivity to all
- Public Internet Access Programme
- e-Governance: Government reformation through Technology
- e-Kranti - Delivery of electronic Services
- Information for All
- Electronics Manufacturing IT for Jobs
- Early Harvest Programmes
- Broadband Highways

As we are familiar with the term carbon footprint, ecological footprint similarly there is a term digital footprint which is used to describe the impressions or traces which we left behind on the internet or on various applications. It comprises of two terms one is digital and another one is footprint. Footprint means the impressions left behind by a person. Digital is used to describe the traces of the internet.

**"The digital revolution is far more significant than the invention of writing or even of printing".**

**Douglas Engelbart**

Digital Footprint means a record of your online activity. Information approximately a selected man or woman that exists at the net because of their online activity.. One's unique set of traceable digital activities, actions, contributions, and communications manifested on

the internet or digital devices. Also called as digital shadow and electronic footprint. The Word Digital originates from Latin word Digitus which means toe or finger. Digital footprint is of two types one is Active: when one deliberately submits the information. Ex. Social media etc. Other one is Passive: data that is leave unintentionally on internet. Ex. Browse history etc. The carbon footprint of our gadgets, the net and the structures assisting them account for approximately 3.7% of worldwide greenhouse emissions.

## Significance of Digital Footprint

- Speed of the development and application increasing exponentially.
- Uncovering new potential to enhance the key pillars of defending and maintaining good animal health.
- Allowing for a level of individualized care never before achieved.
- Provided more, better and earlier data.
- It creates a person's digital identity.
- Helpful in providing needy items in online shopping.
- Necessary to protect to avoid exploitation from online hackers.
- Relatively permanent.
- Better social networking experience.
- Appropriate ads for user.
- Made easy our online world.
- More first rate and accurate.
- Better geographical location.
- Preparation and presentation of relevant online content.
- Language suitability.
- Saves time.

## Negative impact of digital footprint

- Predisposes to hackers.
- Misuse by the companies for selling the items.
- Use by college officers to know more about the applicant.
- Affect the children in wrong way.

## Role of Digital Footprint in Animal Husbandry Sector

Three categories of technology in which these digital footprints are used:

a) Monitoring: To track the vital signs of the animal through activity trackers.

b) Diagnostics: To know the level of different toxic substances and deficiencies in blood.

c) Treatment: To treat the diseases through various devices such as micro fluidic devices.

Digital development in livestock technology: Animal intelligence software, ear tag sensors, smart collars, activity trackers, etc. Benefits of these developments: Disease control, Productivity, Animal welfare, one health, Traceability, Sustainability, Patient care etc. Mobile apps in Animal husbandry sector:

| S.No. | Institute | Applications |
|-------|-----------|--------------|
| 1 | ICAR | Kisaan, ICAR-technologies |
| 2 | CIRG | Bakrimitra |
| 3 | CIRB | Bufelth |
| 4 | IVRI | Dairy manager, Pig farming, vaccination guide |
| 5 | IARI | KVK |
| 6 | CSWRI | Avimitra |
| 7 | NRC Equine | Infoequine |
| 8 | GOI | m-kisan |
| 9 | CIFA | Matsyasetu |
| 10 | GADVASU | Precision dairy farming |

**Future of digital footprint**

 i.    Play a crucial role in recruitment process.

 ii.   Play a vital role in disease diagnosis with the help of activity trackers as they detect minor changes.

 iii.  Improve in production due to timely detection of disease.

 iv.   Economic losses can also be prevented.

 v.    Early diagnosis of zoonotic disease prevents outbreaks.

 vi.   Helpful in reduction of antibiotic resistance.

 vii.  Saves time.

 viii. Provides better match making.

 ix.   Provide information about vitamin and mineral deficiency in the body of animal.

**Conclusion**

It is better to have prevention plan than the cure. So for better management of the livestock and to reduce the losses from various livestock diseases it is very necessary to early diagnose the ailment. And for this we have to use the digital footprint in the Animal

husbandry sector so as to improve the quality of life of the livestock owner. Digital footprint helps in reducing the feeding cost and treatment cost by proper up to date alert notifications. Digital footprint also reduces the language barrier among farmers and between farmer and other advisories.

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