



**Institutional Development Plan (IDP), SKUAST Jammu**  
**Strengthening Institutional Capacities for Delivering Competent Skilled Professionals**

**TRAINING COMPENDIUM**

**Two Days Entrepreneurship Programme on “Start-up Opportunities for Profitable Livestock Farming”**



17th and 18th June, 2022

**Organized By**

**IDP, SKUAST Jammu**

**F.V.Sc. & A.H., SKUAST-J, R.S. Pura**



**Editors:**

**Jonali Devi**  
**Kamal Sarma**  
**Pranav Kumar**  
**Anil Bhat**  
**Ankur Sharma**  
**Rizwan Jeelani**

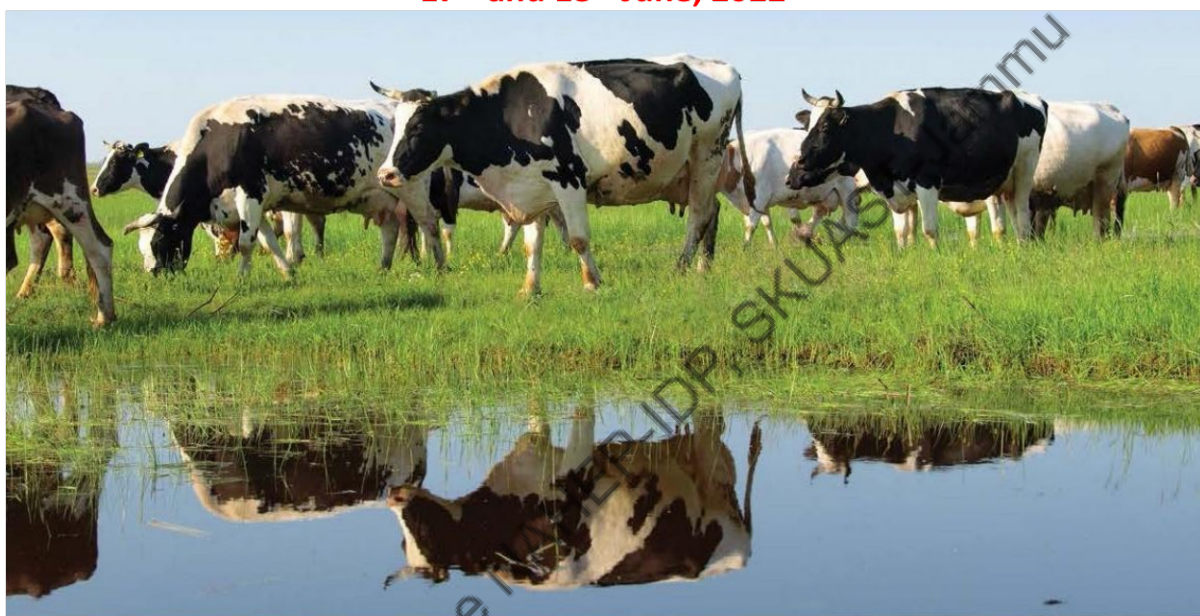




**Institutional Development Plan (IDP), SKUAST Jammu**  
**Strengthening Institutional Capacities for Delivering Competent Skilled Professionals**

**TRAINING COMPENDIUM**

Two Days Entrepreneurship Programme  
on  
**“Start-up Opportunities for Profitable Livestock Farming”**  
**17<sup>th</sup> and 18<sup>th</sup> June, 2022**



**Compilation and Editorial Board:**

*-Dr. Jonali Devi, Professor & Head, Div. of Vety. Physiology & Biochemistry,  
F.V.Sc. & A.H., R.S. Pura and Associate Member, NAHEP, SKUAST-J*

*-Dr. Kamal Sarma, Professor, Div. of Vety. Anatomy, F.V.Sc. & A.H., SKUAST-J, R.S. Pura*

*-Dr. Pranav Kumar, Asstt. Professor, Div. of VAHEE, F.V.Sc. & A.H., SKUAST-J, R.S. Pura*

*-Dr. Anil Bhat, Assistant Professor, Div. of ABM, SKUAST-J, Chatha*

*-Dr. Ankur Sharma, Asstt. Professor, Div. of Surgery & Radiology, F.V.Sc. & A.H., SKUAST-J, R.S. Pura*

*-Dr. Rizwan Jeelani, Asstt. Professor (Contr.), Div. of VAHEE, F.V.Sc. & A.H., SKUAST-J, R.S. Pura*





**Prof. J. P. Sharma**  
Vice-Chancellor  
SKUAST Jammu



## Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu

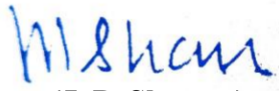
I am pleased to learn that Faculty of Veterinary Sciences & A.H., Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu is organizing a two days entrepreneurship programme on “Startup Opportunities for Profitable Livestock Farming” on 17<sup>th</sup> and 18<sup>th</sup> June, 2022 in collaboration with NAHEP-IDP at it’s R. S. Pura campus.

Government of India has come up with exciting programmes to support startup ecosystem and to nurture innovations and launched Startup India Action Plan for bringing in policies and frameworks that can support and nurture the startup eco-system. Livestock sector plays an important role in rural livelihood, employment and income generation. There is a huge opportunity in this sector for developing start-up/entrepreneurial ventures at their own and generation of employment.

The programme will serve as a platform for providing an opportunity to the upcoming veterinary graduates to discuss and exchange ideas/knowledge/experiences with the experts/resource persons and inculcation of ideas for future strategies. This will also impart them exposure on livestock economics, value chain & FPO formation, processing, financing, marketing, branding, ethics, morals and values in livestock sectors.

I hope that the deliberations of the programme will result in creating a road map in promoting entrepreneurship for employment generation in livestock sector and substantially increase the income of farmers.

I extend my best wishes for the success of the entrepreneurship programme.

  
(J. P. Sharma)



**SKUAST**  
Jammu

Main Campus, Chatha  
Jammu (J&K), India - 180009

Visit us at: [www.skuast.org](http://www.skuast.org)  
E-mail: [vc@skuast.org](mailto:vc@skuast.org)







**Prof. M. S. Bhadwal**

Dean, F.V.Sc & A.H  
SKUAST Jammu



## Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu

It is the matter of great pleasure that the Faculty of Veterinary Sciences & A.H., Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu is organizing a two days entrepreneurship programme on “Startup Opportunities for Profitable Livestock Farming” from 17<sup>th</sup> and 18<sup>th</sup> June, 2022 at F.V.Sc. & A.H., SKUAST-J, R.S. Pura in collaboration with the NAHEP-IDP, SKUAST-Jammu. India is emerging as a global destination for Innovation, Incubation and Start-ups and provides great opportunities for young generations. Livestock sector plays an important role in rural livelihood, employment and income generation. There is a huge opportunity in this sector for developing start-up/entrepreneurial ventures at their own and generation of employment. This is all possible if the skilled and fresh Veterinary graduates can be motivated to choose smart and profitable livestock and poultry based entrepreneurial ventures.

I hope that the deliberations of the programme will enlighten and inculcate ideas in upcoming Veterinary graduates in promoting entrepreneurship for employment generation in livestock sector.

I extend my warmest wishes and congratulations to the organizers for their endeavors in making this kind of entrepreneurial interface possible.

(M. S. Bhadwal)



**SKUAST**  
Jammu

F.V.Sc & A.H, R. S. Pura  
Jammu (J&K), India - 181102

Visit us at: [www.skuast.org](http://www.skuast.org)  
E-mail: [deanfvsc@gmail.com](mailto:deanfvsc@gmail.com)







**Prof. B. C. Sharma**

Principal Investigator  
NAHEP-IDP  
SKUAST Jammu



## Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu

I am delighted to learn that Faculty of Veterinary Sciences & A.H., Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu is organizing a two days two days entrepreneurship programme on “Startup Opportunities for Profitable Livestock Farming” from 17<sup>th</sup> and 18<sup>th</sup> June, 2022 at F.V.Sc. & A.H., SKUAST-J, R.S. Pura in collaboration with the NAHEP-IDP, SKUAST-Jammu.

Livestock sector plays an important role in rural livelihood, employment and income generation. There is a huge opportunity in this sector for developing start-up/ entrepreneurial ventures at their own and generation of employment.

I hope that the entrepreneurial programme will provide an opportunity to the budding Veterinary graduates to deliberate and exchange ideas/knowledge/experiences with the experts/resource persons and for generation of ideas for future strategies.

I wish the entrepreneurial programme a grand success.

(B. C. Sharma)



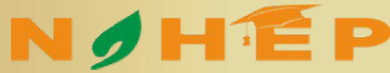
**SKUAST**  
Jammu



Main Campus, Chatha  
Jammu (J&K), India - 180009

Visit us at: [www.skuast.org](http://www.skuast.org)  
E-mail: [idp.jammuskuast@gmail.com](mailto:idp.jammuskuast@gmail.com)





**Institutional Development Plan (IDP), SKUAST Jammu**  
**Strengthening Institutional Capacities for Delivering Competent Skilled Professionals**

**Two Days Entrepreneurship Programme on**  
**“Start-up Opportunities for Profitable Livestock Farming”**



**17<sup>th</sup> & 18<sup>th</sup> June, 2022**

**Venue:**  
**FV.Sc. & A.H, SKUAST-J, R.S.Pura**

**Chief Patron**



*Prof. J. P. Sharma, Vice Chancellor & IDP Team leader SKUAST-Jammu*

**Patron**

*Prof. Rakesh Nanda  
(Director Education, SKUAST Jammu)*

*Prof. M.S. Bhadwal  
(Dean, F.V.Sc. & A.H, SKUAST Jammu)*

**Convener**

*Prof. B.C. Sharma, Principal Investigator  
(IDP, SKUAST- Jammu)*

**Co-Convener**

*Prof. Vikas Sharma  
(Associate Coordinator, IDP)*

**Course Coordinator**

*Dr. Jonali Devi, Professor & Head, Division of Vety. Physiology & Biochemistry, F.V.Sc. & A.H., R.S. Pura and Associate Member, IDP, SKUAST-Jammu*

**Course Co- Coordinator**

*Dr. Kamal Sarma, Professor, Division of Vety. Anatomy, F.V.Sc. & A.H., SKUAST-Jammu, R.S. Pura*  
*Dr. Pranav Kumar, Asstt. Professor, Division of VAHEE, F.V.Sc. & A.H., SKUAST-Jammu, R.S. Pura*  
*Dr. Anil Bhat, Assistant Professor, Division of ABM, SKUAST-Jammu, Chatha*  
*Dr. Ankur Sharma, Asstt. Professor, Division of Surgery & Radiology, F.V.Sc. & A.H., SKUAST-Jammu, R.S. Pura*



# Details of Expert Lectures:

## Day-1 (17.06.2022)



**Prof. J. P. Sharma**  
Hon'ble Vice Chancellor, SKUAST Jammu  
*Topic: Entrepreneurial opportunities in Agriculture*



**Dr. Sashanka Sekhar Dutta**  
Social Entrepreneur, Chief Functionary and Managing Trustee of JBF (India) Trust, Guwahati, Assam  
*Topic: Entrepreneurship Opportunities as a Veterinary Graduate*



**Dr. Smriti Rekha Dutta**  
Chief Clinician and Small Animal Surgeon, Programme Director, JBF (India), Guwahati, Assam  
*Topic: Scopes and Opportunities in Animal Welfare*



**Dr. Devesh Thakur**  
Assistant Professor, Department of VAHE, CSKHPKV, Palampur  
*Topic: The Anatomy and Psychology of Entrepreneurship*

## Day-2 (18.06.2022)



**Dr. Adarsh Tiwari**  
Technical Manager, North India and Consultant, Serval India Animal Nutrition, Prayagraj, U.P  
*Topic: Entrepreneurship in Animal Husbandry: Opportunity, Scope and Real Experience*



**Sh Kulbhushan Khajuria**  
Entrepreneur, Krishna Dairy Farm, Jammu  
*Topic: Success Story of Progressive Dairy Farmer*



**Dr. Anil Bhat**  
Assistant Professor, Division of ABM, SKUAST-Jammu, Chatha  
*Topic: Leveraging Agri-startups through Agricultural Marketing*



**Dr. Jeevan Jyoti**  
Associate Professor, Department of Commerce, University of Jammu  
*Topic: Understanding different aspects of a business plan/how to write a business plan*

### IDP TEAM

Team Leader: Prof. J. P. Sharma, Vice Chancellor, SKUAST Jammu.

IDP Coordinator: Prof. B.C. Sharma, Head, Division of Agronomy, SKUAST Jammu.

IDP Associate Coordinator: Prof. Vikas Sharma, Head, Division of Soil Science & Agril. Chemistry.

### Nodal Officers

Prof. Romesh K. Salgotra, Coordinator, School of Biotechnology.

Prof. Manish Kr. Sharma, Head, Division of Statistics & Computer Science.

Dr. Neelesh Sharma, Asstt. Professor, Division of Veterinary Medicine.

Dr. Nrip Kishore Pankaj, Asstt. Professor, Division of Veterinary Pharmacology & Toxicology.

# CONTENTS

Chapter	Topic	Page No.
1.	<b>Prospects and Potential of Agri-Business Entrepreneurship for Enhancing Income and Employment</b> <i>-Prof. J. P. Sharma</i>	1
2.	<b>Entrepreneurship Opportunities for Veterinary Graduates</b> <i>-Dr. Sashanka Sekhar Dutta</i>	17
3.	<b>Entrepreneurship in Animal Husbandry</b> <i>-Dr. Adarsh Tiwari</i>	23
4.	<b>The Anatomy and Psychology of Entrepreneur</b> <i>-Dr. Devesh Thakur</i>	27
5.	<b>How to Write a Business Plan?</b> <i>-Dr. Jeevan Jyoti</i>	33
6.	<b>Role, Scopes and Opportunities of a Vet in the Field of Animal Welfare</b> <i>-Dr. Smriti Rekha Dutta</i>	37
7.	<b>Government Schemes and Outreach Programmes for Entrepreneurship in Livestock Sector</b> <i>-Pranav Kumar and Maninder Singh</i>	41
8.	<b>Entrepreneurial Opportunities in Agriculture and Allied Sectors</b> <i>-Rizwan Jeelani, Kamal Sarma, Jonali Devi and S. A, Khandi</i>	63
9.	<b>Leveraging upon Agri startups through Agricultural Marketing</b> <i>-Dr. Anil Bhat</i>	69
10.	<b>Shri Kulbhushan Khajuria: A Vivid Story of a Successful Entrepreneurial Journey of a Dairy Farmer</b> <i>-Dr. Pranav Kumar</i>	77



# Prospects and Potential of Agri-Business Entrepreneurship

## for Enhancing Income and Employment

1

**Prof. J. P. Sharma**

*Vice Chancellor, SKUAST-Jammu*

India is an agrarian country and the agriculture and allied sector is the largest employer of workforce as it accounted for a sizeable 18.8 per cent in 2021-22 in Gross Value Added (GVA) of the country (Economic Survey 2021-22). Agriculture is the primary source of livelihood for about 58% of India's population and only the food processing industry employs about 1.77 million people (Indian Agriculture and Allied Industries Industry Report, November 2021). In the year 2019-20, gross value added by agriculture, forestry, and fishing was estimated at Rs. 19.48 lakh crore (US\$ 276.37 billion). But still farming community has to face lot of hardships. The farmers are still applying chemical fertilizers on the basis of their own experiences as they don't possess the soil health cards. Although central government has initiated Soil Health Management (SHM) scheme to assist State Governments to set up new static Soil Testing Laboratories (STLs) and Mini Soil testing Labs (MSTLs). But it is time consuming and cumbersome process. There is great opportunity for Agri-business entrepreneurs with a commercially viable solution to farmers by development of simplified, sensor based and quick soil testing methods to test the nutrients and micronutrients.

Although India has achieved self-sufficiency in food grain production, but still one of the biggest issues facing the agricultural sector in India is low yield. The average productivity of different food grain crops in India is 30-50% lower than that of developed nations. The major factors contributed in low productivity includes: average farm size, poor infrastructure, low use of farm technologies and best farming techniques, decrease of soil fertility due to imbalance application of fertilizers and pesticides, limited access to credit, support expertise, educational services or irrigation solutions, Poor storage facilities. The challenge of seeking affordable, accessible, easy-to-use technologies, products or services to enhance agricultural productivity in India creates opportunities for young entrepreneurs to establish their startups to provide timely solutions. More than 40% of food production is destroyed by insect-pests every year. This loss occurs despite of the application of approximately 3 million tons of pesticide per year plus the use of a wide array of non-chemical controls, like crop rotations and biological control. Due to lack of effective, affordable and eco-friendly technologies to control pests, farmers are left with no choice but to continue spraying harmful and toxic pesticides on crops. The challenge creates new opportunities for young minds to come up with technology solutions to substitute the use of pesticides & insecticides to prevent pre-harvest losses. Burning of crop stubbles, stray and other left over contributing between 12 and 60 Particulate Matter concentration and has been identified as a major health hazard. In addition, it causes loss of vital components such as nitrogen, phosphorus, sulphur and potassium from the top most layer of the soil making the land, less fertile and unviable for agriculture in the long run. These challenges are creating new opportunities for young agripreneurs to come out with technological solutions to discourage crop residue burning. To do the agriculture on scientific lines requires availability of small agricultural implements/ micronutrients/certified quality seeds. This creates scope for youths to come out with agri-business entrepreneurs that can provide small agricultural machinery to farmers through Custom Hiring Centres and other necessary inputs through online/call center.

The concept of Agri-Business is now changing minds and farmers' also are now becoming an entrepreneur. Small-scale farmers all over the world have shown a remarkable

ability to adapt. They look for better ways to organize their farms and enhance their income. They try new crops and cultivars, better animals, and alternative technologies to increase productivity, diversify production, and reduce risk – and to increase profits. They have become more market oriented and have learned to take calculated risks to open or create new markets for their products. They need to be innovative, forward-looking, capability of managing their businesses as long-term ventures and ability to identify opportunities and seize them. The farmer having an entrepreneurial spirit tries to act differently and make decisions about the value chain to be followed in his farm to increase the return and profits of the farm business.

Agribusiness is a term used to describe the sector that encompasses all economic activities that are related to farming, i.e., breeding, crop production/farming, farm machinery, distribution, marketing etc. It relates to industries that are engaged in farming or that produce farm inputs. Examples of agribusiness include farm machinery manufacturing, seed supply, and agrichemicals. It also is used to describe businesses that are involved in the marketing and distribution of farm products. These businesses include warehouses, wholesalers, processors, retailers, and more. Any company that participates in the production, marketing, safety, and distribution of food is involved in agribusiness. More precisely it is defined as a sector that supports the growth of the agricultural industry, which is pivotal to economic growth. It also continues to play a crucial role in the growth of developing countries. Agribusinesses can potentially improve agricultural productivity, which is why governments often offer subsidies to agricultural businesses. Agricultural activities also contribute to an improved system of food security and sustainable food production, as well as income for a majority of the poor in developing countries. However, the activities increase the emission of greenhouse gases and contribute to global warming – which is why innovation is important in the sector to address such problems.

Entrepreneur refers to an individual that has an idea and intends to execute on that idea, usually to disrupt the current market with a new product or service. Entrepreneurship in agriculture can also be defined as the formation of novel economic organization for the intention of growth under risk and uncertainty in agriculture (Dollinger, 2003). Contrary, Gray (2002) defines an entrepreneur as an individual who controls a business with the purpose of growing the business along with leadership and managerial skills necessary for achieving those goals. The most prominent example of entrepreneurship is the starting of new businesses. In economics, entrepreneurship connected with land, labour, natural resources and capital can generate a profit. The entrepreneurial vision is defined by discovery and risk-taking and is an indispensable part of a nation's capacity to succeed in an ever-changing and more competitive global marketplace. Many small-scale farmers and extension organizations understand that there is little future for farmers unless they become more entrepreneurial in the way they run their farms. They must increasingly produce for markets and for profits. Becoming more entrepreneurial can be a challenge for small-scale farmers. They will need help from extension workers and other institutions.

### **Importance of Agri-Business Entrepreneurship**

Agri-Business entrepreneurship is important for national economy in following ways (Sah, 2009).

- i) It helps in achieving productivity profit by small farmers and amalgamating them into local, national and international markets.
- ii) It helps in decreasing food costs and provides high quality diets to the rural and urban poor in the country.
- iii) It accelerates growth, diversifies income and develops entrepreneurial opportunities in both rural and urban areas.



## Prospects and Potential

In India, the losses in postharvest sector are estimated to be from 10 to 25 per cent in durable, semi-perishable products like milk, meat, fish and eggs. The estimated losses in fruits and vegetables are higher and reached from 30 to 40 per cent. These percentages are not acceptable and adversely affect the Indian economy. Only 2.2 % of commodities are processed. In contrast, countries like USA (65%) and China (23%) are far ahead of India in reducing the post-harvest losses and enhancing the value addition and shelf life of the farm products. This has ample scope to provide technological solutions to increase the efficiency of the agricultural chain and ultimately reduce waste while increase farmers' earnings. The potential and scope for agribusiness entrepreneurship in India can be summarized as under:

1. India has diverse climatic conditions for production of various types and varieties of fruits and vegetables such as tropical, subtropical.
2. There is growing demand for agricultural inputs like hybrid seeds, fodder, organic fertilizers etc.
3. Export can be harnessed as a source of economic growth. As a signatory of World Trade Organization, India has vast potential to improve its present position in the World trade of agricultural commodities both raw and processed form. The products line include cereals, pulses, oilseeds and oils, oil meal, spices and condiments, fruits and vegetables, flowers, medicinal plants and essential oils, agricultural advisory services, agricultural tools and implements, meat, milk and milk products, fish and fish products, ornamental fish, forest by products etc (Sundar, 2016)
4. Production of vegetables and flowers under green house conditions can be taken up to harness the export market.
5. Trained human resources in agriculture and allied sciences will take on agricultural extension system due to dwindling resources of state finance and downsizing the present government agricultural extension staff as consulting services.
6. Development in agriculture increases the employment opportunities in the country
7. Livestock in the country can provide one of the successful enterprises
8. Bee keeping and apiary is one of the profitable enterprise.
9. As India is rich in forest resources, it provides opportunities in this sector also.

### Agribusiness Entrepreneurship Potential in India

India has various areas where agribusiness is being done successfully. Organic farming, fruit juices, fruit pulps, flavours, candies, pickled products, frozen food items, processed milk products, value added products, organized food retailing, mushrooms, medicinal plants are few of them. They are discussed below in detail:

1. **Organic farming:** Organic agriculture is expanding fast. The share of agricultural land and farms continues to grow in many countries. 2.4 million producers were reported, more than 3 quarters are in developing countries. Asia and Africa constitute for more than half of world organic producers with 35% and 30% producers respectively followed by Latin America 19%, Europe 14%, North America 1% and Oceania/ Australia 1%. Oceania/ Australia constitutes for only 1% of producers despite having the maximum share of land which shows that Australia has highest per capita land holding. Coming down to countries, India has highest number of organic producers followed by Ethiopia, Mexico and Uganda (FiBL, 2017). Organic agriculture market contributes to US \$ 81.6 billion. The global organic food market which is estimated at USD 90 billion in 2015 has been growing at a CAGR of around 12% of last 14 years. In 2016, the global organic food market has a value of USD 100 billion,

an increase of 60% since 2010. Europe and North America together generate about 90% of the global organic food sales. USA, Germany, France and Italy are the leaders in consumption of packaged organic products. United States leads the market with a market size of over USD 39 billion (47%) followed by Germany (11%) and France (7%). Japan leads the Asian countries in terms of organic food consumption with nearly 54% of the share in 2010 (IFOAM, 2017). In terms of highest per capita consumption, Switzerland tops the chart with 262 Euros followed by Denmark 191 Euros and Sweden 177 Euros in 2015 (FiBL, 2017).

India has a total of 12.07 lakh ha area under organic management out of which 6.40 lakh ha area is organically certified and 5.67 lakh ha is under conversion in 2012-13 (NCOF Ghaziabad, 2014). It has been increased from 42 thousand ha in 2003-04 to 12.07 lakh ha with a CAGR of 45.22 percent (APEDA, 2015). In India, Orissa has maximum OA land of 95.7k ha followed by Gujarat (70.5k ha), Uttar Pradesh (53.5k ha) and Karnataka (51.5k ha). In terms of producers, Madhya Pradesh has maximum farmers (*i.e.* 1.77 lakh) followed by Maharashtra (65.6k), Orissa (62.1k) and Uttarakhand (47.1k). Sikkim is the fully organic certified state of India. The maximum OA land was under cotton cultivation (3.53 lakh ha) followed by oilseeds excluding Soybean (1.79 lakh ha) and fruits and vegetables (1.70 lakh ha). India has a total of 5.98 lakh farmers under organic certification process out of which 3.51 lakh are certified organic farmers while 2.47 lakh are in conversion process. 2099 operators, 427 processors, 919 grower groups, 253 exporters have been reported in 2009. Total quantity of organic produce was 1811111 MT out of which 53918 MT was exported. The total value of exports were 116.09 millions \$ or `591 Cr (NCOF Ghaziabad, 2014). Organic agriculture market of India contributed to `2500 Cr in 2014-15 which is lesser than even one percent of global organic food market out of which largest share was of medicinal and herbal plants (45%) followed by cotton (15%), oilseeds (9.30%) and vegetables and fruits (9%). Rice alone constitutes for 4.50 percent share of OA market. Organic food market in India can be segmented into domestic market and export market which made a share of 31 percent and 69 percent in 2013-14. The OA market of India has been continuously growing from `675 Cr in 2009-10 to `1928 Cr in 2013-14 at a CAGR of 30 percent (Anonymous, 2015). According to Mukherjee *et. al.*, (2014), a large number of companies are investing in organic business activities due to increasing demand for organic food. Maximum companies are engaged in farming and manufacturing activities and minimum companies are engaged in import activities.

- 2. Indian Organized Retail Market:** Organized retailing refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the corporate-backed hypermarkets and retail chains, and also the privately owned large retail businesses. In other words, it is a network of similarly branded stores with an element of self-service. Organized retail in India today holds only a fraction of the market share potential in India. In 2001-02, organized retail trade in India was worth Rs 11,228.7 billion. It has risen from 0 to 6 per cent in a very short period mainly on volumes and not a value-driven growth (Gupta, 2012). (According to McKinsey & Company report titled 'The Great Indian Bazaar: Organized Retail Comes of Age in India', organised retail in India is expected to increase from 5 per cent of the total market in 2008-09 to 14-18 per cent of the total retail market and reach US\$ 450 billion by 2015-16. The food and grocery constitutes the highest retail volume and this share has shown a tremendous growth over the years. According to NSSO 60<sup>th</sup> round, 54 per cent of the rural and 42 per cent of urban expenditure was on food. The second largest share is commanded by the apparels. Clothing and textile is the largest organized market and is dominated by retailers like Pantaloon, Westside, Globus, Koutons. This owes to the increasing disposable incomes and changing lifestyles. Industry trends for retail sector indicate that organized retailing has major impact in controlling



inflation because large organized retailers are able to buy directly from producers at most competitive prices.

3. **Hydroponics:** Hydroponics is the cultivation of plants by placing the roots in liquid nutrient solutions rather than in soil (soilless growth of plants and without conventional soil). It uses artificial means to support and nutrient solutions to provide the required nutrition to plants. A person interested in such type of technology can start his business with hydroponic retail store. Moreover, this area is gaining momentum from the last few years.
4. **Vermicompost production:** Vermicomposting is a simple biotechnological process of composting, in which certain species of earthworms are used to enhance the process of waste conversion and produce a better product. It has become major component of agri-business models with low investment cost.
5. **Hardening nurseries:** Hardening of the plants in the nursery includes "Any treatment that makes the tissues firm to withstand unfavourable environment like low temperature, high temperature and hot dry wind". Such type of business is also gaining importance as far as agribusiness is concerned.
6. **Processing industry:** Fruit and vegetable processing, including dehydration, canning, aseptic packaging, packing, processing of underutilized fruits, and processing for other products walnut, grape raisin, air-dried fruits, fruit candies and spices' powders etc. Processing of maize for starch and feed through improved mini/ small mills and dry milling plants, processing of sugarcane for various jaggery products like spiced jaggery, powdered jaggery, and jaggery cubes, processing of dairy products and many more are part of the processing industry. As demand for processed foods is increasing day by day so the opportunity for agribusiness is also increasing because all the processing industries falls under agribusiness ventures.
7. **Milk Cooperatives:** Now a days selling of milk on cooperative basis also forms the part of agribusiness model. Dairy farmers constitute a group for collection of milk at their own. The milk is than passed through chilling process at collection centre and from the centre it is transported to cooperatives for further processing of the milk.
8. **Packing and Packaging:** Package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product (Rundh, 2005). Also package imparts unique value to products (Underwood et al., 2001; Silayoi and Speece, 2004), works as a tool for differentiation, i.e. helps consumers to choose the product from wide range of similar products, stimulates customers buying behavior (Wells *et al.*, 2007). Thus package performs an important role in agribusiness and could be treated as one of the most important factors influencing consumer's purchase decision. In this context, seeking to maximize the effectiveness of package in a buying place, the researches of package, its elements and their impact on consumer's buying behavior as far as agribusiness is concerned became a relevant issue. A packaging that is well designed for its marketing function helps to sell the product by attracting the attention and expressing the product positively to the ultimate potential consumers. To achieve the communication goals effectively and to optimize the potential of the packaging in a buying place, marketers must recognize the attributes of a packaging and their impact on consumer's purchase decision and integrate these perceptual attributes into their packaging design.

- 9. Fast Moving Consumer Goods:** Fast Moving consumer goods are those goods that are consumed every day by the average consumer and are replaced or fully used up over a short period of days, weeks, or months, and within one year. As per the report of Indian brand equity foundation (2015), the Indian FMCG sector is the fourth largest in the economy and has a market size of US\$13.1 billion. The overall FMCG market is expected to increase at a compound annual growth rate (CAGR) of 14.7 per cent to touch US\$ 110.4 billion during 2015-2020 with the rural FMCG market anticipated to increase at a CAGR of 17.7 per cent to reach US\$ 100 billion during 2015-2025. The foods category in FMCG is gaining popularity with a swing of launches by HUL, ITC, Godrej, and others. As per the report of Indian Brand Equity Foundation (2015), this category has 18 major brands, aggregating Rs.4,637 crore. Amul India's largest food company has a good presence in the food category with its ice-creams, curd, milk, butter, cheese, and so on. Britannia also ranks in the top 100 FMCG brands, dominates the biscuits category and has launched a series of products at various prices.
- 10. Floriculture:** Floriculture is now profitable venture worldwide as it is one of the fastest growing crop trends based on its demand. People are using flowers in their day to day activities also; moreover, it is mostly used in marriages and functions as loose flowers. Demand for cut dry flowers has also increased tremendously for so many years.
- 11. Export of Fruits and Vegetables:** Now-a-days government is providing support to the farmers for exporting their product to get better price for their produce. Farmers' can start their own enterprise/ business for export of good quality fruits and vegetables where demand for the same exists.
- 12. Frozen Foods:** Due to the paucity of time, demand for frozen food items is increasing continuously. An entrepreneur interesting in such type of business will definitely earn a handsome income.
- 13. Mushroom Production:** Mushroom production business can be a mean of big profit in just a few weeks with considerable low investment to start a business. Button mushroom is demandable nowadays. Oyster mushroom is also important as far as the environment and temperature of Jammu is concerned. Post harvesting of the same is very easy. Oyster mushroom is also used in the pharmaceutical industry for boosting of immune system and control of diabetes. Soap and detergent companies are also using it in their products. We can form powder of oyster mushroom after drying it and same can be consumed with milk.
- 14. Juice-Jam-Jelly Processing Industry:** Processing of fruits into juice, jam and jelly has the huge business opportunities as these products fall under ready to drink or ready to eat products category. The demand for these products is at its peak in the current time and so the business opportunity is also high.

Besides above agribusiness opportunities discussed in detail, some of the agro based industries includes Flour milling, groundnut processing, cashew-nut processing, snail farming, sunflower farming, bee-keeping, retailing, organised retailing, fish farming etc.

### **Enhancing Income and Employment**

Increase in Farmer income is a big task and Government of India is very particular to enhance it through different means. Few procedures are much needed to adapt in the form of models to enhance the income of farmers and these are as:



**Promoting Innovations:** Innovations are need of the hour to grow as entrepreneur or start-up depending upon the solution to the problems. We need to promote innovations through farmers and young entrepreneurs as these needs to participate actively in designing, testing, adapting and introducing innovations to the agriculture.

**Increase in Value Addition:** Farmer-entrepreneurs need to realize that capturing value requires producing for buyers and final consumers. But just producing and selling is insufficient. This requires greater understanding and knowledge of value chains and their different elements. It requires a plan for participating further down the value chain. Farmers capture more value by selling their regular fresh produce directly to consumers. Another way is to sell high-value products such as organic products. Instead of producing commodities that are undifferentiated, farmers need to produce commodities that are differentiated such as organic fruit, a unique type of commodity or other specialized products for a limited “niche” market. Another way of adding value is to enter into production and marketing contracts. Contracts are increasingly being used between farmers and input suppliers, farmers and processors and between farmers and other buyers for the production and supply of fresh or processed agricultural produce.

**Development and Adaptation of New Technologies:** Farmers need to be encouraged to develop and adapt new technologies and share them with other farmers. Extension workers can facilitate partnerships among farmers and between farmers and researchers to work together to identify, develop and test new technologies and practices to improve productivity and profitability.

**Use of Information Technology:** Now-a-days Information Technology is available and accessible everywhere. Therefore, it is a very powerful way for extension workers to educate and inform farmers about new ideas, technologies and other information. Physical distances and the lack of transportation facilities often limit the ability of extension workers to share information with farmers. Mobile phones, tablets, and computer-based systems can be used to overcome these physical barriers. The challenge is how information technology can be harnessed for the benefit of both extension agents and farmers without compromising the importance of human and unique local factors.

### **Role of Farmer Producer Organizations**

A Farmer Producer Organization (FPO), formed by a group of farm producers, is a registered body with producers as shareholders in the organization. It deals with business activities related to the farm produce and it works for the benefit of the member producers. It provides end-to-end support and services to the small farmers, and cover technical services, marketing, processing, and others aspects of cultivation inputs.

The year 2014 was observed as the “Year of Farmer Producer Organizations (FPO)” by the Government of India. As per the concept, farmers, who are the producers of agricultural products, can form groups and register themselves under the Indian Companies Act. Presently, around 6000 FPOs (including FPCs) are in existence in the country, which were formed under various initiatives of the Govt. of India (including SFAC), State Governments, NABARD and other organizations over the last 8-10 years. Govt. of India has already taken an initiative to form 10000 FPOs by 2024.

### **Benefits of Farmers’ Collectives**

Some of the important benefits of organizing farmers into Collectives, as demonstrated through various pilots, are as under:

- Cost of production can be reduced by procuring all necessary inputs in bulk at wholesale rates.
- Aggregation of produce and bulk transport reduces marketing cost, thus, enhancing net income of the producer.
- Building the scale through produce aggregation enables to take advantage of economies of scale and attracts traders to collect produce at farm gate.
- Access to modern technologies, facilitation of capacity building, extension and training on production technologies and ensuring traceability of agriculture produce.
- Post-harvest losses can be minimized through value addition and efficient management of value chain.
- Regular supply of produce and quality control is possible through proper planning and management.
- Price fluctuation can be managed; if there are practices like contract farming, agreements, etc.
- Easy in communication for dissemination of information about price, volume and other farming related advisories.
- Access to financial resources against the stock, without collaterals.
- Easy access of funds and other support services by the government / donors / service providers, and
- Improved bargaining power and social capital building.

### **FPO Service Model**

The FPO offers a variety of services to its members and helps to increase income and employment directly and indirectly. It can be noted that it is providing almost end-to-end services to its members, covering almost all aspects of cultivation (from inputs, technical services to processing and marketing). The FPO facilitates linkages between farmers, processors, traders, and retailers to coordinate supply and demand and to access key business development services such as market information, input supplies, and transport services. Based on the emerging needs, the FPO will keep on adding new services from time to time. The set of services include Financial, Business and Welfare services.

### **Entrepreneurship Development Opportunities in Agriculture**

Agribusiness increases the scenario and opportunities for value addition, packaging, branding, retailing, and exports of agricultural commodities through improved technology and agribusiness management. Indian population directly or indirectly depends on agriculture and now agribusiness is taking the lead and raw material for industries comes from agricultural area only. Now, the time is approaching where agribusiness is most likely to control the Indian economic growth. Presently, there are about 25 per cent to 30 per cent of post-harvest losses in fruits and vegetables before reaching the final consumer i.e., due to lack of proper post-harvest management practices. However, introduction of agribusiness in agriculture has created lot of changes in business professionalism. The scope and opportunity in the agribusiness has also been increased. The possible opportunities of entrepreneurship in agriculture are:

- i) Agro produce processing units – New product is not manufactured but the agricultural produce is processed to form end product. rice mills and dal mills are few examples.
- ii) Agro Produce manufacturing units – In this category, new products are produced depending upon the agricultural produce as the main raw material. Sugar factories and bakery are few examples. .

- iii) Agro-inputs manufacturing units – These units are engaged in the production of goods either for mechanization of agriculture or for increasing agricultural productivity. Fertilizer and pesticide production units, food processing units and agricultural implements are few examples.
- iv) Agro service centres – Agricultural engineering workshops and service centre for repairing, maintenance and serving the agricultural implement used in agriculture are the part of agro-service centres.

**Bansal (2011) has proposed some entrepreneurial areas in agriculture:**

- i) Farming- Crop, dairy/poultry/goat, fish, rabbit, vegetables, flowers, ornamental plants, palmrosa, fodder, sericulture, agro-forestry, beekeeping, mushroom.
- ii) Product Marketing- Wholesale, retail, commission agent, transport, export, finance, storage, consultancy.
- iii) Inputs Marketing- Fertilizer, agricultural chemicals, seeds, machineries, animal feed, poultry hatchery, vet-medicines, landscaping, agriculture credit, custom service, bio-control units, bio-tech units.
- iv) Processing- Milk, fruits, vegetables, paddy, sugarcane, cashew, coir, poultry, cattle, tannery, brewery.
- v) Facilitative - Research and development, marketing information, quality control, insurance, energy.

**Opportunities for Agri-Business Entrepreneurship in India**

Agri-business entrepreneurship is the future of India and Government of India is already focusing on it. Farmers and agri start-ups willing to grow are having number of opportunities for agri-business entrepreneurship and some of them are listed below:

- i) Input industry is one of the important industry where demand for agricultural inputs have increased.
- ii) Agricultural Biotechnology is having scope in the form of seed production, bio-control agents, industrial harnessing of microbes for different products.
- iii) Processing is another area where agri-preneurs are having opportunities and can excel.
- iv) Animal husbandry as an industry can become a huge source of generating employment and livelihood. Introduction of new product (Designer Egg, Crossbred cows, Hybrid fowls, etc.) are some of the areas where one can excel as agri-preneur.
- v) Value addition to the livestock products such as milk, egg, meat, and fish have huge profit potential. Value of the products get increased many folds during processing, and thereby provide excellent returns.
- vi) Non-Timber Forest Products are unexploited and therefore is having scope for developing an enterprise.
- vii) Beekeeping, apiary and mushroom production can be taken up on great extent in India.
- viii) Organic farming has huge potential in India as the pesticide and inorganic fertilizer application are less in India compared to industrial nations of the world.
- ix) Huge opportunities for production and promotion of bio-pesticides and bio-control agents for protection of crops.
- x) Micro-irrigation systems and labour saving farm equipments have potential in future due to declining groundwater level and labour scarcity for various agricultural operations.
- xi) Green House production of vegetables and flowers can play a major role in export of these commodities.
- xii) Employment opportunities have increased in marketing, transport, cold storage and warehousing facilities, credit, insurance and logistic support services because of enhanced agricultural production.



## **SUCCESSFUL ENTREPRENEURS OF JAMMU AND AGRI-START-UPS INCUBATED AT AGRI-BUSINESS INCUBATOR, SKUAST-JAMMU**

Various success stories of agri-entrepreneurs have been reported from different sectors and states suggesting their growing importance in agricultural extension (Srinivas IAS et al., 2014). Below are some handpicked success stories about the successful entrepreneurs, farm innovators and agri start-ups incubated at SKUAST-Jammu.

### **Successful entrepreneurs/ Farm innovators:**

**Mr. Kulbushan Khajuria** (58) is a resident of Sohanjana village, Tehsil Mandal, District Jammu of Union Territory of Jammu and Kashmir. He owns 60 healthy milch animals and an automated milk collection system, a well-maintained cattle shed and a feeding area. Currently, his dairy named Krishna Dairy Farm has 48 Holstein Friesians (HF) Cows, nine Jersey cows, two Gir cows, one Sahiwal cow and one Murrah Buffalo. At present, 50 percent of his dairy animals are in the lactating phase and producing 4.5 quintals of milk every day. For marketing of milk, he has established 3 sale counters in Jammu city at Talab Tillo, Shakti Nagar and Channi Himmit Jammu. He is generating a turnover of more than 60 lakhs per year from sale of milk, vermin compost and agricultural products with a net profit of Rs 20-25 lakhs per year. He is providing employment to 7 unemployed youths round the year and 10 persons are engaged for need based services as and when required for cutting of fodder. He is also producing and selling 400-500 qtl. of vermin compost every year through sale counters. To minimize cost of milk production, he is preparing silage on his own farm every year. His visionary and leadership qualities have made him a successful entrepreneur. The success of Mr. Khajuria can be gauged from repayment of loan of 30 lakhs in 5 years that he had taken from the bank at the time of expansion of his dairy farm. He has a clear vision of his venture that helped him to turn the idea of establishing a dairy farm into reality by pooling of his personal resources and availing bank loan.

**Sh. Kuldeep Verma S/o Sh. Puran Chand** is a resident of village Kotli Charakan, Jammu. He has constructed a pond of 1000 sq. metre. In the initial years, the fish production was less ranging between 200-300 kg/year which was encouraging but not upto his satisfaction. Then, he contacted scientists of KVK SKUAST Jammu for technical details and scientific fish farming techniques. KVK Jammu laid front line demonstration of fisheries at his field and briefed him with all the latest technologies and calendar of activities to follow. He followed all the instructions and achieved fish production of 400 kg during the year 2020. He is earning a net profit of Rs. 59000 per year from sale of fishes. Other than this, he is rearing backyard poultry birds near the fish pond after getting advised from KVK Jammu regarding integrated farming system and excreta of birds will work as feed for fishes and it will reduce his production cost. He is having Sahiwal cow for milk and two dogs for watch during night. His activities are continuously captured and recorded to motivate other youths.

**Sh. Dunda Singh** a turmeric farmer from Sultanpur village in Kathua district has three roles by profession- a farmer, an entrepreneur and a turmeric Cultivator. For setting up of processing plant he purchased land (1 kanal 3 marlas) @ 1.5 lakhs per kanal with the initial investment of Rs. 7.00 lakhs for creation of infrastructure, 6.92 lakhs on machinery and established the Baba Deep Singh Spices Park with Brand Name BDS at village Kana Chak and registered his products with Food Safety Standard Authority of India (FSSAI) vide Registration No 11017210000050. There is a handsome increase in his income after setting up of the processing plant. By putting all these stepping stones together he started his own turmeric processing plant in 2014 and named it as Baba Deep Singh Spices Park and BDS Haldi is one of

the most trusted brands of his processing plant. His family including wife, two sons, two Daughters in laws and maternal uncle plays a major role in all the activities related to the processing of turmeric such washing, boiling, polishing and grinding. He also has seasonal laborers working for him in the processing plant and all the packaging, sealing and grinding work is done by the equal contribution of family members in his factory and home. All these steps taken by him has increased the production of raw turmeric from 60 Quintals to 110 Quintals today.

### **Start ups incubated at Agri-Business Incubator, SKUAST-Jammu**

#### **Bhavishya Devgun**

Bhavishya Devgun successfully running his start up 'Salutem Ridegear' selling AGRITREAT – An organic agri-input fluid spray offered as an alternative to harmful chemical pesticides & fungicides after conducting successful trials with farmers pan India. He has current sales generation of around 3 Lakhs pan India with distribution partners across 8 states & counting.

#### **Nikky Kumar Jha**

Nikky Jha successfully established his start up 'Saptkrishi Scientific Pvt. Ltd. selling SABJI KOTHI – A solar powered, cost effective, IOT enabled, microclimate based wheel mountable Preservator for storage of fresh fruits and vegetables to extend their shelf life by 5-30 days for vendors and small producers. He has exhibited his innovation throughout the country and has been invited by Govt. of Arunachal Pradesh to run a pilot trial there.

#### **Payal Sharma**

Payal Sharma successfully running her start up 'Jk Aromatics & Herbs LLP' selling chemical free, natural, sustainable products such as incense, rapid compost, plantable rakhis and chemical free soaps made from flower waste collected from temples/mosques across J&K thereby converting waste to wealth. She has already established a loyal customer base of more than 500 customers.

#### **Vivek Sharma**

Vivek Sharma successfully running his start up 'Vatika Agro Services' selling high quality, high yield, disease free seeds & seedlings of vegetables & cash crops developed in soil less media to farmers as well as individual customers including off season seedlings raised in protected structures. He is rapidly establishing a loyal customer base in the Jammu province & is looking to soon expand his operations outside as well.

#### **Kuldeep Dhaliwal**

Kuldeep Dhaliwal a progressive farmer successfully running his start up 'Kdhariwal Agrotech & IT Services Pvt. Ltd. Selling CROP RECHARGER – A natural Agri input liquid that enriches the soil with nutrients and increases the nutrient absorption capacity of plants as an alternative to chemical fertilizers. He has won numerous awards & certifications from various govt. & non govt. Organizations for his innovative invention and has a huge customer base of fellow farmers.

### **POLICIES**

The task of promoting entrepreneurship was earlier given to different departments and government agencies. In 2014, the Prime Minister decided to dedicate an entire ministry i.e., Ministry of Skill Development and Entrepreneurship to build this sector as he felt that skill development required greater push from the government's side. Furthermore, the idea is to reach 500 million people by the year 2022 through gap-funding and skill development initiatives.

India is gradually building a robust startup ecosystem. In order to promote and support entrepreneurs, the government has created a Ministry (department) dedicated to helping new businesses. The important schemes wherein budding entrepreneurs can get funding or grant-in-aid for establishment and growth of their enterprise are explained below:

### **RKVY-RAFTAAR**

- The Rashtriya Krishi Vikas Yojana (RKVY) is an important scheme of the Government of India, Ministry of Agriculture and Farmers' Welfare (MoA&FW), aimed at strengthening infrastructure in agriculture and allied areas. In order to promote agripreneurship and agribusiness by providing financial support and nurturing the incubation ecosystem, a new component under the revamped scheme RKVY-RAFTAAR has been launched in 2018-19. Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu got selected as one of the Incubation Centre under RKVY-RAFTAAR project and Agri Business Incubator, SKUAST-Jammu has been established in March 2019.
- It is an initiative to encourage young minds to come with innovative ideas in the field of agribusiness and to develop an agripreneurship ecosystem.
- Under this project there are two Agripreneurship Development Programmes namely **UDGAM** (Pre-Seed Stage Funding) and **PRAGATI** (Seed Stage Funding) with grant-in-aid to the tune of 5 lakhs and 25 lakhs, respectively.

### **Atal Innovation Mission (AIM)**

It is Government of India's flagship initiative to create and promote a culture of innovation and entrepreneurship across the length and breadth of our country. It was setup in 2016. AIM's initiatives have played an important contributory role in the advancement of India from a position of 81 in the Global Innovation Index in 2015 to a position of 48 in 2020. AIM has adopted a holistic approach encompassing schools, universities, research institutions, industry, MSME, NGOs, Ministries, at district, state and national levels.

Major initiatives by Atal Innovation Mission (AIM)

- i) Atal Incubation Centres - Fostering world class startups in universities, institutions, private sector adding new dimensions of outcomes based scale up and monitoring to existing incubator model.
- ii) Atal New India Challenges - Fostering product and service innovations in the country with national socio economic impact and aligning them to the needs of various sectors/ministries/industry.
- iii) Atal Community Innovation Centre - To stimulate community centric innovation and ideas in the unserved/underserved regions of the country including Tier 2 and Tier 3 cities and rural India
- iv) Building strategic Innovation partnerships with Public sector, Private Sector, Multinationals, and Global Country to Country Partnerships which include USA, UK, Germany, Russia, Singapore, Sweden, Israel, Denmark, Australia to name a few

*Atal Innovation Mission initiatives are key to further promoting the culture of innovation and giving expression to the innovative and entrepreneurial ideas of startups to enable development of one of the most Innovative Nations of the world.*



## **NIDHI**

National Initiative for Developing and Harnessing Innovations (NIDHI) is an umbrella program conceived and developed by the DST for nurturing ideas and innovations (knowledge-based and technology-driven) into successful startups.

### **NIDHI has following program components**

- i) Technology Business Incubator (TBI), Seed Support System (SSP), Accelerator, Centre of Excellence (CoE), Promoting and Accelerating Young and Aspiring Innovators and Startups (PRAYAS), Entrepreneur in Residence (EIR),
- ii) The NIDHI-EIR programme provides Rs. 30,000 per month as fellowship to an aspiring or budding entrepreneur for pursuing a promising technology business idea.
- iii) While Promoting and Accelerating Young and Aspiring technology entrepreneurs (PRAYAS), support upto Rs. 10 lakhs to enable translation of an innovative idea to a prototype is provided.
- iv) Inclusive TBI is a three years duration initiative supported by the Department of Science Technology DST for educational institutions who are likely to foster innovation and entrepreneurship culture among the students, faculties, entrepreneurs, and nearby communities.

### **Startup India Initiative**

The Prime Minister of India launched the Startup India Initiative in the year 2016. The idea is to increase wealth and employability by giving wings to entrepreneurial spirits. The government gives tax benefits to startups under this scheme and 798 applicants have made use of this scheme to date. The Department of Industrial Policy and Promotion is maintaining this initiative and is treating it as a long term project. Moreover, the overall age limit for startups has been increased from two years to seven years, and for biotechnology firms, the age limit is ten years from the date of incorporation. It is one of the best government-sponsored startup schemes for entrepreneurs as it provides several concessions.

### **Startup India Seed Fund-**

On 16 January 2021, Prime Minister Sh. Narendra Modi announced the launch of the 'Startup India Seed Fund' – worth INR 1,000 crores — to help startups and support ideas from aspiring entrepreneurs. Prime Minister said that the government is taking important measures to ensure that startups in India do not face any capital shortage. Financial assistance to startups is also the part of the initiative for proof of concept, prototype development, product trials, market entry, and commercialization. Under the initiative, the Seed Fund is disbursed to eligible startups through eligible incubators across.

**ASPIRE:** Aspire has been launched by the Indian government to set up a network of technology centres, incubation centres and to promote startups for innovation and entrepreneurship in the rural and agriculture-based industry. ([https://msme.gov.in/sites/default/files/ASPIRE\\_EN.pdf](https://msme.gov.in/sites/default/files/ASPIRE_EN.pdf))

**New GenIEDC:** The NSTEDB startup scheme by the Indian government will provide a limited, one-time, nonrecurring financial assistance, up to a maximum of INR 25 Lakhs. (<http://www.newgeniedc-edii.in/>)

**SFAC:** The quantum of SFAC Venture Capital Assistance will depend on the project cost and will be the lowest of the following: >26 per cent of the promoter's equity and >INR 50 Lakhs. ([http://sfacindia.com/Procedure\\_For\\_VCA\\_Scheme.aspx](http://sfacindia.com/Procedure_For_VCA_Scheme.aspx))

**AIM:** AIM will provide a grant-in-aid of INR 10 Cr to each Atal Incubation Centre for a maximum of five years to cover the capital and operational expenditure cost in running the centre. (<http://niti.gov.in/content/atal-incubation-centresaic#Source:Inc42,NASSCOM>).

**Some of the recent major Government initiatives in the sector are as follows:**

- In October 2021, the Union Minister of Home Affairs and Corporation launched the ‘**Dairy Sahakar**’ scheme in Anand, Gujarat.
- Ministry of Civil Aviation launched the Krishi UDAN 2.0 scheme in October 2021. The scheme proposes assistance and incentive for movement of agri-produce by air transport. The Krishi UDAN 2.0 will be implemented at 53 airports across the country, largely focusing on Northeast and tribal regions, and is expected to benefit farmers, freight forwarders and airlines.
- In October 2021, Agricultural and Processed Food Products Export Development Authority (APEDA) signed a Memorandum of Understanding (MoU) with ICAR-Central Citrus Research Institute (ICAR-CCRI), Nagpur, for boosting exports of citrus and its value-added products.
- In September 2021, Prime Minister Mr. Narendra Modi launched 35 crop varieties with special traits such as climate resilience and higher nutrient content.
- Prime Minister of India launched the Pradhan Mantri Kisan Samman Nidhi Yojana (PM-Kisan) and as per the Union Budget 2021-22, Rs. 65,000 crores (US\$ 8.9 billion) was allocated to Pradhan Mantri Kisan Samman Nidhi (PM-Kisan).
- The Indian government has initiated Digital Agriculture Mission for 2021-25 for agriculture projects based on new technologies such as artificial intelligence, block chain, remote sensing and GIS technology, drones, robots and others.
- In September 2021, the Union Ministry of Agriculture and Farmers’ Welfare signed five MoUs with CISCO, Ninjacart, Jio Platforms Limited, ITC Limited and NCDEX e-Markets Limited. This MoU will have five pilot projects, which will help farmers make decisions on the kind of crops to grow, variety of seeds to use and best practices to adopt to maximise yield.
- With a budget of US\$ 1.46 billion, the ‘Production-Linked Incentive Scheme for Food Processing Industry (PLISFPI)’ has been approved to develop global food manufacturing champions commensurate with India's natural resource endowment and to support Indian food brands in international markets.
- Rs. 4,000 crores (US\$ 551.08 million) was allocated in Union Budget 2021-22 towards implementing Pradhan Mantri Krishi Sinchayee Yojana (PMKSY-PDMC).
- The Ministry of Food Processing has been allocated Rs. 1,308.66 crore (US\$ 180.26 million) in the Union Budget 2021-22.
- Under Pradhan Mantri Formalisation of Micro Food Processing Enterprises (PM FME), an outlay of Rs. 10,000 crore (US\$ 1.34 billion) over a period of five years from FY21 to FY25 has been sanctioned.
- To boost farmer incomes and growth of the agricultural economy, the Indian government released funds in June 2021 for farm mechanisation such as establishment of custom hiring centres, farm machinery bank and high-tech hubs in different states.
- In April 2021, the Government of India approved a PLI scheme for the food processing sector with an incentive outlay of Rs 10,900 crore (US\$ 1,484 million) over a period of six years starting from FY22.
- The Government of India came out with Transport and Marketing Assistance (TMA) scheme to provide financial assistance for transport and marketing of agriculture products in order to boost agriculture exports.
- The Agriculture Export Policy, 2018 was approved by the Government of India in December 2018. The new policy aimed to increase India’s agricultural export to US\$ 60 billion by 2022 and US\$ 100 billion in the next few years with a stable trade policy regime.

- The Government of India is going to provide Rs. 2,000 crores (US\$ 306.29 million) for computerization of Primary Agricultural Credit Society (PACS) to ensure cooperatives are benefitted through digital technology.
- The Government of India launched the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) with an investment of Rs. 50,000 crores (US\$ 7.7 billion) aimed at development of irrigation sources for providing a permanent solution from drought.
- Government plans to triple the capacity of food processing sector in India from the current 10% of agriculture produce and has also committed Rs. 6,000 crores (US\$ 793 million) as investments for mega food parks in the country, as a part of the Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters (SAMPADA).
- The Government of India has allowed 100% FDI in marketing of food products and in food product E-commerce under the automatic route.

#### **Atmanirbhar Bharat Package for Farmers and Agri-entrepreneurs**

<b>S.No.</b>	<b>Particulars of Package</b>	<b>Amount (Rs. Cr.)</b>
	The third tranche of Atmanirbhar Bharat Abhiyan	<b>1,50,000</b>
1.	Agri Infrastructure Fund for farm gate infrastructure including cold chain and post-harvest infrastructure	<b>1,00,000</b>
2.	Food micro-enterprises with a cluster-based approach	<b>10,000</b>
3.	Pradhan Mantri Matsya Sampada Yojana (PMMSY)	<b>20,000</b>
a)	For activities in Marine, Inland fisheries and Aquaculture	<b>11000</b>
b)	For Infrastructure – Fishing Harbours, Cold chain, Markets, etc	<b>9000</b>
4	Animal Husbandry Infrastructure Development Fund	<b>15,000</b>
5	Promotion of Herbal Cultivation	<b>4000</b>
6	Extending Operation Greens project from Tomatoes, Onion, and Potatoes (TOP) to all fruits and vegetables	<b>500</b>
7	Beekeeping initiatives	<b>500</b>

#### **CONCLUSION**

Agripreneurs are facing various challenges in the execution of their plans to develop new start-ups or any other support businesses. The basic problem can be the literacy level of the agripreneurs, farmers or rural people and another strong chance is lack of innovative mind. This acts as root cause for majority of challenges mentioned below. Major challenges faced by the agripreneurs are inadequate infrastructural facilities, lack of innovative entrepreneurial abilities among people, declining interest in agricultural allied services, lack of skilled and managerial manpower, marketing problems, lack of awareness about career in agripreneurship, lack of budget, lack of strategy, innovation initiatives with no innovation strategy, fear of making mistakes, cognitive barriers etc.

Agri-entrepreneurship is the need of the hour to make agriculture a more attractive and profitable business enterprise. Agriculture has great scope for entrepreneurship and innovative start-ups and it needs useful management of production and marketing parameters. Agriculture in developing countries is not successful to produce enough income to lift people out of their poverty and scarcity. Thus, innovation and agriculture definitely generates a solution for growing household incomes. The excellent management and entrepreneurial expertise infused with government measures would facilitate success of the growing needs of agri-businesses. Innovation, confidence, risk bearing, honesty and vision are the parameters to be adopted and

follow for becoming a successful agri-entrepreneur. Agri-entrepreneurship provides direct employment especially in rural areas and contributes to the national income. Value addition of products offer entrepreneurs with high profit and return-on-investment which otherwise farmers is not able to receive. Therefore, farmers by becoming entrepreneurs have to take benefit of change in consumer demand and satisfy consumers' needs with value-added products.

## References:

- Bansal A. 2011. Agri-Business in India–Vision 2020. *International Journal of Multidisciplinary Research*, 1(2):62-72.
- Baregheh, A., Rowley, J. and Sambrook, S. 2009. Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8):1323-1339.
- Buttriss J. L. 2011. Feeding the planet: an unprecedented confluence of pressures anticipated *Nutrition Bulletin* 36, 235 – 241.
- Dollinger, S. J. 2003. Need for uniqueness, need for cognition and creativity. *The Journal of Creative Behavior*, 37(2): 99–116.
- Gray, C. 2002. Entrepreneurship, resistance to change and growth in small firms. *Journal of Small Business and Enterprise Development*, 9(1):61-72.
- Gupta, U. (2012). Customer Loyalty towards Kiranas in Competitive Environment; A Case study *International Journal of Marketing and Technology*, II (8), 249-268
- Kashyap, P., Prusty, A.K., Panwar, A.S., Kumar, S., Punia, P., Ravisankar, N. Kumar, V. 2019. Agri-Entrepreneurship: Challenges and Opportunities, Edited Book published by Today and Tomorrow's Printers and Publishers, New Delhi.
- Misra A. , Singhal N. , Sivakumar B. , Bhagat N. , Jaiswal A. , Khurana L. 2011. Nutrition transition in India: secular trends in dietary intake and their relationship to diet-related non communicable diseases *J. Diabetes* 3, 278 – 292.
- Popkin B. M. 2002. An overview on the nutrition transition and its health implications: the Bellagio meeting *Pub. Health Nutr.* 5, 93 – 103.
- Popkin B. M., Adair L. S. , Ng S. W. 2012. Global nutrition transition and the pandemic of obesity in developing countries *Nutr. Reviews* 7, 0 3 – 21.
- Sah P, Sujan D K and Kashyap S K. 2009. Role of agripreneurship in the development of rural area, Paper presentation in ICARD at Banaras Hindu University, Varanasi.
- Silayoi, P., and Speece, M. 2004. Packaging and purchase decisions: An exploratory study on the impact of involvement level and time pressure. *British Food Journal*, 106 (8), 607-628.
- Srinivas, IAS., B. Shekara, R. C., Murthy, L. and Sahare J. 2014. Agri-Clinics and Agri-Business Centres Success Stories of Agripreneurs. National Institute of Agricultural Extension Management (An Organization of Ministry of Agriculture, Govt. of India). Rajendranagar, Hyderabad.
- Sundar, I. 2016. Agribusiness Scope, Opportunities and Challenges in India. *International Journal of Economic and Business Review*. 4(7):171-178

[www.startupindia.gov.in](http://www.startupindia.gov.in)



# Entrepreneurship Opportunities for Veterinary Graduates 2

**Dr. Sashanka Sekhar Dutta**

*Social Entrepreneur, Chief Functionary & Managing Trustee, JBF(INDIA)TRUST*

**E**ntrepreneurship is a process of identifying opportunities in the market place, arranging the resources required to pursue these opportunities and investing the resources judiciously to exploit the opportunities for long term gains. It involves creating wealth by bringing together resources in new ways to start and operate an enterprise. Veterinarians being a professional graduate and with a scientific knowledge and skills required to serve for the benefit of society through the enhancement of animal health and welfare, the relief of animal suffering, the promotion of public health and the advancement of veterinary knowledge. Gone are the days when the dreams of breaking through the glass ceiling and reaching the topmost rung in the Entrepreneurship ladder were next to impossible for Indian Veterinarians. Today, the vets of our country have come a long way from being just an Animal Doctor and are an equal match to some of the most powerful person in the Entrepreneurship world. From sophisticated & advanced animal care services to founders to some of the most innovative startups, Vets have made mark almost everywhere one can think of. But their journey to the hall of fame wasn't easy; they have to fight against various negative notions and proved their courage eradicating any and all doubts be it regarding their Professional expertise, leadership capabilities or their entrepreneurial abilities.

As a veterinary graduate, if you want to be a successful entrepreneur, make sure to have a clear vision, work hard on your goals, have the right team and be consistent for next few years. Because the idea of entrepreneurship revolves mostly with having an idea, working on it until it is materialized, face challenges, competing with others in your enterprise and ultimately increasing the profits of your business.

Afterwards, entrepreneurship is all about working super hard, reaching out your targets, making profits and attracting the right clients so that you can walk through the path.

## **OPPORTUNITIES OF LIVESTOCK AND POULTRY ENTREPRENEURSHIP**

The demand for animal sourced foods (ASF) is increasing both quantitatively and qualitatively. During the past five years, the milk and meat sectors are growing at about six percent, annually. The government of India is now pegging on livestock to increase the economy from the current value of US \$ 3 trillion to US \$ 5 trillion by the year 2025. Under "Make in Rural India Initiative" NDDDB will provide the financial assistance to private dairy units for processing in order to double the milk processing capacity by the year 2025, increasing the outreach in the unexplored market and improving milk quality at the milk collection centres. Besides this Government of India is also taking measures to improve the meat and egg production through small ruminants and backyard poultry since the growth rate in meat and egg sector is more than 5 and 10 percent, respectively. The policy announced by the Prime Minister of India on decentralized food production and processing systems is a great opportunity for generation of the employment in rural India besides better lives for livestock owning farmers through promotion of micro and small entrepreneurship in livestock sector in rural India. Hence, there are so many proposed training program is designed like AGRICLINIC (NABARD BANK SUBSIDY) to share knowledge and technologies in milk, meat and egg

production and processing, improving the efficiencies of livestock production systems, products making, financing, marketing and branding the products so as to promote entrepreneurship in rural livestock sector for employment generation and double the farmers income and helping the Indian economy.

Similarly, Poultry sector is a highly vertically integrated industry in India and matches the efficiency levels of many western countries. Government of India has taken steps for modernization of municipal abattoirs to provide safe and hygienic meat to consumers. In this sector you have a Key Fiscal Incentives with 100% income tax exemption available to new food processing, preserving and packaging units for the first 5 years of operation, and at the rate of 25%-30% thereafter. Similar many other incentives could be avail on food processing sector.

### **Livestock farms**

The veterinarians can start their own livestock farms with their vast technical knowledge; they can infuse scientific management techniques in their own farms. In the WTO (World Trade Organisation) era, GMP (Good Manufacturing Practices) and SPS (Sanitary and Phytosanitary) measures are of great importance for export of livestock commodities, as the emphasis in international trade is on quality and food safety. If veterinarians start their own scientifically managed livestock enterprise, they can exploit this opportunity. Further, practicing proven scientific management techniques will improve productivity of animals that would lead to overall quantitative and qualitative improvement of livestock sector.

Dairy sector in India plays an important role in the national economy and in the socio-economic development of the country. It has a significant role in supplementary family income and generating employment in the rural areas, particularly among the landless, small, marginal farmers and farm women, besides providing cheap and nutritious food to millions of people. More importantly small and marginal farmers account for three-quarters of these households. Income from livestock production accounts for 14-15% of total farmhouse holds income in different states. Thus, an increase in demand for livestock products can be a major factor in raising the income and living standard of rural households. The majority of rural dairy farmers need support for building up their capacity development through entrepreneurial training program which help them to upgrade their knowledge and create confidence in their endeavor in the existing farming system.

The nucleus of dairy farming and the traditional skill accompanying it, may be profitably used in promoting the enterprise on a more scientific and commercial basis. These are the basic premises underlying and the whole approach to livestock entrepreneurship development through small farmers.

### **Feed manufacturer**

The veterinary graduates can start their own feed mill units for various livestock and poultry species. Commercial feed availability for various unconventional poultry species such as Quail, Emu, Ostrich, etc. are far less than the demand. Manufacturing feed for these species is a niche business as their energy requirement is different from the existing commercially available broiler or layer feed.

### **Fodder supplier**

The main constraint which hampers the growth of livestock production is the inadequacy of nutritious fodder. As there is more than 60% fodder deficit in India, veterinarians can combine together, purchase fertile land and produce quality fodder and supply them to the nearby livestock farmers. They can also start seed / fodder banks in the potential areas.

### **Farm equipment manufacturer/ dealer**

Numbers of farm equipment is needed for livestock farms. For example, in case of dairy farms, chaff cutter, milking machine, feeding manager, etc. are needed. Poultry farmers need debeaker, vaccinator, automatic feeder, waterier, etc. Demand for farm equipment increases with the wide adaptation of intensive livestock and poultry farming system. The veterinarians can either start-up own manufacturing unit or they can act as dealer for this equipment.

### **Dog breeder with license for the purpose of breeding and selling**

Dog breeding is an ever-green field with potential opportunities in urban areas. Dogs with good pedigree record fetches good price and the veterinarians can readily exploit this opportunity. Combining dog breeding with veterinary consultancy services offer excellent earning opportunity.

### **Hatchery**

Though starting a hatchery requires higher investment, it offers good return.

### **Pet Animal/ Large Animal/ Mobile Clinic**

It is the widely practiced by the veterinarians which offer them good earnings in both rural as well as urban areas. Government has also taken up this initiative.g.underGVK, RKVY projects.

### **Livestock products processor**

Value addition to the livestock products such as milk, egg, meat, and fish has huge profit potential. Value of the products get increased many folds during processing, and thereby provide excellent returns. Veterinarians can start milk parlour, where they can sell processed milk and milk products like flavoured milk, goa, ice cream, etc. or meat centre where fried chicken, chicken 65, mutton khima, etc. could be sold. Marketing of these value-added products could be done in their own brand name and they can start chain of parlours / hotels later.

### **Farm consultant**

Livestock farm consultant is a lucrative avenue. Veterinarians with skill and knowledge can earn well in specialized dairy farms, stud farms, breeder farms, hatchery, sheep / goat farms. After some years of experience in managing the farms, they can start their own farms

independently or with partnerships. Veterinarians are the only persons with their expertise can increase the economy of a farm in a holistic way.

### **Organic Farming**

Organic farming and the organic food product is in great demand now in markets and in daily life of people. The great challenge for future organic farming, will be to maintain its environmental benefits, increase yields, reduce prices while meeting the challenges of climate change.

### **Contract Farming**

Contract farming is an emerging system where the livestock farmers are given all the inputs such as chicks/animals, feed, medicines, technical inputs, etc. Farmers have to rear the chicks/animals and the integrator will take care of the marketing activities. Veterinarians can join together and venture into contract farming. Being technical savvy would help them in getting loans, maintaining farm business and marketing the products.

### **Agents for by products utilization**

The livestock feed manufacturers and pharmaceuticals require several ingredients such as bone meal, fish meal, blood meal etc. which they are getting from the agents at contract basis. Here, veterinarians can make interventions. They can make a tie-up and could meet the requirements of feed manufacturers at a reasonable price and also can earn money.

### **Veterinary Pharmaceutical Industry**

It is also a lucrative opportunity but needs huge investment. After working some years in the pharmaceutical industry and learning experience, veterinarians can initially start a small one with fewer drugs which can be expanded later to the needs of local farmers. From thereon, they can grow slowly.

### **OPPORTUNITY IN ANIMAL WELFARE SECTOR**

Start up an Animal Welfare Organization for a social cause and be a Social Entrepreneur.

Animal welfare refers to the quality of life experienced by an animal and encompasses how well the animal is coping with his or her current situation and surroundings. Animal welfare is affected by the relationships human beings have with animals and it is our duty to ensure all animals are treated humanely, responsibly, and with respect. Wherever animals are being exploited by humans, the issue of welfare is present.

Giving an example, JBF (INDIA) TRUST popularly known as JBF (Just Be Friendly) proves as a successful establishment as an Animal Welfare Organization. There are many other such national and international organizations. To name a few such organizations are Help in Suffering, Blue Cross Society, FriendicoesSeca, Humane Society of the United States, Foundation Brigitte Bardott, Help Animals India, Four Paws, Vets Beyond Border and so on.



JBF is a decade old registered and professionally managed community development non-profit social sector organization promoting the welfare of animals, human & environment since its inception in 2003. It is recognized by the Animal Welfare Board of India (AWBI), Ministry of Animal Husbandry, Dairying and Fisheries, Government of India.

These recognitions were entitled after much efforts and patience and consistency in the work by the founder of JBF (INDIA) TRUST. This establishment not only results in self-growth to be a social entrepreneur, but also serves as a social reform in the society.

A veterinary graduate can become a part of numerous national and international conferences and events. These events and expo paves a successful way to express issues arising in our states and also growing as an entrepreneur.

**References:**

<https://www.bls.gov/opub/btn/volume-8/veterinary-occupations-growing.htm>

<https://poultryreporter.com/2020/01/20/opportunities-in-poultry-sector-in-india/>

Scope of veterinarians in livestock entrepreneurship in India. Dr Ajeet Singh. Dr. Rajesh Singh. August, 30, 2021 retrieved from <https://www.pashudhanpraharee.com/scope-of-veterinarians-in-livestock-entrepreneurship-in-india/>

Dr. Sashanka Sekhar Dutta-A Social Entrepreneur. September 15, 2017. Retrieved from <http://drsashanka.com/>

Copyright with the NAHERIDP, SKUAST-Jammu

Copyright with the NAHEP-IDP, SKUAST-Jammu

## Entrepreneurship in Animal Husbandry

Dr. Adarsh Tiwari

Technical Manager, North India & Consultant Serval India Animal Nutrition, Prayagraj, U.P.

**S**elf-Employed - Working for oneself as a freelancer or the owner of a business rather than for an employer.

- Skill Based roles like Doctor, CA, Advocate etc.
- Time Investment is very high with constant efforts to improve skills
- Time\*Skills = Money
- Role of Innovation less but can be beneficial.
- Low scalability, Low risk, less rewarding
- Generates technical employment in low numbers in comparison to non-technical employments,
- Brand of Organisation is dependent of the personal brand.
- No Entry Barrier
- Mostly local or limited area coverage.
- Examples in Animal Husbandry - Practising vets, Farm Owners, Surgeons, Consultants, etc.

**Entrepreneur** - A person who organises and operates an enterprise, taking on greater than normal financial risks to do so.

- Technical skill is initially important but in long run acquiring and retaining skilled employee is essential,
- Time Investment is Initially very high but with time is goes down and organisation can run in absence also.
- Revenue Model \* Scale = Money
- Role of Innovation very essential.
- High scalability, High risk, Rewarding
- Generates technical as well as non-technical employments,
- Personal brand depends on Brand of Organisation
- Significant Entry Barrier
- Coverage Area Big
- High Technological intervention
- Examples in Animal Husbandry: E-commerce, Door supply of Fresh Meat, Milk, Supply chain digitisation, etc.

### Veterinarians in Entrepreneurship

Presence of veterinarian in the field of entrepreneurship is very limited and wherever it is present it is very much localised. Most of the big entrepreneurs do not belong to the veterinary profession though these activities are very much dependent on veterinarians.

It is very necessary to mention here that this is a very high time for veterinarians to get involved very actively in the field of entrepreneurship and start-up because in upcoming decade there will be so many start-ups coming in the field of animal husbandry, dairy, poultry, fishery, meat, egg, milk, etc. if you will observe you will get to know that dairy sector is now full off non veterinarian entrepreneurs doing very well in this sector. There are many start-up coming in meat

supply chain dairy supply chain egg supply chain and they are delivering fresh meat to the doors, being non veterinarians they are not very much responsible to the farmers: the actual producers, but only to the market or you can say there consumers. Keeping in mind above points, it becomes more important for veterinarians to be part of this upcoming start-up boom because only then the interest of farmers can be protected.

### **How to Start?**

It is very difficult for a veterinarian who is trained in doing technical things like surgeries medicines and identification of diseases to think of starting a business so to discuss the way of how to start any enterprise becomes very essential. There are some points to give structure to your thought off how to start.

There are mainly 3 to 4 steps in the process of establishing an enterprise:

1. Pre seed stage activities
2. Seed stage activities
3. Advance stage activities

**1. Pre-Seed** - This is the stage where start-up transforms from idea stage to prototype stage.

**Idea Stage** - This is the stage of identification of problem, finding a solution and critically analyse the practicality of the solution and ultimately reach to a problem statement and a practical solution.

- **Problem Statement:** (Identify -Define- Analyse)
- **Solution:** (Find -Test - Refine)
- **Revenue Model:** (Generate - Calculate – Escalate)

**Problem:** Animal husbandry and veterinary sector is full of problems, but not all the problems are very rewarding to solve so it is very necessary to identify a problem and properly define it before starting to work

### **How to Identify Problem?**

Animal husbandry and veterinary is very vast field so first you must limit to a particular sector for example poultry dairy meet egg etc. In every sector there is a division ranging from input production and supply chain to actual husbandry practice and output production & supply.

**Input Side:** If you will see input side, in general you will find there are many opportunities available to work with like - Feed, Supplements, Medicine, Livestock, Housing, etc. and all these input side off the production is full of problems like Supply chain , Quality , Price , availability etc.

**Production and Output side:** Animal husbandry being associated with food production have variety of outputs like Meat, Milk, Eggs, Wool, Livestock, etc. There are many issues ranging from Supply chain, Quality, Price, Availability etc. there are some emerging new concepts like traceability of food and residue testing etc.

**Distribution side:** Quality, Availability, Delivery, shelf life, Traceability, Residue, Export and many more problems are there waiting to be addressed by experts.

**Define problem:**

Type: Technical, Commercial, Nature: General, Specific, Practical,

The nature of the problem must be identified, general problems which is spread all across the India or at least to the state will always have more potential to generate rewards when solved similarly type of problem must be taken into consideration for example technical nature of problems in which the veterinarians are very much specialized will create a technical barrier for non-veterinarians to enter into the same field, but there are many commercial nature of problems like animal transport, supply chain, cold chain farm food as well as vaccine delivery, availability of low cost input etc. that can also be very much rewarding. One most important thing is identified problem must be a practical problem and the solution must be economically viable to produce by entrepreneur and to use by the farmers.

**How to Find Solution?**

Essential components: Practical, begin, Economic, Revenue generating, Saleable, Sustainable, Scale-able.

Centre of solution must be revenue generating because you cannot make any technology reach to the farmer without making that technology profitable for you for your distributor and very much useful for the end user.

**Revenue Model:**

(Generate - Calculate – Escalate)

The entire problem solution equation is dependent on the proposed revenue model, if the revenue model can generate good revenue for the entrepreneur simultaneously solving the problem after consumer in very effective and economic manner then this solution can be transformed into a prototype.

**Pilot Operation: Prototype stage**

It is basically testing of the prototype either product or service. in this process, identified problem and proposed solution is implemented in actual field condition and data collection is done simultaneously. the main important point of this operation will be identification of the critical points and revenue generating potential, and validation off the idea by data.

Process Test /Product Test – (Will work/ will not work)

Test – (identify issues- Solve -test -Feedback)

Revenue test – (Saleable, Sustainable , Scale-able)

\*Do not try to achieve perfection here



## 2. Seed Stage

( Scale - Invest- Earn- Invest)

Legal and Financial due diligence: at this stage one need to register company and acquire all the essential legal, and technical licenses, NoCs and permissions, The entrepreneur may require help of chartered accountant or any financial expert.

**Launch:** (Traction – Scale)

Launching depend on the nature of product or service and before launching most of the problems related to the technical issues and operational issues must have been solved.

**Funding:** (Financial and Technological support)

There are many institutional and non-institutional mode of generating funding for the venture. But to acquire funding one need to be sure about the revenue generating potential, future prospect, expected turn over, expected growth rate, and the evaluation of the company etc. Help of financial expert chartered accountant or experience entrepreneur may be required at this step also.

## 3. Advanced Stage: (Scale and Expand)

At this stage every entrepreneur is mature enough to understand about every single aspect of entrepreneurship, business plan, revenue generation, scaling up, expanding operations and what not.

### Start-up Examples in Animal Husbandry:

Students are advised to visit the website of all the start-ups mention bellow to get an idea about current innovation trends.

1. Krimanshi Technologies Pvt. Ltd.
2. SIMSUPA ELECTRONICS PRIVATE LIMITED
3. BHAIRAJ ORGANICS PRIVATE LIMITED
4. MACHPHY SOLUTIONS PRIVATE LIMITED
5. KOSHBIO PRIVATE LIMITED
6. iVET Labs LLP- Run by Veterinarian
7. FLIXDROP TECHNOLOGY PRIVATE LIMITED
8. STATLOGIC INDIA PRIVATE LIMITED
9. PROMPT INNOVATIONS PRIVATE LIMITED
10. RAVI PRAKASH
11. Atsuya Technologies Pvt Ltd
12. HUMAWINGS PRIVATE LIMITED
13. SERAGEN BIOTHERAPEUTICS PRIVATE LIMITED

**Animal Husbandry Grand Challenge -** <https://www.startupindia.gov.in/content/sih/en/ams-result.html?applicationId=614831bae4b0f62f933a24bc>

### Schemes -

Incubation Centre under RKVY RAFTAAR Scheme  
Start-up India Portal Schemes /Animal Husbandry Grand Challenge /BIRAC/ NIF/ SHRISTI/  
etc.

# The Anatomy and Psychology of Entrepreneur

4

**Dr. Devesh Thakur**

*Assistant Professor, Department of Veterinary & AH Extension Education, DGCN  
COVAS CSKHPKV Palampur*

***“Every Entrepreneur has his own story to tell about his Journey”***

Entrepreneurship is essential for the rejuvenation of animal husbandry and agriculture, making it more attractive, profitable and doing away with the perception of agriculture as a low prestige occupation. Though youth are generally apathetic to get themselves involved in agriculture yet many are keen to pursue agribusiness as an enterprise. They consider agribusiness as a profession which bestows reputation in the society (amidst the competing IT and related sectors). It also offers better income. Such a change calls for an extension approach beyond the conventional thinking on “crop and livestock production” or “technology”. Entrepreneurship development has gained momentum in this emerging context. Hence approaches on developing entrepreneurship needs to be discovered and appropriately synthesized with extension so as to have a meaningful and relevant extension system that suits to the entrepreneurs who are engaged in agriculture, livestock and related activities. But before that we need to answer these question:

- i. Can anyone become an entrepreneur?
- ii. Is it a personality trait?
- iii. Does an entrepreneur need a degree or certificate to become successful?

## **1. Traits required for Successful Entrepreneurship**

**i) Achievement motivation:** Entrepreneurs have high achievement motivation, i.e. an urge for excellence and desire for success in competing with standards set by others as well as one sets for one.

**(ii) Self confidence:** The entrepreneurs believe that they are capable of doing things and have the ability to control the actions and activities of other people.

**(iii) Risk taking:** An entrepreneur prefers to take calculated risks in dealing with a challenging situation. The entrepreneurial mindset is willing to move out of their comfort zones to stretch themselves. They try something new and different which they feel is necessary to achieve greater financial rewards. However, they make sure that risk is reduced by gathering more and more information from every possible source.

**(iv) Passionate:** Entrepreneurs are passionate about their work. They are constantly reviewing and evaluating the essential elements of business model. They key is to think about customers all the time.

**(v) Taking initiative:** An entrepreneur is prone to take initiative and explore all possibilities to reach the goal.

**(vi) Perseverance:** This constant has to be seen in terms of taking short term pains for long term gains. Delaying the instant gratification. In Stanford university researchers did a very famous studies on delayed gratification in the late 1960's & early 1970's. In these studies, a child was offered a choice between one small reward provided immediately or two small rewards if they

waited for a short period, approximately 15 minutes. The reward was in the form of a marshmallow. In follow up studies the researchers found that children who were able to wait longer for preferred rewards tended to have better life outcomes. Such as educational attainment, body mass index and other life measures. Successful entrepreneurs are willing to sacrifice, to delay immediate gratification in the present, in the short term, to enjoy greater rewards in the future, in the long term. Entrepreneurs are found to set goals that demand long term involvement and require perseverance.

**(vii) Goal setting:** An entrepreneur sets goals for himself both in terms of what she wants to and when. An entrepreneur realizes that time is a valuable resource and wants to utilize it fully to reach the goal in time.

**(viii) Systematic planning:** An entrepreneur believes in planning and takes logical steps to achieve the goals.

**(ix) Dealing with failure:** Failure does not deter an entrepreneur, rather she analyses the failure as feedback information, and take appropriate corrective steps. Failure, trial & error are absolutely essential to the ultimate success. In the words of great inventor Thomas Edison "I have not failed thousand times but I have found 10 thousand ways that do not work". Failures are to be taken as opportunities of learning.

**(x) Money as a measure:** Entrepreneurs see money (profit) as a measure of their success, as against the general stigma attached to money making.

**(xi) Information seeking:** An entrepreneur possesses information seeking behavior and is always on the lookout for relevant current information related to the product, process, market etc. to take sound decisions.

**(xii) Leadership:** An entrepreneur follows a style of persuasive leadership which motivates the team members to put in their maximum effort.

**(xiii) Use of resources:** Procurement and judicious utilisation of resources are other important characteristics of a successful entrepreneur.

**(xiv) Networking:** Developing a good network of relationships with the persons, agencies, organizations connected with the enterprise is an important characteristic for a successful entrepreneur.

**(xv) High Energy:** The entrepreneurs have to work for long hours. The self made entrepreneur & Chinese Billionaire Jack Ma recently told that to achieve financial success young people should be prepared to work for 12 hours a day. The entrepreneurs need to work hard especially in the initial phase or at start up stage. So they need high energy levels. Research has proven that sleep, food and exercise are a major factor for high energy and improved productivity. So entrepreneurs need to work upon these areas for higher efficiency and productivity.

**(xvi) Problem Solving Mindset:** An entrepreneurial mindset involves ways to solve the challenges. Finding solutions to problems instead of cry babying is the quality of entrepreneur. Many business ideas are built on unmet social needs and problems faced by people. Steve Siebold author of the book "How Rich People think" says if you wish to make lot of money, find a big problem that a lot of people have and solve it in a new way.

**(xvii) Vision:** People who have entrepreneurial mindset have futuristic look. Banfield a US researcher did a study involving Billionaires of US and summarized his finding in the book "The

unheavenly city". His conclusion is that "time perspective is a overwhelmingly important factor in the economic success or failure of an individual. He divided society into seven classes ranging from lowest class-(lower, middle, upper) middle class-rich-richer-richest class. At each level of socio-economic class the individual practiced longer & longer time perspective. At the lowest socio-economic scale the time perspective was only few hours or minutes like hopeless drink or drug addict who thinks only about the next drink or dose. At the highest level people had a time perspective of many years .They were futuristic in thinking .In other words they had a vision. So having vision is an entrepreneurial quality.

**(xviii) Ego control:** Another important quality that needs to be harnessed is to control the ego. Entrepreneurs are more concerned with what's right than with who's right. They keep their egos out of the discussion. They are willing to admit, "I could be wrong".

### **Routine Thinking versus Entrepreneurial Thinking:**

It is said that the psychology affects 100% of everything in the business. The mind of a person is always with him. A person with negative mindset will always find excuses of no money, time, help, office etc.

<b>Routine Thinking</b>	<b>Entrepreneurial Thinking</b>
<ol style="list-style-type: none"> <li>1. The routine thinking is seen generally in govt. offices, apathetic shopkeepers. They view customer/service seekers either with disinterest or as problems who are always complaining or requesting something new or different. These people are preoccupied with their routine affairs, following the thumb rules.</li> <li>2. They will say when I go to job, I think about job and when I come home I don't think about my job or locality. They are just going through motion of work thinking about something else.</li> <li>3. Routine business owners see their organizations as organizations that produce &amp; sell products and services.</li> <li>4. An average businessman says : " I sell cars"</li> </ol>	<ol style="list-style-type: none"> <li>1. The entrepreneurial thinking is the committed thinking. They see themselves as self employed. They use words like "We, mine and our" in talks. They have high levels of responsibility for results.</li> <li>2. They are services centric, customer centric people centric.</li> <li>3. Sales are central to them.</li> <li>4. Believe in SMS- Sell More Stuff.</li> <li>5. Entrepreneurial thinkers see their business mission as enhancing the lives of customers.</li> <li>6. Entrepreneurial says: "I enable people to drive wherever they want in comfort &amp; safety".</li> </ol>

### **Stress & Anxiety among Entrepreneurs**

The entrepreneurs are likely to face the challenge of stress due to uncertainty associated with entrepreneurship. The probability of stress may be high in the beginning as there is no product, no revenue and minimal help. So entrepreneurs are likely to face stress and anxiety. Also, entrepreneurship is a long term process and if health is not taken care, it may result in sluggishness. Many times entrepreneurs may put up weight, start overeating (binge eating).In the process energy to run the enterprise may be lost.

## Stress Management in Entrepreneurs

1. Mindfulness: As an entrepreneur one has to be mindful of it. Notice it and acknowledge it. That is part of dealing with it.
2. Exercise: Regular Exercise are important for mental health of entrepreneurs.
3. Eating: Mindless eating at desk while working, buying unhealthy foods.

## Entrepreneurs and the Power of Habits

Most people are good starters and poor finishers. Research says entrepreneurs who fail are enthusiastic for one day, five day, ten days, one month and then the enthusiasm wanes away. The way to succeed is to have long term will. So for that entrepreneur needs to create a habit you will just do something naturally. There will be no force so make a habit to work.

### 4. Psychology for Entrepreneurship: Lessons for Success by Napoleon Hill

**1. Principle of Burning desire:** The first principle is a burning desire. The entrepreneurship is not about a little wish or hope but involves singular focus to achieve big goals. Entrepreneurs are passionate and obsessed about their goals.

**2. Principle of Power of Belief:** The second key to success is to have strong faith in your abilities. Sometimes comparisons to unreasonable standards cause low confidence and company of people can undermine the confidence. Mind and Psychology is the most important thing that affects the business.

**3. Principle of Affirmations:** The third principle of Napoleon Hill is doing affirmations. These are the short statements to yourself. These affirmations have great powers as subconscious mind follows these messages.

By repeated affirmations the subconscious mind automatically develops the emotion of faith. Once all thoughts are emotionalized (given feeling) & mixed with faith they immediately begin to translate themselves into their physical environment.

#### Tips for Doing Affirmations

1. *Do them daily may be twice a day.*
2. *Repeat ten times*
3. *One or few months*
4. *Then move to next statements*
5. *Do n't use negative statements*

### 4. Principle of Specialized Knowledge

The difference between successful happy people and ordinary people is that for the later, learning is done when school is over while for former are lifelong learner. In the digital age there are many avenues for learning such as Books, YouTube, Online courses, Debates/ discussions in online communities. Also, role of experienced people in life such as coaches and mentors is extremely important.

**5. Principle of Imagination:** Ideas are the beginning points of all the fortunes. They are the products of imagination. The idea of secret formulae of Coco cola emerged in a small chemist shop. This idea has given jobs to thousands of men and women. According to Hill, it is through



imaginative faculty the man has discovered & harnessed more of nature's forces during the past fifty years than during entire history of human race (Hill,1939).He has conquered the space so that the birds are poor match in flying. He has harnessed the ether and made it serve as means of instantaneous communication with any part of the world.

**6. Principle of Organized Planning and Action:** Most are good starters and poor finishers. People are prone to give up at first defeat but entrepreneurs are persistent. They create a plan and put into action. They follow through & act with persistence and enthusiasm.

**7. Principle of being a good decision maker:** Making a bad decision is better than not making a decision at all because one can improvise

**9. Principle of Power of Mastermind:** Surround yourself with great people who are aligned with your ideas and who are successful. Associate with great and successful people. Two heads are better than one. Organize groups that meet regularly .This is useful for first time entrepreneurs. As all are in the same niche, they face similar challenges and also little bit competition & co-operation.

**10. Principle of Positivity and Dismiss Negative Emotions:** One should limit current events, news and bad events through social media. Be protective of your mind. One should not read negative feeds. Sometimes you read something and get angry. Find out from where does stress comes from. Here comes the concept of emotional intelligence. Keep a log of common negative emotions. Identify roots. Every negative emotion has an opposite one e.g. anger, athletes channel anger into doing something good instead of venting out.

The Entrepreneurial Behavior is the product of psychological traits and the environment he receives for entrepreneurship. Research has proven that all the successful entrepreneurs have these qualities discussed above. Therefore, any budding entrepreneur must nurture these qualities to be successful in their lives and make a positive change in the society.

Copyright with the NAHEP-IDP, SKUAST-Jammu

## How to Write a Business Plan?

5

**Dr. Jeevan Jyoti**

*Associate Professor, Department of Commerce, University of Jammu*

**E**ntrepreneurship is a powerful driver of economic growth and job creation. It creates new firms and jobs, opens up new markets and nurtures new skills and capabilities. An entrepreneur is someone, who starts or accelerates a business. Schumpeter viewed the role of the entrepreneur as central to capitalist development by providing new products, new production methods, new markets and new forms of organization, thereby acting as an agent of change. Indeed, the entrepreneur is someone who drives forward several factors that together stimulate economic growth — thereby helping to address governments' fiscal challenges.

The development of entrepreneurship does not depend on a single over-riding factor but rather on a 'constellation of factors' at the individual, societal and national levels known as Entrepreneurial Ecosystem framework, which enable growth performance among the entrepreneurs in the knowledge intensive ICT as well as non-ICT sectors. Among all the factors responsible for business success, a sound business plan is of paramount importance. The most vital part of writing the business plan is not the plan itself, but all the learning that you acquire when you pin down on a concept and then research the concept, the industry, the competitors, and customers. Though a written plan has its significance but a well-written plan does not necessarily ensure a successful venture. Inc. Magazine reported that 65% entrepreneur admitted, who have written a formal business plan, that the existing business was significantly different from their original concept. But following a formal process can help ensure that you don't miss any important gaps in your planning process. As General Dwight D. Eisenhower said, "In preparing for battle I have always found that plans are useless, but planning is indispensable".

One of the common misperception is that business plan is used for raising capital. Although it helps in raising capital, the main purpose of the business plan is to aid entrepreneurs have a complete in depth understanding of the opportunity he/she wants capture. Many potential entrepreneurs pursue ideas that can't be profitable due to lack understanding of the business model. Starting a flawed business model can consume huge capital without any results. So you need to do lot of research before stating any new venture, which requires lot of product-market research.

A sound business plan helps an entrepreneur to convert his/her original idea into a viable opportunity by asking critical questions and seeking answers for those questions. For example, one question that every entrepreneur needs to answer is, "what is the customer's need?" Interactions with customers and other market mentors help in developing the product that addresses customers' needs. Such initiatives save effort and money that an entrepreneur may have to spend to reshape the product after its launching. Although all businesses have to adjust their products/services as per customers' feedback but the business planning assists the entrepreneurs to anticipate such adjustments in early stage of the launch of product/service.

## Purpose of Business Plan

Before you write your business plan, it's important to understand the purpose of creating it in the first place. There are the three main reasons you should have a business plan:

- 1) **Establish a business focus:** The primary purpose of a business plan is to establish your plans for the future. These plans should include goals or milestones alongside detailed steps of how your company will reach each step. The process of creating a roadmap to your goals will help you determine your business focus and pursue growth.
- 2) **Secure funding:** One of the first things private investors, banks or other lenders look for before investing in your business is a well-researched business plan. Investors want to know how you operate your business, what your revenue and expense projections are and, most importantly, how they will receive a return on their investment.
- 3) **Attract executives:** As your business grows, you'll likely need to add executives to your team. A business plan helps you attract executive talent and determine whether or not they are a good fit for your company.

## Types of Business Plans

There are two main types of business plans: simple and traditional. Traditional business plans are long, detailed plans that expound on both short-term and long-term objectives. In comparison, a simple business plan focuses on a few key metrics in concise detail so as to quickly share data with investors.

- 1) **Simple Business Plan:** Business model expert Ash Maurya has developed a simple type of business plan called a lean canvas. The model, which was developed in 2010, is still one of the most popular types of business plans emulated today.
- 2) **Traditional Business Plan:** Traditional plans are lengthy documents, sometimes as long as 30 or 40 pages. A traditional business plan acts as a blueprint of a new business, detailing its progress from the time it launches to several years in the future when the startup is an established business.

## Steps in Writing the Business Plan:

One needs to realize that the business plan is a "living document." Though the first draft will need polishing but most business plans become obsolete the day they are finalized. So, entrepreneurs need to continuously update and revise their business plan as they know that it is a learning process. You need to continuously learn new things that can enhance the business in sustainable terms. Following are the essential components of a business plan:

1. **Cover:** It includes company name, tagline, contact person, address, phone, fax, e-mail, date and disclaimer if any.
2. **Executive Summary:** This section is called the "tickler". If you aren't able to capture readers' attention in the executive summary they will read not read the rest of it.
3. **Table of Contents:** It makes the document easy to read. A detailed table of contents is critical as it provides the reader a road map of your plan
4. **Industry, Customer, and Competitor Analysis:** This section illustrates the opportunity and initiatives establish market niche through detailed market research about customer and competitors.

5. **Company and Product:** In this section the basic details of mission and vision of your company and the type of product/service you want to undertake are explained.
6. **Marketing Plan:** This section describes how the product will be launched and which modes will be used to promote the product/service.
7. **Operations Plan:** this section explains how the firm's operations will add value. A detailed analysis of the production cycle and its impact on working capital is discussed.
8. **Development Plan:** It highlights the developmental strategy and extends a detailed timeline for the development especially if product is going to be patented. It includes detailed analysis of features to be developed for the firm's competitive advantage.
9. **Team:** This section of the business plan is often the section that professional investors read right after the executive summary. It is also very important to the lead entrepreneur. It identifies the key members and how they are exceptionally qualified to carry on responsibilities.
10. **Critical Risks:** Although the business plan is an effort to create a success story but the readers identify and recognize a number of threats. The plan has to identify the possible risks; otherwise, the investors will consider the entrepreneur as immature and may possibly withhold investment.
11. **Financial Plan:** This section details about how to construct financial pro-forma in terms of fund flow and cash flow statement as well as the estimated budget.
12. **Appendices:** It includes anything that you think adds further validation to your plan but that is too large for the main sections of the plan.

### The best Business Plan Software

There are many software programs available. These softwares simplify the process and eliminating the need to start from scratch. These often include features like step-by-step wizards, templates, financial projection tools, charts and graphs, third-party application integrations, collaboration tools and video tutorials.

After researching and evaluating dozens of business plan software providers, we narrowed down these four of the best options available:

- 1) **LivePlan:** LivePlan is a cloud-hosted software application that provides many tools to create your business plan, including more than 500 templates, a one-page pitch builder, automatic financial statements, full financial forecasting, industry benchmark data and KPIs.
- 2) **Bizplan:** Bizplan is cloud-hosted software that features a step-by-step builder to walk you through each section of the business plan.
- 3) **GoSmallBiz:** GoSmallBiz is a cloud-based service that offers industry-specific templates, a step-by-step wizard that makes creating a detailed business plan an easy one, and video tutorials.
- 4) **Enloop:** Enloop focuses on financial projections. It provides you with everything you need to demonstrate how financially viable your business can be, and walks you through the process of generating financial forecasts. Annual plans start at \$11 per month.



**References/ Suggested Readings:**

- 1) **Tim Berry, “Hurdle: The Book on Business Planning”** Palo Alto Software, Inc; 6th edition
- 2) D. H. Holt, “ Entrepreneurship” Prentice Hall.
- 3) Rhonda Abrams, "Successful Business Plan: Secrets & strategies".
- 4) Mike McKeever , “How to Write a Business Plan”.
- 5) William D. Bygrave & Andrew Zacharakis, “Entrepreneurship” John Wiley & Sons, Inc.

Copyright with the NAHEP-IDP, SKUAST-Jammu

# Role, Scopes and Opportunities of a Vet in the Field of Animal Welfare

6

**Dr. Smriti Rekha Dutta**

*Programme Director, JBF (INDIA) TRUST, Chief Clinician & Small Animal Surgeon,  
Hiyaa's Clinic & Surgical Centre for pets*

**A**nimal welfare is a core mandate of the veterinary community generally and veterinarians individually. Animal welfare is a human responsibility that encompasses all aspects of animal well-being, including proper housing, management, nutrition, disease prevention and treatment, responsible care, humane handling, and when necessary, humane slaughter. Veterinarians need to assure that the Animal Welfare Acts and programs are useful and truly serve societal need as well as the needs of the animals. They play an important role in safeguarding both animal and human welfare, thus the environment welfare. All these three welfares are indirectly related to Global Welfare.

**Animal welfare subject is categorized into four different categories:**

1. Farm Animal Welfare
2. Companion Animal Welfare
3. Wild Animal Welfare
4. Aquatic Animal Welfare

In 2008 the World Organization for Animal Health (OIE) adopted a definition on animal welfare: "Animal welfare means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing. Animal welfare refers to the state of the animal; the treatment that an animal receives is covered by other terms such as animal care, animal husbandry and humane treatment". This definition clearly shows that an animal can experience both good and poor welfare and that there are important factors that influence its welfare. This definition is reflective of the "Five Welfare Freedoms" that are widely accepted as the foundation of good animal welfare (Webster, J.) and which are supported by the World Veterinary Association (Vallat, 2008).

The concept of "**Freedom Five**" is summarized as:

1. Freedom from thirst, hunger and malnutrition- by ready access to fresh water and a diet to maintain full health and vigour
2. Freedom from discomfort- by providing a suitable environment including shelter and a comfortable resting area
3. Freedom from pain, injury and disease- by prevention or rapid diagnoses and treatment
4. Freedom to express normal behaviour- by ensuring conditions that avoid mental sufferings; and by providing sufficient space, proper facilities, and company of the animal's own kind and
5. Freedom from fear and distress- by ensuring conditions that avoid mental sufferings.

## **Role of Veterinarians in the field of Animal Welfare**

Veterinary profession have a wide range of expertise and skills that make veterinarians unique in their understanding of animal behaviour and animal welfare. Though the veterinary profession is committed to promote animal welfare through the state of art and science of keeping animals fit through attention to good husbandry, hygiene, preventive medicine and prompts treatment of injury and diseases, it lacks in its attention to the study of how the animal feels. Traditionally, the veterinary community has engaged in providing the means to accomplish good animal welfare. Thus, veterinarians play a key role in the tripartite association formed by animals, animal owners and society which may vary from region to region.

The classical view of a veterinarian as a person qualified to practice veterinary medicine has lead most people to think that their clinical practices are related to the prevention, cure or alleviation of pain and treatment of injuries in animals, especially domestic animals. Though these roles are very important, the contemporary roles undertaken by veterinarians go far beyond these more visible tasks, and this is the reason why there is a need for far greater awareness in the public eye. It must be recognized that as the world becomes intricately inter-connected and more complex, so are the various obligations and responsibilities that veterinary professionals must undertake. As challenges have risen, veterinarians have found ways to adapt given that their knowledge and training makes them multifunctional professionals. This aids societies so that its animals stay healthy and productive.

Veterinary professionals must respect the different practices, but base its recommendations and practices on the science of animal welfare. Veterinarians must promote animal welfare based on science. They must recognise the conflicting pressures of work on the area of farming production, animals and in any one farming situation also for a farmer who has an economic need to operate a successful, commercially sustainable business. This means that vet must look at strategies that will attempt to satisfy all the stakeholders. It needs to increase overall production efficiency in the context of global demand. It need to ensure that the animals are well looked after and that their welfare is not compromised beyond an acceptable level. Veterinarians should try to improve animal welfare whenever possible. They belong to the only profession that has a holistic animal welfare expertise because of their extensive education. Their professional ethics oblige veterinarians to work for the benefit of animal welfare and society to satisfy the societal demand for good animal welfare and the global demand for food. The challenge for all veterinarians is to actively participate and contribute to the advancement of animal welfare for all animals on this planet.

### **Good Animal Welfare Vs Bad Animal Welfare**

Good Animal Welfare involves the following activities:

1. Veterinary medical treatment & disease prevention
2. Deworming & Vaccination
3. Good Shelter management
4. Proper Nutrition
5. Humane handling of animals
6. Humane transportation of animals
7. Humane killing of animals
8. Appropriate environmental enrichment

These activities clearly shows that there are important factors which influences animal welfare, an animal can experience bad or poor welfare or good welfare. The standards of good

animal welfare vary considerably between different frameworks. It is strongly linked to animal health and good animal husbandry.

### **Animal Welfare in its true sense is the state of its body, feeling and needs**

Animal welfare includes not only the state of the animal's body but also its feelings. Thus, if an animal feels well, it is faring well. Animal welfare consists entirely in feelings and these have progressed to protect the animal's primary needs. The welfare of animal will remain poor unless all important needs are met. These needs are:

1. Life sustaining needs which must be met in order to survive
2. Health sustaining needs which include avoidance of disease and injury
3. Comfort sustaining needs which contribute to quality of life

### **Opportunities and scopes of veterinarian in the field of animal welfare**

Veterinarians have the necessary skills and tools to meet the social expectations and profession obligations regarding to animal welfare and the profession has great potential, opportunity and responsibility to engage in a wide range of employment fields that deliver animal welfare services to the benefit of society and all animals. Veterinarians should continue to identify current needs and future developments and to ensure that they are always properly trained in the field of animal welfare. In addition, they should make themselves available to cooperate with government & non-government sector to improve the welfare and well-being of animals. Because, all legislation related to animal welfare are drafted in close co-operation with veterinarians and veterinary associations. In countries where there is no Animal Welfare Acts, Veterinary Councils or National Veterinary Associations initiates such Animal Welfare Legislations.

In India we have a board called Animal Welfare Board of India (AWBI) which is now under the Ministry of Fisheries, Animal Husbandry & Dairying.

Thus, the veterinary profession and veterinarians are well prepared and responsible to use its skills and expertise to help animal owners, animals and the public to provide the best practices and education about animal welfare.

Veterinarians have wide range of scopes and activities in Animal Welfare field as follows:

1. Daily Clinical practices
2. Animal Advocacy
3. Promotion of Animal Welfare through education and creating public awareness
4. Animal Welfare scientific research or Research Scientist
5. Drafting Animal Welfare legislations: **Legislators look to the veterinary profession for guidance on issues pertaining to animal health and welfare so your contact will have a significant impact.**
6. Involvement in Animal Welfare Program like Veterinary social work program
7. Collaboration with other organizations, food industries, factory farming etc.
8. Shelter medicine
9. Laboratory animal management
10. Animal behaviourist
11. Ecologist
12. Environmentalist
13. Zoologist

14. Animal psychologist
15. Wild animal management
16. Establishment of an Animal Welfare Organization

**Being a Veterinarian is like creating a difference and standing out of crowd!**

**REFERENCES:**

1. Hewson CJ (2003). "What is animal welfare? Common definitions and their practical consequences". *The Canadian Veterinary Journal* 44: 496–499.
2. Jan Ladewig (2008). The role of the veterinarian in animal welfare. *Acta Veterinaria Scandinavica* 50(Suppl 1): S5 (19 August 2008).
3. Edwards JD and Schneider HP (2005). The World Veterinary Association and animal welfare. *Revue scientifique et technique* (International Office of Epizootics) 24: 639-646.
4. Kenneth L Easton (2004). The veterinarian's role in animal welfare. *Canadian Veterinary Journal* 45: 1030.
5. OIE (2008). <http://www.oie.int/doc/ged/D7201.pdf>
6. Webster, J. Animal welfare: Freedoms, dominions (sic) and “A Life Worth Living”. *Animals* **2016**, 6, 35.
7. BROWN, D. B. (2010). Animal Welfare. *Veterinary Bulletin - Agriculture, Fisheries and Conservation Department Newsletter*, 1-12.
8. Islam, M. A. (2015). ROLE OF VETERINARIAN IN ANIMAL WELFARE ISSUE: A GLOBAL CONCEPT. *Bangl. J. Vet. Med.* (2015). 13 (1): 1-3, 1-3.
9. <https://www.avma.org/KB/Resources/Reference/AnimalWelfare/Pages/what-is-animal-welfare.aspx>



# Government Schemes and Outreach Programmes for Entrepreneurship in Livestock Sector

7

Pranav Kumar<sup>1</sup> and Maninder Singh<sup>2</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup>M.V.Sc Scholar, Division of Veterinary & Animal Husbandry Extension Education, Faculty of Veterinary Sciences & Animal Husbandry, R.S. Pura, Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu (SKUAST-Jammu), Jammu (UT of J&K) INDIA 181102



India is a land of opportunity for investors looking for new and expanding markets. The livestock sector in India has witnessed a growth in recent years on account of rising demand for milk and its products fuelled by expansion in milk production. India is not only the largest producer of milk but also the largest consumer of milk. Entrepreneurs have a huge entrepreneurial opportunity in the livestock sector. Around 20.5 million people depend upon livestock for livelihood. The agriculture and the allied sector is the largest employer of the workforce as it accounted for 18.8% in 2021-22 Gross Value Added of the country.

## *Government Schemes and Programmes towards Entrepreneurial Livestock development:*

### **AHIDF -Animal Husbandry Infrastructure Development Fund**

In pursuance of recently announced **Atma Nirbhar Bharat Abhiyan** stimulus package for ensuring growth in several sectors, the Cabinet Committee on Economic Affairs, chaired by Prime Minister Shri Narendra Modi, has approved setting up of **Animal Husbandry Infrastructure Development Fund (AHIDF)** worth Rs. 15000 crore. The Animal Husbandry Infrastructure Development (AHIDF) has been approved for incentivizing investments by individual entrepreneurs, private companies, MSME, Farmers Producers Organizations (FPOs) and Section 8 companies to establish (i) the dairy processing and value addition infrastructure, (ii) meat processing and value addition infrastructure and (iii) Animal Feed Plant.

**Objectives:**

- To help increasing of milk and meat processing capacity and product diversification thereby providing greater access for unorganized rural milk and meat producers to organized milk and meat market.
- To make available increased price realization for the producer.
- To make available quality milk and meat products for the domestic consumer.
- To fulfil the objective of protein enriched quality food requirement of the growing population of the country and prevent malnutrition in one of the highest malnourished children's populations in the world.
- Develop entrepreneurship and generate employment.
- To promote exports and increase the export contribution in the milk and meat sector.

To make available quality concentrated animals feed to the cattle, buffalo, sheep, goat, pig and poultry to provide balanced ration at affordable prices

**Eligible Entities (EEs):**

- i. Farmer Producer Organisation (FPO)
- ii. Private Companies
- iii. Individual Entrepreneurs
- iv. Section 8 companies
- v. Micro Small and Medium Enterprises

**Benefits:**

- i. The beneficiaries are to contribute a minimum of 10% margin money as investment. The balance 90% would be the loan component to be made available by scheduled banks.
- ii. Government of India will provide 3% interest subvention to eligible beneficiaries.
- iii. There will be 2 years moratorium period for principal loan amount and 6 years repayment period thereafter.
- iv. From the Credit Guarantee Fund, Credit guarantee would be provided to those sanctioned projects which are covered under MSME defined ceilings. Guarantee Coverage would be upto 25% of Credit facility of borrower.

**Components being funded:**

- i. **Dairy Processing:** Establishment of new units and strengthening of existing dairy processing units with quality and hygienic milk processing facilities, packaging facilities or any other activities related to dairy processing.
- ii. **Value added dairy product manufacturing:** Establishment of new units and strengthening of existing manufacturing units for value addition of the following milk products:
  - a. Ice Cream unit
  - b. Cheese manufacturing unit
  - c. Ultra High Temperature (UHT) Milk processing unit with tetra packaging facilities
  - d. Flavoured Milk manufacturing unit
  - e. Milk Powder manufacturing unit
  - f. Whey powder manufacturing unit
  - g. Any other milk products and value addition manufacturing unit

**iii. Meat processing and Value addition of facilities:**

- a. Establishment of new meat processing unit and strengthening of existing meat processing facilities for sheep/goat /poultry /pig / buffalo in rural, semi-urban and urban areas.
- b. Large scale integrated meat processing facilities/ plant/ unit.
- c. Value Added Products: Establishment of new or strengthening of existing value addition facilities for meat products like Sausage, nuggets, ham, salami, bacon or any other meat products. These facilities could either be integral part of meat processing units or standalone meat value addition unit.
- d. The project cost of each meat processing plant should compulsorily include Effluent Treatment Plant (ETP), meat microbiological testing laboratory, residue testing laboratory, cold storage for holding the offals, skin/ hide processing areas and their preservation and refrigeration facilities for holding the chilled products and value added products for minimum of 24 hours.

**iv. Animal Feed Manufacturing and strengthening of existing units/ plants:**

- a. Establishment of mini, medium and large animal feed plant
- b. Total Mixed Ration Blocking Making Unit
- c. By Pass Protein Unit
- d. Mineral Mixture Plant
- e. Enrich Silage Making Unit
- f. Animal Feeding Testing Laboratory

**How to apply**

The beneficiaries intending to invest for establishing dairy and meat processing and value addition infrastructure or strengthening of the existing infrastructure can apply for loan in the scheduled bank through “Udyami Mitra” portal of SIDBI.

<https://www.udyamimitra.in/>



**DIDF - Dairy Processing & Infrastructure Development Fund**

To ensure that Dairy Cooperatives remain competitive for the sustained benefit of farmers, the Government of India had announced creation of Dairy Processing and Infrastructure Development Fund under NABARD in December 2017 with a total scheme outlay of Rs. 10,881 crore.

Under the scheme, a corpus fund of **Rs. 8004 crore** has been set up for creation of dairy processing infrastructure during the period from 2017-18 to 2019-20.

NABARD shall provide loan to National Dairy Development Board (NDDB) and National Cooperative Development Corporation (NCDC) at subsidized rate of 6% per annum.

NDDB/NCDC shall further lend to End Borrowers @ 6.5% who are State Dairy Cooperative Federations, Districts Cooperative Milk Unions, Multi State Co-operatives Societies, NDDB subsidiaries, Milk Producers Companies for creation of dairy infrastructure.

**Objectives of the scheme** - The scheme have been designed with the following objectives:

- To modernise the milk processing plants and machinery and to create additional infrastructure for processing more milk.
- To create additional milk processing capacity for increased value addition by producing more dairy products.
- To bring efficiency in dairy processing plants/producer owned and controlled dairy institutions, thereby enabling optimum value of milk to milk producer farmers and supply of quality milk to consumers.
- To help the producer owned and controlled institutions to increase their share of milk, thereby providing greater opportunities of ownership, management and market access to rural milk producers in the organised milk market.
- To help the producer owned and controlled institutions to consolidate their position as dominant player in the organised liquid milk market and to make increased price realisation to milk producers.

**Scheme Area** - The scheme will be implemented across the country.

**Components** of the scheme are as under:

- Modernisation & creation of new milk processing facilities
- Manufacturing facilities for Value-Added Products
- Milk Chilling infrastructure
- Setting up electronic milk testing equipment
- Project Management and Learning
- Any other activity related to the dairy sector targeted to contribute to the objectives of DIDF and decided by Government of India in consultation with the stakeholders.

**Eligible Institutions / 'Eligible End Borrowers'**

- Cooperative Milk Unions
- State Cooperative Dairy Federations
- Multi State Milk Cooperatives
- Milk Producer Companies
- NDDB Subsidiaries

**Funding Pattern** - The funding support under the scheme will be in the form of interest bearing loan.

- Loan Component – 80% (maximum)
- End Borrower's Contribution - 20% (minimum)
- **Tenure of loan and moratorium period** - Tenure of loan would be a maximum of 10 Years, from the date of the 1st release, including moratorium period of a maximum 2 years on

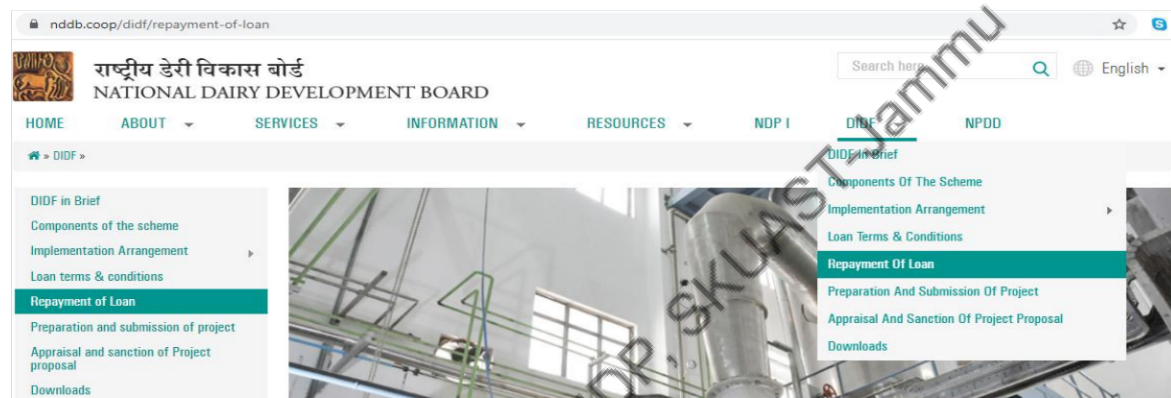


- repayment of principal only (moratorium period will be for the project and not for each release).
- **Interest Rate** – The rate of interest to End Borrowers would be 6.5% per annum (or as decided by NDDDB from time to time) and will be effective throughout the repayment period. Interest will be calculated on daily product basis without compounding.

### How to apply

The form along with all the information about loan facilities is available on the National dairy development board (NDDDB) website.

<https://www.nddb.coop/didf>



### NLM: National Livestock Mission

National Livestock Mission intends to achieve the objectives of employment generation through entrepreneurship development in small ruminant, poultry and piggery sector & Fodder sector, increase of per animal productivity through breed improvement, increase in production of meat, egg, goat milk, wool and fodder

#### *Breed Development of Livestock and Poultry*

This sub-mission proposes to bring sharp focus on entrepreneurship development and breed improvement in poultry, sheep, goat and piggery by providing the incentivization to the Individual, FPOs, FCOs JLGs, SHGs, Section 8 companies for entrepreneurship development and also to the State Government for breed improvement infrastructure.

#### *Feed and Fodder Development*

This sub-mission aims towards strengthening of fodder seed chain to improve availability of certified fodder seed required for fodder production and encouraging entrepreneurs for establishment of fodder Block/Hay Bailing/Silage Making Units through incentivisation.

#### *Innovation and Extension*

The sub-mission aims to incentivize the Institutes, Universities, Organizations carrying out research and development related to sheep, goat, pig and feed and fodder sector, extension activities, livestock insurance and innovation. Under this sub-mission, assistance will be provided to the central Agencies, ICAR Institutes and University farms for applied research required for development of the sector, extension services including promotional activities for animal

husbandry and schemes, seminars, conferences, demonstration activities and other IEC activities for awareness generation. Assistance will also be provided for livestock insurance and innovations.

The National Livestock Mission (NLM) an initiative of the Ministry of Agriculture and Farmers' Welfare, has commenced from 2014-15. The Mission is designed to cover all the activities required to ensure quantitative and qualitative improvement in livestock production systems and capacity building of all stakeholders. This Mission is formulated with the objective of sustainable development of livestock sector, focusing on improving availability of quality feed and fodder.

It has four Sub-Missions are as under:

- **The Sub-Mission on Livestock Development**
- **The Sub-Mission on Pig Development in North-Eastern Region**
- **The Sub-Mission on Fodder and Feed Development**
- **Sub-Mission on Skill Development, Technology Transfer and Extension**

NABARD is the subsidy channelizing agency under Entrepreneurship Development and Employment Generation (EDEG) component of National Livestock Mission. This includes:

- **Poultry Venture Capital Fund (PVCF)**
- **Integrated Development of Small Ruminants and Rabbit (IDSRR)**
- **Pig Development (PD)**
- **Salvaging and Rearing of Male Buffalo Calves (SRMBC)**

#### **Who can benefit from the scheme?**

Farmers, Individuals Entrepreneurs, NGOs, Companies, Cooperatives, groups of organized and unorganized sector which include Self- Help Groups (SHGs) and Joint Liability Groups (JLGs)

#### **Eligible financial institutions**

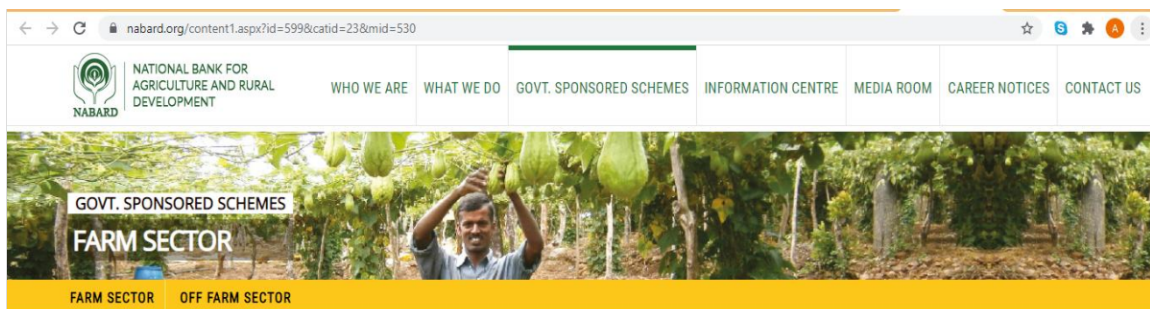
- Commercial Banks
- Regional Rural Banks
- State Cooperative Banks
- State Cooperative Agriculture and Rural Development Banks
- Other institutions eligible for refinance from NABARD

#### **Funding Pattern:**

The sub-scheme National Livestock Mission is being implemented on a cost sharing ratio of 60:40 between Central & State Government except NE and Himalayan States where the ratio is 90:10 and 100% in case of Union Territories. The component Entrepreneurship Development and Employment Generation (EDEG) and Small Livestock Institute are being implemented on 100% Central Assistance. However, the EDEG is a beneficiary oriented scheme wherein the entire subsidy portion (25% for General and 33.33% for SC&ST beneficiary) to eligible beneficiary is provided by Central Government through NABARD. Under EDEG the back ended subsidy in North- East /Hill /Left Wing Extremism (LWE) and difficult areas varies between 35% to 60%.

**How to apply <https://www.nabard.org>**





## NPDD-National Programme for Dairy Development

The National Programme for Dairy Development (NPDD) scheme was launched since 2014-15 by the Government of India. It is designed to provide technical and financial assistance for the dairy development and thereby creating any infrastructure related to the processing, production, marketing and procurement by State Implementing Agencies (SIAs) like the milk federation/unions while extending their activities by providing training facilities to the farmers.

### Objectives of the Scheme

- To strengthen and create the necessary infrastructure for the production of quality milk.
- Creation and development of cold chain infrastructure.
- To strengthen and create the infrastructure required for the production, procurement, marketing and processing of milk.
- To create appropriate training infrastructure and facilities for the training of dairy farmers.
- To strengthen the dairy Producer Companies/cooperative societies at the village level
- To increase the production of milk by providing the most needed technical input services like mineral mixture and cattle feed, etc; to assist the rehabilitation potential and viable milk unions/federations

During current financial year 2020-21, the Department is primarily focusing on mainly two activities namely:

- (a) Village based milk procurement system.**
- (b) Milk Quality Testing Facilities at Village/District/State Level.**

### Under NPDD, Fund sharing Pattern of Centre & State is as under:

- Central share of 50% for Bulk Milk Cooler, Dairy Plant, Milk Powder Plant & Rehabilitation Projects in NDP States.
- Central share of 75% for above components for profit making milk unions in non-NDP States.
- Central share of 90% for above components for loss making milk unions in non-NDP States, hilly States of J&K, HP and States of NER.
- Central governmental assistance will be provided for the project and will be restricted to a total of Rs.15 crores per District.
- Any form of assistance provided for the “technical input services” will be subject to a ceiling of 15% of its project cost.
- For milk powder plants, the central grant per district will be limited to an amount of Rs.5 crores per district.

- The central grant for the establishment of milk powder plant will be limited to dairy cooperatives only.
- Any assistance for the cattle induction
- The subsidy for Cattle Induction shall be allowed only for BPL families, Scheduled Tribes and Scheduled Castes and will be restricted to a total of 50% in all cases except for the women farmers.
- The Cost of calculating the subsidy shall include: cost of cattle, animal insurance and transportation cost.
- Necessary assistance for Information and Communication Technology networking shall be subject to a maximum ceiling of 10% of the project cost.
- The rehabilitation assistance as the central grant will be restricted to a ceiling of Rs.5 Crores.

#### **Services Provided to Milk Producers**

- Doorstep Veterinary Emergence and Health Services.
- Cattle feed subsidy Rs.2-4/kg given.
- The Mineral mixture is supplied to the milk producers at a subsidy of Rs 25 per Kg.
- Animal health camps are conducted in villages for mass deworming and to treat infertility cases in almost all district milk unions.
- Green fodder and fodder slips are provided to milk producers through fodder cultivation in union land.
- FMD vaccinations carried out twice every year in coordination with the Animal Husbandry Department.
- Regular training is given to milk producers and village level workers in training centres.
- Bulk Milk Cooler (BMC) are installed when necessary as per the request of the producers and the budgeting done under this scheme.

#### **Training Institutes Covered under Skill Development of NPDD**

- Training centres at Krishi Vigyan Kendras
- Training institutes at Central/State Agriculture/Veterinary/Dairy Science University/Colleges.
- Training centres at Milk Producer Companies
- Training centres at State Milk Federations/District Milk Unions
- Training centres at Department of Animal Husbandry/Dairy Development of the State.
- For strengthening/upgrading of the above training, centres will be taken up with the purpose of holding/conducting training of milk producer members of dairy PRIs/cooperatives for a period of almost 3 years or more during the implementation of the project under NPDD.

### **NDP I: National Dairy Plan Phase I**

National Dairy Plan Phase I (NDP I) a Central Sector Scheme for a period of 2011-12 to 2018-19. NDP I was implemented with a total investment of about ₹ 2242 crore comprising ₹ 1584 crore as International Development Association (IDA) credit, ₹ 176 crore as Government of India share, ₹ 282 crore as share of End Implementing Agencies (EIAs) that will carry out the projects in participating states and ₹ 200 crore by National Dairy Development Board and its subsidiaries for providing technical and implementation support to the project.

Board of Executive Directors of the International Development Association has approved a US\$ 352 million credit on 15 March 2012 and Department of Animal Husbandry, Dairying and Fisheries, Government of India issued administrative approval of central sector scheme NDP I vide office memorandum F.No. 22-23/2011-DP dated 16 March 2012.

Funding will be through a line of credit from the International Development Association (IDA), which along with the share of the Government of India will flow from DADF to NDDB and in turn to eligible EIAs.

### Objectives

NDP I is a scientifically planned multi-state initiative with the following Project Development Objectives:

- To help increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk
  - To help provide rural milk producers with greater access to the organised milk-processing sector
- These objectives would be pursued through adoption of focused scientific and systematic processes in provision of technical inputs supported by appropriate policy and regulatory measures

### Project Area

NDP I will focus on 18 major milk producing states namely Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal, Telangana, Uttarakhand, Jharkhand and Chhattisgarh which together account for over 90% of the country's milk production. Coverage of NDP I will however be across the country in terms of benefits accruing from the scheme.

As the phase-1 of the ambitious National Dairy Plan (NDP-1) came to an end, the National Dairy Development Board (NDDB) has initiated talks with the World Bank and the government departments concerned to go ahead with the **second phase of the Plan**. The second phase will have a projected financial outlay of about Rs 8,000 crore. The NDP-2 will also look at promoting biogas for households in villages.

### GOBARdhan Yojna (गोबर धन योजना)

Ministry of Drinking Water & Sanitation has launched the **GOBAR (Galvanizing Organic Bio-Agro Resources) - DHAN** scheme. The scheme is being implemented as part of the Swachh Bharat Mission (Gramin).

The Swachh Bharat Mission (Gramin) comprises two main components for creating clean villages – creating open defecation free (ODF) villages and managing solid and liquid waste in villages. With over 3.5 lakh villages, 374 districts and 16 States/UTs of the country being declared ODF, the stage is set for ODF-plus activities, including measures to enhance Solid and Liquid Waste Management (SLWM).

**The GOBAR-DHAN scheme**, with its focus on keeping villages clean, increasing the income of rural households, and generation of energy from cattle waste, is an important element of this ODF-plus strategy.

## Aim

The scheme aims to positively impact village cleanliness and generate wealth and energy from cattle and organic waste. The scheme also aims at creating new rural livelihood opportunities and enhancing income for farmers and other rural people.

## Implementation

The programme will be implemented using SLWM funding pattern of SBM-G Guidelines. The total assistance under SBM (G) for SLWM projects is worked out on the basis of total number of households in each GP, subject to a maximum of Rs 7 lakh for a GP having up to 150 households, Rs.12 lakh up to 300 households, Rs. 15 lakh up to 500 households and Rs.20 lakh for GPs having more than 500 households. Funding for SLWM project under SBM (G) will continue to be provided by the Central and State Government in the ratio of 60:40 as per the existent formula.

Only those Gram Panchayats which have not availed SLWM funds under SBM(G) are eligible to receive the financial assistance under GOBAR-Dhan scheme, subject to the limits of guidelines. However, States shall have the flexibility to provide additional funds to any GP based on viability under the scheme.

## Support from the scheme

There are 4 Models for implementation of the projects. As per GOBAR-DHAN guidelines, the Model wise incentive is as under:

- Model-A (Gram Panchayat): Rs. 7 lakh, Rs. 12 lakh, Rs. 15 lakh and Rs. 20.00 lakh for a GP having households up to 150, 300, 500 and more than 500 respectively.
- Model-B (SHG Federation): Rs. 7 lakh, Rs. 12 lakh, Rs. 15 lakh and Rs. 20.00 lakh for a GP having households up to 150, 300, 500 and more than 500 respectively.
- Model-C (Bulk Waste Generator/ Entrepreneur) is Rs. Rs. 7 lakh, Rs. 12 lakh, Rs. 15 lakh and Rs. 20.00 lakh for a GP having households up to 150, 300, 500 and more than 500 respectively.
- Model-D (Any Eligible Enterprise): No incentive

**Source:** Department of Drinking Water and Sanitation, Ministry of Jal Shakti

The scheme would focus on managing and converting cattle dung and solid waste in farms to compost, biogas and bio-CNG. “The Gobar-Dhan Yojana will help in keeping the village clean while increasing the income of farmers and cattle herders.

“The GOBAR-Dhan yojana must also be seen as a source of income for the farmers of rural India,” Modi and to create self-help groups and creative societies that would help in the “clean energy and green jobs” initiative.

For gobardhan yojana 2020, **farmers can apply online** at **sbm.gov.in** portal to manage cattle dung.

swachhbharatmission.gov.in/SBMCMS/index.htm

Government of India

Swachh Bharat Mission - Grameen  
Department of Drinking Water & Sanitation  
Ministry of Jal Shakti

About Us Documents Media Corner Citizen

What's New

Phase II Guidelines(Hindi) > Swachh Bharat Mission Grameen: Phase II Guidelines > Registration and Su

## Rashtriya Gokul Mission

Rashtriya Gokul Mission (RGM) has been launched in December 2014 with an outlay of Rs 2025 crore for development and conservation of indigenous breeds through selective breeding in the breeding tract and genetic upgradation of nondescript bovine population. The scheme comprises of two components namely National Programme for Bovine Breeding (NPBB) and National Mission on Bovine Productivity (NMBP).

### Objectives of RGM

- Development and conservation of indigenous breeds
- Breed improvement programme for indigenous breeds so as to improve the genetic makeup and increase the stock
- Enhancing milk production and productivity of bovine population by increasing disease free high genetic merit female population and check on spread of diseases
- Upgrading nondescript cattle using elite indigenous breeds like Gir, Sahiwal, Rathi, Deoni, Tharparkar, Red Sindhi
- Distribution of disease free high genetic merit bulls for natural service
- To bring all breedable females under organised breeding through AI or natural service using germ plasm of high genetic merits
- To arrange quality Artificial Insemination (AI) services at farmers' doorstep
- To create e-market portal for bovine germplasm for connecting breeders and farmers
- To increase trade of livestock and livestock products by meeting out sanitary and phyto sanitary (SPS) issues
- To select breeding bulls of high genetic merit at a young age through application of genomics.

## Significant initiatives under RGM

**1. Awards for encouraging farmers/breeder societies to rear Indigenous breeds of Bovines:** In order to motivate farmers for rearing of indigenous breeds and to enhance the production and productivity of indigenous breeds, the following awards have been instituted under RGM every year.

**a. Gopal Ratna awards:** For farmers maintaining the best herd of Indigenous Breed(s) and practicing best management practices.

**b. Kamdhenu awards:** For Best managed Indigenous Herd by Institutions/Trusts/ NGOs/ Gaushalas or best managed Breeders' Societies.

**2. Gokul Gram:** The Rashtriya Gokul Mission also envisages establishment of integrated cattle development centres 'Gokul Grams' to develop indigenous breeds including upto 40% nondescript breeds.

**3. National Kamdhenu Breeding Centre:** Under RGM, two "National Kamdhenu Breeding Centres" (NKBC) are being established as Centres of Excellence to develop and conserve Indigenous Breeds in a holistic and scientific manner.

**4. "E-PashuHaat"- Nakul Prajnan Bazaar:** An e-market portal connecting breeders and farmers, an authentic market for quality- disease free bovine germplasm in the form of: i) semen; ii) embryos; iii) calves; iv) heifers and v) adult bovines with different agencies/stake holders;

**5. PashuSanjivni:** An Animal Wellness Programme encompassing provision of Animal Health cards ('Nakul Swasthya Patra') along with UID identification and uploading data on National Data Base;

**6. Advanced Reproductive Technology:** Including Assisted Reproductive Technique- In-vitro Fertilization (IVF)/ Multiple Ovulation Embryo Transfer (MOET) and sex sorted semen technique to improve availability of disease-free female bovines.

**7. National Bovine Genomic Center for Indigenous Breeds (NBGC-IB)** will be established for selection of breeding bulls of high genetic merit at a young age using highly precise gene-based technology

## Kissan Credit Cards (KCC) to Livestock Farmers

KCC facility to meet the Short term credit requirements of rearing of animals, birds ,flsh, shrimp, other organisms.

## Supporting Dairy Cooperatives and Farmer Producer Organizations (SDCFPO)

A Scheme named "Supporting Dairy Cooperatives and Farmer Producer Organizations engaged in dairy activities" was approved to provide working capital loan to State Cooperatives and Federations.

**Objectives:** To assist the State Dairy Cooperative Federations by providing soft working capital loan to tide over the crisis on account severely adverse market conditions or natural calamities.



To provide stable market access to the dairy farmers.

To enable State Cooperative Dairy Federations to continue to make timely payments of dues to the farmers.

To enable the cooperatives to procure milk at a remunerative price from the farmers, even during the flush season.

### **Livestock Health and Disease Control**

The overall aim of the Livestock Health and Disease Control scheme is to improve the animal health sector by way of implementation of prophylactic vaccination programmes against various diseases of livestock and poultry, capacity building, disease surveillance and strengthening of veterinary infrastructure. It is envisaged that implementation of the scheme will ultimately lead to prevention & control, subsequently eradicating the diseases, increased access to veterinary services, higher productivity from animals, boosting up of trade in livestock and poultry, in livestock and poultry products and improving socio- economic status of livestock and poultry farmers.

#### **Objectives:**

- To implement Critical Animal disease control programme to eradicate PPR by 2030 by vaccinating all sheep and goats and to control Classical Swine Fever (CSF) by vaccinating the entire pig population
- To provide veterinary services at the farmers' doorstep through Mobile Veterinary Units (MVUs)
- To assist States/UTs for Control of Animal Disease (ASCAD) by prevention & control of important livestock and poultry diseases prevalent in different States / UTs as per the State /UT's priorities.

### **National Animal Disease Control Programme**

National Animal Disease Control Programme (NADCP) is a flagship scheme launched in September, 2019 for control of Foot & Mouth Disease and Brucellosis by vaccinating 100% cattle, buffalo, sheep, goat and pig population for FMD and 100% bovine female calves of 4-8 months of age for brucellosis with the total outlay of Rs.13, 343.00 crore for five years (2019-20 to 2023-24).

**Objectives:** The overall aim of the National Animal Disease Control Programme for FMD and Brucellosis (NADCP) is to control FMD by 2025 with vaccination and its eventual eradication by 2030. This will result in increased domestic production and ultimately in increased exports of milk and livestock products. Intensive Brucellosis Control programme in animals is envisaged for controlling Brucellosis which will result in effective management of the disease, in both animals and in humans.

National Animal Disease Control Programme for FMD and Brucellosis (NADCP) is a Central Sector Scheme where 100% of funds shall be provided by the Central Government to the States / UTs.

### **Livestock Census and Integrated Sample Survey**

The main objective of the scheme is to estimate the production of milk, egg, wool and meat, State-wise.

**Implementing Agencies:** State/UT Governments through Directorates of Animal Husbandry & Veterinary Services.

**Target Group/Beneficiaries:** This is a scheme to estimate the production of major livestock products of the country and study animal husbandry practices and related information.

### **Integrated Sample Survey Scheme for Estimation of Major Livestock Products**

**Objectives of Scheme:** The main objective of the scheme is to estimate the production of milk, egg, wool and meat, State-wise.

**Implementing Agencies:** State/UT Governments through Directorates of Animal Husbandry & Veterinary Services.

**Target Group/Beneficiaries:** This is a scheme to estimate the production of major livestock products of the country and study animal husbandry practices and related information.

**Pattern of Assistance/Funding:** The Central Government provides grant-in-aid to the States on 50:50 basis For ONER States, 90:10 for NER and 100% basis to the UTs for the implementation of the scheme. The major part of the funds is utilized on the salaries and allowances of the staff employed under the scheme.

### **Government Sponsored Schemes For Boosting Employment Through Livestock Rearing And Augmenting Farmers' Income In Jammu And Kashmir Implemented By Departments Of Animal And Sheep Husbandry**

## **SCHEMES FOR DAIRY DEVELOPMENT IMPLEMENTED BY DEPARTMENT OF ANIMAL HUSBANDRY**

### **Centrally Sponsored Scheme – Dairy Entrepreneurship Development Scheme (DEDS)**

<b>Component of the unit</b>	<b>Total cost of the unit</b>	<b>Margin money (beneficiary's contribution)</b>	<b>Bank loan (governed by terms and conditions of bank)</b>	<b>Back-end subsidy</b>	<b>Eligibility</b>
A small dairy unit with indigenous or crossbred cows/buffaloes upto 10 animals	Rs. 7.00 Lacs	Rs. 70,000/-	Rs. 6.30 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, cooperative societies, FPOs, SHGs.
Rearing of heifer calves of milch breed of cows or buffaloes upto 20 calves	Rs. 9.70 Lacs	Rs. 97,000/-	Rs. 8.73 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, cooperative societies, FPOs, SHGs.
Purchase of milking machines or bulk milk coolers upto	Rs. 20.00 Lacs	Rs. 2.00 Lacs	Rs. 18.00 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, cooperative societies, FPOs, SHGs.

5,000 liters capacity					
Purchase of dairy processing equipment for manufacturing indigenous dairy products	Rs. 13.20 Lacs	Rs. 1.32 Lacs	Rs. 11.88 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, cooperative societies, FPOs, SHGs.
Establishment of dairy product transportation facilities and cold chain	Rs. 33.00 Lacs	Rs. 3.30 Lacs	Rs. 29.70 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, cooperative societies, FPOs, SHGs.
Dairy marketing outlet or dairy parlour	Rs. 3.00 Lacs	Rs. 30,000/-	Rs. 2.70 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, cooperative societies, FPOs, SHGs.
Vermicomposting unit (along with animal unit only)	Rs. 25,200/-	Rs. 2,520/-	Rs. 22,680/-	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, cooperative societies, FPOs, SHGs.

**Where to apply:** Office of the Veterinary Assistant Surgeon or Veterinary Dispensary of Animal Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, affidavit attested by first class magistrate, photocopy of Adhaar Card, photocopy of Ration Card, photocopy of Bank Passbook and photocopy of land naqal. For landless farmers, guarantor who is a government employee is required.

#### Centrally Sponsored Scheme – Kisan Credit Card (KCC) for Dairy Development

Type of scheme	Scale of finance	Bank loan	Interest rate	Interest subvention	Eligibility
Working capital	Rs. 29,000/- per cow and Rs. 27,700/- per buffalo.	Total amount based on scale of finance and bank guidelines	7.0% (based on terms and conditions of bank)	3.0% (based on terms and conditions of bank)	Farmers owning dairy cows or buffaloes

**Where to apply:** Office of the Veterinary Assistant Surgeon or Veterinary Dispensary of Animal Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, photocopy of Adhaar Card, photocopy of Ration Card and photocopy of Bank Passbook.

**State Sector Scheme – Cattle Feed Processing Units/Fodder Development**

Component of the unit	Total cost of the unit	Margin money (beneficiary's contribution)	Bank loan	Back-end subsidy (@ 50%)	Eligibility
<b>Cattle Feed Processing Units</b>					
Pellet/Mesh Cattle Feed Plant, 1-2 ton/hour capacity	Rs. 35.00 Lacs	Rs. 3.50 Lacs	Rs. 31.50 Lacs	Rs. 17.50 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
Nano/Small Mesh Feed Plant, 100-200 kg/hour capacity	Rs. 4.00 Lacs	Rs. 40,000/-	Rs. 3.60 Lacs	Rs. 2.00 Lacs	Individual or group of dairy farmers
Diesel Generator Set with minimum 5 KVa power output	Rs. 3.00 Lacs	Rs. 30,000/-	Rs. 2.70 Lacs	Rs. 1.50 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
<b>Fodder Development</b>					
Silage making machine	Rs. 5.00 Lacs	Rs. 50,000/-	Rs. 4.50 Lacs	Rs. 2.50 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
Fodder block making machine	Rs. 16.00 Lacs	Rs. 1.60 Lacs	Rs. 14.40 Lacs	Rs. 8.00 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
Feed block making machine	Rs. 5.00 Lacs	Rs. 50,000/-	Rs. 4.50 Lacs	Rs. 2.50 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
Mini tractor 26HP	Rs. 5.00 Lacs	Rs. 50,000/-	Rs. 4.50 Lacs	Rs. 2.50 Lacs	Individual farmers, milk federation,

					cooperative societies, FPOs, SHGs, group of beneficiaries
Fodder harvester	Rs. 11.00 Lacs	Rs. 1.10 Lacs	Rs. 9.90 Lacs	Rs. 5.50 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
Chaff cutter with motor	Rs 50,000/-	Rs. 5,000/-	Rs. 45,000/-	Rs. 25,000/-	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
Bore well (submersible motor 5HP, starter box, 10-15 pipes 20 feet each)	Rs. 80,000/-	Rs. 8,000/-	Rs. 72,000/-	Rs. 40,000/-	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries

**Where to apply:** Office of the Veterinary Assistant Surgeon or Livestock Development Officer or Chief Animal Husbandry Officer of Animal Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Veterinary Assistant Surgeon, two passport size photographs, business plan, pro-forma invoice by the dealer, affidavit stating that no benefit shall be accrued under the same scheme in forthcoming five years, category certificate (if any), NOC from bank in loan cases, self-attested photocopy of Adhaar Card, self-attested photocopy of Ration Card and photocopy of bank passbook duly attested by bank manager.

**State Sector Scheme  
Integrated Dairy Development Scheme (IDDS)**

Component of the unit	Total cost of the unit	Margin money (beneficiary's contribution)	Bank loan	Back-end subsidy (@ 50%)	Eligibility
Establishment of dairy unit (5 cows/buffaloes per unit)	Rs. 3.50 Lacs	Rs. 35,000/-	Rs. 3.15 Lacs	Rs. 1.75 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries
Bulk milk cooling unit (250 to 2000 liter capacity)	Rs. 10.00 Lacs	Rs. 1.00 Lac	Rs. 9.00 Lacs	Rs. 5.00 Lacs	Individual farmers, milk federation, cooperative

					societies, FPOs, SHGs, group of beneficiaries. The beneficiary should own dairy unit and must be linked to processing facility.
Paneer making machine, khoa making machine, cream separator of varied capacities	Rs. 7.00 Lacs	Rs. 70,000/-	Rs. 6.30 Lacs	Rs. 3.50 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries. The beneficiary should have at least 2 dairy animals with sale outlet.
<b>Component of the unit</b>	<b>Total cost of the unit</b>	<b>Margin money (beneficiary's contribution)</b>	<b>Bank loan</b>	<b>Back-end subsidy (@ 50%)</b>	<b>Eligibility</b>
Milking machine of varied designs	Rs. 1.60 Lacs	Rs. 16,000/-	Rs. 1.44 Lacs	Rs. 80,000	Any individual having at least 2 dairy animals
Milk vending machine or milk ATM	Rs. 10.00 Lacs	Rs. 1.00 Lac	Rs. 9.00 Lacs	Rs. 5.00 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries owning or linked to chilling or processing facilities.
Diesel Generator Set with minimum 3.5 KVa power output	Rs. 3.00 Lacs	Rs. 30,000/-	Rs. 2.70 Lacs	Rs. 1.50 Lacs	Individual farmers, milk federation, cooperative societies, FPOs, SHGs, group of beneficiaries owning dairy farm or milk processing facility or milk ATM.
Purchase of milk van	Rs. 4.00 Lacs	Rs. 40,000/-	Rs. 3.60 Lacs	Rs. 2.00 Lacs	Individual farmers, milk federation,

					cooperative societies, FPOs, SHGs, group of beneficiaries owning dairy unit or milk processing facility or bulk milk cooler or milk outlet.
--	--	--	--	--	---

**Where to apply:** Office of the Veterinary Assistant Surgeon or Livestock Development Officer or Chief Animal Husbandry Officer of Animal Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Veterinary Assistant Surgeon, two passport size photographs, business plan, pro-forma invoice by the dealer, Adhaar Card of seller selling livestock, affidavit stating that no benefit shall be accrued under the same scheme in forthcoming five years, category certificate (if any), NOC from bank in loan cases, self-attested photocopy of Adhaar Card, self-attested photocopy of Ration Card and photocopy of bank passbook duly attested by bank manager.

#### **SCHEMES FOR SMALL RUMINANT DEVELOPMENT IMPLEMENTED BY DEPARTMENT OF SHEEP HUSBANDRY**

##### **Centrally Sponsored Scheme – Integrated Development of Small Ruminants & Rabbits (IDSRR)**

<b>Component of the unit</b>	<b>Total cost of the unit</b>	<b>Margin money (beneficiary's contribution)</b>	<b>Bank loan (governed by terms and conditions of bank)</b>	<b>Back-end subsidy</b>	<b>Eligibility</b>
A Sheep/Goat Unit of 10 female animals and 1 male animal	Rs. 50,000	Rs. 5,000/-	Rs. 45,000/-	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, unemployed youth, SHGs.
A Sheep/Goat Breeding Farm with 100 female animals and 5 male animals	Rs. 10.00 Lacs	Rs. 1.00 Lac	Rs. 9.00 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, unemployed youth, SHGs.
Commercial rabbit unit or breeding farm with 15 females and 5 males	Rs. 3.00 Lacs	Rs. 30,000/-	Rs. 2.70 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, unemployed youth, SHGs.

**Where to apply:** Office of the Veterinary Assistant Surgeon or Sheep Extension Centre (SEC) of Sheep Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, affidavit attested by first class magistrate, photocopy of Adhaar Card, photocopy of Ration Card, photocopy of Bank Passbook and photocopy of land naqal. For landless farmers, guarantor who is a government employee is required.



### Centrally Sponsored Scheme – Kisaan Credit Card (KCC) for Sheep and Goat Rearing

Type of scheme	Scale of finance	Bank loan	Interest rate	Interest subvention	Eligibility
Working capital	Rs. 7650/- for 10 sheep/goat (for feeding 500g feed/animal/day @ Rs. 17/kg for 90 days.	Total amount based on scale of finance and bank guidelines	7.0% (based on terms and conditions of bank)	3.0% (based on terms and conditions of bank)	Farmers owning sheep/goat

**Where to apply:** Office of the Veterinary Assistant Surgeon or Sheep Extension Centre (SEC) of Sheep Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, photocopy of Adhaar Card, photocopy of Ration Card and photocopy of Bank Passbook.

### Centrally Sponsored Scheme – Rashtriya Krishi Vikas Yojana (RKVY)

Component of the unit	Total cost of the unit	Retrieval of animals	Time period for retrieval	Eligibility
A Sheep/Goat Unit comprising of 10+1 or 25+1 strength of animals.	Nil (Participatory and retrieval modes)	Third year onwards; 02 female animals/year for 10+1 unit and 05 female animals/year for 25+1 unit.	In phased manner third year onwards, subsequently for 05 years to retrieve all 10 or 25 animals.	Individual farmers and unemployed youth with land holding and experience in trade willing for retrieval of animals after 03 years.

**Where to apply:** Office of the Veterinary Assistant Surgeon or Sheep Extension Centre (SEC) of Sheep Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, affidavit attested by first class magistrate, photocopy of Adhaar Card, photocopy of Ration Card and Photocopy of Bank Passbook.

### State Sector Scheme – Mini Sheep Farm

Component of the unit	Total cost of the unit	Margin money (beneficiary's contribution)	Bank loan	Back-end subsidy	Eligibility
50 ewes	Rs. 2.38 Lacs	Rs. 0.38 Lac	Rs. 2.00 Lacs through J&K Bank (terms and conditions applied)	Rs. 60,000 (extended by Sheep Husbandry Department)	Individual farmers and unemployed youth with land holding and experience in sheep/goat rearing.

**Where to apply:** Office of the Veterinary Assistant Surgeon or Sheep Extension Centre (SEC) of Sheep Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, affidavit attested by first class magistrate, photocopy of Adhaar Card, photocopy of Ration Card and photocopy of Bank Passbook.

**Process:** The applicants are shortlisted based on eligibility and called for personal interview by the screening committee before sanctioning Mini Sheep Farm.

**State Sector Scheme – Integrated Sheep Development Scheme (ISDS)**

Component of the unit	Total cost of the unit	Retrieval of animals	Time period for retrieval	Eligibility
A Sheep/ Goat Unit comprising of 10 or 25 strength of female animals.	Nil (Participatory and retrieval modes)	Third year onwards; 02 female animals/year for 10 animals unit and 05 female animals/year 25 animals unit.	In phased manner third year onwards, subsequently for 05 years to retrieve all 10 or 25 animals.	Individual farmers, group of individuals, SHGs, cooperative societies, FPOs.

**Where to apply:** Office of the District Sheep Husbandry Officer, Veterinary Assistant Surgeon or Sheep Extension Centre (SEC) of Sheep Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, affidavit attested by first class magistrate, declaration by the farmer, photocopy of Adhaar Card, photocopy of Ration Card and Photocopy of Bank Passbook.

**SCHEMES FOR POULTRY DEVELOPMENT IMPLEMENTED BY DEPARTMENT OF ANIMAL HUSBANDRY**

**Centrally Sponsored Scheme – Poultry Venture Capital Fund Scheme (PVCFS)**

Component of the unit	Total cost of the unit	Margin money (beneficiary's contribution)	Bank loan (governed by terms and conditions of bank)	Back-end subsidy	Eligibility
Hybrid broiler chicken units upto 20,000 birds	Rs. 2.24 Lacs for 1,000 birds	Rs. 22,400/-	Rs. 2.01 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.
Hybrid layer chicken units upto 20,000 birds	Rs. 8.00 Lacs for 2,000 birds	Rs. 80,000/-	Rs. 7.20 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.
Breeding farms for birds of alternate species like turkeys, ducks, Japanese quails, guinea fowls and geese	Upto Rs. 30.00 Lacs depending upon the size of the unit	10 percent of loan amount	Other than margin money	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.
Feed mixing unit with a capacity of 1 ton/hour	Rs. 16.00 Lacs	Rs. 1.60 Lacs	Rs. 14.40 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.
Transport vehicle - open cage	Rs. 8.00 Lacs	Rs. 80,000/-	Rs. 7.20 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.
Retail outlets – dressing units	Rs. 10.00 Lacs	Rs. 1.00 Lac	Rs. 9.00 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.

Mobile marketing units	Rs. 10.00 Lacs	Rs. 1.00 Lac	Rs. 9.00 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.
Cold storage for poultry products	Rs. 20.00 Lacs	Rs. 2.00 Lac	Rs. 18.00 Lacs	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.
Egg/broiler carts	Rs. 15,000/-	Rs. 1,500/-	Rs. 13,500/-	25% for APL and 33.33% for BPL/SC /ST	Individual farmers, FPOs, SHGs.

**Where to apply:** Office of the Veterinary Assistant Surgeon or Veterinary Dispensary of Animal Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, affidavit attested by first class magistrate, photocopy of Adhaar Card, photocopy of Ration Card, photocopy of Bank Passbook and photocopy of land naqal. For landless farmers, guarantor who is a government employee is required.

#### **Centrally Sponsored Scheme – Kisaan Credit Card (KCC) for Poultry Production**

Type of scheme	Scale of finance	Bank loan	Interest rate	Interest subvention	Eligibility
Working capital	Rs. 70,000/- for 1000 birds	Total amount based on scale of finance and bank guidelines	7.0% (based on terms and conditions of bank)	3.0% (based on terms and conditions of bank)	Farmers owning poultry farms

**Where to apply:** Office of the Veterinary Assistant Surgeon or Veterinary Dispensary of Animal Husbandry Department.

**Documents required:** Duly filled application form attested by concerned Sarpanch, two passport size photographs, photocopy of Adhaar Card, photocopy of Ration Card and photocopy of Bank Passbook.

#### **State Sector Scheme – Jammu & Kashmir Poultry Policy, 2020**

##### **Salient features**

1. Access to easy credit for broiler/layer farms with rearing capacity of more than 10,000 birds @ 30 percent of the investment in plant and machinery with upper limit of Rs. 50.00 Lacs.
2. Interest incentive @ 3 percent on working capital credit advanced by scheduled banks to broiler/layer farms with rearing capacity of more than 10,000 birds.
3. Reimbursement of 100 percent insurance premium for a period of five years to all the newly established eligible poultry units.
4. For broiler/layer farms with rearing capacity of more than 10,000 birds, 100 percent subsidy on diesel generator set with maximum ceiling of Rs. 4.50 Lacs.
5. For broiler/layer farms with rearing capacity of more than 10,000 birds, 50 percent subsidy on incinerator with maximum ceiling of Rs. 1.00 Lacs.

**Where to apply:** Office of the Nodal Officer (Joint Director Poultry, Jammu/Hariparboth)

# Entrepreneurial Opportunities in Agriculture and Allied Sectors

8

Rizwan Jeelani<sup>1</sup>, Kamal Sarma<sup>2</sup>, Jonali Devi<sup>3</sup> and S. A. Khandi<sup>4</sup>

*<sup>1</sup>Assistant Professor(Contr.), <sup>4</sup>Assistant Professor, <sup>2</sup>Prof. & Head, Division of Veterinary & Animal Husbandry Extension Education, <sup>3</sup>Prof. & Head, Division of Veterinary Physiology & Biochemistry, Faculty of Veterinary Sciences & Animal Husbandry, R.S. Pura, Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu (SKUAST-Jammu), Jammu (UT of J&K) INDIA 181102*

Traditionally, agriculture has been perceived as a low-tech industry with limited dynamics, largely controlled by a huge number of small families, which over the years paid attention to improving crop yield rather than looking at it as a money-making module. The agricultural sector provides food for 1.3 million people in India as well as supports over 60 per cent of the population for their livelihood and plays a crucial role in the sustainable growth of the country's economy as well as the economy of UT of J&K.

Many farmers are forced to migrate to cities for their livelihood because of the lower remuneration or unbearable crop losses on accounts of volatile market dynamics or unpredictable weather conditions as well as finding it difficult to make both ends meet even in the livestock sector as the cost of production in dairy as well as small ruminant meat production sector is more than the returns they get back in the sale. There is a need to bring about transformational changes in the agricultural as well as allied sectors by making farmers change their outlook toward farming. They need to consider their farms as their businesses. More focus needs to be on productivity than production.

Agricultural entrepreneurship is an emerging field. It involves analyzing and understanding the strategies of agricultural entrepreneurs, particularly in response to the institutional changes and economic and technological disruptions to which the agricultural industry is subjected in the recent times. Entrepreneurship should be encouraged in agriculture as innovation would not just help farmers improve crop productivity and thus fetch them more profits, but also create new and innovative avenues of employment generation for rural youth as well.

Technically, entrepreneurship involves entrepreneurial skills, models and innovative ideas to solve problems in the farm sector and increase the profitability of the farming business with sustainable, community-oriented, directly marketed farm practices. It is not an opportunity but an imperative to achieve the union government's target of doubling the farm income through the integration of the latest technologies and innovations.

The central government has in past invited private entrepreneurships in farming and allied sectors while announcing mega public investment for the sector. There is a great potential for private investment in the agriculture sector, which can boost the sector overall. Over the past two decades, the corporate spectrum has seen several entrepreneurial activities, in which farmers were assisted to get more yield through technological interventions and product aid. All these offerings included access to quality seeds, fertilisers, better irrigation systems, farm tools and equipment. India needs innovation in the field of agriculture and allied sectors, so as to increase the agricultural productivity, as quoted by Shri Amitabh Kant, the Ceo of NITI Aayog.

Agriculture entrepreneurship can help tackle the challenges related to information dissemination, farm management, capital availability, mechanisation of farms and the agriculture supply chain. There are some successful examples of the transformation of agriculture practices with the help of technology in the US, China and Israel. These countries have demonstrated that an assortment of technology like hybrid seeds, precision farming, big data analytics, artificial intelligence (AI), geo-tagging, satellite monitoring, mobile apps and farm management software can be applied at every stage in the agriculture process to increase productivity and farm incomes, says a report by National Institute of Agricultural Extension Management, which comes under the Agriculture Ministry.

The labour market is constantly changing. With the digital revolution and digital transformation being everywhere, we see all professions changing completely. Agriculture is one of the oldest sectors in the labour market if not the oldest sector but of course, agriculture is going to change as well. It already has and in the years to come it will change even more.

### **Opportunities**

With entrepreneurship opportunities in the agriculture sector rising, there are many options for students. According to the Economic Survey 2020-2021, agriculture constitutes about 19.9 per cent of the gross domestic product (GDP), up from 17.8 per cent in 2019-20. This is a positive news not only for more than the 150 million farmers of country, but also for the industries that are dependent on a good harvest for their survival.

### **Agri-entrepreneurship Concepts**

With agri-entrepreneurship rising, it is advisable to look at some various options within this field. There are short-term certificate courses, diplomas or degrees in agriculture and agricultural engineering that cover soil science, agricultural chemistry, seed technology, livestock rearing and more. For those interested in a more advanced understanding, postgraduate degrees and research options are also available in the universities.

However, the foundation for all this is rooted in having studied science atleast in senior school. That does not mean students from a humanities or commerce background cannot become agri-entrepreneurs. While the latter can play a vital role in the management of an agri-based companies, humanities students can channelise their soft skills and understanding of the social nuances to manage their business. In addition, they can always upskill themselves with many certified online modules to choose from.

### **The strength**

In recent times, with the emergence of new concepts such as 'precision agriculture', 'farm to fork' and 'farming as a service', technology is playing a decisive role in this sector. Studying agriculture or a niche domain within it, will help entrepreneurs achieve a competitive edge. Being a part of the agri-value chain can bring immense benefit to farmers, offering them better access to quality seeds, diverse irrigation systems, fertilizers and farm tools and equipment etc. The agricultural market in India already has many players and their numbers are rising. A National Association of Software and Service Companies (NASSCOM) study shows that the country had more than 450 start-ups in the agriculture sector, which until June 2019, raised nearly \$248 million in capital.

Therefore, knowing the sector well will not only help entrepreneurs design a business model that is both feasible and suits their interests, but will also help them negotiate with the fund managers with insights and scientific knowledge. However, this is not the only solution to the

economic woes of India's rural poor. Apart from generating new sources of jobs and income, it is equally important to bring about transformational change in the agribusiness sector to augment incomes, create more sub-industries within the agricultural sector and help the rural poor add to their agricultural resources.

The success of cooperatives in India, particularly Gujarat's dairy cooperative and Maharashtra's sugar cooperative are examples of what innovation and entrepreneurial thinking can do for the rural sector. Enterprising young entrepreneurs who have flooded urban India with startups in recent years have unfortunately neglected the rural economy. Or we can say that entrepreneurs who can transform the face of the rural economy have failed to emerge in rural India.

Not only in developing alternative sources of employment, but entrepreneurship can also help radicalize farming techniques and bring innovation to improve yields per hectare. Smart farming is the need of the hour. Biotechnology can be also utilized in agriculture for benefits by increasing the health of the soil and reduce the intake of the nitrogen intake. The sectors that can benefit hugely from entrepreneurial intervention are food processing and packaging, preservation of seasonal fruits and vegetables, seed processing, flower farming in addition to crop farming etc.

Agro-based industries can flourish in rural sectors where labour is abundant and labour cost is low. Small and medium enterprises are set up at the rural level to supplement traditional farm income in a big way and create alternative sources of income.

### **Startups backed up by the agricultural concept**

As discussed above, India today is emerging as a major startup hub with the urban sector enthusiastic with new entrepreneurial energy. Unfortunately, the agricultural sector has remained out of ideas and out of mind. The government has already initiated offering attractive incentives including easy loans, insurance schemes and tax benefits to farmers-cum-entrepreneurs.

*Developing entrepreneurs in agriculture can immensely benefit the Indian economy by*

- Reducing the burden on agriculture.
- Generating employment opportunities for rural youth.
- Reducing the need for migration from rural to urban areas, thereby reducing pressure on urban cities etc.
- Increasing individual and national income.

### **Sectors where entrepreneurship can help the agribusiness:**

#### **1. Food processing**

Agriculture-based industrial products account for half of all exports from developing countries. However, most of them involve exports of raw materials as against developed countries, whose exports mostly comprise processed goods. By continuing to operate at a low level of the value chain, we are losing income and production. An entire food processing industry can be developed in rural areas, augmenting income and employment.

#### **2. Floriculture**

In several cases, flower farming can be done on small tracts of land. Bulks of flowers are cultivated on 'micro farms'. Farmers can utilize a part of their land to cultivate seasonal flowers alongside regular conventional crops. But, this needs markets in the vicinity of processing and

preservation units. Entrepreneurs knowing flower cultivation and marketing can set up parallel industries in fertile rural lands. Medicinal and rare flowers are an added advantage.

### **3. Pisciculture**

Fish farming is practised by a lot of farmers to augment their incomes. However, they do so on an amateurish and small-scale basis. A conscious business effort to develop small pond fish farms in rural areas can enable pisciculture to become a valuable sector in the rural economy. Fish cultivation on a market scale needs some knowledge and boosting entrepreneurship in the sector can make a difference, as done in the western countries.

### **4. Farm technology**

Dependence on outdated and inefficient technologies leads to poor productivity and low income. While large-scale farmers have adopted modern technology on a major scale in India, most small farmers still rely on age-old farming techniques with mostly manual methods. Boosting entrepreneurial minds in agriculture can boost productivity by incorporating modern technologies in the farming sector. With increasing awareness and technology the risk of weather changes and the price trends in the markets can be taken care of.

### **5. Bee keeping**

Beekeeping is also an emerging field whereby the consumers are ready to pay any price for honey, provided it satisfies the demand for quality, flavour and rareness as expected. The medicinal properties of honey are well known and the wild honey, which is not easily available can be a good lucrative startup, targeting the cosmopolite populace.

### **6. Animal Husbandry and Dairying**

Animal husbandry, also called animal science, stockbreeding or simple husbandry, is the agricultural practice of breeding and raising livestock. The industries that come under animal husbandry include dairy, poultry, small ruminants, cuniculture, dog breeding, horse breeding, poultry breeder and factory farming. Animal husbandry and dairying is a state subject and the governments are primarily responsible for the growth of the sector. Dairying has become an important secondary source of income and employment for millions of rural families. The Indian dairy industry acquired substantial growth momentum from 9<sup>th</sup> Plan onwards, achieving an annual output of 97.1 million tonnes of milk during 2005-06. This has not only placed the country on top in the world but also represents sustained growth in the availability of milk and milk products for the burgeoning population of the country.

The government of India is making efforts to increase the productivity of milch animals and thus increase the per capita availability of milk. Most of the milk is produced by small, marginal farmers and landless labourers who are grouped into cooperatives at the village level. To provide them with a steady market and a remunerative price for the milk produced, about 12 million farmers have been brought under the ambit of more than one lakh village-level cooperative societies in the country.

### **The shift in the agricultural sector**

Nowadays, across the world, agribusinesses are an important component of the economy. Especially in countries with a lot of rural lands that border with a lot of other countries seeing as



agricultural products are now often being exported. However, to understand agribusiness one must dive deeper into the meaning of the concept.

An agribusiness must inspect and evolve all the different aspects of creating an agricultural product. Agricultural products can be anything from animal products overweight to harvesting fruits and vegetables. As the profession of agriculture involves so do the technique that farmers use to raise animals, harvest the fruit and vegetables and so on.

### **Taking on the entire process**

Starting, the very first thing that separates an agribusiness from a regular agricultural venture is technology. Nowadays, farmers are using everything from drawings to GPS to track their harvesting operations and direct them. The machines that are now being used basically can drive themselves and as a result, the production and harvesting process becomes twice or even three times faster.

The processing of the plants as well as the products derived from animals has also been upgraded. As a result, collecting, packaging and shipping everything from livestock to fruit is now easier than ever. What defines an agribusiness is innovation and as a result, entrepreneurship will play a pivotal role in the evolution of the sector.

### **Entrepreneurship and innovation in agriculture**

Entrepreneurship is all about innovation. A young farmer with a lot of experience in farming does know the needs and can identify the gap that will take their business to the next level. By being able to come up with a solution that can have a technological application, a farmer immediately becomes an entrepreneur.

The most important factor we need to watch out for when it comes to agribusiness entrepreneurship is the fact that it can be combined with a lot of other types of businesses. For example, a farmer who is also an entrepreneur will want to create a brand for products and advertise them properly.

### **Employing new technological achievements and professionals**

This is the work of a marketing company freelance marketeers. At the same time, we want to be financially covered which means that, an accountant or an accounting company with specific expertise to go sector is something we are going to need. At the same time, when we start to grow our business, we will need more hands on the deck and perhaps a variety of different people from different sectors with different expertise to help take our business to the next level.

We need to understand that, farming and agricultural businesses that do not add the technological factor to their activities are most likely going to fail within the next few years. The use of new technology is vital for businesses to remain competitive on a global level. If we want our agricultural products to continue increasing in production, quality and of course sales we need to employ the latest technological achievements for our sector.

### **Conclusion**

From the last many years country is constantly struggling with the problems of unemployment, underemployment, especially amongst the rural populace and unfortunately. Agricultural entrepreneurship can be the answer to this. No doubt, setting up of an agribusiness venture is not easy. It needs capital, devotion of time and most likely the expertise which might not be present at this moment. Whether we seek national funding or already have the capital and the help of professionals in the field to help us set up, the key is going to be innovator.

We need technology, innovative ideas and most importantly, the need to always take things a step further. In agribusiness and entrepreneurship, there is no such thing as a finish line. The more we try, the more ideas we are going to get and the more likely the probability to enhance our business. We need to evolve our entrepreneurship practices and always take things to the next level. After all risk taking is the innate characteristic of an entrepreneur.

There are many opportunities for agri-tech start-ups to solve key farm-related challenges, which range from providing fair prices to the farmers, to creation of yield estimation models that can be used by the farmers, to bolster productivity, by removing inefficiencies. Building a system for data-driven diagnostics for the determination of soil and crop health to enhance farm productivity as well as creating new technology to find an alternative to pesticides and insecticides to prevent pre-harvest losses are the important concerns that call for innovations on a large scale. Also, agriculture tools and equipment renting as well as easy access to certified micronutrients and seeds through the online interface can be attractive areas for agri-tech start-ups.

In north India, stubble burning is a big menace. So, ways to find alternate usage of paddy straw can be one of the important solutions needed to be addressed urgently. Besides, innovations to inform farmers about the timely and accurate estimation of sowing and harvesting following the market demands, technology to test adulteration of fresh produce, automated farming techniques and the development of warning system for unpredictable weather patterns and pest infestation can be used to improve the farming system. Last but not least, entrepreneurial intervention in food processing and packaging can protect farmers hugely from the price volatility of commodity markets and help earn additional money through exports. Agriculture entrepreneurship has the potential to revolutionise the entire food chain, benefitting small land holding poor farmers and marginalised communities in a long term.

#### References

1. Alex, Lwakuba (2011). A review and analysis of policies on farmers' entrepreneurship development, A Publication of PELUM, Misereor, pp. 1–55.
2. Bairwa, S.L. and Kushwaha, S. (2012). Agro Industry scenario in India In Edited by Prof. S. P. Singh, Agricultural research and Sustainable development in India, Bharti Publications, New Delhi, 110093, pp 159-182.
3. Bairwa, S.L., Lakra, Kerobim, Kushwaha, S., Meena, L.K. and Kumar, Pravin (2014). Agripreneurship development: As a tool to upliftment of agriculture. Internat. J. Scientific & Res. Publications, pp. 1-4.
4. Ghosh, Sudipta (2011). Entrepreneurship: An overview of the issues and challenges in the context of rural development in India". Vol.1, No. 2, July – December 2011, Business spectrum.
5. Mehra, Kavita (2002). Entrepreneurial spirit of the Indian farmer. National Institute of science technology and development studies" 112-118.
6. Sridhar, G. and Ballabh, B. (2007). Indian agribusiness institutions for small farmers: Role issues and challenges. In V. Ballabh (Eds) Institutional alternatives and governance of Agriculture". 311-328. New Delhi: Academic Foundation.
7. Verma, R. K., Sahoo, A. K and Rakshit, S. (2018). Opportunities in agri-preneurship in India: Need, challenges and future prospects. Rashtriya krishi. 13(1): 69-72.

# Leveraging upon Agri startups through Agricultural Marketing

9

**Dr. Anil Bhat**

*Assistant Professor, Division of Agricultural Economics and ABM, Sher-e-Kashmir  
University of Agricultural Sciences and Technology of Jammu*

**E**ntrepreneurship involves seeking and exploiting opportunities available for the benefit of the society. The changing agro-economic conditions in our country have offered a prospective context for developing entrepreneurship in agri-business in the country. Agri-entrepreneurship has the prospect of social and economic development, for example, employment generation, poverty reduction, improvements in nutrition, health and overall food security in the national economy especially in rural areas. In the face of growing unemployment and poverty in rural areas, there is urgency of entrepreneurship in agriculture for more productivity and profitability. Agripreneurship converts agricultural activity into an entrepreneurial activity. Several opportunities such as crop production, dairying, bee keeping, secondary agriculture, food processing, input production, market led agriculture etc exist in the field for entrepreneurship which offers scope for employment for youth, enhancing income and decent livelihood for the people associated with the sector. The creation of agricultural opportunities and policy framework in conjunction to entrepreneurship in terms of production may represent a further step in understanding the role and importance of diversifying the rural potentials in contemporary India. Efficient policies and schemes are essential to meeting increasing demand for employment and safe & nutritious food in a sustainable way. While growth in demand for food, feed, fuel and fibres presents significant opportunities for agriculture, government policies must address challenges such as increasing productivity growth, enhancing environmental performance and adaptation to climate change, and improving resilience of farm households to market shocks brought on by weather and other unforeseen circumstances. The policies formulated by the Government of India for agricultural and allied activities are making inroads to agriculture-based entrepreneurship.

***Take up one idea. Make that one idea your life, think of it, dream of it, live on that idea, let the brain, muscles, nerve, every part of your body be full of that idea and just leave every other idea alone. This is the way to success.***

*- Mr Narendra Modi, Prime Minister of India*

India is an agrarian country and the agriculture and allied sector is the largest employer of workforce. The share of the agriculture & allied sector in total GVA improved to **20.2 per cent** in the year 2020-21 and 18.8 per cent in 2021-22. Agriculture is the primary source of livelihood for about 58% of India's population and only the food processing industry employs about 1.77 million. In the year 2019-20, gross value added by agriculture, forestry, and fishing was estimated at Rs.19.48 lakh crore (US\$ 276.37 billion). But still farming community has to face lot of hardships. Problems and hardships can be reduced by creating entrepreneurial interest in the farmer and youth of India. India is gradually building a robust startup ecosystem. In order to promote and support entrepreneurs, the government has created a Ministry dedicated to helping new businesses. The entrepreneurial vision is discovery and risk-taking and is an indispensable part of a nation's capacity to succeed in an ever-changing and more competitive global marketplace. The task of promoting entrepreneurship was earlier given to different departments and government agencies. In 2014, the Prime Minister decided to dedicate an entire ministry to build this sector as he felt that skill development required greater push from the government's

side. Furthermore, the idea is to reach 500 million people by the year 2022 through gap-funding and skill development initiatives.

There are number of schemes which are currently functional for promotion of agri startups and agri-preneurship. Details of few among them are given below:

**(i) Seed Capital Fund Scheme: Government of Jammu and Kashmir UT, Department of Labour and Employment (Source: JKEDI)**

***Seed Money***

Apart from imparting skill based training to aspiring entrepreneurs from various economic sectors, the institute is also implementing a major finance support programme, Seed Capital Fund Scheme (SCFS), of the State government. SCFS is an important component of "Sher-e- Kashmir Employment and Welfare Programme for Youth (SKEWPY)" which in turn is a path breaking initiative of the government of Jammu and Kashmir for addressing unemployment in the state. Under SCFS, seed money of up to Rs 7.5 lakh is provided to eligible youth. The seed capital is like a onetime grant given to the entrepreneurs for making their business plans bankable. The rest of the business cost is provided through bank finance on low interest rates. JKEDI is having a tie up with the J&K Bank for hassle free loan for entrepreneurs promoted by them.

**Objectives**

The main objective of the Scheme is to motivate, train and facilitate a large segment of educated young men and women to take up entrepreneurship as a career option instead of hankering after the government jobs. By opting for self employment a class of first generation entrepreneurs will be created who will create job opportunities not only for themselves, but also for others. It is also an objective of the Scheme to invest in various areas of economy to optimally exploit the resources.

**Implementing Agency**

The Department of Labour and Employment shall be the Administrative Department of J&K Entrepreneurship Development Institute for the purpose of Seed Capital Fund Scheme. The Scheme shall be implemented through Jammu & Kashmir Entrepreneurship Development Institute (JKEDI)

**Seed capital fund**

Seed Capital equivalent to 35% of the project cost shall be provided to the prospective entrepreneurs' upto a maximum of Rs. 4.00 lacs for under graduates, Rs. 5.00 lacs for graduates, Rs. 6.50 lacs for post graduates and Rs. 10.00 lacs for Professional/Technical Graduates. However, for Group initiatives the upper limit shall be relaxable upto sum total of individual entitlements

Provided further that the Professional / Technical qualification shall include the following categories of degrees:

- i) Five and Four-Year Bachelors Degree Courses viz: MBBS, BDS, BVSc & A.H, BAMS, BUMS, BE, B.Tech, BSc (Agriculture), B.Sc (Forestry), LLB (including LLB done at University level after Graduation) etc. approved by concerned regulatory Body (s).
- ii) Computer Science & Technology Graduates, MBA, etc. from recognized University / Institute.
- iii) All two year Masters Degree Courses that are declared as professional degrees by Kashmir/Jammu Universities.

- iv) For all such degrees that are awarded by other Universities and the holders thereof claim to possess professional degrees, shall be referred to respective Universities for clarification. However, in case of Professional/Technical degree holders, the Seed Capital shall be available only if their proposed enterprise(s) is/are related to their qualifications. Otherwise they shall be treated at par with other graduates or post graduates as the case may be.

**Eligibility:**

The following shall be eligible for assistance under the Scheme:

- a) A State subject in the age group of 18 to 40 years having a qualification of 10+2 or above who is unemployed,
- b) There will be no income ceiling for coverage under the scheme;
- c) The beneficiaries must be registered with the concerned District Employment and Counselling Centre. They can also be registered with other departments and institutions like DICs etc. wherever required so as to take advantage of the benefits which may accrue through such registrations. The JKEDI shall facilitate this during the course of training under Entrepreneurship Development Programme;
- d) Any person or any, existing units and the units which have already availed of any incentive or subsidy under any scheme of the Government of India or the State Government shall not be eligible for assistance under the scheme;
- e) No institution, corporate body, society or an NGO shall be eligible for assistance under the scheme.

Provided that for differently/specially abled persons, the age group of 18 to 42 years shall be applicable. Provided that the “person with disability” shall mean a person suffering from not less than forty percent of any disability, as certified by a competent medical authority.

**(ii) Youth Startup Loan Scheme: Government of Jammu and Kashmir UT, Department of Labour and Employment**



**Start your business with 0% hassle**

The institute also provides direct off-bank finance to eligible youth under its Youth Start up Loan Scheme (YSLS) programme whereby projects costing up to Rs.8 lakh are directly financed at 6% simple interest. Entrepreneurs covered under either of the programmes have

to undergo mandatory three-week training. The training pro-gramme has been formulated with the help of international organizations like Making Cents whereby trainees are trained through experiential training methods and simulation exercises. With most of the process same, it differs with SCFS only on the resource front. Instead of free money, YSLS offers a loan to a maximum of Rs 8 lakh for start ups at only six percent of simple interest and that can cover up to 90% of the project cost.

**Implementing Agency(s):**

Jammu & Kashmir Entrepreneurship Development Institute (JKEDI) and Mercy Corps under the overall supervision of Labour & Employment Department, Government of Jammu and Kashmir, UT.

**Eligibility:**

The eligibility criteria under the Scheme is same as applicable under Seed Capital Fund Scheme which includes:

- i. A State Subject in the age group of 18-37 years having a qualification of 10+2 or above.

- ii. The beneficiary must be unemployed and registered with the concerned District Employment and Counseling Center.
- iii. There shall be no income ceiling for coverage under the Scheme.
- iv. Only new entrants to the field of entrepreneurship will be covered under the Scheme. Any person or any unit existing and the units which have already availed of any incentive or subsidy under any Scheme of the Government of India or the State Government shall not be eligible for assistance under the Scheme.
- v. No Institution, Corporate Body, Society or NGO shall be eligible under the Scheme.

### **Sanctioning of Loan**

The loan amount will be sanctioned in favour of the beneficiaries by the competent authority as per the benchmarks detailed out in the Business Plan. However, in case of projects with an investment of more than Rs. 8.00 lacs, the concerned beneficiaries shall have the obligation of investing their own contribution in the first phase. Thereafter the loan amount will be released in favour of the concerned beneficiaries.

### **Mode of Repayment**

The total loan amount along with the interest @ 6% per annum (Simple Rate of Interest) shall be repayable within a period of 5 years in 20 equal quarterly installments. The repayment of loan shall have moratorium period of 6 months. During the moratorium period only interest charged shall be recovered on quarterly basis and the repayment of the principal with interest shall be taken up thereafter. The repayment received will be appropriated first towards interest and thereafter toward the principal. For this purpose, the beneficiary will be required to submit 20 post dated Account Payees Cheques from Jammu & Kashmir Bank Limited in his service area along with the Bank verification letter and attestation of signatures as per the prescribed format. The beneficiary shall have to produce original documents along with the attested photocopies of all the relevant documents required for record and verification.

### **Security**

Since the scheme is being implemented on pilot basis, implementing agency shall seek a security from the beneficiaries against the Loan to be disbursed. The norms of security shall be such that the beneficiaries are able to meet them and the recoveries are ensured. In general, following security provisions shall be followed:

- a) For Loans upto Rs. 4.00 lacs : Guarantee of a State Government Employee or Bank Employee with a service of at least 6 years at his/her disposal.
- b) For Loans above Rs. 4.00 lacs : Guarantee of two State Government employees or Bank with a service of at least 6 years at his/her disposal.

### **Other Terms and Conditions**

The beneficiary shall submit the following documents on the prescribed format duly notarized:

- a) D.P Note
- b) Deed of Irrevocable Power of Attorney
- c) Deed of Guarantee (the guarantor/s should be a Government Servant/Bank Employee) with at least 6 years of service to superannuate.
- d) Deed of Hypothecation of assets created in the joint names of Jammu and Kashmir Entrepreneurship Development Institute and the State Government.
- e) Deed of Agreement
- f) Affidavit
- g) Letter of Undertaking.

### (iii) RKVY-RAFTAAR

- The Rashtriya Krishi Vikas Yojana (RKVY) is an important scheme of the Government of India, Ministry of Agriculture and Farmers' Welfare (MoA&FW), aimed at strengthening infrastructure in agriculture and allied areas. In order to promote agripreneurship and agribusiness by providing financial support and nurturing the incubation ecosystem, a new component under the revamped scheme RKVY-RAFTAAR has been launched in 2018-19. Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu got selected as one of the Incubation Centre under RKVY-RAFTAAR project and Agri Business Incubator, SKUAST-Jammu has been established in March 2019.
- It is an initiative to encourage young minds to come with innovative ideas in the field of agribusiness and to develop an agripreneurship ecosystem.
- Under this project there are two Agripreneurship Development Programmes namely **UDGAM (Pre-Seed Stage Funding)** and **PRAGATI (Seed Stage Funding)** with **grants-in-aid to the tune of 5 lakhs and 25 lakhs, respectively.**

- (iv) **Atal Innovation Mission (AIM)** is Government of India's flagship initiative to create and promote a culture of innovation and entrepreneurship across the length and breadth of our country. It was setup in **2016**. AIM's initiatives have played an important contributory role in the advancement of India from a position of 81 in the Global Innovation Index in 2015 to a position of 48 in 2020. AIM has adopted a holistic approach encompassing schools, universities, research institutions, industry, MSME, NGOs, Ministries, at district, state and national levels.

#### Major initiatives by Atal Innovation Mission (AIM)

1. Atal Incubation Centres-Fostering world class startups in universities, institutions, private sector adding new dimensions of outcomes based scale up and monitoring to existing incubator model.
2. Atal New India Challenges-Fostering product and service innovations in the country with national socio economic impact and aligning them to the needs of various sectors/ministries/industry.
3. Atal Community Innovation Centre- To stimulate community centric innovation and ideas in the unserved /underserved regions of the country including Tier 2 and Tier 3 cities and rural India
4. Building strategic Innovation partnerships with Public sector, Private Sector, Multinationals, and Global Country to Country Partnerships which include USA, UK, Germany, Russia, Singapore, Sweden, Israel, Denmark, Australia to name a few

*Atal Innovation Mission initiatives are key to further promoting the culture of innovation and giving expression to the innovative and entrepreneurial ideas of startups to enable development of one of the most Innovative Nations of the world.*

### (v) NIDHI

National Initiative for Developing and Harnessing Innovations (NIDHI) is **an umbrella program conceived and developed by** the DST for nurturing ideas and innovations (knowledge-based and technology-driven) into successful startups.



## **NIDHI has following program components**

Technology Business Incubator (TBI), Seed Support System (SSP), Accelerator, Centre of Excellence (CoE), Promoting and Accelerating Young and Aspiring Innovators and Startups (PRAYAS), Entrepreneur in Residence (EIR),

The NIDHI-EIR programme provides Rs. 30,000 per month as fellowship to an aspiring or budding entrepreneur for pursuing a promising technology business idea.

While Promoting and Accelerating Young and Aspiring technology entrepreneurs (PRAYAS) will support upto Rs. 10 lakhs to enable translation of an innovative idea to a prototype.

Inclusive TBI is a **three years duration initiative supported by the Department of Science Technology DST** for educational institutions who are likely to foster innovation and entrepreneurship culture among the students, faculties, entrepreneurs, and nearby communities.

### **(vi) Startup India Initiative**

Startup India is a flagship initiative of the Government of India, intended to catalyse startup culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India. The START UP INDIA initiative was launched in 2016 by the Honorable Prime Minister with the aim of supporting a thriving ecosystem of entrepreneurs and startups. The most important feature of START UP India is that it is a successful initiative in changing people's minds, creating an India of job creators rather than job seekers. It is this mindset that lifts the spirits of young people because it gives them confidence that if the Prime Minister of a country shows faith in the youth, it is the responsibility of the young people to stand up and demonstrate that belief exactly. If we glance at the statistical data, the number of startups in India has grown to more than 60,000 from less than 500 just 5 years ago, across 55 industry sectors. In 2021, India granted 28,000 patents while 2,500,000 trademarks were registered in 2020-21 compared to 70,000 in 2013. In July 2021, the department for promotion of industry and internal trade (DPIIT) had recognised 52,732 Indian startups.

Even in COVID scenario when many people lose their job, these start up remain as one of their hope and Government do played its part even in that case by promoting VOCAL FOR LOCAL. This provided the push so required by the youth, the moral boost to take up any job that they are capable to perform as they have this mind setup that Startup Initiative is there with them to hold the hands.

### **(vii) Startup India Seed Fund**

On 16 January 2021, Prime Minister Narendra Modi announced the launch of the 'Startup India Seed Fund' — worth INR 1,000 crores — to help startups and support ideas from aspiring entrepreneurs. PM Modi said that the government is taking important measures to ensure that startups in India do not face any capital shortage. Under this scheme, financial assistance is provided to startups for proof of concept, prototype development, product trials, market entry, and commercialization. The Seed Fund will be disbursed to eligible startups through eligible incubators across India.

## Agri-startups and Agricultural Marketing

In the last couple of years, India has seen a rise in the number of agritech startups that are not only making technology more accessible but also helping these farmers to improve their lives. Below are the details of 10 agritech startups helping Indian farmers ([www.prakriti.in](http://www.prakriti.in)).

### 1. Ninjacart

Founded by Thirukumaran Nagarajan, Kartheeswaran K K, Ashutosh Vikram, Sharath Loganathan and Vasudevan Chinnathambi in June 2015, Ninjacart started as a B2C hyperlocal food delivery startup. It was transformed into a B2B agritech startup in order to solve the fresh agricultural produce supply chain problem for the farmers and the retailers. So far, Ninjacart has raised \$164.2 million from Tiger Global Management, Accel, Qualcomm Ventures and Steadview Capital.

### 2. WayCool

Founded by Karthik Jayaraman and Sanjay Dasari in July 2015, WayCool offers a B2B agritech platform that uses technology to control end-to-end agriculture supply chain right from farming inputs to last-mile distribution to help the farmers to sell their produce through multiple distribution channels. Till date, WayCool has raised \$60.8 million.

### 3. AgroStar

Founded by brothers Shardul Sheth and Sitanshu Sheth in 2013, AgroStar offers an online marketplace for farmers to buy agricultural inputs. This agritech startup also helps farmers by providing real-time advice from experts on how to manage their crops and boost their yield. AgroStar has raised \$42 million.

### 4. DeHaat

Founded by Shashank Kumar and Amrendra Singh in 2012, DeHaat offers agricultural services like access to agricultural inputs like seeds and fertilizers at affordable prices, personalized assistance, soil testing, weather reports, micro-finance, and insurance. DeHaat has raised \$19.3 million to help Indian farmers.

### 5. Stellapps

Founded by Ranjith Mukundan, Ravishankar G. Shiroor, Praveen Nale, Ramakrishna Adukuri and Venkatesh Seshasayee in 2011, Stellapps helps dairy farmers and cooperatives to maximize their profits by digitizing and optimizing Milk Procurement & Coldchain Management through its IoT-based SmartMoo platform.

### 6. Bijak

Founded by Nikhil Tripathi, Daya Rai, Jitender Bedwal, Mahesh Jakhotia and Nukul Upadhye in 2019, Bijak enables traders and wholesalers to discover new suppliers, maintain ledgers, make payments, and access working capital through its app to scale their business. Bijak has raised \$14.3 million.

## 7. Crop in Technology

Founded by Krishna Kumar and Kunal Prasad in 2010, CropIn provides one-stop SaaS-based solutions platform enabling agribusinesses to increase efficiency, productivity and sustainability. Its platform offers real-time weather updates, ability to manage farm activities, and predicts crop yields to minimize risk and yield better produce.

## 8. EM3 Agri Services

Founded by Rohtash Mal and his son Adwitya Mal in 2013, EM3 AgriServices helps small farmers who can't afford to buy expensive farming technology to rent specialization machines to boost productivity at cheaper costs.

## 9. Intello Labs

Founded by Milan Sharma, Nishant Mishra, Himani Shah and Devendra Chandani in 2016, Intello Labs offers digital products like Intello Track, Intello Sort, Intello Pack and Intello Deep which uses technologies like computer vision and deep learning to help farmers, retailers and exporters to access the quality of their fruits and vegetables.

## 10. Aibono

Founded by Vivek Rajkumar in 2014, Aibono has pioneered the seed-to-plate concept, wherein it helps the farmers to increase their crop yield and also sell the produce to the retailers. The company uses soil sensors, IoT devices and imaging drones to collect farm data and transfers it onto their cloud platform which uses predictive analytics to help the farmers make smart agriculture decisions in order to increase their produce. Aibono has raised \$3.5 million.

## References

- Gray, C. 2002. Entrepreneurship, resistance to change and growth in small firms. *Journal of Small Business and Enterprise Development*, 9(1):61-72.
- Gupta, U. (2012). Customer Loyalty towards Kiranas in Competitive Environment; A Case study *International Journal of Marketing and Technology*, II (8), 249-268.
- Misra A. , Singhal N. , Sivakumar B. , Bhagat N. , Jaiswal A. , Khurana L. 2011. Nutrition transition in India: secular trends in dietary intake and their relationship to diet-related non communicable diseases. *J. Diabetes* 3, 278 – 292.
- Sundar, I. 2016. Agribusiness Scope, Opportunities and Challenges in India. *International Journal of Economic and Business Review*. 4(7):171-178
- [www.prakriti.in](http://www.prakriti.in): Top 10 Agritech Startups In India helping Farmers - Prakati India: assessed on January 15, 2022.

[www.startupindia.gov.in](http://www.startupindia.gov.in)



## **A Vivid Story of a Successful Entrepreneurial Journey of a Dairy Farmer**

Compiled by

**Dr. Pranav Kumar**

*Assistant Professor, Division of Veterinary & Animal Husbandry Extension Education, Faculty of Veterinary Sciences & Animal Husbandry, R.S. Pura, Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu  
(SKUAST-Jammu), Jammu (UT of J&K) INDIA 181102*

**S**hri Kulbhushan Khajuria, presently J&K Dairy Farmers Association's (JKDFA) working President is a man of deeds, an example before the society, is of the view that dairy farming sector can be a profitable venture among the youth if more and more start-ups and dairy units get government-sponsored initiatives and incentives and if genuine demands of dairy farming association are addressed timely and properly.

### **Entrepreneurial journey of Mr. Kulbhushan Khajuria**

In 1988, he started innovative farming with small dairy unit with the daily supply of milk up to 60 litres in the market and also gave regular employment to three people in the project. At present, the said dairy farm has been established on 12 kanal piece of land at village Sohanjana under the Name of "Krishna Dairy Farms (KDF)" having shed capacity of 120 plus cattle with 100 cows & calves having seven quintals plus of daily milk production and providing regular employment to twelve persons and 20 persons are engaged for need based services as and when required. For marketing of milk, he has established 3 sale counters in Jammu city at Talab Tillo, Shakti Nagar and Channi Himmit Jammu. He is generating a turnover of more than 60 lakhs per year from sale of milk, vermin compost and agricultural products with a net profit of Rs 20-25 lakhs per year. The dairy is established with all hi-tech system with equipments such as milking machines, Bulk Milk Cooler (BMC), Total Mix Ration (TMR), Silage Making Unit with Chaff Cutter, tractors, Gen Set, Milk Vending Machines (Milk ATM) Van, and others.



Now, he along with his engineer son Mr. Abineesh Khajuria is working for the breed promotion of cows namely Gir, Shahiwal, Jersey, HF etc. They are focusing on promotion of A2 Protien milk and selling it by packing in glass bottles as it is the dire need of the society. Besides that, they have started making milk by-products such as Curd, Cheese, and Ghee. From the very beginning, they aim to provide hygienic, unadulterated and pure milk to consumers. More than 5000 people have visited their dairy farm for consultancy and training.



### Background and history

Mr. Kulbushan Khajuria S/o Late Pt. Krishan Dutt Sharma having Degree in Dogri Language (Shiromani) from Jammu University is a resident of Sohanjana village, Tehsil Mandal, District Jammu of Union Territory of Jammu and Kashmir. He lost his father in his childhood and thus the responsibility of agriculture came to his shoulders as his elder brother was in government job. After completing his graduation in 1985, he applied for government job but failed but didn't lose his heart and confidence. There was tough time for the family and for Kulbushan Khajuria to sustain. He was already looking after his ancestral occupation of agriculture after his father's death. Thus, the meagre income from traditional agriculture is not enough to meet both ends. Therefore, in 1988, he started small dairy farm with agriculture and start supplying 60 litres of milk per day to the market. But, he was not satisfied with the annual income he got from



agriculture and dairy sector. So, he decided to do dairy farming on large scale and contacted Krishi Vigyan Kandra Jammu and Department of Animal Husbandry Jammu for technical advice. In 2013, he got an opportunity to visit Gujarat in the Vibrant Gujarat expo where he visited farms of different dairy entrepreneurs. In 2014, he visited Haryana and Punjab and got chance to interact with dairy farmers. Getting motivation from dairy farmers of Gujarat, Punjab and Haryana and the sense of achievement propelled him to expand his existing dairy unit. He decided to practice dairy farming on large scale and establish dairy as an enterprise. Thus, in 2015, he created infrastructure from his own income sources and applied for a loan of Rs 35 lakh for purchase of crossbred animals. He established dairy farm on one acre of land in the name of M/S Krishna Dairy Farm.



Bulk Milk Cooler

Open area of Cow shed



Silage Unit



Gir and Rathi

Vermi-composting Unit



Crossbred HF



Shri Kulbhushan Khajuria explaining



Covered area of Cow shed

### Transformation from farmer to dairy entrepreneur

- ❖ Mr. Khajuria is now a job creator rather than a job seeker as he is providing jobs to others on his farm round the year. Because of his sheer perseverance, continuous motivated hard works and always ready to help nature for the dairy farming community of UT of J&K, recently he is nominated as Working President of J&K Dairy Farmers Association's (JKDFA). JKDFA on the pattern of PDFA has been created because of active and sincere approach.
- ❖ Earlier, he was nominated as the member of state advisory board for development of kisans of Jammu and Kashmir.
- ❖ Remained President of Jammu Kashmir Agri Entrepreneurship Development Association (JKAEDA). Source of entrepreneurial inspiration for young generations and farmers of the area who are in constant touch with him to seek advises on dairy farming.

### Risk Taking and Initiatives of Mr Khajuria: qualities of a successful entrepreneur

- ❖ His visionary and leadership qualities made him a successful entrepreneur. The success of Mr. Khajuria can be gauged from repayment of loan of 30 lakh in 5 years that he has taken from the bank at the time of expansion of dairy farm. He has a clear vision of his



venture that helped him to turn the idea of establishing a dairy farm into reality by pooling of his personal resources and availing bank loan.

- ❖ Motivated his elder engineer son, Mr. Abineesh Khajuria to left his job in private sector at New Delhi where he was getting a handsome annual package to join family business of dairy farming.
- ❖ Mr. Abineesh Khajuria in 2021, established a commercial cattle feed mill/plant of 2 tonnes per hour capacity for manufacturing customized pure animal feed for self-supply and supply to other dairy farms.
- ❖ Commercial cattle feed mill/plant was established by availing government scheme under which he will get 50 lakh loan having 50% subsidy with a ceiling of maximum subsidy of Rs. 17.5 lac. The unit will provide jobs to 8-10 persons on regular basis. Repayment of loan of 30 lakh taken at the time of expansion of dairy farm in the stipulated time limit helped him earn good reputation among the financial institutions and now they are coming to his farm gate for sanctioning of loan.
- ❖ Running vermi-compost unit in 2 kanals of area with annual production of 1000 M. Tons per annum.
- ❖ To minimise cost of milk production, he is preparing silage on his own farm every year.
- ❖ Achievements: In agriculture sector, maximum yield obtained in wheat is 62 Quintals per Hectare, Paddy (370 variety) is 40 Qtls per Hectare.
- ❖ Towards organic way of farming: He uses vermicompost, manure, biopesticides and bio-fertilizers in his 150 kanals of land for crop and fodder production.
- ❖ Introduced True Potato Seed brought from CPRS Kufri Shimla (H.P).
- ❖ Promoted tissue cultured potato seed to farming community of Jammu province.
- ❖ Started vegetable production in polyhouse for out of season cultivation, which is always attraction of market/ Mandi viz. cucumber, bottle gourd, summer squash, broccoli and baby-corn.
- ❖ Smart and entrepreneurial marketing: Supply of baby-corn, broccoli, lettuce as well as button mushroom in the leading hotels like K.C. Residency, Asia hotel etc.,
- ❖ Fruits: - He cultivated Strawberry for the first time in Jammu, good yield, earning and product as well. Many other farmers followed the practice and earned a lot.
- ❖ He produced 2.2 lakh plants saplings of Jatropa (rattan jot) which were supplied to Command Area Development Deptt. and in the District of Udhampur and Rajouri etc.
- ❖ Raised Nursery: -For the distribution of budding and grafted plants of fruits to the local farmers to raise their financial status.
- ❖ Concept of Organic Farming: - 20 Kanals of tomatoes crop sown during 2005 by using Bio- Fertilizers and biological control method without any use of pesticides, keeping in view the health hazards striving for certificate of method and produce as well.
- ❖ Diversified agriculture: - Crop rotational method is being used for getting more yield viz. Paddy-Potato-Wheat/ Berseem.
- ❖ Lily Flower plantation for 1st time in Jammu on trial basis under the guidance of Mr. Hank Van Voorbergen from Holland who visited thrice in the field was satisfied with 90 % survival of 30,000 tubers and supplied to Delhi market.

#### **Socialistic approach of Mr. Khajuria: a leadership quality**

- ❖ Working as active member of NGO namely “Manav Kalyan Mission J&K (Regd)”.
- ❖ Served as Panch member Panchyat Halqa Sohanjana and has done a lot of works in the environment field by planting 1,80,000 plants in the closures raised in waste land near village Sohanjana in association with social forestry department, Jammu.

- ❖ Also raised a nursery to grow the saplings for the distribution among the farmers to plant in their waste/available land. This has resulted in greenery in and around the villages besides raising the financial status of the farmers.
- ❖ Because of this initiative, he was appointed as President “Green India Mission” of J&K state.
- ❖ In view of the above social works, he was elected as Sarpanch in Panchayat Halqa Sohanjana.
- ❖ As a Sarpanch of Panchayat Halqa Sohanjana, he completed the following glaring tasks
  - i. By involving the women & children in his mission for “Nasha Mukht Panchayat” the wine shop was shifted from the panchayat to a long distant place.
  - ii. Sports activities were introduced to attract the youth to turn their attention for sound health and mind. For encouraging youth, ‘Akhada’ was built in the village premises near Hanuman temple.
  - iii. The people of the panchayat were actively pursued for making “Nirmal and Swachh Bharat”. In this context almost 90% task to provide toilet to each house hold has been achieved under NBA scheme and the rest is under way.
  - iv. The name of his panchayat was recommended for National Award to achieve 100% results in NBA scheme.
  - v. The panchayat is running a “Sunday school” for the children to teach them the moral ethics and love and service for the country.
  - vi. For saving energy, all his panchayat household were encouraged to replace bulbs with CFL tube lights provided at subsidized rates by Rural Energy department. Beside that, solar lights were installed at prominent places of the villages.
  - vii. Biogas plants were also built in certain households in his panchayat.
  - viii. In Govt. Girls High School Sohanjana, a bio digester toilet was donated by IFFCO and 8 computers were allotted by Sadh Bhavna through army during his tenure.
  - ix. He was appointed as Chairman, Inderwah Cooperative Society, Phallain.

### **Awards & Honours**

Mr. Khajuria’s work has been acknowledged through several awards and honours for his remarkable achievements

#### **AWARDS**

- ❖ Best farmer award by Hon’ble Agriculture Minister of J&K in 2011.
- ❖ ‘National Dairy Farmer’ award in the field of dairying by Hon’ble Agriculture Minister, GOI in a function at New Delhi, 18.11.2011.
- ❖ Progressive farmer Award in Krishi Vigyan Mela at Indian Agriculture Research Institute (IARI) Pusa, New Delhi, 21-23 Feb 2008.
- ❖ ‘Innovative Farmer Award’ for Integrated Farming system by His Excellency the Governor of J&K Sh. N.N. Vohra in a Kissan Mela organized by SKUAST Jammu, on 19- 20 March 2012
- ❖ Certificate of Excellence by BAYER Co for hybrid rice production record
- ❖ First Prize for strawberry awarded by Hon’ble Agriculture Minister Jenab A.A Zargar in Krishi Jagriti Mela held at R.S.Pura in which seven states representatives also participated. Also prize won for summer squash (Seoul Green).
- ❖ Hon’ble Chief Minister of J&K Jenab Ghulam Nabi Azad became irresistible towards crisp and compact Broccoli and awarded consolation prize.
- ❖ Dairy bull got first prize by then Governor ‘N.N Vohra’ in a cattle show.

- ❖ Progressive farmers award at Banaras by “Bhartiya Sabji Anusandhan Sansthan” on 23/2/2018 by then Hon’ble Agriculture Minister of India, Sh. Radha Mohan Singh.
- ❖ Progressive Farmer Award by Krishi Vigyan Kendra, Jammu on 12 September 2016.
- ❖ In Feb 2021, received award for Innovative Farmers held at SKUAST-Jammu during Innovative Farmers’ Conference (IFC 2021).

### **HONOURS**

- ❖ Addressed 5th Asian Regional Conference, ICID at New Delhi 9-11 Dec. 2009, wherein then Dr. Man Mohan Singh Hon’ble Prime Minister of India also spoke on the same dais.
- ❖ Jenab Omar Abdullah, the then Hon’ble Chief Minister, J&K presented a Shawl to the ‘Progressive Farmer’ in a function organised by Department of Agriculture at Press Club Jammu.
- ❖ A brief interaction with the then Hon’ble Chief Minister of Gujarat, Sh. Narinder Modi during Global Agriculture Summit (Vibrant Gujarat), Gandhi Nagar on 09 to 13 Sept.2013.
- ❖ My contribution in the field of agriculture and dairy was praised by Hon’ble Lt. Governor Shri Manoj Sinha Ji while addressing PM Sh. Narender Modi and local farmers in a video conference in December 2020.
- ❖ Hon’ble Union Agriculture and Farmers Welfare Minister Shri Narinder Tomar Ji praised products of Krishna Dairy Farm at SKUAST-J.

### **Meetings Attended**

- ❖ Attended meeting of commission for Agriculture Costs and Prices (GOI) on price support, procurement and Public Distribution system at New Delhi on 19.05.2010
- ❖ Parliament (Lok Sabha) proceedings as Progressive Grower at New Delhi on 30.07.2009
- ❖ Participated in foundation course of first batch of halqa panchayats of J&K held at AMR AP academy of Rural Development, Hyderabad during April, 2014

### **Tours and Exposure visits undergone**

- ❖ Modern Floriculture Centre at G B Pant Agriculture University in Pantnagar (Uttarakhand).
- ❖ Moti Lal Nehru Farmer Training Institute, Allahabad (UP) 12-16 Sep.2009.
- ❖ 10 days tour of Agriculture Awareness in 2004, visited five states of Northern India wherein the important places/ universities of agriculture importance were visited including IARI Pusa, New Delhi, University of Horticulture Solan, PAU Ludhiana, Central Potato Research Institute Shimla (H.P.)

### **Trainings, Workshops and Courses attended**

- ❖ Attended Workshop on Development of Commercial Floriculture in J&K 23-24 Dec,2009 at Le Meridian, New Delhi wherein FEO of seven countries participated.
- ❖ Attended Training on improving the quality of Farm saved Seed organized by SKUAST Jammu, 29-30 Mar 2010
- ❖ Attended workshop at IIFSR Modipuram, Meerut during July 2013.
- ❖ Attended Krishi Vigyan Mela at Indian Agriculture Research Institute (IARI) Pusa, New Delhi, 23-26 Feb.2009
- ❖ Attended TECHNOTEX 2009 organized by Indian Chamber of Commerce and Industry(FICCI)at New Delhi
- ❖ Attended Training on Commercial Floriculture organised by J&K EDI, 27 June 2008

- ❖ Attended Workshop-cum-Training on quality production of Medicinal & Aromatic Plants in J&K, 25 June 2008 organised by Indian Institute of Integrative Medicines (IIIM) Jammu
- ❖ Attended consultation workshop titled “EU Trade & Investment Agreement Negotiation identifying the products of concern to India New Delhi on 05.10.2007
- ❖ Participated in River Bed Vegetable Day organized by SKUAST Jammu, 27 Mar 2006 (Got prize in vegetable Exhibition)
- ❖ Participated in Krishi Jagriti Diversified Agriculture, North Zone Regional Fair SKUAST Jammu, 18-20 Mar 2006 (received prize for Strawberry )
- ❖ Participated in Workshop on Cultivation & Marketing of Medicinal & Aromatic Plants organised by J&K EDI , 16-11-2005 to 03-12-2005
- ❖ Attended two days’ Orientation Training Programme on integrated Pest management 29.09.2005 to 30.09.2005
- ❖ Got 1st prize for Broccoli from Director Agriculture Jammu in Agriculture Exhibition held in Block Satwari.
- ❖ Attended Motilal Nehru farmers training institute Phoolpur Allahabad for training programme

### Nominations received

- ❖ Working President of J&K Dairy Farmers Association’s (JKDFA)
- ❖ Member State Advisory Board for Kissan Development J&K
- ❖ State President, Green India Mission.
- ❖ Member State Seed Selection sub Committee in respect of Agricultural and horticultural Crops.
- ❖ Provincial President, All J&K Panchayat Conference.
- ❖ Member Scientific Advisory Committee KVKs.
- ❖ Panellist of TV and Radio debates on ‘Agriculture Related Issues’.
- ❖ Unanimously elected PRESIDENT of effective Farmers Organization under the name & style of JAMMU KASHMIR AGRI ENTERPRENEURSHIP DEVELOPMENT ASSOCIATION (JKAEDA)
- ❖ In 1996 elected unanimously Chairman of MPCS (Pry. Cooperative Society, Sohanjana and continued up to 2002, under the jurisdiction of Marketing Society, Phallian, Jammu.

### Conclusion

The success story highlighted that the most crucial thing required for the success of an entrepreneurial farm is innovativeness, taking initiative and risk taking ability of an individual. He is of the view that livestock is emerging as an important sector in the economy of Jammu and Kashmir and plays an important role in the socio-economic development of Jammu and Kashmir. Dairying has a potential source of additional income for the rural people of Jammu and Kashmir. Farmers in J&K no longer see dairy farming as a part-time venture and instead have taken it up as a full-fledged profession. "Farmers in J&K are now quite keen on running a dairy farm on large-scale, which will help in cutting the cost of milk production considerably and help in getting remunerative rates," Traditionally, J&K farmers used to have just 10 to 20 cattle per farm. "But now, farmers have started owning dairy farms with 100 to 200 cattle for producing milk in bulk. According to Mr. Khajuria, the selection of breed is of paramount importance for the success of a dairy farm. Poor quality breed produces less amount of milk having high cost of milk production. He advocated that the farmers should remain in regular touch with SKUAST-Jammu and Department of animal husbandry Jammu for timely information regarding dairy farming and allied activities. He is a successful farmer in his village because he is always quick to implement

new technologies suggested by research institutes. He believes that dairying is like a 'Test match'. One has to be patient, as one cannot expect "profit" immediately. But dairying is the only farm activity where one could get daily income or weekly income and market the product directly to customers without middlemen. He is of the firm opinion that the dairy-farming has a potential to generate jobs for thousands of unemployed youth in Jammu and Kashmir provided Government's priority should be to promote local milk-processing units. Government must do more to help as dairy farmers need a stable market and better pricing for liquid milk, affordable, uninterrupted supply of feed and reliable veterinary services. He said that farmer has to face a lot of challenges in this sector, adding that the need of the hour is to work out on all the modalities and trying to prepare a roadmap to help the dairy farmers and others associated with this sector. In this regard he asked for improving milk production and productivity govt should think of various interventions.

\*\*\*\*\*

Copyright with the NAHEP-IDP, SKUAST-Jammu



# Institutional Development Plan (IDP), SKUAST Jammu



*To turn SKUAST Jammu a hub of quality education in farm and allied sciences with global vision and local action.*



*To strive for consistent improvement in students for evolving them into efficient and competent professionals /entrepreneurs.*



Designed by: Sanveet Kour

**Sher-e-Kashmir**  
**University of Agricultural Sciences & Technology of Jammu**

[www.skuast.org](http://www.skuast.org)