

Skill and Entrepreneurship in Agriculture



Indian agriculture is at crossroads and the need of the hour is not only to make farming as profitable venture to attract and retain those who want to quit farming but also enhance agricultural productivity and hence income to solve the issue of disguised unemployment in agricultural work force of India. The possible solution to this problem can be skill development in agricultural sector. Although the techniques developed and mechanization came to rescue of farmers but not to the desired level but attracted the attention to develop skill in agriculture sector. India is short of skilled human resource in agriculture and we are still performing with traditional knowledge.

The book on "**Skill and Entrepreneurship in Agriculture**" has been divided into two sections viz.; (1) Basics of skill and entrepreneurship and (2) Prospective areas of skill and entrepreneurship in agriculture with a total of 41 chapters. The book is primarily aimed at providing comprehensive knowledge and information on different aspects of skill and entrepreneurship development in agriculture. It would be useful to students, un-employed youths, teachers, field functionaries, planners and enlightened farmers all over the world.



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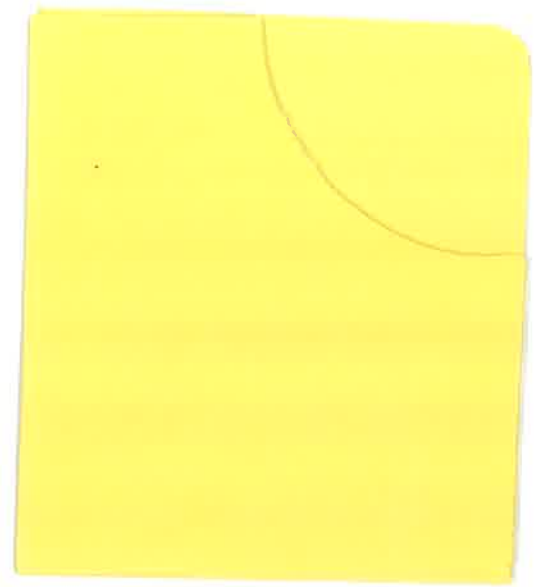
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About the Editors



Dr. Lokesh Gupta, Associate Professor, is presently working as Head, Department of Animal Production, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, Udaipur. Dr. Gupta completed his Masters in 2000 with Gold Medal and doctorate degree in Animal Production in 2003. Dr. Gupta has 17 years experience and fulfilled the mandate of teaching, research and extension. His area of interest is organic poultry farming, feeding of area specific mineral mixture and production and utilization of azolla in the diets of dairy animals and poultry. He is a recipient of several awards including Bharatiya Govansha Sambardhan Pratishthan Award in Animal Energy by Indian Society of Agricultural Engineering (ISAE), New Delhi; Best Paper Award by International Congress for Animal Reproduction, Vancouver (Canada); Best Teacher Award by MPUAT, Udaipur and many more by different National level organizations. He has published more than 50 research papers, 6 books, manuals, book chapters, articles and documentaries. He is associated with 18 externally funded projects. Dr. Gupta has organized many programmes for skill and entrepreneurship development in Agriculture including workshops/seminars/summer/winter schools for the students, rural youths and faculties of State Agricultural Universities and Research Institutes of the country. He has visited Vietnam, Canada and Australia for presentation of research papers and as a part of delegation for exploring the opportunities of research and teaching exchange programme.



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Preface

More than ever before entrepreneurship is in trend these days. Entrepreneurship is being undertaken by a person to augment his business interests. It is a creative and innovative response to the environment in any field of social endeavour and may relate to business, agriculture, social work and education, etc. Entrepreneurship is solving the problem of unemployment to some extent, thus playing a key role in the process of economic development.

Entrepreneurship is a vocation admired by people of all ages and backgrounds. It is practically synonymous to opportunity. By understanding one's own passion and visualizing the dreams a person can push start his drive to become an entrepreneur. There are several entrepreneurial ventures which can be adopted for livelihood as well as earning profits. In a way, entrepreneurship leads to more stability and a higher quality of community life.

Over the next several decades, tech industry may be the most lucrative for prospecting entrepreneurs. Agri-business can also expect steady growth over the next several years. Innovation is a vital component of business growth and thus, an essential skill in becoming a successful entrepreneur. So, a person who wish to be an entrepreneur will be successful only if he has skills to take certain steps and risks that are challenging. At the same time he needs skills in planning and taking decisions, skills in financial management, budgeting, marketing, analysing and designing suitable strategies to increase productivity in industry, business and agriculture, etc. Today, Government of India has announced several schemes which are providing financial support in the form of loans and subsidies to encourage budding entrepreneurs in all sectors.

It is a pleasure to present this book on "**Skill and Entrepreneurship in Agriculture**". We are indebted to all the authors for their contribution and sharing their great ideas regarding the basic concepts of entrepreneurship and entrepreneur, dynamics of entrepreneurship development, entrepreneurship quality and motivation, process of developing entrepreneur qualities, agri-start-ups, various avenues for successful ventures in agriculture, women entrepreneurship, small business ideas, etc. The book is useful for students, entrepreneurs, corporate executives, small business managers and professionals as it gives insight to various aspects of entrepreneurship growth and development in agriculture and allied sectors.

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Chapter 1

Extension Strategies for Effective Entrepreneurship Development

Prof. Baldeo Singh

Former Joint Director Extension (IARI, New Delhi) & President (ISEE)

Agriculture has been the anchor for achieving the socio-economic growth. While food security still remains a matter of concern, the present agricultural scenario has resulted into new priorities and calls for meaningful role of extension education to exploit the opportunities for the desired gains. The science and technology development in agriculture has opened tremendous opportunities for income and employment generation. Today, a new paradigm of agricultural development is fast emerging and demand for agricultural technology are changing and diversifying. The overall development of rural areas is expanding in new directions, old ways of delivering important services to the people are being challenged and traditional societies are being transformed into knowledge societies. Markets are now the driving force for agricultural and rural growth, depending on effective information support i. e. what people want, at what price, where to get it, and who can supply it. Developing the capacity to generate, absorb, disseminate and protect knowledge and exploit it as a powerful tool is necessary to derive societal transformation. There is an imperative need for generating adequate resources and opportunities for the farmers, farmwomen and rural youths in order to achieve household food, employment and income security in the rural sector.

The major challenges facing the Indian agriculture are:

1. Stagnation in agricultural production and productivity
2. Increasing trends of unemployment, hunger and poverty
3. Shrinking and degrading production resources
4. Disparity between irrigated and rain-fed areas

Facilitation for financial assistance

The ZTMC facilitates the availability of loans with the aid of State Bank of India (SBI), Agri-Commercial Wing and provides direct access to financial schemes offered by Micro Small and Medium Enterprises (MSME) for gathering capital investment, company expansion and new product development. It also helps entrepreneurs in developing linkages with various venture funding agencies. ABI being a registered member of Indian STEP and Business Incubators Association (ISBA), the privileged tenants of incubator are entitled for getting tax exemption benefits as well as opportunity to attend the ISBA Annual conference, workshops, training programs, etc.

Promotion of ICAR Technologies

The ZTMC, since its establishment at CIFT, has been responsive to the rapid transformation of innovation processes and business needs, and has been continuously trying to enhance the visibility of ICAR technologies through Business/Industry Meets, Exhibitions, Industry Interface Programmes, etc. This has helped in strengthening the public private partnerships and to bring together innovators involved in research and development, and entrepreneurs from the field of fisheries on to the same platform. Technology exhibitions are regularly organized, and entrepreneur-ready innovations and technologies developed by the ICAR Institutes specialized in fisheries and aquaculture are exhibited to the Industry. The areas addressed are seed production technologies of fish and shrimp, cost-effective and nutritious fish feed formulations, diagnostic and test kits, new and improved aquaculture methods, harvest and post-harvest technologies, ready-to-cook/ready-to-serve products from fish, pharmaceutical and biotechnological products, and techniques for fisheries waste management.

Human Resource Development

Human resource development for the fisheries industry has been in the mandate of CIFT since its inception. Fish processing industry is a fast growing industry in our country as well as abroad, where there are immense opportunities for rightly trained professionals. CIFT has the right expertise and facilities to provide hands-on, application-based training courses, such as HACCP concepts, HACCP Audit, Seafood Quality Assurance, Basic Food Hygiene, Food Processing and

Preservation, Energy Efficient Harvesting Techniques, Boat Construction, etc. Successful trainees have high potential for employment in India and various foreign countries including Middle East and South Africa. The ZTM Organises several awareness workshops, seminars, training programmes, etc. for human resource development in the fisheries sector. The Unit also conducts capacity building programmes to help the incubatees build their competence in the areas of business practices, technology upscaling, networking and financing strategies.

Outcomes

- Transmitting benefits of developed technologies to the nation fast and effectively
- Distributed regional economic growth and national wealth creation through SMEs
- Creation of gender equity and economic independence to women through SHG clustering
- Reduced chances of failure for first generation entrepreneurs and consequent saving of national wealth
- Import reduction and enhanced national lifestyle through introduction of innovative products and services
- Increased national savings through efficiency enhancement of industries
- Employment generation
- Enhanced build-up of human resources and national IPRs
- Encourage thrust towards solution driven research to benefit target groups
- Increased revenue to host Institute

LESSONS LEARNED IN BUSINESS INCUBATION AND WAY FORWARD

From the experience gained from the interaction with budding entrepreneurs, three primary reasons which create difficulty to the small and medium start-up businesses to remain competent have been identified. They are, lack of access to capital, lack of managerial skills, and the lack of knowledge about how to estimate their markets, gauge

growth and potential business basics. Incubators are proved tools that can specifically address these three issues. High risk start-ups are instrumental in creating jobs, and business incubators play a role in making and leveraging the investments these entrepreneurs make. In a country like India, entrepreneurship is ubiquitous and is reflected in all the major dimensions of civilization *viz.* social, political and economic. With the initiation of economic reforms in early 1990s, India's business environment has witnessed considerable improvement. Domestic and foreign investors are finding it easier to do business after the reforms, which are aimed at re-orientation of the centrally controlled economy to a market-oriented one in order to foster greater efficiency and growth. In spite of the global meltdown, Indian economy offers ample opportunities for business, both to the domestic and foreign entrepreneurs.

Conclusion

Amidst the changing paradigms and demanding global structure, India, in order to remain a front runner among developing nations, has primarily focused on the agriculture sector. The scope and level of protection of intellectual property rights (IPRs) has been increasing in the past few decades. The three-tier IP management system is introduced in ICAR as an incentive for investing in research and development, creative activities, and for extending markets for technology and products. Among the various strategies to promote planned growth in this sector, focus was also given on promoting viable small and medium scale enterprises. However, the Indian agricultural sector, despite its importance in industrialization strategy and immense potential for employment generation, confronts several problems in business development and management. In this context, business incubators which can help entrepreneurs turn their ideas into viable businesses and promote innovation, by providing business support services and resources have great scope and significance.

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