Impact of Agripreneurial initiatives of Ministry of Agriculture and Farmer's Welfare, Government of India on Employment generation

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This e-book is prepared as an outcome of the Research study conducted at National Institute of Agricultural Extension Management (MANAGE) on Impact of Agripreneurial initiatives of Ministry of Agriculture and Farmer's Welfare, Government of India on Employment generation. The Agri Clinics and Agri Business Scheme of Ministry of Agriculture and Farmers Welfare, GoI is studied in detail with respect to the employment generated by the scheme's intervention. Neither the publisher nor the contributors, authors and editors assume any liability for any damage or injury to persons or property from any use of methods, instructions, or ideas contained in the e-book. No part of this publication may be reproduced or transmitted without prior permission of the publisher/editor/authors. The publisher and author do not give a warranty for any error or omissions regarding the materials in this e-book.

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Introduction

Agriculture is the prime pulse of the Indian economy and is at the core of the country's socio-economic development. It accounts for around 19 per cent of the GDP, and about two-thirds of the population depends on this sector. The growth of other sectors and the overall economy hinges on the performance of agriculture to a considerable extent through its backward and forward linkages. It is not only a source of livelihood and food security for a large population of India but also has a special significance for low-income, poor, and vulnerable sections.

Agriculture in India has been segregated into various sectors such as farming, agriculture equipment, fertilizers, pesticides, warehousing, cold chain, dairy market, floriculture, fisheries, poultry, animal husbandry, and more. These are the largest source of livelihood in India, where 70 percent of the rural households still depend primarily on agriculture, with 82 percent of farmers being small and marginal.

The average age of an Indian farmer is 50.1 years with primary level education farming approximate 1.08 ha land will not have a bright future in this sector if he is alone. Growing demand and rising constraints demand stakeholders to be open to technology, knowledge, and change. This can be attained through extension services. The extension is an informal educational process directed toward the rural population. This process offers advice and information to help them solve their problems. The extension also aims to increase the efficiency of the family farm, increase production, and increase the standard of living of the farm family.

Due to rising risks associated with the production and distribution of agri and allied sectors, farm businesses must assess their ability to survive in a challenging environment. These risks range from falling agricultural workforce to climate change. Ensuring self-sufficiency in agriculture is in the hands of farm mechanization, farmers adopting advanced technologies, and their connectivity to the agriculture market information. All these details can be availed from various sources, but to an average farmer, these sources are not a comfortable option. Until now, many farmers depend on their input dealers for this information. Input dealers advise them on what variety of seed to sow and what insecticide/pesticide to spray, and in most cases, these input dealers act as first-level aggregators in the supply chain. Because of their position in the input and output market channel, they play a very crucial role in the Indian agriculture extension network. Having untrained people in such positions makes the system inefficient despite the efforts taken by the state. There were nearly 2.83 lakh such professionals in the system during early 2000.

The Situation Assessment Survey of Farmers 2003 reported that, given a choice, 40 per cent of farmers were willing to leave agriculture. The survey also showed that the coverage of Government extension programs and extension services of the National Agricultural Research System (NARS) was very low (NSSO 2005). Only 40 per cent of farmers had access to any source of information on modern technology. Of those who had access to such information, the highest proportion obtained information from other progressive farmers (16.7 per cent), followed by input dealers (13.1 per cent), and radio broadcasts (13 per cent). Only 5.7 per cent of farmers had received information from extension agents.

Further, the major problem reported by those who had access to extension services was the practical relevance of the advice. The Situation Assessment Survey 2013, though not strictly comparable, again highlighted the prominence of farmer-to-farmer exchange of information in Indian agriculture. Traditional and modern ICTs (newspapers, radio, television, and internet) have also assumed an important role as a source of information for farmers. At the all-India level, 41 percent of cultivating households accessed technical help from any source during the reference period (July-December 2012). Public extension agencies, including extension workers, KVKs, and State Agricultural Universities, were a source of information for around 10 per cent of households (NSSO 2014).

A study in Maharashtra by Bachhav (2012) concluded that most farmers seek information on the availability of seeds (74 per cent), crop production (71 per cent), fertilizer (65 per cent) and insecticide availability (62 per cent). Other areas mentioned by farmers were water management (34 per cent), weather information (23 per cent), and agricultural equipment (18 per cent). Similar findings were observed by Meitei and Devi (2009), who concluded from a study in Manipur State that most farmers seek information on crop production and the availability of seeds and fertilizers. Babu *et al.* (2012) observed that the critical information needed for rice farmers in Tamil Nadu related to disease and pest management, and pesticide and fertilizer application. The most important information needs of tribal farmers, as identified by Saravanan (2007), concerned disease and pest management, followed by information related to suitable crop varieties, packages of practices, farmers' training programs, irrigation, and farm credit.

A recent study by Reardon *et al.* (2011) in Uttar Pradesh showed that public sector extension sources (State extension staff, KVKs, All-India Radio, university extension, and plant protection units) were collectively a source of information for only 25 per cent of farmers. In Madhya Pradesh, 37 per cent of the farmers had contacted State extension staff (Reardon *et al.* 2011) for services. Other major sources of extension services for farmers in Madhya Pradesh were All-India Radio and Television (21 per cent) and KVKs (12 per cent). Private sector sources accounted for 25 per cent of all information sources.

Glendenning *et al.* (2010) concluded from a review of agricultural extension in India that despite the variety of agricultural extension approaches that operate in parallel and sometimes duplicate one another, the majority of farmers in India do not have access to any source of information; this lack of access severely limited their ability to increase productivity and income and reduce vulnerability.

Agriculture Extension in India

Agricultural extension in the post-Independence era was primarily the function of State Departments of Agriculture. Some voluntary organizations were also involved in agricultural development activities in different parts of the county, but with limited outreach. The Indian Council of Agricultural Research (ICAR) began participating in agricultural extension through National Demonstrations in 1964.

A major change in public sector extension came with implementing the World Bank sponsored Training and Visit System (T&V) in 1974. Most States adopted the T&V system during the 1980s, which improved the extension system's financial and human resource capacity. The 1970s also witnessed the launch of Krishi Vigyan Kendras (KVKs) or Farm Science Centres, Lab-to-Land programs, and Operational Research Programs by ICAR. Krishi Vigyan Kendras (KVKs) were begun by ICAR to provide need-based and skill-oriented vocational training to farmers, field-level extension workers and other self-employed persons. KVKs were meant to bridge the gap between technology developed at research institutions and its adoption at the field level. Their role was to feed proven technologies to the main extension system. The KVK program began in 1974. There is now a total of 731 KVKs in the country - 506 under State Agricultural Universities (SAUs) three Central Agricultural Universities (CAU), seven under deemed universities, 66 under ICAR institutes, 103 under Non-Government Organizations (NGOs), 38 under State Governments, three under various Public Sector Undertakings (PSUs), and the remaining five under other educational institutions. KVKs work under the administrative control of Zonal Project Directorates (ZPDs). There are 11 ATARIs in the country. In 1992, National Demonstrations, Operational Research Projects, and the Lab-to-Land Program were merged with KVKs, and front-line demonstrations and on-farm testing were added to the responsibilities of KVKs. From 2009 onwards, KVKs have also assumed the role of Knowledge and Resource centres in the concerned districts. Each KVK has scientific manpower of six to seven subject-matter specialists. Low manpower resources restrict the reach of KVKs to a limited number of farmers. Many KVKs are constrained by financial, infrastructural, and human resource limitations and are unable to reach the farming community of a district. Agricultural extension witnessed a qualitative change in the 1990s, with a new focus on privatization and the withdrawal of support to the state-led extension system. Reduced spending by the government weakened the public sector extension system. Other non-governmental agencies stepped in to fill the vacuum.

Facing criticisms on the failure of the extension, the government introduced the Agricultural Technology Management Agency (ATMA). The ATMA model was pilot-tested from 1998 to 2005 in 28 districts, and later extended to all 691 rural districts in the country. The ATMA model was meant to make the extension system a demand-driven, market-oriented, and farmer-accountable system. At the district level, ATMA was to function as a registered society of all major stakeholders in agriculture and allied activities, to become a platform for the convergence of the various agencies involved in extension in a district. ATMA was to be the nodal point at the district level for technology dissemination, integrating research and extension activities, and decentralizing day-to-

day management of the public agricultural extension system. Field-level activities are coordinated through Farm Information and Advisory Centres (FIAC) at the block level. Another feature of ATMA is that it deals with groups such as farmer groups or self-help groups rather than with individuals for the delivery of extension services. It also has provisions for public-private partnerships in the district. In 2000, ICAR introduced Agricultural Technology Information Centres (ATIC) in selected ICAR institutes and State Agricultural Universities to function as a single window to disseminate technologies developed in the Universities and Institutes.

Many new service providers and institutional arrangements in agricultural extension have emerged over the last two decades. These include private extension agencies, input agencies, agri-business firms, farmers' organizations, producer cooperatives, financial agencies involved in rural credit delivery, and consultancy services (Sulaiman 2012). The establishment of Agri Clinics and Agri Business Centres (AC & ABC) Scheme was an explicit move by the government to support private sector initiatives in extension in 2002.

AC and ABC scheme plays a major role in developing private agriculture extension network in India. This scheme is implemented through the National Institute of Agriculture Extension and Management (MANAGE), to transform unemployed farm graduates into agripreneurs by training them for 45 days and giving them an access to the credit to start their own ventures. The National Bank for Agriculture and Rural Development (NABARD) acts as a subsidy channelizing agency for the scheme. In this scheme, nearly 82,576 agri graduates were trained between 2002 and 2023 and more than 36,355 ventures were established (AC & ABC, 2023). All these institutions provide training to build the capacity of the workforce engaged in agricultural production.

Importance of training in improving productivity

Need for and Importance of Training in Agriculture

Jobs and career opportunities in agriculture are unorganized and informal because of the nature of entrepreneurship in this sector. Until we create awareness among the entrepreneurs about the advantage of having a skill specific to their activity, they will not understand the need for skilled labourers. Lack of skill is the major challenge in agriculture production in India. With limited skill and inadequate information, the industry is struggling to realize the labor productivity in the industry. To increase the productivity of agricultural labours state is organizing need-based training programs on the production activities. Training is a fundamental need for human resource development in the agriculture sector and for the expansion and modernization of rural economies. The creation and expansion of training and extension networks for both men and women are very important to develop and improve skills and to increase productivity and income-generating capabilities.

According to Lynton and Pareek (1990) training is the process of organization of opportunities for participants to acquire necessary understanding and skills. In agriculture, cognitive skills are required to make better decisions, technical skills required for handling various implements and

interpersonal skills required for exchange of farm related information. Training has great significance in replacing the old attitudes with new ones, knowledge and skills, exchanging opinion and experiences, removing and clarifying doubts and difficulties. Moreover, agricultural training is a potentially effective method to diffuse relevant new technologies, new information and also to orient them in the frontier areas of development.

To increase a pool of skilled persons, training is important in agriculture and allied sectors. It is closely related to empowerment by gaining strength, confidence, and vision of work for positive changes in life. The institutions which focus on farmers' capacity building are, State Agricultural Universities, Indian Council of Agricultural Research Institutes, MANAGE, KVKs, Development Departments, Corporate bodies, Input Agencies, and private organizations etc.

In India, youth is an important segment with one-fourth of the total population. They have spirit, enthusiasm, dynamics and are receptive to new ideas. But in recent years, the unemployment rate is rising among educated youth, which is a major concern for sustainable growth. This demands new strategies for educating, making them self-reliant and competent. Therefore, skill-based training is important to guide and motivate them for establishing profitable agri based enterprises in rural areas. Through training, one can improve their living by carrying out various farming operations more scientifically and by taking appropriate decisions that enable them to realize better profits. Department of Agriculture and Farmers' Welfare, GOI, has introduced various programs for employment generation in India. These programs are organized for the benefit of various segments of the farming community like men, women, youth, entrepreneurs, self-help groups and other learners who are interested in establishing agro-based industries in rural areas.

Role of MANAGE in Indian Agriculture Extension Network:

MANAGE is working to address challenges in agricultural extension system through developing concepts, training people on various specializations, coordinating extension related activities pan-India. It is the only institute which connects most of the entities working in the area of agriculture extension. In their training activity schemes like AC & ABC and DAESI are concerned with building an extension system whereas schemes like STRY and RKVY - RAFTAAR are about building the technical capacity of the agricultural workforce.

Agri Clinic & Agri-Business Centres

This scheme is in operation to ensure -

- To supplement efforts of public extension by necessarily providing extension and other survives to the farmers on payment basis or free of cost as per the business model of agripreneur, local needs and affordability of target group of farmers.
- To support agricultural development and

- To create gainful self-employment opportunities to unemployed agricultural graduates, agricultural diploma holders, intermediate in agriculture and biological science graduates with post-graduation in agri-related course

Agri Clinics:

Agri clinics are envisaged to provide expert advice and services to farmers on various aspects to enhance productivity of crops/animals and increase the income of farmers. Agri Clinics supports in following area:

- Soil health assessment
- Production Practices support to agriculture and allied sectors
- Crop Protection
- Crop insurance
- Farm mechanization
- Post Harvest Practices support
- Process of various crops in the market

Agri Business Centres:

Agri-business centres are commercial production/ processing/ service units managed by agriculture and allied sector trained professionals. These ventures include selling of inputs like seed to advanced machineries related to agriculture and allied sectors, custom hiring units for higher end machineries, post-harvest management and market linkages for income generation and entrepreneurship development. Stakeholders involved in this scheme is presented in figure 1.

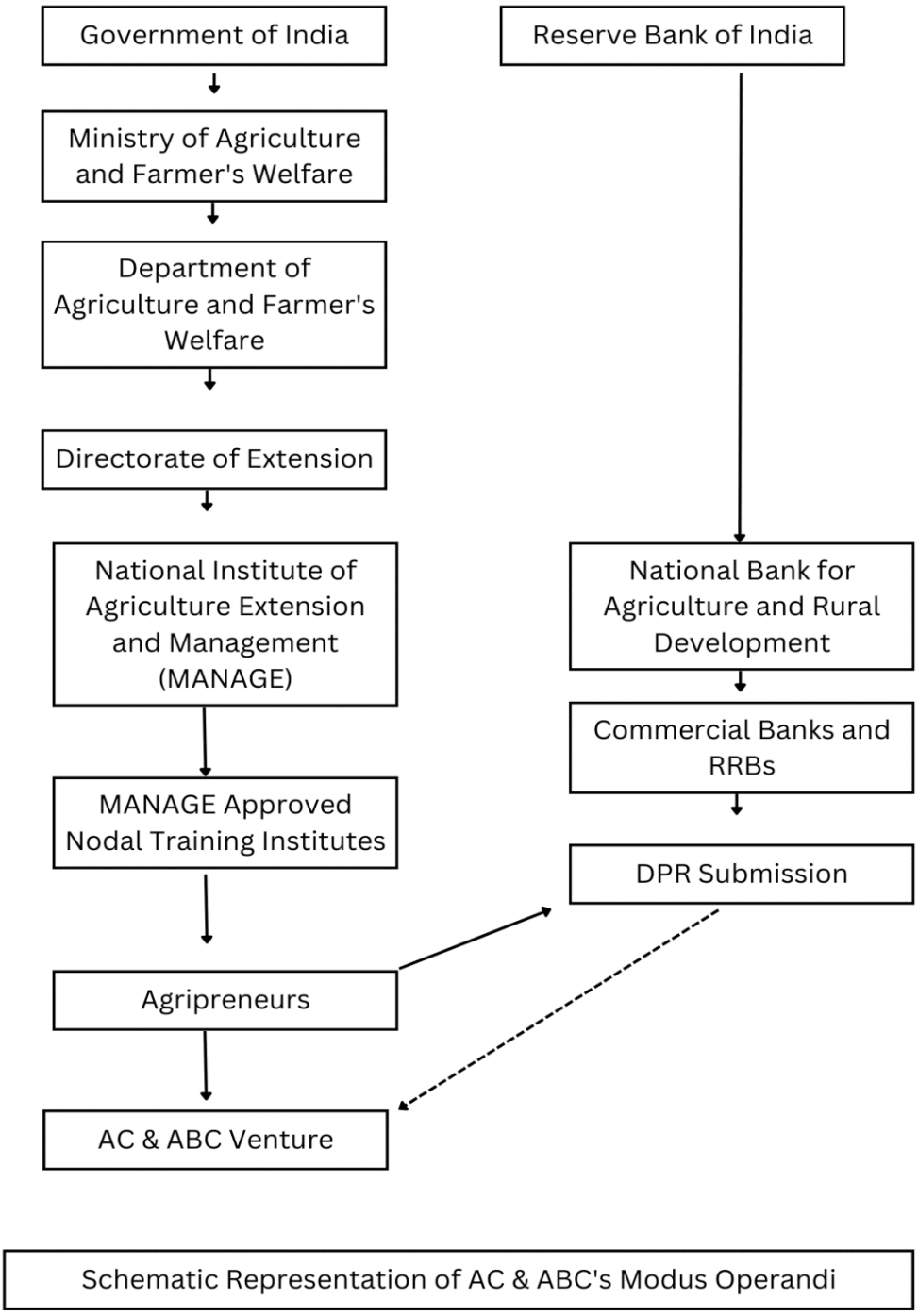


Figure 1 Schematic Representation of AC & ABC Operations

Rational for the research study:

Agri Clinic and Agri - Business Centre (AC & ABC), major schemes facilitated by MANAGE since 2002. In these schemes Nodal Training Institutes (NTI) helps beneficiary to become entrepreneurs and to create employment for others too. It has twenty years of penetration in society, we thought it would give better understanding on how agripreneurial initiatives help direct and indirect employment in the society.

Objectives of the research

The planned objectives of the research are as follows -

1. Estimating the number of entrepreneurs trained, supported pan India
2. Understanding the Impact of the training /education on the entrepreneurs
3. Estimating the direct and indirect employment generated and farming community supported by the enterprises supported.
4. Estimating the state-wise performance of the scheme
5. Identification of the factors affecting the performance of the scheme
6. Suggesting the relevant policy interventions for improvement

Scope of the Study:

Proposed study focused on assessing the employment generation of Agripreneurial initiative taken by ministry of Agriculture and Farmer's Welfare, GOI. In this study we tried to study the impact of AC & ABC scheme since 2002. This study attempted to understand the impact of entrepreneurs on employment generation. This study has limitations in sample size that can be further explored to increase the validity of the results. Similarly, understanding the impact of other factors like demographic characteristics of entrepreneurs and the nature of the venture will help us shed some light on why most of the trainees are not turning into entrepreneurs. The distribution of sample across pan India is also not uniform, this has to be studied from the Nodal Training Institute's perspective to understand what can be added to the NTI activities in least explored region.

Limitations of the study:

This is an exploratory study on the characteristics of agripreneurs and their potential to generate employment. Still, there are lots of factors like entrepreneurial attitude, factors influencing successful venture establishment, determinants of scale of operation, agriculture extension service offered like aspects need to study to understand nature and characteristics of private agriculture extension system in India. Studying these aspects will help us understand the factors influencing the success rate of the schemes to improve the efficiency of the efforts of GOI. Since the sample size per activity is less, this study's result has limited validation.

Chapter - 2

Review of Literature

Agricultural extension programs have been one of the main conduits of addressing rural poverty and food insecurity. This is because, it has the means to transfer technology, support rural adult learning, assist farmers in problem-solving and getting farmers actively involved in the agricultural knowledge and information system (Christoplos & Kidd, 2000). Extension is defined by FAO 2010 as; "systems that should facilitate the access of farmers, their organizations and other market actors to knowledge, information and technologies; facilitate their interaction with partners in research, education, agribusiness, and other relevant institutions; and assist them to develop their own technical, organizational and management skills and practices". By this definition, extension is deemed as a primary tool for making agriculture, its related activities as well as other economic activities more effective and efficient to meet the needs of the people. It is, therefore, regarded as a policy tool for promoting the safety and quality of agricultural products. Agricultural extension is aimed primarily at improving the knowledge of farmers for rural development; as such, it has been recognized as a critical component for technology transfer. Thus, agricultural extension is a major component of facilitating development since it plays a starring role in agricultural and rural development efforts (Bonye et al., 2012).

Bonye et al., 2012 argued that extension provides a source of information on new technologies for farming communities which when adopted can improve production, incomes and standards of living. Extension service providers make an innovation known to farm households, act as a catalyst to speed up adoption rate and control change, and attempt to prevent some individuals in the system from discontinuing the diffusion process (Alemu et al., 2016). In reaching farmers, extension officers demonstrate a technology to farmers but with much concentration on early adopters since the laggards would learn later from the early adopting farmers. Through extension services, farmers' problems are identified for further investigation and policy direction. (Swanson, 2008) argued that extension service goes beyond technology transfer to general community development through human and social capital development, improving skills and knowledge for production and processing, facilitating access to markets and trade, organizing farmers and producer groups, and working with farmers towards sustainable natural resource management. Where market failures such as limited access to credit and non-competitive market structures that provide a disincentive to farmers to produce exist, extension services tend to provide solutions.

Entrepreneurial Training

There is a need to instill entrepreneurship assertiveness in young people (Adelaiye, Adubasim & Adim, 2018). In the opinion of Fadeyi et al. (2015), setting up a business constitutes having the

capacity to do so and such capacity have to be acquired. In essence, learning and developing entrepreneurial skills are critical to the sustenance of any business. According to Njoroge and Gathungu (2013), education and training are fundamental in establishing an effective entrepreneurship system in developing countries. Training is important for entrepreneurs (Nwazor, 2012). Enterprise training is a "more planned and systematic effort to modify or develop knowledge and skills through learning experiences to achieve effective performance in an activity or range of activities" (Njoroge & Gathungu, 2013). Entrepreneurial training and education promote youth engagement in entrepreneurial activity and equally enhances the performance of new and existing businesses (DeJaeghere & Baxter, 2014; Swarnalatha & Vasantha, 2014). There is evidence showing a strong relationship between education and new businesses (Hulsink & Koek, 2014). Skills, innovative concepts and entrepreneurial management competence required to initiate and build new businesses are acquired through training and education (Okon & Friday, 2015). Entrepreneurial training and education has been associated with some benefits some of which include - empowering youths to becoming autonomous, responsible, creative, self-sufficient, confident in taking business risks and equipping potential entrepreneurs with relevant and applicable business knowledge and skills (Ojeifo, 2013; Oseni, 2017); fostering business sustainability, economic and national development (Okon & Friday, 2015). In the opinion of Hulsink and Koek (2014), a substantial number of young entrepreneurs only possess generic entrepreneurial knowledge acquired through parents, friends, colleagues or self-acquisition but lack the essential industrial-specific knowledge. For youths to be able to conceive entrepreneurship as a feasible livelihood activity, there is a need to put in place support systems such as providing them with entrepreneurship skills, boosting their business knowledge and guiding them towards attaining success (TVeT Forum, 2016). Skills training and development can have an overall positive effect on a potential enterprise. Sambo (2016) study found a strong significant correlation between entrepreneurship education and the development of youth entrepreneurship. Brixiová et al. (2015) empirical analysis also revealed that providing support for training is very efficient in stimulating the successful initiation of new enterprises. For instance, Roodt (2018) suggested that youths are especially to be shown ways in which their business concepts can be appropriated into practicable business plans such that it will attract potential financiers. Youths require empowerment, mentoring, orientation, teaching and training entrepreneurial programs to aid successful business start-up and sustainability. Jakubczak (2015) noted that although various authorities recognize the relevance of youth entrepreneurship and try to initiate empowerment programs such as entrepreneurial training and advisory services, a number of these programs tend to fail. As a result, youth entrepreneurship remains remarkably low. It is, therefore, critical to re-structure many of these programs and particularly address many of their prior lapses to allow for a more efficient impact on the youth. Malaj and Dollani (2018) outlined critical areas where youths require entrepreneurial training some of which include finance, product promotion, business regulations and documentation. The authors buttressed that providing training in these areas enhances the growth and development of youth enterprises.

Access to Finance

Inadequate financing severely limits the establishment and growth of new businesses (Alvarado et al., 2017). Many studies have continuously shown that access to finance remains critical in running a business (RupeikaApoga & Solovjova, 2017) and is ranked as a major entrepreneurial constraint (Fowowe, 2017). Rupeika-Apoga (2014) and Chen et al. (2018) further points to several works of literature indicating the adverse effects of lack of access to finance on enterprises. According to Angela (2011), access to finance is central to enterprise development; thus, the growth and sustainability of businesses largely depend on access to internal and external finance (Fatoki & Chindoga, 2011). Financing businesses has been a prevalent issue for youths. Malaj and Dollani (2018) described the extreme difficulties young people encounter in financing new businesses. The authors confirmed that young entrepreneurs struggle to amass and save the money required to set up their business and are often dependent on familiar sources like friends and families for support. This usually is insufficient. Roodt (2018) likewise, stated that lack of access to finance is one of the most incapacitating problems for youths in developing countries which restricts take-off of businesses. Angela (2011:435) identified some factors affecting the abilities of entrepreneurs to access finance some of which are: Entrepreneurs are neither knowledgeable of the prospects of sourcing for funds from external sources nor aware of potential consulting or financing institutions. Business plans submitted to financiers usually fall below the expected standard. Deficient negotiating skills and personal guarantees or securities. Roodt (2018) described a crucial factor affecting developing countries Youth's access to finance. Organizations like the Ministry of Micro, Small and Medium Enterprises (MSME) and the National Bank for Agriculture and Rural Development (NABARD) which assists young entrepreneurs with funding, being often consider assets and financial management skills of prospective applicants as a prerequisite to access funds by commercial banks. The authors expressed concerns with these criteria as the reality is that the majority of the developing countries' youths (between 18 and 35 years) do not own sufficient personal assets and as such, cannot meet up with the set standards. Botrić and Božić, (2017) observed from some literature that internal financing alone may constrain the expansion of businesses. Small entrepreneurs particularly struggle to run their businesses with internal funds and experience extreme difficulty in sourcing external financing like bank loans. According to Malaj and Dollani (2018), lending institutions have stringent measures for loan applications and in financing innovative businesses of young people. Though, Taslim and Naim (2017) noted that banks and other external financial institutions are currently providing financing opportunities to entrepreneurs, Botrić and Božić, (2017) reported that lending institutions are still found wanting especially with providing suitable financial mechanisms to new enterprises. Better access to finance significantly develops and sustains businesses and accelerates the emergence of new enterprises and stimulates economic activities and growth (Rupeika-Apoga, 2014; Alvarado et al., 2017). Overall, pieces of evidence reveal that enterprises that can gain access to funding grow faster than those with no access (Rupeika-Apoga & Solovjova, 2017).

Entrepreneurial Capacity

The term 'entrepreneurial capacity' connotes the ability or competence of entrepreneurs in operating any enterprise. Jayeoba (2015: 222) defined entrepreneurial ability as the "possession of abilities necessary for the starting and nurturing to the growth of a new enterprise, especially in a competitive environment". While entrepreneurial competencies have been described as "sets of proven ability to select, combine, and use appropriate knowledge, skills, and other acquisitions (values and attitudes) to successfully solve a particular category of work or learning situation for professional or personal development in terms of effectiveness and efficiency" (Suhaimi et al. 2018: 253). According to Urban (2013), zeal for business must be complemented with the necessary abilities and competencies to be successful and remain competitive. Entrepreneurial capacity is thus a highly significant element an entrepreneur must possess for growth, development, sustainability and efficient business performance (Mojab, Zaefarian& Azizi, 2011; Mitchelmore & Rowley; 2013; Chipeta, et al., 2020). Vast entrepreneurial skills and knowledge are required to tackle extensive challenges associated with running a business (Jayeoba, 2015). Arranz et al. (2017) review of some studies highlighted leadership, interactive, personality and knowledge competencies as some of the primary entrepreneurial competencies required to run a successful business. Performance orientation, creativity, taking initiative and calculated risks, perseverance, communication skills, ability to plan and organize, decisiveness, ability to collaborate and self-assess business performance were also profiled as fundamental entrepreneurial competences (Schelfhout, Bruggeman & Maeyer, 2016). Other identified competencies drawn from the literature include being independent, proactive, aggressive, confident, competitive, determined, efficient, idealistic, sociable, intuitive, authoritative and energetic (Jayeoba, 2015; Chan et al. 2015). Prospects for viable businesses require technical know-how and many other enterprise skills (Malaj&Dollani, 2018). The lack of basic entrepreneurial skills is a major constraining factor in start-up and sustenance of new enterprises. The dearth of entrepreneurial skills decreases entrepreneurial efficiencies of youths (Brixiová et al., 2015). Even if financial opportunities are made available for start-up businesses, such investments are highly prone to insolvency without adequate knowhow (TVeT Forum, 2016). According to Fatoki and Chindoga (2011), the lack of enterprise competencies constrains entrepreneurial goals. Roodt (2018) expressed that the inability to properly execute business strategies, guarantee business growth, expansion, sustainability and long-term success are examples of entrepreneurial incapacities that require critical attention.

Entrepreneurial Atmosphere

There are many existing forces influencing business operations (Esangbedo & Che, 2016). One such force is the environment within which businesses are set up and managed. Every enterprise is a product of its environment; therefore, business growth, expansion and sustainability are largely dependent on the manner of integration in its environment (Jayeola, Oladunjoye & Adewumi, 2018). The quality of the business environment for any country determines its economic growth and development as such, an efficient and supportive business atmosphere promotes successful establishment, operation and sustenance of businesses (Kljucnikov *et al.* 2016; Cepel *et al.,* 2018).

Adeoye and Elegunde (2012) submitted that the environment within which entrepreneurs operate is highly dynamic, fast, unpredictable and consistently changes. Therefore, entrepreneurial activities are significantly influenced by the events of their surrounding environment. Unfriendly entrepreneurial atmosphere discourages prospective entrepreneurs from participating in the entrepreneurial domain (Shamsudin *et al.,* 2017). A supportive business environment is, therefore, critical to enhancing entrepreneurial activities particularly amongst the youths. Suhaimi *et al.* (2018) point to literature which describes a supportive environment as one which provides security and support services to new or existing businesses. Shamsudin *et al.* (2017) suggests good socioeconomic conditions, government policies and measures, entrepreneurial competencies, monetary and non-monetary support to businesses as common features of a supportive environment. A supportive entrepreneurial atmosphere opens opportunities for employment, start-up of innovative enterprises and gives room for increased and healthy competitiveness (Glover, 2012). Several studies (Shinnar, Giacomin, & Janssen, 2012; Adeoye & Elegunde, 2012; Urban, 2013; Buno *et al.* 2015; Esangbedo & Che, 2016; Ohanyan & Androniceanu, 2017; Shamsudin *et al.* 2017) have identified some environmental factors that influence entrepreneurial activities. Social, economic, cultural, political, legal, institutional, technological and infrastructural factors are some of the common environmental factors recognized as promoting or restricting business operations. Kljucnikov *et al.* (2016) cited social factors such as the perception of the society towards businesses, quality of entrepreneurial education system and even gender differences where males and females have been found by some studies to have varying entrepreneurial orientations with regards to being innovative, proactive and taking risks. Jayeola et al. (2018) review of literature substantiates elements of an economic environment such as operational costs, profits, business growth, development and sustainability, interest and income tax rates of an economy at a point in time. Other economic elements could include access to finance, the propensity of economic inflation, savings and expenditure (Cepel *et al.,* 2018). According to Yu and Ramanathan (2013), as technology advances, businesses will continue to face an entrepreneurial atmosphere that is remarkably intricate and dynamic. From their reviews, the authors surmised that an enterprise operational strategy must be suited to its immediate environment to survive. There must, therefore, be an alignment between business operation and its external environment. Political elements include regulating transnational business relations, tax and levies, instituting frameworks for businesses, stabilizing legislative environment and enforcing laws amongst others (Cepel *et al.,* 2018). The business environment is also significantly influenced by its state legislature; for instance, Hulsink and Koek (2014) noted that young entrepreneurs are sometimes challenged with legislative issues such as registering new businesses. As highlighted by Bosma, Wennekers and Amorós (2011) available evidence submits that easing the regulatory environment could positively influence the growth and sustenance of new enterprises. Adeoye and Elegunde (2012) citing several studies classified the entrepreneurial environment in two groups - the general environment comprising of the social, political, educational, economic, legal, technological, natural environment and resources; and the tasking environment consisting of competitors, suppliers, consumers, capitals, and the industry. The latter factors are understood to directly affect and have a greater impact on entrepreneurs.

Youth Entrepreneurship

The inability of many national economic sectors to generate extensive job opportunities and absorb the rapidly increasing young population into its system (Altman et al.2014; Edeme & Akpotohwo, 2016; Sakala, 2017; Latkovikj et al., 2018), becomes a budding problem to national economies. Protracted unemployment status affects youths' social development (Steenekamp, Van der Merwe &Athayde, 2011); Chimucheka (2012) considers youth redundancy as a representation of a murky era in their personal and social growth. Wilkinson et al. (2017) for instance, observed the growing state of youth unemployment as a major social and economic problem for developing countries with short and long term deleterious effects on the country's economy. These concerns gave rise to developing youth entrepreneurship engagement in the country (Edeme&Akpotohwo, 2016); with its agendas focused on job creation (DeJaeghere & Baxter, 2014). According to Fatoki (2014), entrepreneurship is one way out of the rising spate of youth unemployment and its resultant social quandaries. It is being considered to play a significant role in a national development process, curbing vices associated with idleness (Oluremi, Akinseye & Paul, 2016); and has been established as a channel to poverty reduction and economic development (Geldhof *et al.,* 2013; Sinyolo, Mudhara& Wale, 2017). There has been a growing interest in youth entrepreneurship in many regions as a promotional mechanism for economic development (Dash & Kaur, 2012). Micro-entrepreneurship provides innovation areas and opportunities for young people to explore and generate income (Malaj & Dollani, 2018). Young people who venture into these innovative business spaces to earn a living for themselves could be termed as 'youth entrepreneurs. Youth entrepreneurs are persons within the age range of 16 and 35 who can identify business opportunities, initiate new businesses or enhance an existing business, creating value and wealth in the process (Gwija, Eresia-Eke &Iwu, 2014). Ojeaga (2015) opined that Africa has a teeming population of youths that are already engaging in businesses; they have a comparative advantage in the use of contemporary technologies and the ability to work longer hours and engage in rigorous intellectual activities factored into initiating new businesses and creating new products. As indicated in some literature (Fatoki & Chindoga, 2011; Steenekamp *et al.*, 2011; Shambare, 2013), youth entrepreneurship and entrepreneurial intentions are quite low in developing countries when compared to other regions. According to Fatoki and Chindoga (2011), the low participation rate of developing youths in entrepreneurial activities is a major causal factor for the general low rating of the country's entrepreneurial position. Nicolaides (2011) review of literature highlighted challenges encountered with entrepreneurial education and training particularly for its youths as critical obstacles to entrepreneurial development in South Africa. Steenekamp *et al.* (2011) also point to some literature which suggests lack of interest, the dearth of skills and innovations and limited access to finance, as factors affecting youth entrepreneurial activities in the region; nonetheless, other studies show that youths still have a positive attitude towards entrepreneurship.

Multiple benefits have been linked to youth entrepreneurship. Youths become economically productive, independent and less reliant on social grants; their self-esteem is raised, and they can contribute to the national economy through tax payments thus, enhancing political and national security (Fatoki & Chindoga, 2011). Youth entrepreneurship has also been established as a tool for

crime, drug, poverty and income inequality reduction (Boateng, Boateng & Bampoe, 2014). Chimucheka (2012) and Boateng *et al.* (2014) review of relevant literature asserted that youth entrepreneurship can be efficient if youths are armed with critical entrepreneurial qualities like hunger for business, nerve for risk-taking, commitment, doggedness, and innovativeness amongst others.

Problems reported by Agripreneurs in India-

Lack of adequate skills among agripreneurs creates various challenges in the execution of their plans to develop new start-ups or any other businesses. The basic problems reported by majority of agripreneurs were the low literacy level, lack of innovative mind, inadequate infrastructural facilities, lack of innovative entrepreneurial abilities among them, declining interest in agricultural allied services, lack of skilled and managerial manpower, marketing problems, lack of awareness about career in agripreneurship, lack of budget and strategy, innovation initiatives with no innovation strategy, fear of making mistakes and cognitive barriers (Sharma and Bhatt, 2022). Entrepreneurship in agriculture is not only an opportunity but also a necessity for improving production, productivity and employability. In the study of Uploankar and Biradar (2015) lack of adequate information regarding capital, technology and connectivity with the market and marketing agencies, technical and business information, and contact with suppliers of critical inputs and equipment and research stations were the major constraints in starting and sustaining the business. Moreover, non-availability of agencies to guide the entrepreneurs, lacking management, marketing and communication skills as well as poor technical know-how and lack of awareness regarding potential enterprise were the problems reported by small and medium entrepreneurs (Sharma &Singh, 2006, Upadhyay *et al.* 2014 and Kumari *et al.* 2016). From the previous studies, it was also found that entrepreneurs are highly intended to start a new venture and have good decision-making abilities, but lack of achievement motivation and fear hinders them to implement their ideas. Therefore, skill-based training helps them, especially the educated unemployed people, to improve their capabilities to think out of the box to become successful in the careers of their choice.

Need of Agripreneurial initiatives -

Agri-preneurship plays a crucial role in the growth and development of national economy through developing entrepreneurship capability which increases the income level and employment opportunities in rural as well as urban areas (Bairwa*et al.,* 2014). As, it helps in achieving productivity profit by small-marginal farmers and amalgamating them into local, national, and international markets and agripreneurship provides high quality diets at cheapest rate to the rural and urban people. Moreover, it accelerates growth, diversifies income, and develops entrepreneurial opportunities in both rural and urban areas (Sah *et al.,* 2009). There are a number of opportunities for agri-business entrepreneurs such as input industries, agro-processing unit, agri-clinics, manufacturing unit, dairy unit, agro-services unit etc.

Starting with any kind of business, one needs sufficient knowledge and skills to manage and run a business in the long term. Therefore, to become a successful entrepreneur, training is necessary as it bridges the skill and knowledge gaps of agripreneurs before entering into self-employment. Training programs are helpful in building the confidence, risk and time management, conflict management abilities, communications skills as well as business planning skills among them (Melak and Derso, 2022). Programs for entrepreneurship education and training are a crucial part of any initiative aimed at encouraging young people to start businesses. These can be an effective tool for forming young people's attitudes and abilities to employ themselves and to others also (Report: International Labor organization, 2007). Participating in training programs shows the positive impact on performance of agripreneurs such as better managerial skills, recordkeeping and accounting of financial transactions, inventory management, marketing of products, competitive aggressiveness and recognizing marketing opportunities. It also facilitates the transformation of small businesses to medium scale and hence to large businesses and enhances the success of small businesses (Alarape, 2007, Mayuran, 2017 and Shetty *et al.* 2021). In addition, domain specific trainings have significant impact on changing the knowledge and attitude of the entrepreneurs (Yadav et al. 2021 and Sasikala*et al.* 2022) because the personal qualities of an agri-entrepreneur significantly affect the agribusiness (Punitha, 2021). Training with practical exposure creates significant positive impact on self-employment by changing their behavior by improving skills, attitude, and the knowledge on various aspects. There is several research indicating that entrepreneur's personal characteristics such as innovativeness, prior experience, push factors of motivation, advisory circle etc. had significant impact on establishing a sustained venture and generate employment nearby (Simson *et al.* 2012 and Qureshi *et al.* 2022).

Recruitment and retention of employees-

The effectiveness and sustainability of any enterprise largely depends on the right selection and retention of labors or employees in the firm. Recruiting and hiring the employees for small businesses is tougher than large enterprise, especially in attracting high quality employees because generally people cannot rely on their name, their reputation or their market share (Williamson, 2000) and cannot compensate the loss of high-quality employees. Due to their size and reputation, the pool of applicants is frequently much smaller than in large organizations (Barber *et al.,* 1999). The differences in size and resources of companies can be used to create a competitive advantage because through effective recruitment, firms have an influence on the success and longevity of the business (Tanova, 2003). Therefore, any SME needs a clear picture regarding the methods that will be used to recruit new employees, what job and employee characteristics should be examined and how they should be examined as well as employee fit to organization etc. (Gomez-Mejia *et al.* (2012). Previous studies indicated the factors needs to be addressed during the selection of employees such as their knowledge, skills, abilities, clarity in language, their native place, background history, age and gender of employees etc. and most of SMEs follow the internal sources and external sources for the recruitment (Sharma (2005) and Gopinath &Nathrajan (2014). They

generally use words of mouth, advertisements in local newspapers, distribution of leaflets/ pamphlets in public places or fairs and job portals for the publicity of their firms and products (Vanaja and Chandrasekar, 2020). In this digital era, social media is very popular platform among them to announce the vacancies and to popularize their enterprise (Paul & Kleiner, 2022). Due to the advancement in technologies, organizations also demand highly qualified and knowledgeable workers to meet the demand of the market. Hence, to remain more competitive and sustained, small and large organizations need to not only concentrate over the recruitment but also to retain these talents into the firms and it is very toughest challenge now a days to keep them on the job as long as possible (Bidisha&Mukulesh, 2013 and Mita, 2014). Training and development are viewed as the key factor for employees' retention (Messmer (2000), Deery (2008) and Leidner (2013). In addition, participative leadership, rewards, fair remuneration, favorable work environment, feeling of belongingness, supportive management, social support and work-life balance etc. are very important considerations to create loyalty and autonomy among the employees (Kroon and Freese (2013), Cristeen (2015), Ramlall (2003), Kossivi*et al.* 2016). It was also found by Butt and Zeb (2016) that medium enterprises preferred formal ways of recruitment at managerial level and mixed ways (both formal and informal) at lower levels and the final decision made by owner of that enterprise. Thus, it can be concluded that the more appropriate working environment for the employees plays a significant role in increasing their performance that directly has a positive impact on the productivity and growth of the enterprise (Abbasi *et al.* 2020). Meanwhile, after the selection of the right employee, it is more critical for the organization to keep them motivated and try to decrease the job turnover by increasing the employee retention ratio. It is therefore important for agripreneurs to have a better understanding of human resource management.

Chapter-3

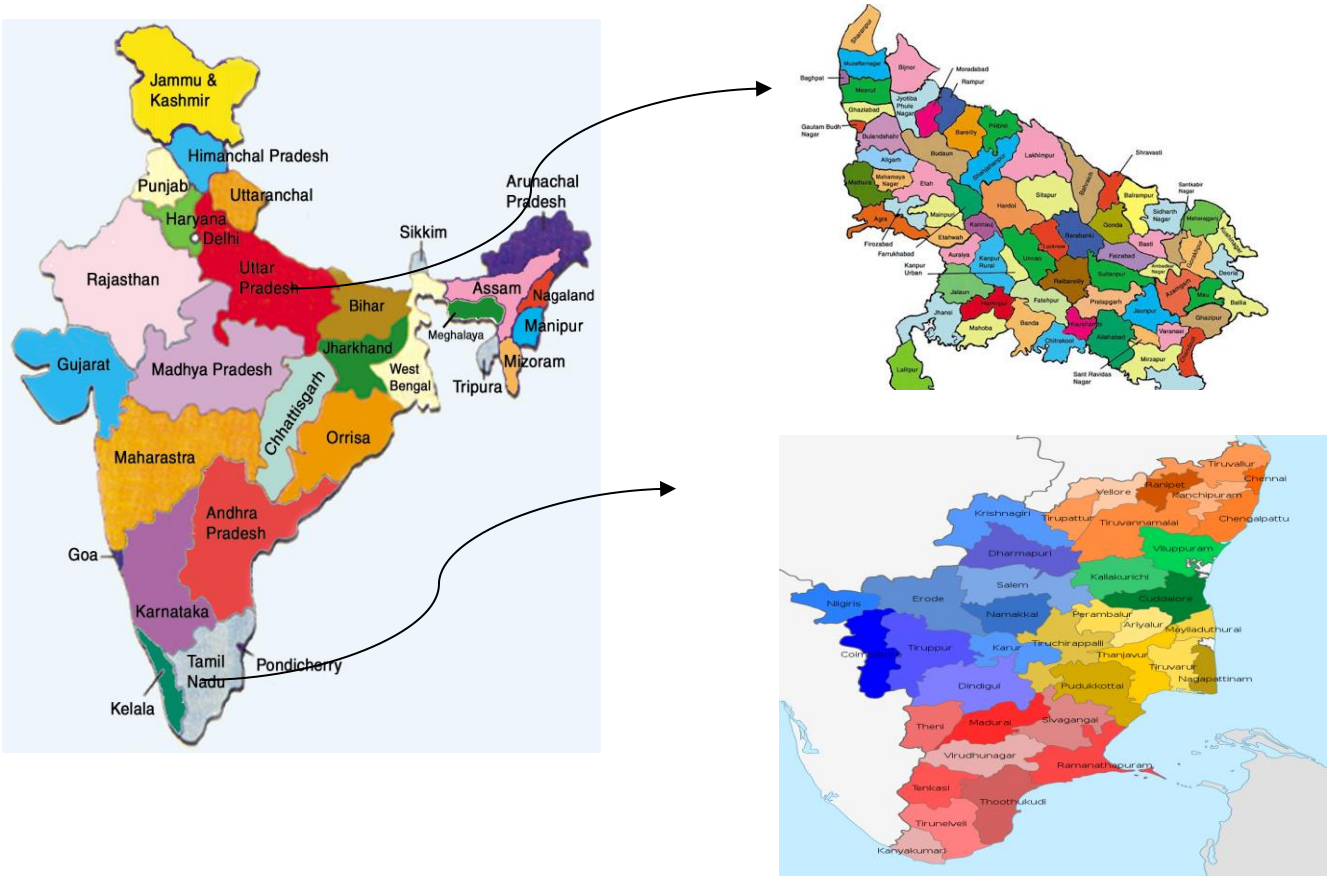
Methodology

Research methodology is a way to systematically organize research work. It may be understood as a science of studying how research is done scientifically. This chapter provides a comprehensive view of methodology adopted for the investigation viz., locale of study, selection of respondents, source of data, research design, variables and their measurement and statistical tools and techniques used to quantify and assess the objectives.

Universe:

Agri Clinic and Agri Business Centre Scheme beneficiaries in India

Locale of study: All districts of Uttar Pradesh and Tamil Nadu state



Sampling procedure:

Sampling is a method of selecting a fraction of the population in such a way that it represents the whole population. It enables the researcher to collect data on all possible aspects of research problems for generalization. Based on the secondary data on scheme beneficiaries, top five states were worked out (Maharashtra, Uttar Pradesh, Tamil Nadu, Madhya Pradesh and Rajasthan). Further, Uttar Pradesh and Tamil Nadu states were selected randomly for data collection. Under AC & ABC program, the total numbers of activities were 32 therefore to ensure the full representation of respondents; four successful beneficiaries from each activity were surveyed randomly. Thus, the final sample constitutes a total of 128 respondents. Activity code with activity name was represented below in figure 2:

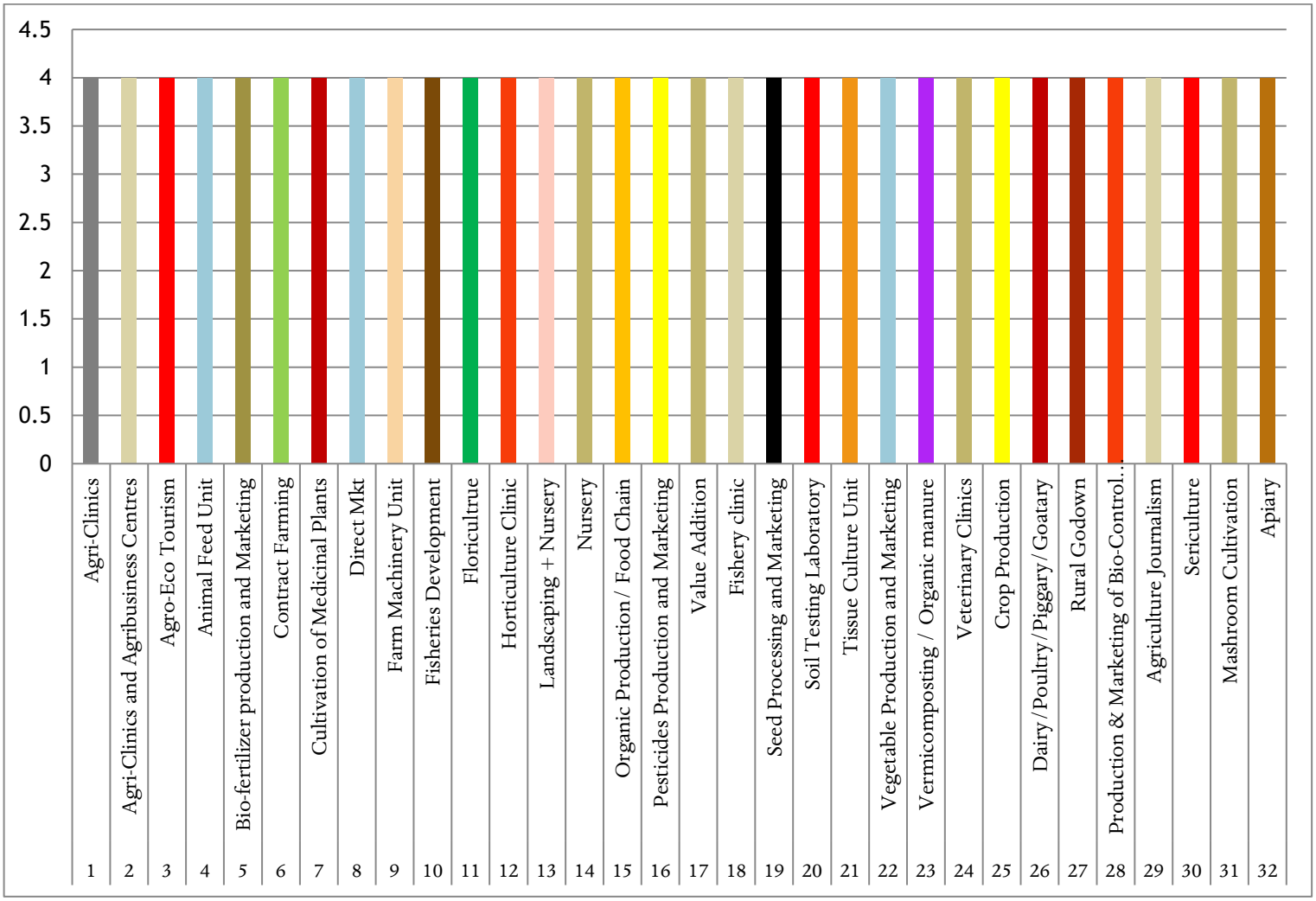


Figure 2 Activity wise beneficiaries' representation as sample

Variables and their measurement

The variables were selected for the study based on the objectives of the study. While selecting the variables, review of literature collected for the purpose of study was taken into consideration. The variables chosen are presented below along with their measurements:

Age

Age of the respondents refers to their chronological age. The actual age of respondent at the time of data collection was considered in the study. It was calculated in terms of the number of years completed as on the date of interview. The respondents were then categorized into three categories i.e., young age, middle age and old age.

Gender

It is conceptualized as the role played by men and women. Gender is an important demographic factor which affects the provision of education, exposure to mass media, extension contact and socio-economic participation. It also plays an important role in decision making. It was categorized as male and female.

Educational qualification

It is operationalized as the formal schooling/college completed by the respondent till the time of enquiry. Educational categories used for primary data analysis was presented in table 1.

Table 1 Educational Category among respondents

SR.	EDUCATION CATEGORY	CODE
1	High school / Sr.SC	1
2	Intermediate / HSC	2
3	Graduation	3
4	Post-graduate	4

Source of information

This has been operationalized as the various means on which the respondents depend upon for obtaining information for performing their activities. The medium they used for updating themselves. Respondents were categorized as following based on information sources. Multiple responses were recorded, and the data obtained was analyzed by using frequency and percentage. Details of various information sources were listed in table 2.

Table 2 Types of information sources for respondents

SR. NO.	CATEGORY	INDICANTS
1	Print Media	Yes/No
2	Electronic media	Yes/No
3	Social Media	Yes/No
4	Words of mouth	Yes/No

These were further classified as:

PRINT MEDIA	CODE	E-MEDIA	CODE	SOCIAL MEDIA	CODE	WORDS OF MOUTH	CODE
Newspaper	1	Radio/FM	1	Mobile App	1	Friends& family	**1**
Posters	2			What's app group	2	Govt Extn. officer	**2**
Leaflet	3	Television	2	Telegram	3	Pvt. Field Officer	**3**
Pamphlet	4			Facebook	4	FIG	**4**
Magazines	5					FPO	**5**
						PROGRESSIVE FARMER	**6**

Type of enterprise

Enterprises not only vary in size but also in their ownership. Some are owned by just one person, some are owned by more than one person or shareholders, some are owned by charitable foundations or trusts, and some are even owned by the state. Types of categories were presented in table 3.

Table 3 Type of enterprises among respondents

SR. NO.	ORGANIZATIONAL TYPE	CODE
1	Sole Proprietorship	1
2	Partnership	2
3	Pvt. Ltd. Company	3
4	LLP Company	4

Type of Sector

Sectors have been operationalized as per the main functioning of the firm and were classified into three main sectors of agriculture and details were presented in table 4. Those units which were involved in milk production and agriculture production come under the production sector and all value addition activities were considered under processing sector. Moreover, advisory, consultancy services and agri-clinics were considered under the service sector.

Table 4 Sector categorization of respondents

SR. NO.	TYPE OF SECTOR	CODE
1	Production	1
2	Processing	2
3	Service	3

Trainings attended

This has been operationalized as the number of trainings attended by agripreneurs except AC & ABC and in which domain by the respondents till the time of inquiry. Further, the influence of these trainings was also analyzed in terms of incorporating those skills. Format used to collect this information were presented in table 5.

Table 5 Training details of respondents

A	NUMBER OF TRAININGS ATTENDED	FREQUENCY
1	One	
2	Two	
3	Three	
4	Four	
5	Five	
6	More than five	
B	Domain (area) of training	Name
C	Influence of these trainings	Yes/No

Perceived motivators to start the enterprise

According to McClelland's, there are three kinds of human need. Need for achievement, need for power, and need for affiliation where the need for achievement is important for entrepreneurial success. Both extrinsic and intrinsic factors are important to push an individual towards the right direction. Motivator is one of the key components to foster creativity and innovation to get success in entrepreneurial life. In the present study, it has been operationalized as the motivators which influenced the respondents' efforts and their willingness to start agri-based enterprise. Therefore, motivating factors are important for deciding over number of choices with a clear vision and goal. Based on various literatures, a list of motivators was developed with yes or no answer.

Training utility

Training has an important role in motivating the respondents to work efficiently according to the current situation and need and move fast with the new developments or innovations made in science and technology. Throughout the training session trainees receive proper guidance and support to generate income and employment in the post-training phase. Training can be formal or informal and short duration or long duration, but both required effective planning and implementation. Thus, content and methodologies must be designed as per the need and areas of interest. It must be able to bring desirable change in their knowledge and develop skill as an impact.

In present study, a scale given by Jirli and Akanchha (2021) with some modifications was used to measure the usefulness of training which were received by respondents under these programs. The utility of content was measured in a five-point continuum Likert scale as extremely useful, very useful, useful, somewhat useful and not useful. The scores obtained by each respondent on all the items of training contents were pooled and the total obtained score was computed.

$$Utility\ Index = \frac{\text{Total score obtained } * \ 100}{\text{Maximum Possible score}}$$

Recruitment and retention of employees in firm

Recruitment is the process of actively seeking out, finding and hiring candidates for a specific position or job in the enterprise whereas retention refers to the ability of owner/ entrepreneur to retain their labors or employees over time. Retention is an important component of business growth and maintaining turnover. Previously such factors of management were not studied, hence an effort was made to explore the factors or criteria a small and marginal agripreneurs were following. In the present study, first they were asked about the awareness of recruitment and retention process. Further, some criteria and factors were identified from literature and directly asked to the entrepreneur which criteria they consider while recruiting an employee and the factors they considered for retaining the existing employees in firm.

Problems faced by agripreneur

A clearly specified list of problems is the most suitable basis for identifying potential solutions. Problems can be identified, both now and in the future, as evidence that objectives are not being achieved. In the present study, problems faced by the agripreneurs before setting up the enterprise and after setting up the enterprise were identified. The problems reported by them were analyzed by using Garrett ranking method to identify the major problems.

Data collection:

Secondary data from training centers of MANAGE were collected and analyzed for its pattern to decide how to collect primary data for the study.

A structured interview schedule was developed after reviewing related literature (research studies and case studies etc.). Moreover, to validate the developed schedule a pilot survey among 12 beneficiaries of AC & ABC program was conducted in Telangana state. Thereafter, necessary corrections were made, and the final interview schedule was administered via offline mode and telephonic mode. Responses from 128 beneficiaries were collected and analyzed.

Statistical analysis

The data has to be analyzed with the application of desired statistical tools in a systematic manner. Therefore, collected data was assigned with scores wherever necessary and tabulated for classification and simplification and then were subjected to statistical analysis. In the present study, Data was analyzed and tabulated by using appropriate statistical measures such as Frequency, Percentage, Mean, Standard deviation and Garrett ranking.

Chapter - 4

Results and Discussion

The findings of the study are presented in tabular and graphical form in this chapter. The results are explained and interpreted as per the objectives of the study.

The findings are categorized under following sub- headings:

- Socio-economic personal, psychological and communication characteristics of universe and sample respondents
- Impact of training in terms of training utility as perceived by respondents.
- Activity wise approximate employment generated by respondents.
- Approximate employment generation by all beneficiaries in India
- Factors considered by respondents for recruitment and retention of employees
- Constraints faced by respondents after setting up the enterprise.

Profile characteristics of Respondents

Age

Successful establishment of an enterprise depends on various factors among which age is one of the important factors. While assessing the relation between the area and successful establishment of venture among the beneficiaries, it was found that trainees above 31 years of age have around 50 per cent success rate. The relationship between age and success rate was presented in figure 4. The data regarding age has been presented in the table 6. It is observed that more than half of the number of agripreneurs belonged to middle age i.e., between 24-44years.

Table 6 Age distribution of respondents

SR. NO.	AGE RANGE	FREQUENCY (N=128)	PERCENTAGE
1	Young (up to 24 years)	27	21.09
2	Middle (between 24-44)	73	57.03
3	Old (more than 44years)	28	21.88

(Mean 34.35 and S.D. 9.84)

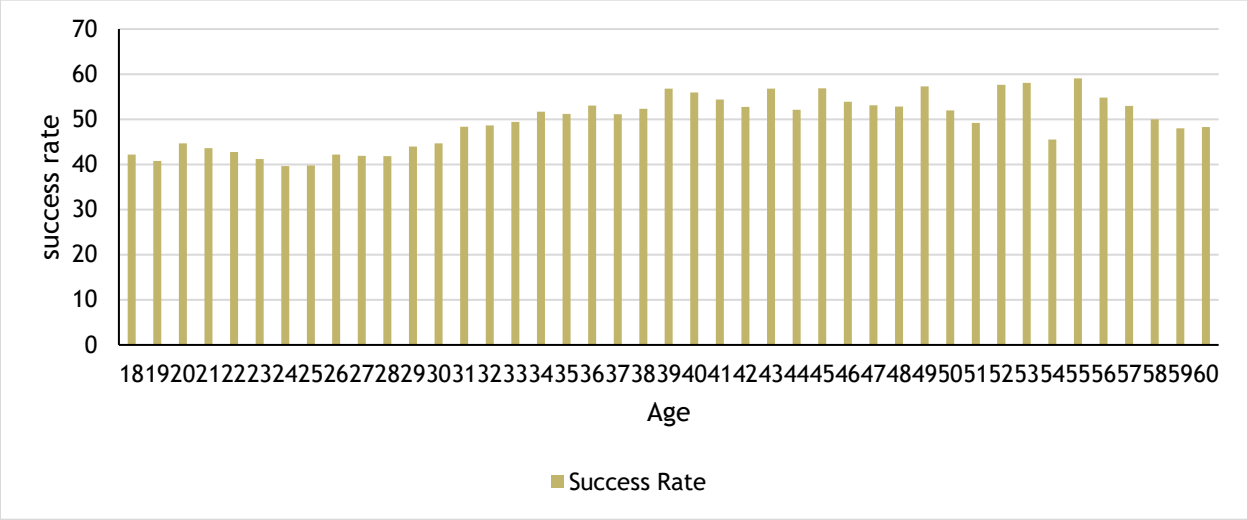


Figure 3 Relation between beneficiary age and venture establishment rate

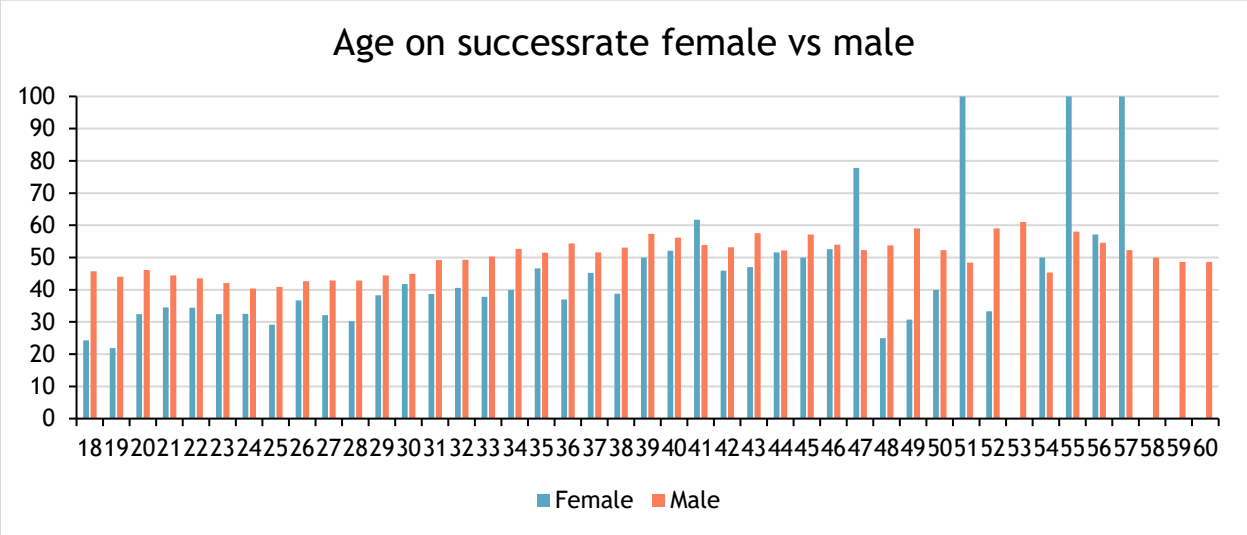


Figure 4 Impact of age on success rate, comparison between male and female beneficiary

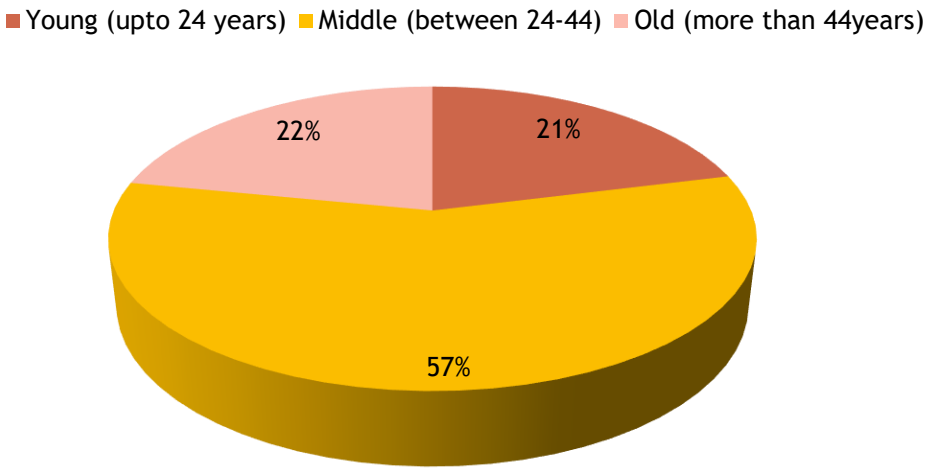


Figure 5 Age distribution of our sample

Further, data presented in figure 5 revealed that the same percentage of respondents belonged to the old age category followed by young age group i.e., less than 24 years.

Gender

Fostering entrepreneurship is a key policy goal of Government and for holistic development it is important to promote gender equality especially in agripreneurship. Gender distribution of AC & ABC scheme beneficiaries over year is presented in figure 6.

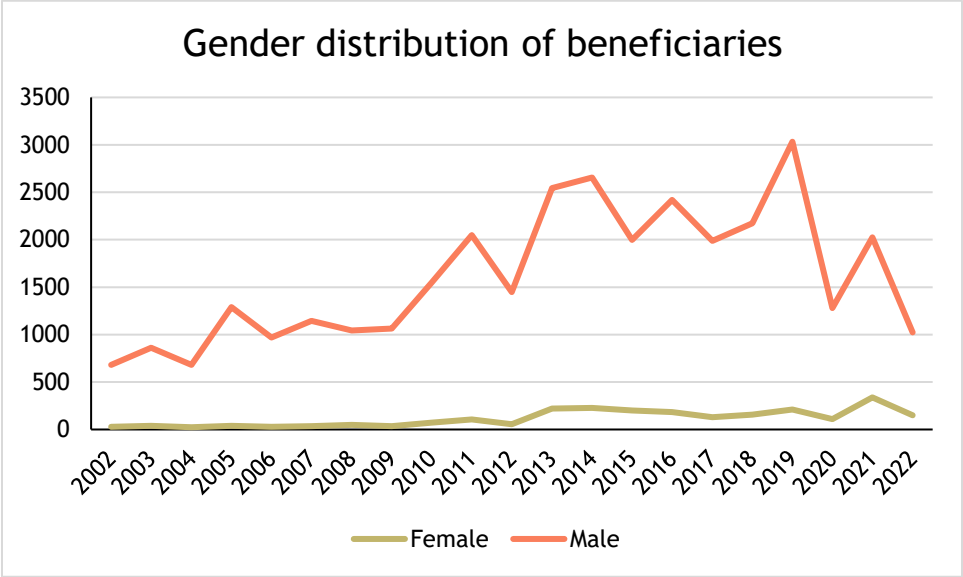


Figure 5 Gender distribution of universe

Women enrollment per year in the scheme was less than 10 per cent initially and it has been increasing in the recent year. Women beneficiary success rate also significant, in 2021women beneficiaries have registered 53 per cent success rate.

The primary data related to gender has been presented in table8, below which reflected that majority of respondents (73.44%) were male and only 26.56 percent were female as entrepreneurs.

Table 7 Gender distribution of respondents

SR. NO.	GENDER CATEGORY	FREQUENCY (N=128)	PERCENTAGE
1	Male	94	73.44
2	Female	34	26.56

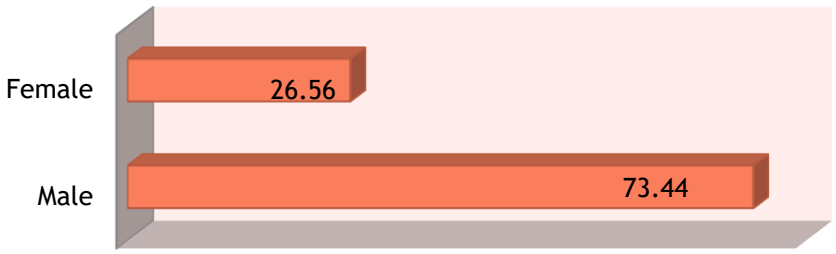


Figure 6 Gender distribution of respondents

Education-

Education was a crucial factor responsible for the successful survival of any establishment. Relationship between venture establishment and educational background was analyses and results were presented in the table 9.

Table 8 Educational distribution of AC & ABC scheme beneficiaries

EDUCATION	PER CENT OF SUCCESSFUL UNITS
H. SC	47.13
DIPLOMA	56.04
GRADUATE	39.36
POST - GRADUATE	40.21
OVERALL	44.02

Details of the educational background of the respondents were presented in table 10. It is evident from the table that maximum (42.18 %) numbers of Respondents were graduate followed by intermediate (28.13%), high school (16.41 %) and post- graduate (13.28%).

Table 9 Educational distribution of respondents

SR. NO.	EDUCATION CATEGORY	FREQUENCY (N=128)	PERCENTAGE
1	High school	21	16.41
2	Intermediate	36	28.13
3	Graduation	54	42.18
4	Post-graduate	17	13.28

From the findings it can be interpreted that entrepreneurial intention is higher among the graduate and intermediate respondents, it might be due to that they were agricultural diploma holders or degree holders. Thus, it can be said that instead of working in private companies and preparing for Government exams, youth are moving towards self-employment after receiving some training. Now they are becoming job providers, not job seekers and contributing to the national economy.

Sources of advisory information -

To keep eyes and ears on valuable information and new happenings is necessary for any entrepreneur. Technology is evolving, and people are moving towards digitalization. Now a days, each person is having smart phone or android phone for communication and exchange of ideas, thoughts etc. Therefore, to know the importance of media in entrepreneurs' life, in this study media used by respondents were categorized as below in table 10. Detailed utilization of different forms of information sources were portrayed in figure 8.

From the below table 10, it is clear that Agripreneurs were using social media on daily basis for seeking information about new happenings and keeping themselves updated whereas they also preferred interpersonal mode/ words of mouth for consultancy to clear their doubts. Moreover, it can be observed that electronic media and print media were comparatively less preferable among the agripreneurs. It might be due to the fact that these media needs time to sit read and watch and might be quick access of technology anywhere and anytime. Therefore, new media is popular among all kinds of agripreneurs.

Table 10 Distribution of respondents based on their source of information

SR. NO.	CATEGORY	FREQUENCY (N=128)	PERCENTAGE
1	Print Media	43	33.59
2	Electronic media	62	48.44
3	Social Media	128	100.00
4	Words of mouth	96	75.00

Figure 7 Distribution of respondents according to media preferred.

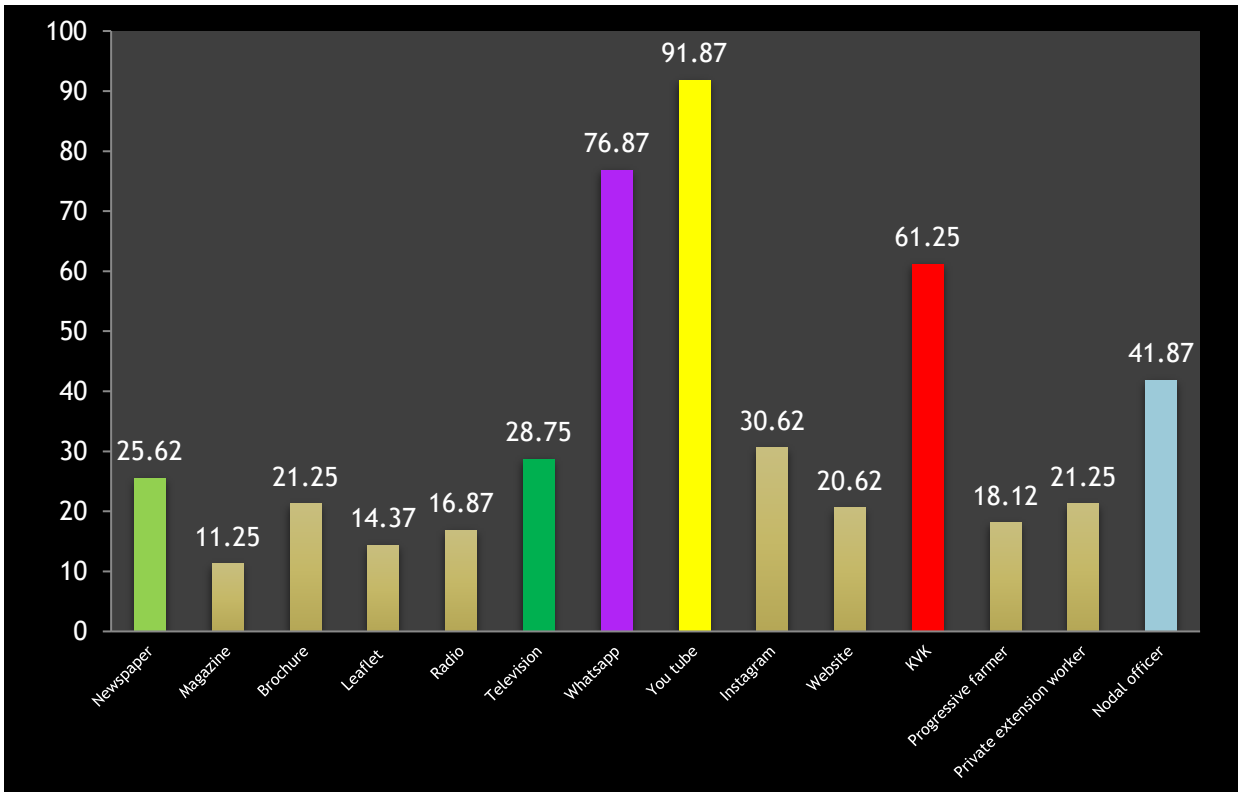


Figure 8 Distribution of respondents according to media preferred.

The above figure 8 further indicates that YouTube and WhatsApp platform were much preferable by them. Agripreneurs said that they usually visit their nearby KVKs and take consultation from their nodal officers. According to them, everything is now available on the Internet like local, international national affairs and remedial videos etc. Therefore, the popularity of newspapers, magazines, brochures and leaflets as well as radio and television were less among them. Those who

preferred electronic media, they were listening and watching DD Kisan, Hello Kisan, Krishi Jagat, Kisan Samachar and some their local radio programs.

Motivators as perceived by Respondents to start their enterprise

The desire and motivation to keep focusing on the tasks and to work hard are the keys to becoming successful entrepreneurs. Hence, extrinsic, and intrinsic motivation is obligatory to take an initiative. An entrepreneur must be self-motivated, must have one goal towards which his effort will be directed. Motives are not the same for all entrepreneurs because all have different intellect, vision and needs for running a certain type of business. Therefore, in the present study some motivators are enlisted in the table which has been indicated by the respondents. The findings indicate that the main motivator for respondents was their own satisfaction and growth. Details of this analysis was presented in table 11.

The majority of respondents (90.63% and 73.44% respectively) stated that training motivated them to use their skills and knowledge to grab the market opportunities by starting their own firm followed by, to improve their wealth and status (85.94%). Moreover, more than half of respondents (59.37%) reported that they want to improve employment and provide jobs to others followed by those (56.25%) who said that they could not find stable and satisfying jobs anywhere.

Table 5 Distribution of respondents according to perceived motivators

SR. NO.	PERCEIVED MOTIVATORS	FREQUENCY (N=128)	PERCENTAGE
1	To provide employment and job security	76	59.37
2	To tap benefits of existing marketing opportunities	94	73.44
3	To take advantages of creative talent	53	41.41
4	For my own satisfaction and growth	128	100
5	To challenge myself and enjoy taking risks	46	35.94
6	Easy access to credit and low rate of interest on loans	57	44.53
7	To invest personal savings	41	32.03
8	To use the skills and knowledge learned through the trainings	116	90.63
9	Entrepreneurial family culture	42	32.81
10	To increase my prestige and status	110	85.94
11	Follow the example of someone (entrepreneur)	47	36.72
12	I can't find stable and satisfying job before	72	56.25
13	To avail grant and subsidy	65	50.78

(Multiple answers were recorded)

Further, the table revealed that respondents (50.78 % and 44.53 %) were motivated to avail themselves of the grants and subsidy because of low interest on loans and easy access to credit under these schemes and to use their mind and creativeness. In addition, 36 percent of respondents were motivated by other successful entrepreneur followed by about same percent of respondents had entrepreneurial background and they want to invest their personal savings in right direction (32.81 percent and 32.03 percent). From the table, it can be observed that only 35.94 percent of respondents reported that they were challenged and enjoyed taking risks in business.

Thus, it can be interpreted that trainees were motivated towards entrepreneurship after gaining skills and knowledge during training program and they were having agri related degree or diplomas, so they were motivated to generate employment at their respective areas.

General information about enterprise

The findings related to organizational type showed that majority of enterprises (71.09 %) were under sole Proprietorship and remaining (28.91%) were under partnership type. Further, it is observed that more than half of enterprises were dealing with production sectors such as apiculture, dairy, poultry, goatry, composting, integrated farming, mushroom, nursery etc. More than one third (30.47%) of units belonged to the service sector which provided advisory and consultancy services to farmers, for example AC& ABC centre units. Only 12.5 percent of enterprises belonged to processing units such as value-added units. Results were presented in table 12.

Table 6 Data regarding general information of enterprise running by respondents.

SR. NO.	ORGANIZATION TYPE	FREQUENCY	PERCENTAGE
1	Sole Proprietorship	91	71.09
2	Partnership	37	28.91
SR. NO.	**Type of Sector**	**Frequency**	**Percentage**
1	Processing Unit	16	12.5
2	Production Unit	73	57.03
3	Service sector	39	30.47
SR. NO.	**Establishment Year**	**No. of ventures established**	**Percentage**
1	Before 2000	9	7.03

2	2000-2005	13	10.16
3	2006-2011	19	14.84
4	2012-2017	33	25.78
5	2018-2023	54	42.19

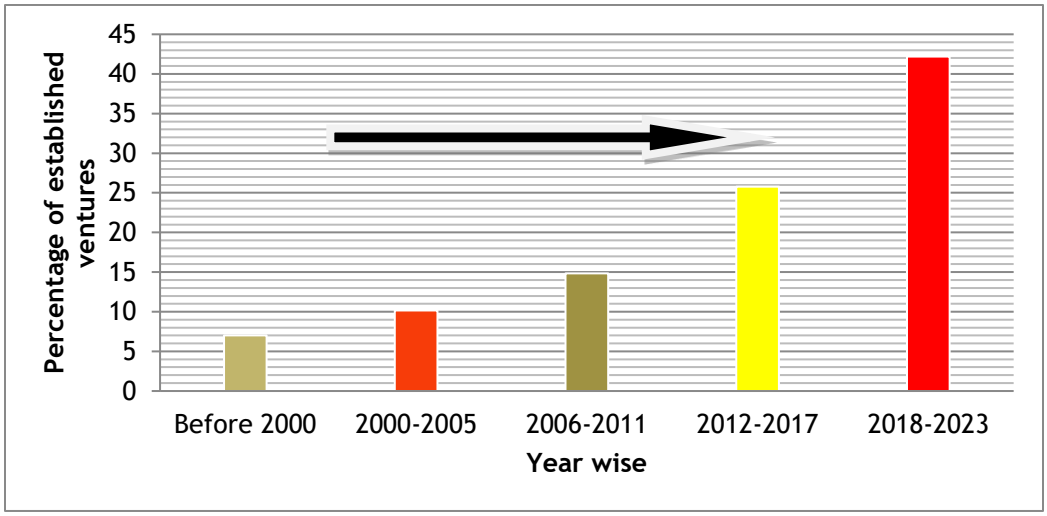


Figure 9 Year wise establishment of Agri Enterprises

Furthermore, table 12 reveals that maximum (42.19%) numbers of enterprises were established between 2018-2023 year followed by 25.78 percent were established in between 2012-2017 year and 14.84 percent in between 2006-2011. The remaining agri-enterprises were established before 2005. From figure 9, it can be observed that there is a significant increase in the number of agri based enterprises which is a good indicator of economic development.

Employment level in enterprise

The main aim of agripreneurial initiatives is to create agri-entrepreneurs and generate more employment by the enterprise. Therefore, an entrepreneur will generate jobs absorb unemployed youths in the region. In the present study the major focus was given on the employment generated by the respondents. The term **"**Hired labors**"** refers to non-family members who are employed by respondents and they get a salary after completion of the task/job. Some of Agri ventures provide job security to their family members also but it is not necessary to give salary while they receive a share of benefit from the enterprise. Therefore, the present findings reveal the percentage of hired labourers and family members employed by the settled respondents.

The data has been presented in table which reveals that majority (56.25%) had not hired any labor from outside whereas more than two fifth of total respondents (43.75%) reported that labors were

hired from outside to provide jobs. The majority of enterprises had three to five labourers followed by less than three (32.14%) and more than five (16.07%). Among these hired labors, Majority (57.14%) were daily wage worker followed by permanent workers (19.64%) and remaining (16.07%) were part time workers. Most labourers (66.07%) were paid on a daily basis according to their work done and 33.93 percent of hired labors on monthly basis.

Table 13 Distribution of respondents based on their labour force in their enterprise.

Sr. No.	Particulars	Frequency	Percentage
1.	**Hired labors -** a) Yes	56	43.75
	b) No	72	56.25
2.	**If yes, Number of labors hired (n=56)**		
	Less than 3	18	32.14
	Between 3-5	29	51.76
	More than 5	9	16.07
3.	**Types of labors- (n=56)**		
	Daily wage workers	32	57.14
	Part time	9	16.07
	Permanent full-time workers	11	19.64
4.	**How do you pay- (n=56)**		
	Daily	37	66.07
	Monthly	19	33.93
5.	**Number of villages served (n=128)**		
	Less than 5	26	20.31
	Between 5-10	61	47.66
	More than 10	41	32.03
6.	**Do you provide employment to your family members- (n=128)**		

	Yes	67	52.34
7.	**Do you pay for family members (n=67)**		
	a) Yes	26	38.81
	b) No	41	61.19

The findings of table-13 also reveal that majority of respondents (52.34%) had employed their own family members to sustain their business and generate more wealth within a home. Among those only 38.81 percent of family members got salary based on work assigned. From the table-13 it can also be seen that maximum agripreneurs (47.66%) were covering five to ten villages whereas 20.31 percent of respondents were serving less than five villages and 32.03 percent had expended their services by covering more than ten villages.

Other trainings received by respondents

There are various initiatives and programs run by the Government through training institutions like KVKs, NTIs, SAUs, FTCs, ATMA etc., which are implementing need-based skill trainings in different-different domains to rural people for their upliftment.

Table 14 Distribution of respondents according to training received

SR. NO.	NUMBER OF TRAININGS RECEIVED	FREQUENCY (N=128)	PERCENTAGE
1	One	39	30.47
2	Two	21	16.41
3	Three	9	7.03
4	Four	11	8.59
5	Five	3	2.34
TOTAL		**83**	**64.84**
SR. NO.	**Domain of trainings (multiple answers) (n= 83)**		
1	Vermicompost	43	51.81
2	Pest Management	32	38.55
3	Mushroom	39	46.99

4	Natural resource management	18	21.67
5	Livestock rearing and management	57	68.67
6	Horticulture	22	26.50
SR. NO.	**Influence of training on existing business (n=83)**		
1	Incorporated	49	59.04
2	Not incorporated	34	40.96

In present study, an effort was made to know the other training received by respondents apart from these three trainings. The data has been presented in table-14 which shows that most respondents (64.84%) had received one or more than one training in another domain also. Among these respondents, more than one fourth (30.47%) had received one training followed by two (16.41%), three (7.03%), four (8.59%) and less number of respondents had received five trainings from various institutions.

Further, it is observed that more than half of the respondents (68.67%) had received training on livestock rearing and management and Vermicompost (51.81%). In addition, maximum number (46.99%) had also trained in mushroom production followed by pest management (38.55%), horticulture (26.50%) and natural resource management i.e., 21.67 percent. Most of respondents reported that they had received training from KVKs and Farmer's training centers nearby. Moreover, among these trained respondents' majority (59.04%) had incorporated these skills in their existing business and expanded their business to improve their livelihood and employment for others.

Advisory services provided by Respondents

The findings in table 15, revealed that the majority of agripreneurs (61.72%) were providing advisory services to other farmers also. They were helping them by suggesting ways of improvement and answering their queries. Agripreneurs, who (35.45%) were using leaflets and 27.85 percent were using booklets also.

Table 15 Distribution of respondents based on advisory services provided

SR. NO.	DO YOU PROVIDE ADVISORY TO OTHERS-	FREQUENCY (N=128)	PERCENTAGE
	a) Yes	79	61.72
	b) No	49	38.28

SR. NO.	Medium Used for consultancy/ advisory * (n=79)			
1	Print Media –	A) Leaflet	28	35.45
		B) Booklet	22	27.85
2	Social Media –	A) WhatsApp	79	100
		B) Facebook	41	51.90
		C) YouTube	27	34.18
3	Word of mouth	A) Interpersonal Contact	79	100
		b) Group Meetings	48	60.76

*(*Multiple answers were recorded)*

Social media is immensely popular for quick response to any problem and to keep updated. In villages people live in distant locations, and it is difficult to visit frequently for consultation. In that case, the majority of agripreneurs were connected via WhatsApp with farmers followed by Facebook (51.90%) and YouTube (34.18%). Moreover, they perceived that inter-personal communication is a better medium to clear all doubts and for sharing thoughts and information. All agripreneurs were giving consultancy services through interpersonal contact followed by through conducting group meetings (49%) also.

Thus, from the findings it can be said that agri entrepreneurs are strengthening the linkages and contributing to the extension work by disseminating the information, new technologies as well as helping them to analyze the problems and suggesting effective measures.

Factors considered by Agripreneurs for recruiting the employees in firm

Better recruitment and selection strategies result in improved business outcomes. Recruitment is the process of selecting and hiring an individual to perform a particular job or role. The need varies from firm to firm due to their functioning or type of enterprise. Results were presented in table 16.

Table 16 Distribution of respondents according to recruitment criteria considered

SR. NO	RECRUITMENT CRITERIA	FREQUENCY (N=64)	PERCENTAGE
1	Age	18	28.12
2	Gender	47	73.44
3	Geographical location	52	81.25
4	Language proficiency	13	20.31

5	Educational background	31	48.44
6	Prior experience	3	4.68
7	Salary	46	71.87
8	Willingness to travel	23	35.94
9	Skills	27	42.19
10	Employee Commitment	49	76.56
11	Reference	29	45.31

(Multiple answers were recorded)

More than two third of Respondents (71.87%) reported that salary amount given to labors was main criteria to hire whereas majority were considering employees native place and their commitment towards work i.e., 81.25 percent and 76.56 percent respectively. About half of Respondents reported that they also considered gender according to nature of work. Less than half said based on education they select the employees. According to them, an employee/labor must have the ability to read the medicines' name and basic mathematical knowledge.

Further, it is observed that references and employees' willingness to travel from here to there was also considered while hiring the employees. Some work skills are also important factor to do a job effectively and efficiently especially in agriculture and allied sectors. It is noted that 42.19 percent of respondents hired their labor because of basic skills followed by age, language proficiency and very few considered their prior experience.

Factors considered by Agripreneurs for retention of employees in firm

Retention of employees is important for overall organizational performance. For improving retention, an agripreneur must maintain the healthy working environment and from study also it can be seen that all respondents create positive working climate and interpersonal relationship with their labors. Table 17 clearly shows that agripreneurs were considering employees' suggestions or feedback and maintaining the feeling of belongingness and aware about the effective management and marinating equity among the labors. They perceived that healthy work relationship between employer and employees and among the employees lead to growth and sustain the business.

Table 7 Distribution of respondents according to their retention criteria

SR. NO.	PARTICULARS	FREQUENCY (N=64)	PERCENTAGE
1	Remuneration/reward	41	64.06
2	Fairness/equity in firm	64	100
3	Recognition given for extra work	36	56.25
4	Effective management	64	100
5	Working relationship	64	100
6	Wellness of employee (check-ups)	11	17.19
7	Feeling of belongingness	32	50.00

(Multiple answers were recorded)

Further, the table-17 revealed that respondents also gave remuneration or a reward occasionally and to promote their commitment towards their work, they gave some kind of recognition for extra work. In addition, some respondents were providing free health check-ups to their employees which is one of the good steps to win the heart of an individual.

Perceived effectiveness of training received under these programs by Respondents

The competencies required for an entrepreneur can be acquired through training and development. Fostering hidden skills and a strong entrepreneurial spirit in people is one of the key facets of economic development. The basic purpose of entrepreneurial programs is to influence potential people and motivate them to take entrepreneurship as their career. Entrepreneurs can be developed through training by inculcating entrepreneurial skills for setting up and operating the enterprise. Therefore, to enhance the skill and knowledge of entrepreneurs through training and development is crucial which should be need based. The training can be considered as useful or effective when it covers all the aspects of business. In the present study, the usefulness of training was measured by calculating the utility index score.

The data has been presented below in table which reveals that training sessions were highly useful for them with respect to human resource development (97.5%) like in changing their attitude and improved knowledge. Moreover, respondents reported that during training they learnt various things like legal procedures of registering and getting loans, acts, rules and regulations of banks and government with utility index score 88.75. Majority of them felt that each training session was helpful especially experience sharing interactive session and trainer were effective in instructing the course/lessons, so it was useful in building the networks with other entrepreneurs with utility score 80.42.

Table 8 Distribution of respondents with respect to Utility Index score

SR. NO.	CONTENT	TOTAL SCORE OBTAINED	UTILITY INDEX SCORE
1	Personality enhancement (Confidence in business outreach)	342	**71.25**
2	Communication skills (oral and writing skills)	212	**44.17**
3	Leadership Skills	310	**64.58**
4	Networking with others	386	**80.42**
5	Problem solving and decision-making ability improved	352	**73.33**
6	Agri-business management	246	**51.25**
7	Human resource development	468	**97.5**
8	Exposure visits/ field tour/ study tour	480	**100**
9	Legal aspects (acts/ programs/rules/banking)	426	**88.75**
10	Course curriculum, content covered and teaching methods	386	**80.42**
11	Marketing management	288	**60.00**

Furthermore, data shows that training was useful in enhancing their personality and improving their abilities to solve problems by taking decisions with 71.25 and 73.33 Utility Index score respectively. Meanwhile, Respondents perceived that the training was effective in inculcating the leadership skills, marketing management skills such as pricing, packaging, customer dealing etc. and overall agricultural business management such as bookkeeping, record maintain, cost-benefit analysis etc. with 64.58, 60 and 51.25 Utility Index score respectively. In addition, training was less useful regarding communication skill development with 44.17 Utility Index score.

Overall training utility as perceived by respondents

Data in table 19, regarding overall usefulness of training as perceived by respondents revealed that a large proportion of respondents (74.22%) agreed that training was useful followed by those who considered highly useful (18.75%) and only few perceived it not useful i.e., 7.03 percent.

Table 9 Distribution of respondents according to overall training utility

SR. NO.	CATEGORY	FREQUENCY (N=128)	PERCENTAGE
1	Highly Useful (>28.85)	24	18.75
2	Useful (24.61- 28.85)	95	74.22
3	Not Useful (up to 24.61)	9	7.03

(Mean 26.73 and S.D. 2.12)

Thus, from overall data related to training utility it can be interpreted that the sessions conducted under these programs were effective and useful for the respondents. Only a few perceived it less useful, it might be due to some personal factors like cognitive and intellectual abilities.

Activities undertaken by the beneficiaries

Activity specific state wise distribution of scheme beneficiaries and successful entrepreneurs were presented in table 20 and 21. From those it was well understood that major activities undertaken by these agripreneurs were grouped into 32 different activities. Because of some logical contradictions these groups were not based on domain of work (table 22), but for this study we needed groups based on type of activity undertaken by the respondents. Hence, we grouped the successful unit to create homogeneity across unit based on the activity they undertake. This homogenization was created based on the nature of activity and labour requirement of the operations. The number of ventures under each category is worked out and results were furnished in the following table 22.

Goatry Unit

Low cost Mushroom Unit

Dairy Unit (Milk

Poultry Farm

Table 10 Activity wise distribution AC & ABC Scheme Beneficiaries

STATE NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	UU	TOTAL
ANDHRA PRADESH	164	72		1	4	5	1	1	8	5	3	3	2	13	1	1	4	1	13	4	2	7	7	2	23	125			1	1	6	1	1121	1602
ARUNACHAL PRADESH		2																								1							46	49
ASSAM	40	30		2	1		1	1	4	6			1	5			2	1	3	2		1	5	97	1	51					1		589	844
BIHAR	233	517		1	3		16	6	11	119		7	1	21	6	1	38	6	34	23		1	127	66	3	256	5				34	8	2788	4331
CHANDIGARH	1																					1									1		8	11
CHHATTISGARH	68	65			1	2	3	2	9	49	1	6		3	5	1	7		10	1		24	6		13	95			1		11		599	982
DELHI	2	1																	1	1													36	41
GOA	1	1	2										2													1							7	14
GUJARAT	182	312	1	2	4	1	1	8	32		3		1	15	5	4	9		22	6		4	7	17	8	237		1	2		2	1	1318	2205
HARYANA	29	101		1	1	3			9	3		2	1	8					12	1		10	4	6	1	36					4	14	494	740
HIMACHAL PRADESH	15	25				1	4	3	16	1	5	7	1	8					3			9	1	2		8					2		318	429
JAMMU AND KASHMIR	11	57		2				3	9	2	7	3	4	13			11					4	2	23	5	26					6	3	1332	1523
JHARKHAND	84	30			1		2		1	8		2		3	1	1	2	1	1	1		8	8	16		34				1	2		585	792
KARNATAKA	303	506	1	6	23	13	14	16	29	12	21	23	15	50	22	10	11		57	13	11	8	42	11	28	504	2	4	3	10	2	2	2599	4371
KERALA	21	7			1				1	14			3	3	1		1		1	1			2			4							213	273
MADHYA PRADESH	378	236	1	2	2	9	5	4	51	11	2	5	1	16	19	5	46		16	4	1	80	23	2	119	1127	2	3	1		4		2703	4878
MAHARASHTRA	2708	2295	15	20	57	6	6	66	268	55	33	68	46	259	40	34	221	4	49	22	8	60	106	377	90	4239	9	13	9	21	22	1	10549	21776
MANIPUR	8	25							2	11		2		8	2		2		1			2	2	28	1	22				19	1		370	506
MEGHALAYA		2																						1									34	37
NAGALAND	2	3		1													3							7		6							165	187
ORISSA	29	21			2		2	4	3	5			1	6	1				3	1	4	2	2	2	11	10					6	1	526	642
PONDICHERRY	19	17			1		1		2	7		2	4	3	2				3				2	3		15		1			5		59	146
PUNJAB	34	32				1	1		3		4	1		11	6		4		29	1		17	18			61						1	444	668
RAJASTHAN	206	182			11	1	31	5	14	6	3	1	1	16	8	3	12		14	1		14	74	84	49	1126	1		1		1	2	2603	4470
SIKKIM	1	2			1																					8							19	31
TAMIL NADU	967	682	1	5	16	21	10	13	101	49	15	29	25	125	21	5	48	6	35	25	2	36	56	163	20	1920	3	3		11	46	2	4373	8834
TELANGANA	252	101		1	14	6	5	2	8	6	2	11	3	13	2	2	8		32	2		8	13	6	6	103		1	2	1			1593	2203
TRIPURA	1									1																							4	6
UTTAR PRADESH	1514	2988		15	37	37	13	38	246	58	17	13	1	93	105	8	71	5	44	7		183	65	22	57	3007	36	12	3		23	67	9379	18164
UTTARANCHAL	28	29		1	2	1		2	8	1	4		1	3	1		3					4	6	3	2	71					4	1	378	553
WEST BENGAL	36	47			1	8		1	11	18	3			8			2		7	3		44	1	10	2	90				1	5		918	1216
TOTAL	7337	8388	21	60	183	115	116	175	846	447	123	185	114	703	248	75	505	24	390	119	28	527	579	948	439	13183	58	38	23	65	188	104	**46222**	**82576**


Shot on OnePlus
Powered by Triple Camera

Table 11 Activity wise distribution of successful units under AC & ABC scheme

ROW LABELS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	TOTAL
ANDHRA PRADESH	164	72		1	4	5	1	1	8	5	3	3	2	13	1	1	4	1	13	4	2	7	7	2	23	125			1	1	6	1	481
ARUNACHAL PRADESH		2																								1							3
ASSAM	40	30		2	1		1	1	4	6			1	5			2	1	3	2		1	5	97	1	51					1		255
BIHAR	233	517		1	3		16	6	11	119		7	1	21	6	1	38	6	34	23		1	127	66	3	256	5				34	8	1543
CHANDIGARH	1																					1									1		3
CHHATTISGARH	68	65			1	2	3	2	9	49	1	6		3	5	1	7		10	1		24	6		13	95			1		11		383
DELHI	2	1																	1	1													5
GOA	1	1	2										2													1							7
GUJARAT	182	312	1	2	4	1	1	8	32		3		1	15	5	4	9		22	6		4	7	17	8	237		1	2		2	1	887
HARYANA	29	101		1	1	3			9	3		2	1	8					12	1		10	4	6	1	36					4	14	246
HIMACHAL PRADESH	15	25				1	4	3	16	1	5	7	1	8					3			9	1	2		8					2		111
JAMMU AND KASHMIR	11	57		2				3	9	2	7	3	4	13			11					4	2	23	5	26					6	3	191
JHARKHAND	84	30			1		2		1	8		2		3	1	1	2	1	1	1		8	8	16		34				1	2		207
KARNATAKA	303	506	1	6	23	13	14	16	29	12	21	23	15	50	22	10	11		57	13	11	8	42	11	28	504	2	4	3	10	2	2	1772
KERALA	21	7			1				1	14			3	3	1		1		1	1			2			4							60
MADHYA PRADESH	378	236	1	2	2	9	5	4	51	11	2	5	1	16	19	5	46		16	4	1	80	23	2	119	1127	2	3	1		4		2175
MAHARASHTRA	2708	2295	15	20	57	6	6	66	268	55	33	68	46	259	40	34	221	4	49	22	8	60	106	377	90	4239	9	13	9	21	22	1	11227
MANIPUR	8	25							2	11		2		8	2		2		1			2	2	28	1	22				19	1		136
MEGHALAYA		2																						1									3
NAGALAND	2	3		1													3							7		6							22
ORISSA	29	21			2		2	4	3	5			1	6	1				3	1	4	2	2	2	11	10					6	1	116
PONDICHERRY	19	17			1		1		2	7		2	4	3	2				3				2	3		15		1			5		87
PUNJAB	34	32				1	1		3		4	1		11	6		4		29	1		17	18			61						1	224
RAJASTHAN	206	182			11	1	31	5	14	6	3	1	1	16	8	3	12		14	1		14	74	84	49	1126	1		1		1	2	1867
SIKKIM	1	2			1																					8							12
TAMIL NADU	967	682	1	5	16	21	10	13	101	49	15	29	25	125	21	5	48	6	35	25	2	36	56	163	20	1920	3	3		11	46	2	4461
TELANGANA	252	101		1	14	6	5	2	8	6	2	11	3	13	2	2	8		32	2		8	13	6	6	103		1	2	1			610
UTTAR PRADESH	1514	2988		15	37	37	13	38	246	58	17	13	1	93	105	8	71	5	44	7		183	65	22	57	3007	36	12	3		23	67	8785
UTTARANCHAL	28	29		1	2	1		2	8	1	4		1	3	1		3					4	6	3	2	71					4	1	175
WEST BENGAL	36	47			1	8		1	11	18	3			8			2		7	3		44	1	10	2	90				1	5		298
TOTAL	7337	8388	21	60	183	115	116	175	846	447	123	185	114	703	248	75	505	24	390	119	28	527	579	948	439	13183	58	38	23	65	188	104	36354

Oil Separator unit

Consultancy services given by Agripreneurs

Honey production

Table 22 Group wise distribution of scheme beneficiaries

ACTIVITIES GROUP	NO OF VENTURES
AC & ABC	20256
PRODUCTION	14521
MARKETING	768
VALUE ADDITION	484
HI-TECH FARMING	91
LANDSCAPE	66
CONTRACT FARMING	52
INTEGRATED FARMING SYSTEM	35
INFORMATION COMMUNICATION TECHNOLOGIES	29
RETAILING	18
DOMESTIC PEST CONTROL	15
TOURISM	12
TRAINING CENTRE	5
OTHERS	2
TOTAL	36354

Results in table 22, reveal that activities under AC & ABC groups were mostly selling inputs for specific production processes like crops, aquaculture etcetera. Around 56 per cent of successful ventures were registered under this group. Most of the units under this group were generating turnover of around 25 lakhs per annum and this type of unit hardly hires labourers for its operation. Second most registered units were for production purposes like dairy, Aqua crops like fish, shrimp etc. this group also takes around 40 per cent of whole units and all other units were around only four percent.

Table 23 Activity code wise agripreneurs distribution across groups

A. CODE	ACABC	CF	DPC	HTF	ICT	IFS	LS	MK	PROD	RETAIL	TOUR	TC	VA	TOTAL
1	7139	6	2	4	11	10	1	23	121	2	1	1	16	7337
2	8098	3	10	8	2	3	2	59	176	1			26	8388
3	10							1	1		9			21
4	24							1	33	2				60
5	78					1		10	94					183
6	76	31							6				2	115
7	57	2						4	48				5	116
8	99	2		1				48	15	5			5	175
9	809	5		2			3	5	17				5	846
10	142					3		9	279		1		13	447
11	43	1		10			1	10	55				3	123
12	93			7			4	2	74				5	185
13	44			1			50	2	16		1			114
14	118			13	1		2	18	548	1			2	703
15	44			3					192	1			8	248
16	51		1					2	21					75
17	100			6	1	11	2	33	124	1			225	505

18	10								12	1			1	24
19	131	2		1				10	157	3			86	390
20	117								1			1		119
21	7			14					7					28
22	47			10				29	436				5	527
23	162			1		1		13	399			3		579
24	908							6	34					948
25	105		2	4		3	1	7	301				16	439
26	1612			6	2	3		451	11061	1			47	13183
27	39							14	2				3	58
28	18							2	15				3	38
29	10				12				1					23
30	8							7	45				5	65
31	18							1	169					188
32	39							1	61				3	104
TOTAL	20256	52	15	91	29	35	66	768	14521	18	12	5	484	36354


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Table 24 Abbreviation as follows:

A. Code	Activity Code	**LS**	Landscape
ACABC	Agri Clinic and Agri Business Centre	**MK**	Marketing
CF	Contract Farming	**VA**	Value Addition
DPC	Domestic Pest Control	**Prod**	Production
HTF	Hi-Tech Farming	**Retail**	Retailing
ICT	Information Communication Technology	**Tour**	Tourism
IFS	Integrated Farming System	**TC**	Training Centre

Among the production units most people were engaged in dairy units with a turnover over of around 12 to 15 lakh per annum followed by fish and shrimp culture. Distribution of activity code under each group was presented in table 24. Details of specific activities done under each group were furnished in table 25.

Table 25 Details of activities grouped

ACTIVITIES GROUP	TYPES OF ACTIVITIES
AC & ABC	Inputs, Veterinary, Custom Hiring, Micro Irrigation, Farm Machinery, Soil Testing Lab, Aquaculture, Organic Agriculture, Marketing, Feed, Vermicompost, Nursery, Floriculture, Hi-tech Farming, Apiculture, Irrigation, Value Addition, Landscape, Bio-inputs, Contract Farming, Medicinal Plants, Integrated Farming System, Mushroom, Dairy, Goatry, Hatchery, Sericulture, Biodiesel, Urban Garden, Tourism
PRODUCTION	Cattle, Crop, Aqua, Bio-inputs, Milk, Fruit, Floriculture, Feed, Farm Machinery, Forestry, Poultry, Medicinal Plants, Bio-diesel, Spices, Vegetables, Fertilizer, Micro-food
MARKETING	Milk, Animal Husbandry, Field Crops, Storage, Nursery, Plantation, Bio-inputs, Floriculture, Aquaculture, Sericulture, Spices, Irrigation, Medicinal Plants, Apiary, Farm Machinery, Poultry
VALUE ADDITION	Apiculture, Aquaculture, Crops, Flowers Fruits, Inputs, Medicinal Plants, Milk, Plantation, Sericulture, Waste

HI-TECH FARMING	Capsicum, Dairy, Floriculture, Flower, Nursery, TC Unit, Vegetable, general
CONTRACT FARMING	Aloe vera, Fruits, Gherkin, Jerkhin, Marigold, Medicinal Plants, Seed,
INTEGRATED FARMING SYSTEM	Organic Agriculture, General
INFORMATION COMMUNICATION TECHNOLOGIES	Kiosk, Visual Content Creator, Printed Content creation, News content
RETAILING	Aqua feed, Cattle Feed, Organic Outputs, Farm products, Vegetables, Nursery
OTHERS	Packing material, Cardboard boxes

Table 26 Details of labour required for each activity

ACTIVITY	AGE	EXPERIENCE	TURNOVER	REGULAR EMP	SEASONAL EMPLOYMENT
AC & ABC	55	20	60 lakhs	2	1
AC & ABC - VETERINARY	49	15	50 lakhs	3	
PRODUCTION - DAIRY	59	20	20 lakhs	4	
PRODUCTION - GOATRY	62	20	22 lakhs	4	
PRODUCTION - PIGGERY UNIT	55	10	50 lakhs	2	
PRODUCTION - NURSERY	50	20	20 lakhs	5	
MARKETING - NURSERY	55	15	150 lakhs	8	
PRODUCTION - MUSHROOM	27	2	10 lakhs	2	
PRODUCTION - VERMICOMPOST	50	10	100 lakhs	8	
PRODUCTION - FISHERY	23	5	30 lakhs	4	
PRODUCTION - BIOFERTILIZER	45	10	100 lakhs	11	

PRODUCTION - COCOON	42	8	20 lakhs	2	
VEGETABLE MARKETING	38	6	55 lakhs	10	
HATCHERY - FISH/PRAWN	40	10	30 lakhs	8	
PRODUCTION - MEDICINAL PLANT	58	20	50 lakhs	2	5
PRODUCTION - FLORICULTURE	45	15	80 lakhs	10	
AC & ABC - FARM MACHINERY	47	15	50 lakhs	3	
PRODUCTION - MANGO	43	12	20 lakhs	10	
PRODUCTION - BROILER	56	20	3 lakhs	1	
VALUE ADDITION - OILSEED	45	5	20 lakhs	2	
VALUE ADDITION - PADDY	50	10	100 lakhs	5	
CONTRACT FARMING	55	10	30 lakhs	2	
DOMESTIC PEST CONTROL	42	5	30 lakhs	3	
MICRO IRRIGATION UNIT	31	5	52.5 lakhs	4	2
SPIRULINA UNIT	35	10	12 lakhs	1	

Source: Primary Data

Seasonal employment generated was normalized to year man days to extrapolate it to the universe. Assuming all successful units are running at their minimum possible scale, labour required for such units were worked out and presented in table 26.

Table 26 Approximate employment generation by individuals

GROUP NAMES	LABOUR REQUIRED	NUMBER OF VENTURES REGISTERED	APPROXIMATE EMPLOYMENT GENERATED (MAN-DAYS PER YEAR)
AC & ABC	2	20256	40512
PRODUCTION	5	14521	72605
MARKETING	10	768	7680
VALUE ADDITION	3	484	1452

HI-TECH FARMING	10	91	910
LANDSCAPE	15	66	990
CONTRACT FARMING	2	52	104
INTEGRATED FARMING SYSTEM	3	35	105
RETAILING	7	18	126
DOMESTIC PEST CONTROL	4	15	60
TOURISM	5	12	60
TRAINING CENTRE	5	5	25
TOTAL		36,354	1,24,629

From the table 26, it was concluded that beneficiaries of AC & ABC scheme are generating 1,24,629 Man-days per year.

Problems faced by Respondents after setting up the business

Identifying the problems is important in any study. Problems need to be solved which enables us to identify and exploit opportunities in the environment and exert (some level of) control over the future. There are a number of uncertainties associated with a business, but we need to identify them because problems are a crucial part of any enterprise. In the present study, some problems had been identified after pilot study and from secondary sources. Next, a primary survey was conducted to assess the major problems reported by respondents through Garrett ranking.

The results in table 27, indicate that seasonality of business; fluctuations in demands of products and heavy competition were the major problems faced by them with first, second and third rank respectively. Moreover, the majority were reported that banks rejected their proposal for getting loans with 72.58 Garrett mean score and IVth rank. Respondents who were dealing with production units reported transportation and risk of selling perishable products was the challenge for them with 69.54 Garrett Mean score and Vth rank followed by receiving low profit over the investment with VIth rank.

Table 27 Ranking order of problems faced by respondents

SR. NO.	STATEMENTS	GARRETT MEAN SCORE	RANK
1	Difficulty in convincing others (Influencing–persuasive skills)	58.62	8

2	Fluctuation in demands	83.71	2
3	Heavy competition in market	74.84	3
4	Lack of ability to maintain a record book/balance sheet	37.81	11
5	Lack of collateral support	53.45	9
6	Lack of proper infrastructure	63.25	7
7	Lack of skills to maintain and handle the working environment	42.30	10
8	Low profit over the investment	63.60	6
9	Rejection of proposal from banks	72.58	4
10	Seasonality of business	86.21	1
11	Transportation and risk of selling perishable products to cover large area	69.54	5

The findings further reveal that respondents found difficult to convince and persuade others to adapt new practices with Garrett mean score 58.62 followed by lack of collateral support, lack of ability to maintain the work environment and balance sheet or records were less scored problems identified by respondents and assigned IXth, Xth and XIth rank. Thus, it can be interpreted that the majority of agri ventures were dealing with production of goods and most of them might be started their enterprise before one year.

It is a fact that individuals can be developed, their outlook can be changed, and their ideas can be given true shape of agri-enterprise through an organized and systematic training program. Agripreneurial training aims at arousing and reforming entrepreneurial behavior in day-to-day activities and helping them to develop their own ventures or enterprises as a result of their formal knowledge and training. The development of an entrepreneur means inculcating entrepreneurial traits in a person, imparting requisite knowledge, developing technical, managerial, financial and marketing skills and building the entrepreneurial attitude. The process of entrepreneurial training involves equipping a person with the information needed for enterprise building and sharpening his entrepreneurial skills. The results of the present study revealed that trained settled entrepreneurs were more motivated and offered employment at local level. Therefore, the overall impact of these training initiatives was effective in generating employment. Respondents perceived it effective for sustaining their business. They were aware of the recruitment and retention of labourers and were

also helping in strengthening the extension services through connecting with local farmers and creating awareness through advisory/consultancy.

Dairy- Value addition unit

Agripreneur who is organizing **Pathshala** free for local farmers at every Sunday for one hour.

Organic Manure unit

Fishery unit

Small scale mushroom grower

Contract farmers- vegetables & rice

Poly house Floriculture unit

Papaya Cultivation

Chapter 5

Conclusion and Policy Suggestions

Conclusion

This study has revealed that AC & ABC scheme has high potential to create employment for rural and regional development. Developing agriculture through financial and technical support from both state and universities should be complemented with entrepreneurial initiatives. Like Alfred Marshal said, "it is not a from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest. We address ourselves not to their humanity but to their self-love, and never talk to them of our necessities, but of their advantage." Our analysis confirms that success rate of participant with 60 year of age is on par with 31-year-old participants, female representation is meager but who ever got an opportunity tried hard to establish a venture and their success rate is also near to their male counterparts. Participant in the age band of 18 years to 26 years shows very less success rate in establishing a venture. Steps need to be taken to increase the interest among the vibrant section of youth for long lasting impact on regional development. Most of the successful participants had education till diploma and units were in rural settings. This may be the reason for most of the units that are running in subsistence scale and agripreneurs are reluctant to scale up their activity They are not competent as their urban counterparts with college degree, seeking for new information on necessary help to develop an enterprise is necessary to compete with others in real world. Necessary steps need to be taken to improve interpersonal links between the region and within the specialization. Overall success rate of the program is 44 percent in this female led ventures have 33 per cent of success rate whereas their male counter parts have registered 45 per cent of success. From this analysis we could estimate that all successful entrepreneurs had generated 1,24,629 employments in a year.

Policy suggestions

- Agripreneurs need to be gathered in groups on a regional basis or on an enterprise basis for healthy discussion and to solve their problems. This unit should have participants in all domains like non agri venture who can help agripreneurs in building their brand and increase their penetration in ecommerce etc. A chamber of Agripreneurs and Innovators or Agripreneurs association can be formed.
- There have been lots of initiatives taken from the government side to ensure that agripreneurs are included in institutional credit, these efforts can be complemented by creating a social capital among agripreneurs. This will give more confidence to the banker to extend institutional support to the beneficiaries.

- Comparative assessment on Nodal Training Institutes is necessary to understand what can be replicated and changed in the least performing regions in India.
- Women representation needs to be increased to improve the success rate of the scheme because when we develop a woman, we develop a community as a whole.
- Outreach through social medial like YouTube will have a great reception for this scheme across India.
- More than half of the beneficiaries hold maximum diploma level education, to them concepts on business management should be intensive to harness the benefit of being an entrepreneur.
- Reaching agripreneurs is difficult hence it will be great if we can map the beneficiaries to reach them easily.
- Agripreneurs need be taught on cooperative development, since their scale is so low, they can't dominate production or any of the services they provide in the region. If they can work as a group their ability to produce and influence the market will improve tremendously.

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