

Chapter 2

Review of Literature and Research Methodology

2.1. Introduction

The previous chapter highlighted the background of the present study. The present chapter concentrates on reviewing the existing literature related to entrepreneurship, ADP, etc. and the research methodology which has been applied in the study. There are two parts in the present study: the first part is concentrated on the review of the literature, and the second part is concentrated on research methodology.

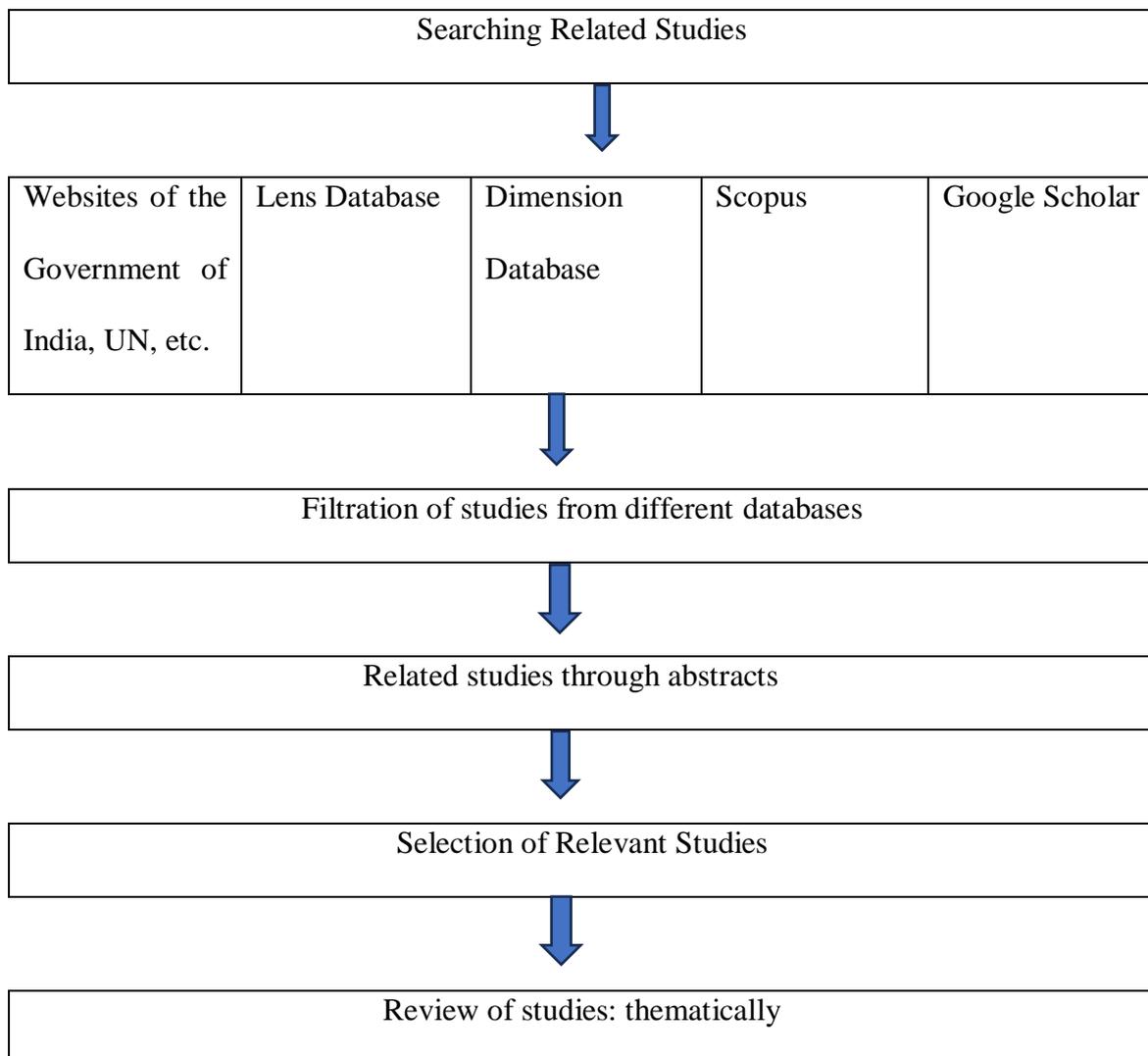
According to Cooper (1998), *'A literature review is the process of reviewing published works on a particular topic, critically analysing their contributions, and synthesising the findings to provide an overview of the current understanding of the subject matter'*. This definition identifies that a literature review's objective is to reveal gaps in the existing research and areas that need more exploration. In the same line, Boothet, al.(2012) define the review of literature as *'an account of what has been published on a topic by accredited scholars and researchers. It is not a mere summary, but rather a critical analysis of the reviewed works' content, methodology, and findings*. It indicates that a review of the literature includes activities including summarising previous studies, critically evaluating methodologies applied in different studies and contributions to the field and finding the area which had not been touched by the previous studies.

There are two main objectives of the 1st part of the present chapter: they are (a) to check the type of research methods applied in the previous studies, and (b) to find out the research gap. To conduct the review, a systematic review of the literature method was applied.

In undertaking a detailed and in-depth review of literature relevant to the present topic, a total of 42 numbers of relevant works published in specialised academic journals, books, etc., were reviewed starting from the year 1993 until 2024. The Literature Review used material sourced from Google Scholar, Shodh Ganga, Books,

eBooks, and Library sources. The study categorised various journals and resources related to research in the relevant areas. The studies that have been reviewed were considered after having a thorough investigation of their relevance to the present study. The steps followed in reviewing the literature of the present study are shown in diagram 2.1.

Diagram 2.1: Steps followed in Review of Literature



Source: developed by the researcher

The review has been conducted under four sub-themes. They are:

- A. Review of Literature related to the Aspirational Districts Programme (ADP)

- B. Review of Literature related to Entrepreneurship, Entrepreneurial Ecosystem,
- C. Review of literature related to Entrepreneurship development in NorthEast India,
- D. Review of literature related to Awareness of ADP among entrepreneurs of Northeast India

2.2. Review of Literature related to the Aspirational Districts Programme (ADP)

A broad range of studies related to the Aspirational District Programme (ADP), have been reviewed, shedding light on its role in advancing socio-economic development across India and highlighting both its achievements and areas for improvement. Some of the studies, like Agarwal & Mishra (2024), focus on investigating whether the ADP has improved in the areas of health and nutrition, which cover child malnutrition, skilled birth attendance, and maternal and child health indicators. The findings of the study reveal that there is a 2–4% reduction of underweight children under 5 years in Aspirational Districts. The study considers data from National Family Health Survey round 4 & 5 as pre and post implementation of ADP. Esposito (2023) draws attention to the programme's contributions towards meeting Sustainable Development Goal (SDG) indicators, particularly regarding essential services, access to clean fuel, and digital connectivity. The study praises ADP for its innovative governance model, its utilization of the Distance to Frontier (DTF) framework to design district-specific interventions, and its collaborative initiatives, including partnerships such as the Aspirational Districts Collaborative, which engage local governments and communities to achieve targeted developmental outcomes. Esposito's study also focuses on assessing the role of public-private partnerships, capacity-building, and digital platforms in driving the success of the ADP and understanding how the ADP leverages technology for monitoring progress, identifying areas needing attention, and promoting convergence of resources and schemes for holistic development. The study also provides insights into the unique needs of aspirational districts, the role of local committees in community engagement, and the formulation of District Development Plans for sustainable growth.

Rishi (2023) emphasises that ADP builds on existing government schemes without allocating additional funds, focusing instead on enhancing the efficiency of these initiatives through better governance and fostering competition among districts.

The study also highlights the programme's success in improving outcomes in areas like health, nutrition, and financial inclusion, as evidenced by an independent United Nations Development Programme (UNDP) study. The findings of the study reveal that aspirational districts have outperformed their non-aspirational counterparts in these key areas.

The Centre for Social and Behaviour Change (2022) underscores the pivotal role of behavioural insights in shaping ADP interventions. This approach ensures that social development is people-centred, driving change from the grassroots level. The interventions, implemented across 112 districts, demonstrate how tailored behavioural strategies can effectively complement policy initiatives. The report presents several impactful examples of how behavioural insights have been applied to enhance ADP outcomes. Green and Kapoor (2020) describe ADP as a transformative step towards reducing regional disparities across India. Their analysis documents best practices and strategies employed in the aspirational districts, offering valuable lessons for improving the programme's effectiveness. Furthermore, their study provides actionable recommendations to guide the programme's future direction, including measures for enhancing entrepreneurship development, financial inclusion, and skill acquisition. A notable finding was the emphasis on skill development as a critical component for improving employment opportunities, aligning the districts with current market trends in self-employment and wage employment.

Kumar (2021) examines the training programs conducted under ADP, noting that while these initiatives enhanced participants' skills and knowledge, they often fell short of translating these gains into entrepreneurial ventures. The study attributes this to the lack of participatory needs assessments and inadequate financial and technical support for trainees. Nevertheless, these training programs were moderately effective in boosting respondents' skill sets and providing a foundation for economic self-reliance. Deb (2021) and Borah, Raj, and Sharma (2020) focus on the importance of knowledge management and data-driven governance in the success of ADP. They highlight the effectiveness of real-time data tracking and consistent monitoring in improving outcomes. The study also identifies the need for better inter-departmental coordination and capacity-building initiatives at the local level to ensure a broader and more sustainable impact. According to Green & Kapoor (2021), ADP is a significant step

towards addressing regional disparities across the Indian landscape. The study highlights that Skill Development is one of the few components that not only can monitor an individual's skills, but can also trace the trends that exist in the present-day markets in terms of self-employment and wage employment.

The United Nations Development Programme (2021) recognises ADP as a catalyst for expediting development in aspirational districts. Stakeholders interviewed in the study conducted by the United Nations mentioned various successful initiatives being carried out in the aspirational districts, especially in the domains of basic infrastructure, financial inclusion, and skill development. The study also underscores a gap in institutional structures, pointing out that the absence of dedicated departments for financial inclusion and skill development in many districts limits the programme's effectiveness in these sectors. According to the study, for the development of entrepreneurship, more cutting-edge interventions at the district level are required.

Bora's (2021) study on ADP related to 'the Health & Nutrition Sector' that focuses on the role of knowledge management in the transformation of an aspirational district, considers the Baksa district, and reveals five key strategies for successful implementation of the programme. They are: (a) to develop an effective knowledge sharing mechanism, (b) a capacity building mechanism for local health workers, (c) community engagement and ownership that fosters local ownership and sustainability, (d) integration of indigenous knowledge, and (e) monitoring and evaluation systems to ensure continuous improvement. According to the study, integration of indigenous knowledge in the ADP in the 'Health & Nutrition Sector' can create more acceptance among the people of the study area. The study also highlights that robust monitoring and evaluation systems should be implemented for the continuous assessment of program effectiveness.

Niti Aayog's reports (2018, 2019) highlight the success of the "3 Cs" framework—Convergence, Collaboration, and Competition—in improving the programme's impact across key sectors, such as education, health, agriculture, and infrastructure. For example, one study reported measurable progress in students' mathematics and language skills compared to earlier national benchmarks. These reports also assessed district-wise performances in various sectors, identifying gaps and

recommending pragmatic, tailored solutions to address them. Additionally, they emphasise the scalability of ADP's achievements and its potential for replication both within India and internationally.

The Summary Review of Literature Related to the Aspirational Districts Programme (ADP) is shown in Table 2.1.

Table 2.1: Summary Review of Literature Related to the Aspirational Districts Programme (ADP)

S No	Author & Year	Main Objective	Type of research and methodology applied	Major Findings
1	Agarwal & Mishra (2024)	To evaluate the causal impact of the Aspirational Districts Programme (ADP) on key health and nutrition outcomes in India	Descriptive; combination of Propensity Score Matching (PSM) and Difference-in-Differences (DID) techniques to estimate the causal impact of the ADP is employed. Data Source: Data from the NFHS rounds 4 & 5 (2015–16 & 2019–21)	While the ADP brings improvements in certain health indicators, particularly in reducing child undernutrition, the overall impact on health outcomes is modest.
2	Esposito (2023)	To evaluate the effectiveness and impact of the ADP in India	Mixed method; Data used: secondary data from the NFHS (2016); Area considered: 707 districts of India. Framework Analysis employed: The Distance to Frontier (DTF) framework proposed by the National Institute of Competitiveness.	Several districts under the ADP show a higher likelihood of meeting SDG. The ADP has expanded to include partner programs and collaborations like the Aspirational Districts Collaborative, involving community leaders,

				volunteers, and local government. The ADP's pioneering approach to local governance serves as a model for development projects in India and globally, emphasising community engagement and capacity-building.
3	Rishi, (2023)	To analyse the mechanism of the ADP for better performance in the key performance indicators (KPIs)	Descriptive Study Data used: secondary data from the Champions of Change, Niti Aayog, and an independent study carried out by UNDP.	ADP focuses on leveraging the existing government programs rather than an infusion of additional funds The ADP enhances data-based governance, strengthening the system and spurring competition among the districts. Aspirational Districts have outperformed non-aspirational Districts across the sectors of health and nutrition, and financial inclusion.
4	Deb (2021)	To assess the efficacy of the ADP for substantial growth across	Case study and anecdotal method; Data used: Secondary	The programme has profound impact in various sectors; To reach a larger section of society in the country, more focus is needed on

		various socio-economic parameters in areas		improved capacity-building exercises, fund allocation, and technical expertise at the block level.
5	UNDP (2021)	To assess effectiveness and to analyse the specific impact of ADP across the different districts.	Both empirical and descriptive; Primary data collection: Interview Schedule method Secondary data: ADP dashboard – Champions of Change.	ADP has catalyzed the expediting development among Aspirational districts. The 3 Cs approach has been efficacious in effecting change and positive change in areas like Financial Inclusion and Skill Development, leading to a positive ecosystem for further innovations. One of the main reasons for the progress at a slower pace in the Financial Inclusion and Skill Development sectors is the lack of dedicated departments.
6	Kumar, .(2021)	To assess the effectiveness of skill development training programmes in the	Both Descriptive and Empirical Research designs. Two aspirational districts; Sample size: 120 sampling method. : the proportionate stratified	Training programmes are more focused on covering the training syllabus; they are least effective in analysing the training needs of trainees. Skill trainings, which are

		agricultural sector through ADP.	random Scale used to measure training effectiveness: 3-point continuum viz., agree, undecided, and disagree.	conducted in Aspirational Districts for farmers and agricultural labourers, are found to be moderately effective. Financial, technical, and marketing support is necessary for promoting entrepreneurial ventures
7	Borah, <i>et al.</i> (2020)	To assess how knowledge management practices influence the implementation and outcomes of ADP	Descriptive method; Area considered: Baksa district of Assam Data collection: Primary data through structured questionnaire	5 major strategies include capacity-building efforts and indigenous knowledge integration with the ADP. Capacity-building efforts empower local people to implement health and nutrition programs effectively, which creates better service delivery to the community. Integration of indigenous knowledge with the programme can be used as an effective health promotion strategy.
8	Green & Kapoor, (2020)	To examine role of ADP in accelerating the socio-economic development	Mixed-methods Research; 112 Aspirational Districts; Baseline and Delta ranking to compare performances of Districts;	While the health and education sectors show significant progress, agriculture and financial inclusion lag, indicating the need for targeted interventions in these

		of Aspirational districts		areas.
9	Niti Aayog (2018)	Study of Good Governance Practices taken up under the ADP for replicability and enhancing ADP performance through innovations	Descriptive; Area considered: All 112 Aspirational Districts of India;	Success of the three Pillars/three Cs of ADP – Convergence, Collaboration, Competition. Success of the use of out-of-the-box thinking and innovations with the underlying spirit of mass movement to improve the 49 Key Performance Indicators (KPIs). Replicability of results is feasible in the ADP framework.
10	Niti Aayog (2018)	To assess the best-performing Districts under the ADP, along with causative analysis	Household surveys in all Aspirational Districts during June 2018; covering more than 1,00,000 households.	Students in several districts improved their average marks in both Mathematics & Language compared to the National Achievement.

Source: compiled by the researcher from the literature

2.3.Review of Literature Related to Entrepreneurship and Entrepreneurial Ecosystem

The pace of entrepreneurship development is highly dependent on the form of the entrepreneurial ecosystem of a nation. The Entrepreneurial Ecosystems (EE) serve

as significant enablers of economic progress by shifting the emphasis from individual firms to the larger, interconnected environment supporting entrepreneurship. The Entrepreneurial Ecosystems can be defined as a set of interconnected elements that include culture, markets, economic policy, availability of finance, and human capital that collectively foster entrepreneurship. Human capital can also be developed through various training and skill development programmes.

The effectiveness of policies and programs to nurture entrepreneurship relies heavily on continuous evaluation. Ferdilani *et al.* (2021) emphasize the value of thoroughly assessing Entrepreneurship Development Programs (EDPs). They argue that ongoing program evaluation ensures their relevance, helps identify gaps, and improves outcomes by addressing the specific competencies required for successful entrepreneurship. In terms of skill enhancement, Sarkar (2020) highlights mismatches between available education programs and market needs. Gender inequalities, particularly concerning income disparities, remain a critical issue. Sarkar suggests that residential vocational training programs in remote areas, especially for marginalized tribal communities in the Northeast, can help equip individuals with relevant skills. These programs could further promote women-led collectives to tackle socio-economic inequalities effectively. The United Nations General Assembly (2020) underscores the critical contribution of entrepreneurs and small enterprises in driving economic recovery, particularly in a post-pandemic scenario. It advocates for advancing inclusive financial technologies, improving market access, and expanding digitalization to bolster small and medium-sized enterprises (SMEs) and help them remain resilient in changing global markets.

Mason and Brown (2014) describe entrepreneurial ecosystems as fluid and constantly evolving, noting that even large corporations play a role in nurturing entrepreneurial managers to drive firm growth. They emphasize that while businesses may differ in scale, it is high-growth firms that play an outsized role in advancing economies. Similarly, Flores and Kovacs (2018) highlight that for developing economies, strengthening critical ecosystem components like finance, education, infrastructure, and governance is essential to support business success. Onken *et al.* (2013) suggest that understanding entrepreneurship as part of a larger ecosystem is crucial, as the success of firms is often very much dependent on their external

environment rather than on their internal characteristics. The study highlights that firm growth is influenced by other factors such as networks, resources, and the policies surrounding them, rather than merely by the firm's size or internal operations.

Women's entrepreneurship, especially in rural settings, plays a critical role in local economic development. Agarwal (2018), Chanu&Haloi (2017) and Das (2012) all agree on the necessity of customized support, including skills training, access to credit, and capacity-building programs to empower women entrepreneurs. They highlight that most women entrepreneurs remain confined to traditional industries due to limitations in skills, infrastructure, and marketing networks. These studies suggest for encouraging a positive entrepreneurial ecosystem to promote entrepreneurship in rural areas. On a broader scale, rural entrepreneurship is recognized as a catalyst for addressing poverty and driving growth. Das (2014) identifies several barriers, such as disinterest among youth, skills shortages, and lack of market access. The study advocates for the collaborative efforts of government entities, NGOs, and women's cooperatives to build self-reliant and resilient rural economies.

2.4.Review of literature related to Entrepreneurship development in North-East India

Several studies have focused on the broader entrepreneurial ecosystem and the external factors that impact businesses around the growth in North East India (NEI). This view aligns with Karthik *et al.* (2023), who has stressed on the importance of NEI's geographical proximity to the Southeast Asia, which enhances opportunities for entrepreneurs to tap into international market opportunities. According to the study, the challenges such as infrastructure deficits and quality control issues that hamper entrepreneurial development in the region. The study also emphasises the need for improved infrastructure and government support to enable sustainable entrepreneurship and harness the potential for exports from this region of India.

Education and skills development are central themes in fostering entrepreneurship. Kumar (2023) underscores the importance of entrepreneurship education, especially for tribal communities, as it helps youth transform their traditional knowledge and cultural heritage into viable business opportunities. This perspective is reinforced by Solo & Nagi (2017), who argue that providing training in emerging

sectors such as industry, commerce, and services is crucial to promoting self-employment and entrepreneurial growth in the region.

In addition, Chakrabarty (2016) highlights the role of the MSME sector in driving entrepreneurship but notes the failure to absorb unskilled and semi-skilled labor. The studies collectively point to the need for policies that focus on improving education and training to empower individuals with the skills required to succeed in the entrepreneurial ecosystem.

The entrepreneurial landscape in Northeast India is riddled with challenges specific to the region. Sorokhaibam and Guloulung (2012) identify Assam as a leader in small enterprise activity but emphasize persistent issues such as insufficient infrastructure, poor connectivity, and sociopolitical instability that hinder growth. Echoing this, Borah (2019) and Chakravarty (2017) stress the Northeast's lack of deep engagement in regional trade opportunities, despite its proximity to ASEAN countries. To strengthen cross-border trade, priority must be placed on promoting exportable products, developing processing industries, and building strategic infrastructure, particularly around trade corridors like those leading to Myanmar, which acts as the Northeast's key gateway to Southeast Asia.

The issue of gender disparity in entrepreneurship is another prominent theme in North East Indian studies. Several studies highlight the challenges that women entrepreneurs face in the region, where participation in entrepreneurial activities remains significantly low. For instance, Mahanta (2023) notes a substantial gender gap, with women entrepreneurs in North East India constituting less than 0.5% of all women entrepreneurs in India. Key barriers for women include a lack of managerial skills, limited access to finance, and the double burden of household and business responsibilities, as pointed out by Kumar (2021) and Saikia (2022). Despite these challenges, women entrepreneurs in North East India have reported positive impacts, including economic, social, and family empowerment (Saikia, 2022). Sharma (2020) also observes that while marketing remains a challenge, women entrepreneurs are generally more focused on local markets and prefer to produce products that meet local demand. Addressing these gender-based barriers requires targeted policies and support

systems that enable women to overcome obstacles and thrive in the entrepreneurial space.

A recurring theme in the literature is the importance of leveraging local resources and indigenous knowledge for entrepreneurial development in North East India. Lalhunthara (2006) highlights the interconnectedness of the industrial, agricultural, and service sectors in the region, where entrepreneurship often arises out of necessity due to limited job opportunities. This underscores the need for policies that support the growth of businesses based on local capabilities and strengths. Similarly, Karthik *et al.* (2023) suggest that North East India's rich indigenous resources can be utilized for eco-friendly industrialization and sustainable development. The region's unique cultural and natural assets also provide opportunities for entrepreneurship, particularly in sectors like agro-tourism. In this context, Tayang (2024) identifies agro-tourism in Arunachal Pradesh as an emerging entrepreneurial avenue, driven by local interests in using cultural and natural resources for business ventures. These studies suggest that promoting businesses based on regional strengths can contribute to both local development and sustainability.

Entrepreneurs in North East India face a variety of challenges that hinder their growth and success. A consistent theme across the studies is the lack of access to finance, inadequate infrastructure, and difficulties in marketing products and services. Chyne (2020) identifies these barriers as critical for the success of women-owned enterprises, along with a lack of formal loans and training programs. Similarly, Das (2012) explores the challenges faced by micro and rural enterprises, particularly issues related to market access, credit, and technology. Kumar (2021) also highlights the significant hurdles women entrepreneurs face, such as limited financial resources and the challenge of balancing work and family responsibilities. These constraints limit their ability to scale their businesses and restrict their participation in the broader economy. To address these challenges, the studies suggest that improving access to finance, offering skills development programs, and providing managerial training are key interventions needed to support the growth of entrepreneurship in North East India.

Several studies point to the crucial role of government programs and policies in fostering entrepreneurship in North East India. Kumar (2023) highlights initiatives like

the Northeast Entrepreneurship Development Scheme (NEDS) and the Northeast Venture Fund (NEVF), which provide financial support and resources to aspiring entrepreneurs. These initiatives are aimed at empowering local entrepreneurs and promoting sustainable business development. Settigar (2012) also discusses the positive impact of government and NGO-led programs, such as RUDSETI, which have successfully trained entrepreneurs and helped them establish businesses. However, Deb (2018) argues that the entrepreneurial ecosystem in North East India remains underdeveloped, primarily due to a lack of cohesive support systems. He suggests that government policies should focus on improving infrastructure, enhancing skill development, and fostering entrepreneurship as a central pillar of economic growth. According to Timungpiand Chanu (2017), there are number of challenges faced by women entrepreneurs such as limited access to finance, societal constraints, and balancing business with family responsibilities. The paper suggests strong government initiatives and support systems in fostering women entrepreneurship. Studies of Mahanta (2023) and Agarwal (2018) also highlight several challenges of women entrepreneurs of North-East India. The summary of the review of Literature Related to Entrepreneurship Development in North East India is shown in Table 2.3.

Table 2.3. Summary Review of Literature Related to Entrepreneurship Development in North East India

Sl No	Author & Year	Main Objectives	Research Methodology	Major Findings
1	Tayang (2024)	To identify future entrepreneurial actions for tribal farmers and to explore the potential for agri-entrepreneurial activities .	Area of research : Mishmi Hills of Arunachal Pradesh Data Collection method: open-ended questionnaire; Approach used: A triangulation approach to analyze the potential	The study identified ten key entrepreneurial actions; Agro-tourism emerged as the top choice; There is a significant gap between agricultural entrepreneurship potential and the current state of MSMEs; proper policies and training programs are necessary to empower tribal

			ventures .	farmers in agriculture and related sectors.
2	Karthik <i>et. al</i> (2023)	To identify various opportunities available in the floriculture industry in the North East region of India, focusing on how these can be leveraged for entrepreneurship development and highlight the challenges faced by entrepreneurs in the floriculture sector	Descriptive; Source of data: secondary; Based on review of existing literature, reports, and expert opinions	The NEI has geographical advantage and climate suitability, proximity to Southeast Asian countries enhances its export potential, allowing entrepreneurs to tap into international markets for unique floral varieties .Entrepreneurs face several challenges, including inadequate infrastructure, limited access to finance, and quality control issues.
3	Mahanta(2023)	Current status, scope and challenges of woman entrepreneurship in north east India.	Systematic Study: Secondary data and Literature review	There exists a gender gap in participating entrepreneurial activities in North east India. Lack of knowledge on the credit schemes, entrepreneurial skills and double burden of work owing to gender identity are found to be key limiting factors.
4	Kumar (2023)	To identify and review the current	Review of existing literature and	Entrepreneurship education (EE) helps tribal youth to

		tribal entrepreneurship education policies, schemes, institutions, and programs in Northeastern India	reports. Area covered: North Eastern Region of India.	recognize and utilize their unique cultural heritage and traditional skills. EE encourages youth to think beyond personal success and address community issues, fostering a spirit of social entrepreneurship that can lead to broader community improvements
5	Chouhan (2022)	To identify different elements that help women to become entrepreneurs.	Descriptive research; Statistical techniques used: %age, mean score, and t-test.	Personal motivational factors are the most influential for women entrepreneurs, ranking highest compared to economic and social factors. The challenges faced by women entrepreneurs are financial, social, managerial, and marketing.
6	Kumar (2021)	The status and challenges of women entrepreneurship in North East India	Descriptive study; Data used: Secondary data	In 2020-21, the share of NorthEast to the total number of India's women entrepreneurs was 2.16%. The constraints for the women entrepreneurs are lack of managerial skills, lack of cooperation from family members, mobility issues and ability to take risks.

7	Saikia (2022)	To study the characteristics of women entrepreneurs who own micro enterprises.	Descriptive, and simple random sampling method was adopted for selection of sample; Area of study: North East India.	Women entrepreneurs experiences economic, social, and family empowerment after starting their businesses.
8	Sarma (2020)	To compare between the women entrepreneurs of Aizawl and Itanagar with demographic variables as well as few variables of marketing.	Quantitative Study based on empirical data; Sampling used: Quota Sampling Primary data collection method: structured and open ended questionnaires	More similarity than differences among the women entrepreneurs in both the areas of study. The marketing aspect of any enterprises are considered important next to finance. Entrepreneurs prefer to produce demand based products with uniform pricing and do not have much appetite for promoting their products or services, more focus on the local markets.
9	Sing (2020)	To examine social entrepreneurship practices in North East India.	Descriptive; Data used: Secondary data;	Social Entrepreneurship in financing is philanthropic in nature. Social entrepreneurship adopted by government as well as NGOs have brought social change by working on unemployment, enhancement

				in socio-economic status.
10	Chyne (2020)	To study the nature of women entrepreneurship and identifying factor affecting performance of women entrepreneurs	Descriptive; Data used and collection method: Primary data through schedule; Area of Study: 3 districts of Meghalaya; Respondents: the first generation Khasi women entrepreneurs.	Majority of enterprises are from the service sector. Entrepreneurs struggle more on marketing of their goods and services compared to accessibility and infrastructural issues. Work experience, Skill development and access to loans are crucial for the success of the firms.
11	Deb, (2018)	To analyse the state and role of entrepreneurship in socio-economic development in the North East Region of India.	Case study method; Area of study: North East Region; Data Used: Primary data; Primarily data collection method: informal discussions with officials and individuals .	A growing trend of social entrepreneurship which can address socio-economic issues while promoting business initiatives is visible. There is a significant lack of support systems and an entrepreneurial ecosystem in the North East Region, which hinders the growth of entrepreneurship.
12	Borah, (2019)	The extent and potential of entrepreneurship in Northeast India.	Descriptive. Study area: six districts of Assam. Data Collection method: questionnaire.	The rural enterprise sector, with its high employment potential, can drive economic growth. Stakeholders must take proactive measures to support its development.

13	Kedrivai (2018)	To explore the initiatives that can enhance entrepreneurship development through the commercialization of traditional meat products	Descriptive; Data used: secondary; comprehensive review of existing literature Area of study: the North East Hill (NEH) region of India	Meat production in the NEH region, is higher than the national average. Traditional meat products are often produced locally and are not widely available in commercial markets. The commercialization of these products can enhance entrepreneurship and provide economic opportunities for local communities.
14	Agarwal, (2018)	To find out challenges of women micro-entrepreneurs and motivating factors for the women to take on entrepreneurship	Descriptive; Data used: both primary and secondary; Primary data collection method: questionnaires and interviews.	The main challenges are shortage of raw material shortages, lack of infrastructural development, etc. Women entrepreneurs often choose safer, traditional sectors.
15	Chanu & Haloi, (2017)	To examine the relationship between social background and entrepreneurial traits among women entrepreneurs	Descriptive and analytical; Data used: both primary and secondary data. Primary data collection method: personal interviews. Statistical method used: descriptive	There is no relationship between social background of women entrepreneurs and entrepreneurial traits among women entrepreneurs of the study area. Women entrepreneurs of the study area need training, financial support, marketing network to market their products.

			statistics, Spearman correlation	
16	Chakravarty, (2017)	To study the scope and potential for entrepreneurship in Northeast India in the context of trade in North East India with South East Asia	Explanatory study Data Used: secondary data,	To benefit from cross-border trade, regional industries must develop export-oriented goods and establish processing units for competitive international markets. Strengthening infrastructure, including strategic roads, Integrated Check Posts, and border trade points, is essential.
17	(Solo & Nagi, 2017)	To study the role of private agencies in assisting potential entrepreneurs in North East India, and to identify the prospects for entrepreneurs in North East India with the effective implementation of India's Act East Policy.	Data used: both primary and secondary. Primary data collection method: personal interviews and questionnaires	NGOs play a crucial role in supporting youth and tribal communities to embrace entrepreneurship. Industrialization in NEI should leverage indigenous resources and local skills for sustainable development, emphasizing eco-friendly practices. Local capacity building can enhance the region's potential, facilitating the entry of specialized products into the international market.

	Timung pi& Chanu (2017)	To examine the emergence of women entrepreneurship ventures in India, the factors driving their growth, and the challenges they face.	Descriptive and analytical approach using secondary data from reports, journals, and government publications.	Women entrepreneurs are increasing in number, especially in urban and semi-urban areas however, they still face systemic and cultural barriers. Some of the challenges faced by women entrepreneurs are: Limited access to financial resources, Gender bias and social stigma ,Lack of family support, Balancing business and home life.
18	Chakra barty (2016)	To study the total employment, output and total fixed investment in MSME	Empirical research; Area of study: North East India; Data used: secondary; Data analysis method: Fixed Effect Panel data model to capture the impact of the variable that vary over time by using binary variables.	MSME sector has contributed significantly towards the growth of entrepreneurship in North Eastern states of India. The MSME Sector has been able to create employment opportunities within the sector but it has failed to absorb the unskilled and semi-skilled labour forces.

19	Das, (2014)	To study the problems faced in growth of rural entrepreneurs in NER.	Descriptive; Data used: Both Primary and secondary; Primary data collection method: personal interview.	Rural entrepreneurship is the answer to removal of rural poverty in India, however, most of the rural youth do not think of entrepreneurship as a career option.
20	Sorokh aibam, &Thai mei (2012)	To analyse the relationship between entrepreneurship development and employment in NEI.	Type of study: Comparative ; Area of study: 3 states of North East India (Assam, Manipur and Meghalaya); Data used: Secondary; Main source: Statistical handbook of those states considered.	The number of enterprise and number of employments are varied from one state to another. Assam has the highest number of enterprises and employment and Manipur has the smallest number. The most probable reason is poor transport and communication facilities and insurgency problem.

Source: compiled from literature

2.5. Review of literature related to Awareness of ADP among entrepreneurs of Northeast India

Sarmah *et al.* (2021) explored the impact of awareness on entrepreneurial development in Assam's aspirational districts. The study adopted a quantitative research design involving structured surveys across three districts in Assam which are Baksa, Dhubri, and Darrang. The findings of the study reveal that entrepreneurs who are exposed to targeted awareness drives are more likely to apply for financial support schemes and training programs. A study which was conducted by Borah *et al.* (2022) to investigate awareness levels of rural youth about ADP initiatives, focusing on three aspirational districts in Assam (Barpeta, Goalpara, and Hailakandi) revealed that youth participants who engaged in awareness programs demonstrated a higher participation

rate in ADP-supported skill development initiatives and vocational training programs gained better acceptance when supported by awareness drives in local dialects. The study employed a mixed-method approach combining surveys and focus group discussions. According to the study, increased awareness fostered greater trust in government institutions, ultimately enhancing long-term entrepreneurial engagement. Kashyap *et al.* (2022) examined awareness levels of ADP among women entrepreneurs in Mizoram's rural areas. The study revealed that social networks like self-help groups (SHGs) played a critical role in disseminating information about ADP initiatives, ultimately increasing participation rates among female entrepreneurs by 30 %. A study on ADP's awareness among tribal entrepreneurs in Arunachal Pradesh which was conducted by Gogoi & Dutta (2023) reveals that lack of access to digital information platforms is a key barrier to awareness. The study recommended strengthening awareness campaigns through culturally adapted communication strategies and local language-based interventions. Das & Barman (2022) analysed ADP awareness in Meghalaya's rural districts, emphasizing the role of local governance institutions. The study found that entrepreneurs who attended awareness sessions conducted by the government had significantly higher participation in government programs compared to those who relied on informal networks for information.

2. 6. Research Gap

From the literature review, it is revealed that ADP being a recent area, launched in 2018, studies related to ADP are minimal. While there are some studies and reports on the Performance Assessment of ADP in the sectors and data points that are a part of the ADP portal itself, a limited number of Case studies and impact assessments of ADP in some sectors only are found. There is hardly any documented work on the long-term impact of ADP on sectors related to Enterprise Development, Micro, Small, and Medium Enterprises Development.

It is also revealed from the review that a sizeable number of studies are found on the various facets of entrepreneurship development throughout the country and also specific to North East India. Few studies related to the awareness of entrepreneurs about ADP are found in the existing literature, however, any study considering all the fourteen aspirational districts of the North East India is not found in the existing literature. There

is hardly any documentation or related study on the relationship between ADP and Entrepreneurship Development in the 14 Aspirational Districts of North East India.

Further, it has also been revealed that researchers have applied different research designs in studies related to entrepreneurship development. The most widely used research design is descriptive. Studies on Aspirational Development Programmes (ADP) and their impact on entrepreneurs are also found to be very limited at this moment; hence, methodologies to be used to study the impact of the Aspirational District Programme on Entrepreneurs and a standard questionnaire which can be used for the present study are not available in the literature. Hence, the present study is an attempt to fill up the existing research gap.

2.7 . Research Methodology

This section presents an overview of the research methodology applied in the study. It includes research approach, research design, population, sampling, statistical techniques considered for data analyses, questionnaire design , mode of data collection and profile of respondents. Results of both the Reliability and Validity of Questionnaire are also presented in the chapter.

2.7.a. Research Approach and Design:

Quantitative research approach is applied in the present study.

The study attempts to find out the extent of implementation of ADP in Aspirational Districts as well as examine the state of MSME based entrepreneurship in the study area. Further, the study also attempts to ascertain the awareness level of ADP among the entrepreneurs and measure the impact of APD on entrepreneurs of the study area. Hence, both descriptive and correlational research designs are followed in the present study.

Descriptive research design is adopted to describe the current situation of MSMEs in the study area and ascertain the awareness level of ADP as well as the impact of this programme on entrepreneurs.

The correlational research design is adopted to measure the relationship between the variables like demographic profile of respondents and level of awareness, nature of enterprise and volume of employment generation etc.

2.7.b. Universe, Population and Sample distribution:

Universe: Owners of Registered MSME in Aspirational Districts of North East India: **46920**(as of December 2023) and Nodal Officers of Aspirational Districts of North East India: 14

Population: Owners of Registered Micro Enterprises in Aspirational Districts of North East India: **46168**, Nodal Officers of North East India: 14

Number of Aspirational Districts of North East India: **14**

Sample Size: **385**

Sample Unit: (a) Micro Entrepreneur (b) Nodal Officer

Sample size Calculation for Micro Entrepreneurs: Cochran's sample size determination formula was used to determine the sample.

Here,

$$n = \frac{Z^2 \cdot p \cdot q}{e^2} = \frac{(1.96)^2 \cdot (0.5) \cdot (0.5)}{(0.05)^2} = \frac{(3.8416)(0.25)}{0.0025} = (384.16) \approx 385$$

Where, $p=0.5$, (95% conf. level), $e=5\%$, $Z=1.96$

Sample unit: micro-entrepreneurs

Sampling design:

- (a) Census method for first Objective : Since there is one nodal officer in each Aspirational District, all are considered.
- (b) Two-stage sampling for objectives number two, three, and four ;
 - a. 1st stage: selection of micro-enterprises from the total population of MSME
 - b. 2nd stage: proportionate distribution of sample amongst the Aspirational Districts of the study area.

(c) Sampling method and sample unit selection: A convenient sampling method was applied, however, the sample size of each aspirational district was distributed proportionately.

The sample size of each district is shown below in Table 2.4.

Table 2.4 : Distribution of Sample size based on Population

S.No	Name of District	Population	Sample Size	S.No	Name of District	Population	Sample Size
1	BAKSA	3739	31	8	HAILAKANDI	3786	32
2	BARPETA	8617	72	9	KIPHRIE	642	5
3	CHANDEL	1178	10	10	MAMIT	738	6
4	DARRANG	8293	69	11	NAMSAI	100	1
5	DHALAI	1930	16	12	RI BHOI	1533	13
6	DHUBRI	6233	52	13	SORENG	72	1
7	GOALPARA	5444	45	14	UDALGURI	3862	32
	Total						385

Source: Researcher's own calculation based on MSME data supplied by the DICC's

Though determined the sample size is 385, the present study considers 373. Since 12 number of respondents didn't fill up of all the required information, the researcher does not consider those cases. Hence, the number is arrived at 373. The district wise distribution of respondents/ sample for the study is shown in table 2.5

Table 2 5. : Distribution of Respondents based on the questionnaire collected

S.No	Name of District	Respondents	S.No	Name of District	Respondents
1	BAKSA	31	8	HAILAKANDI	30
2	BARPETA	72	9	KIPHRIE	4
3	CHANDEL	9	10	MAMIT	6
4	DARRANG	69	11	NAMSAI	1
5	DHALAI	12	12	RI BHOI	10
6	DHUBRI	52	13	SORENG	1
7	GOALPARA	45	14	UDALGURI	31
Total					373

Field survey

2.7.c. Data Collection Design:

Both primary and secondary data are used in the present study. The primary data were collected by applying both an interview schedule and a questionnaire. For objective one, data were collected from the nodal officers of all the ADP; for objective two, the data were collected directly from the records of respective DICCs and for objective three & four, questionnaires were distributed to the micro-entrepreneurs.

2.7.d. Questionnaire Construction

A structured interview schedule and a questionnaire containing both open and close-ended questions were considered. There are two parts to each question set. The first part is related to the profile of respondents, and the second part is related to the information required for the research objectives. A total of 8 (eight) questions related to the profile of entrepreneurs and 85 questions (in the form of statements) were asked to the respondents. To measure the level of awareness of ADP, 4 point scale was used (Not at all aware, Somewhat aware, Aware-3, and Highly Aware- 4) and to measure the impact, the respondents were asked to rate from 1 to 5 where 1is not at all, 2-Slightly,3-Moderately, 4- Significantly and 5-To large Extent. Open One open question was given to the respondents to put any other comments. The interview schedule and questionnaires are attached herewith (see annexure 1 & 2).

2.7.e.Statistical tools and software used for analysis:

A. Data analyses for objectives

- (a) For objective 1, descriptive statistics: tabulation, simple %age, mean and standard deviation are used.
- (b) For objective 2 and 3, both descriptive and inferential statistics are used. Tabulations both simple and cross tabulations, line graph, both average and compound annual growth rate are used.

B. To test Hypotheses

To test the hypotheses in chapter 4, non-parametric statistics- Kruskal Wallis Test and Mann-Whitney U test are used. These tests have been considered after conducting the normality test. In Chapter 5, since the data follow normal

distribution, parametric statistics – One way ANOVA and Pearson Correlation are used (the test results are shown in Chapter 5).

C. To Check the Normality and Reliability

(a) Both Kolmogorov-Smirnov and Shapiro-Wilk Test are used for conducting the normality test. The test results are shown in different chapters.

(b) Cronbach's Alpha is considered for checking the reliability of data. (the result is shown in table 3).

D. Software Used for data analysis

Both IBM SPSS Statistics 20 and Microsoft Excel have been used for data analyses.

2.8. Reliability Test Result

The reliability test of the questionnaire was also conducted and the results are shown in Table 2.6; here, the Cronbach's Alpha result is found to be .841 which shows a high level of internal consistency.

Table 2.6: Reliability Statistics Result

Case Processing Summary			
		N	%
Cases	Valid	354	94.9
	Excluded ^a	19	5.1
	Total	373	100.0
a. Listwise deletion based on all variables in the procedure.			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	
.841	.789	84	

2.9. Profile of Respondents

The profile of Sample entrepreneurs who have been considered for the present study is shown in Table 2.7. as mentioned, the total sample considered for the present study is 373. Out of the total respondents, 66.2 % of the total respondents operate Manufacturing-based micro-enterprises and 33.8 % of the total respondents operate Service-based micro-enterprises. The gender-wise classification shows that 71 % of the total respondents are male entrepreneurs and 29 % of the total respondents are female entrepreneurs. Regarding the social category of the respondents, 68.6 of the total

respondents belong to general category, 16.4 % of the total respondents belong to Scheduled Tribe (ST) category, which is followed by the entrepreneurs belonging to Other Backward Classes (OBC) sharing with 9.6 % of the total respondents and the least is from Scheduled Caste (SC) which share 5.1 % of the total respondents. From the profile of the respondents, it can be revealed that majority of the entrepreneurs which is considered in the present study are male entrepreneurs and majority of sample entrepreneurs belong to general category. (The details of the overall ownership pattern of MSMEs of the study are shown in Chapter 4).

Table 2.7 .Profile of Sample Respondents

Nature of Enterprise owned	Frequency	percentage	Valid percentage	Cumulative percentage
Service	126	33.8	33.8	33.8
Manufacturing	247	66.2	66.2	100.0
Total	373	100.0	100.0	
Gender	Frequency	percentage	Valid percentage	Cumulative percentage
Male	265	71	71.0	71.0
Female	108	29	29.0	100.0
Total	373	100.0	100.0	
Caste	Frequency	percentage	Valid percentage	Cumulative percentage
Gen	256	68.6	68.6	68.6
OBC	37	9.9	9.9	78.6
ST	61	16.4	16.4	94.9
SC	19	5.1	5.1	100.0
Total	373	100.0	100.0	

Source: field survey

The year of establishment of enterprises, which were reported by the respondents, is shown in Table 2.8. The highest number of establishments (12.9 percentage) is found to be in the year 2021. The number of entrepreneurs who have joined entrepreneurial ventures after the implementation of ADP is found to be higher among the respondents. Out of 373, a total of 219 entrepreneurs, which is 58.7 percentage of the total entrepreneurs considered, have established their enterprises after the implementation of ADP. It is also revealed from the field survey that 31.9 percentage of the total enterprises (119) were established during 2007-2017. The remaining were established before the enactment of the MSME Act 2006. There is one

entrepreneur who established the enterprise in 1960. It is also revealed from Table 2.8 that 11 enterprises were established before 1991.

From the above findings, three points can be derived:

- (a) In the study area, the majority of the micro-entrepreneurs have emerged in the post-ADP;
- (b) More than one-third of the total enterprises were established between 2007 to 2017.
- (c) Some of the micro enterprises were established before the adoption of the new economic policy of 1991, which was based on liberalisation, privatisation, and globalisation.

Table 2. 8. Year of Establishment of Enterprises

Year	Frequency	Percent	Year	Frequency	Percent
1960	1	.3	2006	4	1.1
1970	1	.3	2007	2	.5
1973	1	.3	2008	1	.3
1975	1	.3	2009	8	2.1
1985	3	.8	2010	7	1.9
1987	1	.3	2011	9	2.4
1988	1	.3	2012	14	3.8
1990	2	.5	2013	4	1.1
1991	1	.3	2014	10	2.7
1997	1	.3	2015	17	4.6
1998	1	.3	2016	23	6.2
1999	1	.3	2017	24	6.4
2000	3	.8	2018	35	9.4
2001	3	.8	2019	42	11.3
2002	1	.3	2020	39	10.5
2003	1	.3	2021	48	12.9
2004	4	1.1	2022	33	8.8
2005	4	1.1	2023	22	5.9

Source: field survey

2.10. Limitation of the Study:

While this study attempts to provide valuable insights into the impact of the Aspirational Districts Programme (ADP) on entrepreneurship in North East India (NEI), certain inherent limitations are acknowledged. These limitations stem from the scope of data collection, methodological constraints, and the evolving nature of policy interventions, which are common challenges in research of this scale.

One key limitation is that the study focuses exclusively on registered micro-enterprises, thereby excluding unregistered and informal businesses, which form a substantial part of the entrepreneurial ecosystem in NEI. While the sample size of 373 respondents is statistically sound, it represents only a fraction of the total MSME population, and some districts have relatively smaller sample sizes, limiting cross-regional comparisons. Additionally, convenience sampling was applied, ensuring practical accessibility but potentially influencing the representation of businesses that are more actively engaged with government initiatives.

Furthermore, the study is based on self-reported data collected through structured questionnaires, which, while systematically designed, may be subject to social desirability bias. Entrepreneurs' perceptions of ADP's impact are valuable indicators, but, they do not replace objective business performance metrics such as revenue growth, profit margins, and employment generation. Given the dynamic nature of ADP and evolving government interventions, the study presents a snapshot of current trends rather than long-term policy outcomes.

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