



Role Of Ngos In Promoting Sustainable Livelihood Among Women Agripreneurs: A Case Study Of Sesta

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Abstract: Numerous non-governmental organisations (NGOs) in India are addressing the issue of rural livelihood sustainability, particularly in the agricultural sector. These non-governmental organisations (NGOs) seek to empower rural populations, predominantly women farmers, who face problems as a result of traditional norms, limited options, and a lack of resources. The main purpose of the study was to recognize the programs undertaken by SeSTA to promote livelihood sustainability and to find out how the NGO is promoting sustainable livelihood among women agripreneurs through their interventions. A single case study was adopted to achieve the objectives of the study. The findings suggested that the NGO played an important role in achieving livelihood sustainability, mainly in the face of climate change and changing agricultural dynamics. The organisation is training rural communities, encouraging them to embrace innovative and sustainable practises and, as a result, improve their assets. While success stories are emphasised, it is noted that NGOs such as SeSTA deserve recognition for their emphasis on capacity building and knowledge enrichment, allowing women to become self-sufficient by using innovative techniques to intensify women's resource base, with a focus on capital asset improvement. Transitioning from traditional agricultural practises to sustainable ways has significantly reduced vulnerabilities in the focus area of the study. The study is a novel direction towards understanding the linkage between entrepreneurship and sustainable livelihood and especially for women; where there is a requirement of more research and evaluation required to understand to what extent agricultural entrepreneurship can impact the livelihood of women in the long term.

Index Terms - NGOs, Sustainable Livelihood, Agripreneur, Women, Community Institutions, Case Study

I. INTRODUCTION

India is an agrarian and multi-crop society where 54.6% of the population is dependent on agriculture and its associated areas for their livelihood (Ministry of Agriculture & Farmers' Welfare, 2021). With nearly 61% of the total land in India utilised for agricultural purposes (World Bank, 2020), It is time to shift from agriculture to agripreneurship, which will lead to employment and improved livelihoods. However, there is still an absence of access to economic benefits and information in rural areas, which is where NGOs step in to provide their services. The government and private sectors have worked to improve rural areas, but much remains to be improved. NGOs or non-governmental organizations have been working in the developmental sector in India since the 19th century and since then, recent years have seen them shifting focus from developmental activities to sustainable livelihood activities (Pegu, 2013; Singh & Nain, 2016). Sustainability is essential due to rising issues such as food insecurity, natural disasters, diseases, and unemployment. The Sustainable Livelihood Framework was formulated to alleviate poverty in rural areas by enhancing assets and allowing individuals to recover from shocks and stress. NGOs have come up with initiatives to ensure

livelihood sustainability in rural parts, predominantly in the agricultural sector, as agriculture and its allied activities make up 54.6% of the total workforce in India, with 40.67% of the workforce being women (Ministry of Agriculture & Farmers' Welfare, 2021).

Non-Government Organisations or NGOs are entities that are independent of the government and are generally non-profit entities that work on societal issues. According to the World Bank, NGOs are private entities that have attained private player status because of their exclusion of government officials in their policy-making process and membership (Pandey, 2019). NGOs are also a group of individuals that have organised themselves as a legal body to provide social services or rural development through several programs (Pegu, 2013). According to Bhaker, (2014), NGOs are an important part of development in India, known as the 'Third Sector'. The first voluntary efforts were shown by Christian Missionaries in the early 19th century. Post-independence, NGOs became prominent and their activities depend on the core principles upon which they are formed. They operate on different levels, starting from the grassroots level, national level, and even on an international scale. Their activities depend on funding from external sources or from a group or an association from citizens. (Pegu, 2013). Non-governmental organisations are an important part of India's society, with 3.2 million registered NGOs operating in different states. NGO Darpan has 1.6 Lakh registered NGOs, with 40,869 in agriculture, 29,375 in animal husbandry, dairying, and fisheries, and 24,521 in food processing (NGO Darpan, 2022). The Indian government is struggling to meet the needs of various segments of society, and NGOs have played an important role in mobilising physical and human resources. This has led to the Central and State governments seeking assistance from NGOs to upgrade the process of development. NGOs focus on poverty eradication, human rights violations, capacity building for self-help, and advocating policies that support disadvantaged communities based on their vision and mission (Banakar et al., 2018; Mukherjee, 2009; Surudhi & Jayakumar, 2018). NGOs are working to improve the competencies and resources of rural communities, particularly rural women farmers. However, poverty, lack of exposure to modern farming methods, inefficient marketing channels, and a lack of training continue to impede women from pursuing agripreneurial activities. Seven Sisters Development Assistance is an organisation in Karbi Anglong, Assam that is working to promote livelihood sustainability through its unique methods and tactics, such as handholding and training, natural resource management, and women's capacity building. This study, therefore attempts to assess the effect of non-governmental organisations in the promotion of viability of livelihood among women.

The term "Sustainable" denotes a person's capacity to provide for themselves in the long run. De Haan defines it as a person's ability to manage with and recuperate from stresses and shocks and sustain or boost their capabilities, assets, and activities both in the present and in the future. The theory was developed by the Brundtland Commission on Environment and Development in 1987 and has since become widely accepted (De Haan, 2000; Zhang et al., 2019). In 1992, the concept underwent an expansion by United Nation's Conference on Environment and Development, with a broader aim for reducing poverty, therefore, the concept of sustainable livelihood enables a researcher to organise the complex issues that pose a threat to the less privileged section of the society (Scoones, 2015). The sustainable livelihood approach was endorsed in 1992 by Chambers and Conway, Scoones and Ashley, and Carney, and is now adopted by individual researchers, organisations, government bodies, and NGOs (Zhang et al., 2019). The Sustainable Livelihood Approach (SLA) is a way to think about developmental activities to enhance the way of the vulnerable section of society (Serrat, 2017). It helps to articulate developmental actions that are people-centric, responsive and hands-on, dynamic and sustainable (Scoones, 2015). SLA is not a cure, but it helps people take realistic steps on their own. It draws emphasis on the potential of the people to impact the results of their means of livelihood through their networks, skills, and access to more material and financial resources (Ashley & Carney, 1999; De Haan, 2000).

The actors of the SLA consist of capital assets, vulnerabilities, policies and institutions and strategies and outcomes (Ashley & Carney, 1999; Serrat, 2017). The term "Capital" in this aspect is used at par with other terms such as "asset" and "resource" (De Haan, 2000). Different households have diverse access to assets. The five capital required for achieving sustainable livelihood are: human capital consists of education, nutrition, capacity to adapt and work, health, skills, and knowledge; social capital includes a platform for decision making, leadership, network, and connection; natural capital includes property, harvest, marine resources, trees, and forest products, minerals; physical capital includes infrastructure, technology, and tools, and financial capital includes savings, wages, loans, or credit money stored in a piggy bank. (Ashley & Carney, 1999; De Haan, 2000; Serrat, 2017). Vulnerability is uncertainty in the wellbeing of the individual. It has two components: external shocks and stresses (diseases, natural disasters, conflicts), seasonality such as employment opportunities and stresses such as technological trends, environmental, governance. Shocks are violent and often come in an unexpected manner, while stress is less violent but can last for a longer period of time. Some examples of shocks include environmental shocks, economic shocks, drought, and politics.

Institutions are structures that set up policies that can grant access to resources. The laws, rules, system, operational arrangements, social customs, and practises that govern how institutions run are all included in the concept of processes. Process thus, transforms one asset into another. The intention of a strategy is to achieve certain goals which can enhance assets. Potential outcomes can be increased income, well-being, reduction of vulnerabilities, better food security, and sustainable usage of capitals. Strategies or coping strategies can also stem from wanting to come up with safety mechanisms from shocks and stresses.

The Indian economy depends on agriculture and adjacent industries for raw resources and employment. The advent of the global free market has spawned a new industry called "Agripreneurship," which is based on people's need to manage their own businesses (Dhingra et al., 2018; Parambil, 2016). Dollinger, 2003 defines entrepreneurship in agriculture as the 'creation of organisations for the purpose of growth or gain under conditions of risk and uncertainty in agriculture' (Parambil, 2016). Farmers have taken up the responsibility to supply value-added agri-products despite constraints such as marketing linkages and the emergence of new technologies etc. These 'agripreneurs' have shown that given a chance they can transform Indian agriculture to meet emerging needs (Parambil, 2016). Dabson and Markley, 2010 define agripreneurs as 'an individual whose main commercial activity is agriculture or allied sectors' (Carr & Roulin, 2016; Parambil, 2016). Brahma & S. Tripathi, 2020 defines "Agripreneurs" or "Agri-entrepreneurs" as those individuals whose "main business is agricultural-based or agriculture". Sudharani defines agripreneurship as a "generally, sustainable, community-oriented, directly-marketed agriculture. Sustainable agriculture denotes a holistic, systems-oriented approach to farming that focuses on the interrelationships of social, economic, and environmental processes" (Carr & Roulin, 2016; Uplaonkar & Biradar, 2015). The main activity of an agripreneur is to add value to agricultural products by starting his/ her own business, changing the way of conducting work, and getting involved in activities that will increase his or her agricultural output (Vidani et al., 2017). Agripreneurs are new-age farmers who bring together farming and agriculture with business. Some add value to the products they grow, while farmers produce keeping in mind their consumption requirements and the MSP (minimum support price). Farmers lack the entrepreneurial drive to turn their activities into a business proposition, and only a small fraction try new crops, adopt new technologies, and process activities to make a profitable business (Gupta, 2017).

Agripreneurship activities are mainly categorised into inputs, production, processing, trading, management and marketing (Brahma & S. Tripathi, 2020). Therefore, an agripreneur is an individual who works within the boundary of a food system, not necessarily in a rural location that believes there is a market opportunity to directly produce foods like vegetables, meat, fish, and grains using new and sustainable production techniques (Carr & Roulin, 2016). Agricultural entrepreneurship is highly on the rise and it includes both farm activities and non-farm activities as well. Rural livelihoods are reliant directly or indirectly on agriculture, backyard animal husbandry, and small-scale fisheries. Entrepreneurship ventures taken on this are a means to diversify income generation activities of the rural communities (Kumari & Kumar, n.d.). Where there are drawbacks in rural communities such as absence of awareness amongst the people, lack of will to try new things, lack in the availability of services, reluctance and ignorance; NGOs are therefore seen to bridge these gaps by foraging into areas through several developmental activities for this sector (Dhingra et al., 2018).

Women in rural areas are in possession of abundant resources hence they are capable of taking up several activities such as production and processing activities (Kumari & Kumar, n.d.). Women are also inclined to take up ventures in homestead farming activities (Nandan & Kushwaha, 2017). Some of the complications encountered by women agripreneurs include dearth of infrastructure, paucity of funds, problems in marketing products including intense competition from large-scale units, problems in management, technological illiteracy or lack of technical know-how, low skill level and inaccessibility to procure raw products (Kumari & Kumar, n.d.). NGOs have improved the social and personal capabilities of women by increasing social interaction, problem-solving, market development, socio-economic opportunity, social equality, decision-making activities, family development, and community development (Islam & Sultana, 2005; Kumari & Kumar, n.d.). For example, the NGO AWAKE has trained 10,000 women in Karnataka, and other NGOs such as ASCENT and RUDSETI also provided EDP programmes. The before and after analysis exhibited a substantial surge in asset value and income of the women who took part in the training (A, 2016). Another example was found where, women in Hapur, Uttar Pradesh launched agribusiness ventures and NGOs provided mentoring and marketing to sustain them and increase farm incomes. This case study of five NGOs by Nandan & Kushwaha, 2017 in the district of Allahabad, found that since attending the training programs conducted by these NGOs, they have come up with their own micro-enterprises. Around 400-500 women have come up with their own enterprises after taking part in the training programs (Singh et al., 2016). The purpose of these trainings were to improve livelihood sustainable outcomes through enhancement of the available resources, uplifting the status of the destitute women by involvement in economic activities and

overall reap profits that were also at the same time ecologically sound (Banakar et al., 2018; Islam & Sultana, 2005).

However, in the present body of literature, we find that the relationship between agricultural entrepreneurship and sustainable livelihood has been adequately assessed; although there are studies trying to understand to what extent entrepreneurs have achieved livelihood sustainability. Especially for women agripreneurs; the evaluation on long-term viability of taking up entrepreneurship activities on their livelihood is yet to be exhaustively studied. This study, therefore is an attempt to fill this gap and contribute to the present body of the literature in the area. The main purpose of conducting the study was to identify the programs undertaken by SeSTA to promote livelihood sustainability and to understand the role of NGOs in promoting livelihood sustainability among women agripreneurs.

II. MATERIALS AND METHODS

In this present study, we adopted a case study method to get a detailed understanding of the various training programs conducted by the NGO SeSTA (Seven Sisters Development Assistance) to equip women with various techniques and skills in achieving livelihood sustainability. To get a comprehensive understanding of the NGO, a case study is perhaps the most suitable method (Bhaker, 2014). The case study methodology is a qualitative research method that allows a researcher to explore a phenomenon within its context. It also allows a researcher to understand an organisation, an individual, relationships, communities, or programs (Baxter & Jack, 2008). A case study usually has a single sample (Schoch, 2020) unless it is a multiple case study. A review of the literature was also conducted based on published literature on the said topic to provide a comprehensive understanding of the concepts undertaken for the study.

Data was collected by interviewing the executives of the NGO at the office of SeSTA and ASRLM1 (Assam State Rural Livelihood Mission) located at Diphu, Karbi Anglong, and the women beneficiaries from the clusters regarding the training programs and livelihood sustainability via phone calls and e-mails. Secondary sources include the annual report of the NGO for a comprehensive idea of the NGO. The NGO, SeSTA is currently working in one block that is Lumbajong Block, located 5-8 km from the district headquarter, Diphu under Lumbajong Block, where they are operating in three clusters; which are: Dhansiri, Rongkangthir, and Borlangpher. The NGO was selected based on the criteria for the study: sustainable livelihood, women agricultural entrepreneurs, and farmers. Since SeSTA was the only NGO that was working in livelihood sustainability as their core motive in the study area, the researchers excluded other NGOs from the study as it was inconsequential for fulfilling the aims of the study.

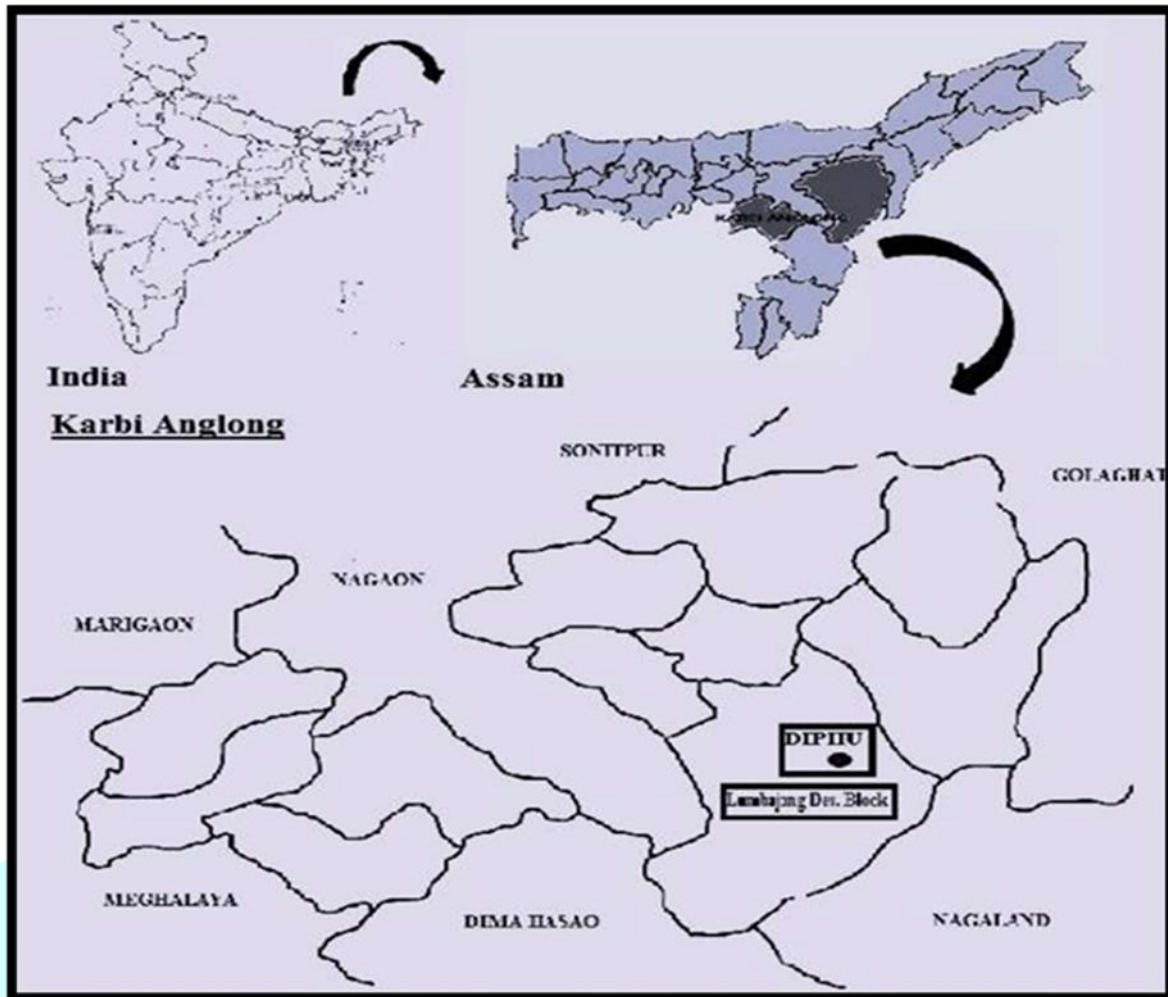


Fig 1: Map of the study area. From Composite Index of Anthropometric Failure (CIAF) among pre-school (2-5 years) tribal children of Assam (India) by Kramsapi et al., 2018, Human Biology Review.

III. RESULTS AND DISCUSSIONS

3.1 Various activities undertaken by the NGO for promoting sustainable livelihood

The North-Eastern part of India is home to SeSTA (Seven Sisters Development Assistance), an organisation that only works with women. They are currently based in Assam, Meghalaya, and Tripura, three different states. SESTA has worked with 71,270 households since its beginning, spread throughout 2,021 villages across 22 districts. With the establishment of self-help groups (SHGs), village organisations, producers' groups, and farmer producers' groups, the organisation hopes to mobilise women from low-income areas (SeSTA, 2022). As per their Annual Report for 2020-21 and 2021-22, women farmers from 32,810 households have adopted planned agricultural-based livelihood activities leading to higher yield and income (SeSTA, 2021). The programs are discussed below:

3.1.1 Livelihood Promotion- Financial Capital:

Agro-climatic conditions, a lack of farmland, declining livestock productivity, poor infrastructure, a lack of financial services, a dearth of capital, inadequate access to credit services, little to no access to markets, lack of financial services, lack of skill and experience, inadequate skill training, lack of technical backing and awareness, etc. are some of the problems that prevent livelihood diversification activities (Wondim, 2019). A review of existing literature on livelihood would provide a variety of justifications for why one needs a livelihood, such as "a livelihood is a means of gaining a living." (Chambers & Conway, 1992) or 'a combination of activities takes on to live and the resources used'. In rural areas, some of the key activities that are undertaken for livelihood include agricultural activities, farm labour, and small-scale enterprises (Scoones, 2009). This may appear to be a clear-cut distinction between the types of activities that rural communities engage in, but in practise, individuals frequently link many activities together into what is known as a portfolio of activities or a complex bricolage (Scoones, 2009).

Livelihood activities are, therefore, grouped into farm, non-farm and off-farm-based activities (Ellis, 2000). Because of the resources available in each home and the previously indicated division of livelihood activities, the organisation supports a variety of household projects that begin the livelihood of the women. The "Less Land model," which provides food security by improving paddy output through SRI, using the SCI

approach and cultivating vegetables all year long for cash income, are some major activities where SeSTA is achieving its objectives under the following division. The 'Animal Husbandry model' focuses on backyard poultry, piggery, and goat farming. For instance, raising pigs is a significant source of income for rural people in the area, but outdated methods of rearing, including letting them outside, make them more susceptible to infections and raise their mortality rate. SeSTA is therefore offering assistance in the form of cutting-edge scientific methods to assure income enhancement through piggery. Raising several fish species, including Rahu, Grass carp, and Common carp, helps pond farms generate cash during the dry season. Moreover, SeSTA encourages the establishment of handloom, mushroom, and spice businesses. Actions are often taken that are related to revenue generation, saving, and credit to strengthen the financial capital of farmers (Kusters et al., 2006). Livelihood activities are shown in Table 1 below:

Table 1: Livelihood Activities

Farm-based	Off-farm based	Non-farm based
Food security through: Increasing production of rice through System of Rice Intensification (SRI)	Enhancing cash income through: The animal husbandry model	Enhancing income through: Promotion of micro enterprises
Cash income through: Increasing production of crops through Systems of Crop Intensification (SCI)	Enhancing cash income through: vermicompost	

3.1.2 Organising Natural Resource Management by Improving Soil Health, Water Management and Conservation-Natural Capital:

The whole point of achieving sustainability is to enhance livelihood assets, while not diminishing the natural reserve base (Chambers & Conway, 1992). Hence, management of natural resources, viz., soil, air, and water so as to not decline the resource base is an important agenda for the NGO. The importance of natural resources cannot be stretched enough especially in communities where agriculture is the primary source of income, since it is vital for the well-being of the animals as well as the people (DFID, 2001). According to Kusters, 2006, programs that are related to physical access and control over target resources can be instigated to reinforce people's natural capital (Kusters et al., 2006). The NGO is focused on enhancing the natural capital through training provided on soil testing and soil health management, use of organic fertilisers such as vermicompost, application of organic manure and pesticides, promotion of organic and climate-resilient farming etc. For example, in the study area, an indigenous seed bank was started in associated with ASRLM in the month of February, 2022 to store indigenous seeds for natural farming. The seed bank has many varieties of species that are indigenous to the villages and are on the verge of extinction. This is also a step forward to preserve the species found locally and for further documentation of knowledge related to the locally available species. Some of the seeds available in the seed bank are ginger, maize, mustard oil seed, ladies' finger, bitter gourd, ridge gourd, etc.

3.1.3 Institution Building-Social Capital:

Social capital constitutes 'the quality of relationships among people' (De Haan, 2000). The development of agribusiness combines the other capitals—financial, natural, physical, physical, and human capitals—through social capital. The NGO focuses on bringing together women from different socio-economic backgrounds to mobilise them for further livelihood options through communal institutions solely consisting of women. These organisations serve as a forum for education, information exchange, emotional support, and a means of addressing socioeconomic problems. To earn income for the members and establish market connections, they are encouraged to raise livestock and manufacture agricultural goods. The upper body of the hierarchy, Farmer Producer Organisation, is a legal body run and owned by women which is involved in preparing business models, training, and governance. Social capital-based organisations support the creation of novel ideas, possibilities for construction, opportunities for collaboration, and access to financial resources, all of which contribute to a better standard of living (Muralikrishnan & Singh, 2018). There are different types of community organisations that are mobilised by SeSTA, which are shown in Table 2 below:

Table 2: Community Institutions in the Study Area

Type of Community Institution	Whether active in the study area?	Total	Total Members
Self-help group (SHGs): It is a group of 10-20 women from a similar socio-economic circumstance.	Yes	961	11.415 (Each SHG comprises of 10-20 women)
Village Organizations (VO): It is formed after the formation of SHGs and comprises of members of 10-15 SHGs.	Yes	NA	NA (Comprises of 10-15 SHGs)
Cluster Level Federations (CLFs): It is formed in close collaboration with ASRLM and includes of all the VOs in the block.	Yes	3 (known as Dhansiri Model, Atiripi and Teran clusters respectively)	NA (the three CLFs consists of 41, 38 and 39 villages respectively)
Producer Groups (PGs): This body is mobilized to produce agricultural and livestock products in order to earn profits for the members and facilitate market linkage.	Yes	16	800
Farmer Producer Organizations (FPOs): It consists of primary producers such as farmers, milk producers, artisans etc. to form a legal body. It includes all the PGs to facilitate in governance and decision-making.	No (In the process of formation)	NA	NA

3.1.4 Capacity Building- Human and Physical Capital:

The process of strengthening and developing skills, abilities, processes, and resources which are required to subsist and adapt in a fast-changing world is termed capacity building (UN, 2022). The human capital notion runs parallel to this one and conveys comparable concerns, such as strengthening rural populations' abilities, knowledge, creativity, and ingenuity in order to establish sustainable livelihoods. Low marketing skills, poor financial management, ineffective management, etc. are a few issues small enterprises encounter (Aladejebi, 2018). Physical capital, on the other hand, includes equipment, tools, and machinery (De Haan, 2000). SeSTA has been working to strengthen the governing bodies of the FPOs through practical training. This has included facilitating market linkages with other FPOs and marketing institutions, enabling crop insurance and farm mechanisation, and enabling financial linkages from banks, NABARD, etc. SeSTA has also promoted organic and sustainable cultivation, provided technical support for enhancing income, increased member inclusion, and strengthened the governing bodies of the FPOs.

Women are being trained by SeSTA in collaboration with the Assam State Rural Livelihood Mission to become "Community Cadres." These cadres are a group of women with a wide range of technical talents who are in charge of their community. 'Krishi Sakhis' also known as Community Agriculture Care Service Providers (CASP) are women who are trained in agricultural practices and they are required to provide extensive training to beneficiaries on SRI, SHG/ PG planning, seed sorting, and treatment, demonstrating how to prepare nurseries, transplantation, weeding, seeding in nutrition garden, the concept of seeding on horticulture, pit digging, plantation, intercultural operation, soil testing, application of organic manure, nutrients, and pesticides, yield assessment, preparing crop calendar, yield assessment, monthly planning and review and maintain records of expenses and income generated from the products. 'Pashu Sakhis' or Community Animal Care Service Providers (CASPs) are women trained animal husbandry practices such as training on livestock management (Feed preparation and Shed maintenance), livestock business planning, shed construction, deworming, castration, sty preparation, artificial insemination, concept seeding of fish management, feed management, and monthly planning and review. They then train other women beneficiaries. They are trained by veterinary departments from the local areas and experts in animal husbandry. Women cadres known as "Adhikar Sakhis" are trained to contact beneficiaries of various government programs and spread awareness about them. The cadres will facilitate access for women to get the benefits of the schemes. Table 3 below summarises the types of community cadres and their activities:

Table 3: Community cadres and their activities

Community Cadres	What they do
Krishi Sakhis	Trained and responsible for providing farm related services and building capacity on agricultural-related activities
Pashu Sakhis	Trained and responsible for providing clinical services and creating awareness on livestock related livelihood activities
Adhikar Sakhis	Trained to connect beneficiaries eligible for various government schemes.

3.1.5 Rights and Entitlement-Human Capital:

According to Department for International Development (2001), lack of education and ill health must be addressed to overcome poverty. Assistance related to access to information can lead to a strengthening of the human capital (Oleas, 2015). For the benefit of its population, the Indian government has proposed numerous legislations, such as MGNREGA. Individuals who are eligible tend to be unaware of the benefits because of little to no information in this regard. As a result, SeSTA is making sure to simplify the difficult procedure of granting the scheme's benefits to its recipients.

3.1.6 Financial Inclusion- Financial Capital:

Financial capital also includes having access to loan or credit facilities (De Haan, 2000). Acquiring credit access and loans lead to improvement in agricultural production activities (Oleas, 2015). The NGO has been supporting the beneficiaries in accessing financial services such as insurance, savings, and credit facilities to meet their financial needs.

To further highlight the impact of the activities of the NGO, we highlight two successful women from the study area:

Hasnu*, belonging to the Dimasa community in Dawjingphang village, Dhansiri stated that SeSTA's intervention has had a positive impact on her life, building her capacity and expanding her knowledge. She had been trained to diversify her income source through activities such as goat rearing, poultry rearing, and vegetable production. Being a part of an SHG has also made her secure in the fact that she can borrow money from the group and take credit from her SHG in case of emergencies.

Beypi**, a resident of Ramsing Hanse village before becoming a part of SeSTA, used to undertake small farming activities such as farming of black sesame seeds and rice, vegetables such as pumpkin, tomatoes, and spices, and backyard animal husbandry, such as piggery. However, she was only able to sell one pig in a year due to a lack of scientific knowledge on pig rearing. In 2018, she was selected as Pashu Sakhi under SeSTA and undertook scientific training in pig rearing. After the training, she spent Rs 12,000 in the construction of a pig sty and bought one piglet and, after three months, bought another. Now, she is able to sell around 2-3 pigs in a year, increasing her income and decreasing the mortality rate of the pigs through the scientific method. Currently, she has eleven piglets and two fully grown pigs ready to be sold and will be ready to be sold in 2-3 months. Apart from training on scientific pig rearing, she is also trained in the SCI and SRI methods of cultivation. Through the SCI method, she started her own horticulture in 2020 and has planned areca nuts in 4 bighas of land. Being a part of SeSTA had brought many changes in her life and she is now able to provide door-to-door training to other women in nearby villages. This has enabled her to teach others in this manner.

(* **Names modified for anonymity)

3.2 Interventions of the NGO and their Role in Promoting Livelihood Sustainability among Women Agripreneurs

Under this section, we seek to highlight the activities of the NGO by relating its areas of focus with the sustainable livelihood framework through each capital; viz., natural, human, social, financial, and physical capital. The following is shown in Table 4:

Table 4: Sustainable Livelihood and related activities with SeSTA

Capital	SeSTA's Focus Areas	Expected Activities	SeSTA's activities
Natural	Organising natural resource management by improving soil health, water management and conservation	Management, safeguarding and regulating of natural capitals: air, water and soil.	Training in soil health management and soil testing, organic farming, usage of organic fertilisers such as vermicompost and pesticides. Initiating a seed bank in the study area for preservation of indigenous species etc.
Human	Rights and entitlement, capacity building, livelihood promotion	Nutrition, health and access to information, skills, experience, knowledge, labour.	Awareness on several laws for the benefit of the citizens of India such as MGNREGA, maintaining nutrition of the individuals through nutrition garden. Capacity building through continuous training and evaluation of Krishi Sakhis, Pashu Sakhis, Adhikar Sakhis and members of the FPOs.
Social	Building and mobilisation of communal institutions	Building relationships, exchange of information, membership of formalised groups, connectivity and quality of relations among people.	Mobilising SHGs (Self Help Groups), Village Organization (VO), Cluster Level Federation (CLF), PGs (Producer Groups), FPOs (Farmer Producer Organisations) and continuously evaluating and monitoring their activities.
Financial	Financial inclusion, livelihood promotion activities	Income generation, credit savings, access to loan and transportation.	Insurance, savings and credit facilities through banks, NABARD etc. promotion of livelihood by increasing paddy production using SRI method, year-round production of vegetables through SRI for cash income, animal husbandry, pond farming and supporting of micro enterprises.
Physical	Assistance in building structures for income generating activities	Warehousing, equipment, tools, machinery and building structures required for income generating activities.	Assistance in building nurseries, pig sty construction, preparation of vermicompost unit etc.

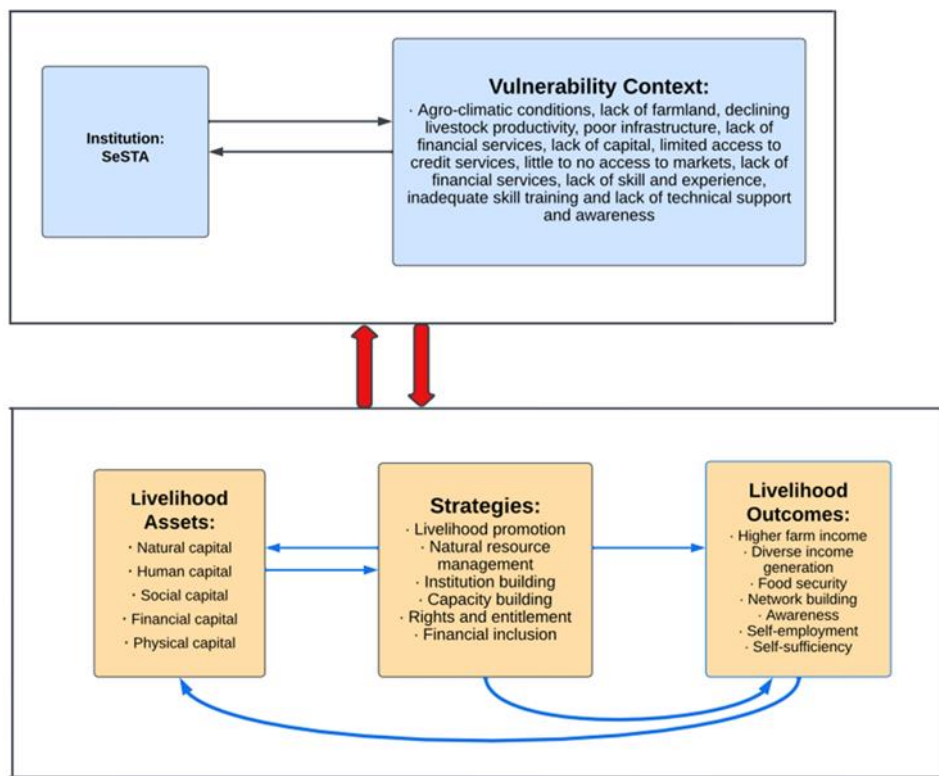


Fig 2: The Sustainable Livelihood Framework for the study (Source: Prepared by the authors)

IV. CONCLUSION AND RECOMMENDATION

The study, although limited to a single NGO, has given many insights into the inner workings of the NGO and their thrive for achieving sustainability. The findings of the study suggest that the NGO is committing to its original mission and vision in the project area. Greater effort and research are required to understand the impact of these programmes on the lives of the women. For instance, the impact of the programmes on the women in the long run require further investigation. According to Farrington, et al. (1993), favour long-term effects over short-term effects because the latter tend to disappear when an NGO stop providing support because they are sustainable. As one beneficiary mentioned that she “stopped production of vegetables as there were losses from non-salability”. The NGO has trained the women in various aspects such as management of natural resource base, livelihood promotion, building community institutions, building the capacity of the women, and making the women aware of matters relating to finance and legal rights. These programmes have enabled the women to network among themselves, build, and take up leadership roles. So, it is crucial to understand that after receiving training in various income-generating activities, are the participants able to foray on their own, or have they been phased out? And even if they are, it is still unclear as to whether the beneficiaries are still motivated or not to carry on the activities, especially for beneficiaries who have been part of SeSTA since the initial phase. Another important aspect is to understand whether sustainable agricultural practises have impacted the natural resources of the project area. For example, has it improved the overall soil quality of the project areas or whether the beneficiaries who have received training from the cadres are practising them in their day-to-day lives for the long term? Another thing that remains to be evaluated to be further is, whether the income-generating activities have had a significant impact on the economy of the region as opposed to the non-project areas of the NGO. The paucity of such information makes the achievements of the NGO unclear; although one has to note that the NGO is not responsible for changing the economic dynamics of the region entirely. In comparison to its counterparts in other project areas, since SeSTA is working in only one block in the area, there is still room for growth and an increase in its activities in the area in terms of reaching out to more women. The efforts of NGOs like SeSTA need to be appreciated for moving away from run-of-the-mill activities and focusing on developmental activities of the women in the region. Nonetheless, studying the before and after the impact of the programmes in the case of the efforts of NGOs on the capital assets of the beneficiaries remain a vital future direction for the study.

V. ACKNOWLEDGEMENT

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VI. REFERENCES

- [1] A, P. K. (2016). Role of NGOs in Women Entrepreneurship Development: A Grass Root Level Experience. *Amity Journal of Entrepreneurship*, 1(2), 44–58.
- [2] Aladejebi, D. O. (2018). The Impact of the Human Capacity Building on Small and Medium Enterprises in Lagos, Nigeria. *Journal of Small Business and Entrepreneurship Development*, 6(2), 15–27. <https://doi.org/10.15640/jsbed.v6n2a2>
- [3] Ashley, C., & Carney, D. (1999). Sustainable livelihoods: Lessons from early experience. Department for International Development.
- [4] Banakar, M. B., Tambakad, B. R., & Yatnalli, C. S. (2018). Role of NGOs' in Women Entrepreneurship Development- A Case Study of Haveri District. *International Journal of Innovative Science and Research Technology*, 3(8), 178–184.
- [5] Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544–559. <https://doi.org/10.46743/2160-3715/2008.1573>
- [6] Bhaker, S. K. (2014). Role of NGOs in Rural Development in India. *Journal of Business & Economic Policy*, 1(1), 93–109.
- [7] Brahma, M., & S. Tripathi, S. (2020). Indian Society of Agribusiness Professionals: Helping Agripreneurs Innovate. *Emerging Economies Cases Journal*, 2(1), 15–23. <https://doi.org/10.1177/2516604220920752>
- [8] Carr, S., & Roulin, A. (2016). An exploration of Agripreneurship Scope, Actors and Prospects (Issue June).
- [9] Chambers, R., & Conway, G. R. (1992). Sustainable rural livelihoods: practical concepts for the 21st century. In *IDS Discussion Paper* (Vol. 296).
- [10] De Haan, L. J. (2000). Globalization, Localization and Sustainable Livelihood. *Sociologia Ruralis*, 40(3), 339–365. <https://doi.org/https://doi.org/10.1111/1467-9523.00152>
- [11] DFID. (2001). The Sustainable Livelihood Framework.
- [12] Dhingra, G., Arora, N., & Panday, P. (2018). Role of NGOs in the Promotion of Agriculture. *Journal of Global Economy*, 14(4), 91–99. <https://doi.org/10.1956/jge.v14i4.500>
- [13] Ellis, F. (2000). The determinants of rural livelihood diversification in developing countries. *Journal of Agricultural Economics*, 51(2), 289–302. <https://doi.org/10.1111/j.1477-9552.2000.tb01229.x>
- [14] Gupta, S. K. (2017). How can farmers become entrepreneurs? *Inclusive Business*.
- [15] Islam, N., & Sultana, N. (2005). Role of NGOs in Empowering the Vulnerable Women: A Study on ACD. *Asian Affairs*, 27(4), 24–40.
- [16] Kramsapi, R., Singh, K. N., & Mondal, N. (2018). Composite Index of Anthropometric Failure (CIAF) among pre- school (2-5 years) tribal children of Assam (India). *Human Biology Review*, 7(1), 1–18.
- [17] Kumari, P., & Kumar, T. (n.d.). Opportunities, Roles and Prospect Challenges of Rural Entrepreneurs in Economic Development in India. *Dimensions of Agricultural Science*, 354–364.
- [18] Kusters, K., Achdiawan, R., Belcher, B., & Ruiz Pérez, M. (2006). Balancing development and conservation? An assessment of livelihood and environmental outcomes of nontimber forest product trade in Asia, Africa, and Latin America. *Ecology and Society*, 11(2). <https://doi.org/10.5751/ES-01796-110220>
- [19] Mukherjee, S. (2009). Women Entrepreneurship Development: The Catalytic Role of NGOs. *IUP Journal of Entrepreneurship Development*, 6(2), 21.
- [20] Muralikrishnan, L., & Singh, R. (2018). Social capital based Agripreneurship Models for Inclusive and Sustainable Development in India Social value system development about judicious use of Pesticides and other agro-chemicals and entrepreneurship among youth View project Development of Innovati. *Trends in Biosciences*, 11(18), 1–7. <https://www.researchgate.net/publication/335159642>
- [21] Nandan, S., & Kushwaha, A. (2017). Role of NGOs in Skill Development and Promotion of Micro-Entrepreneurship among Women: A Study of Allahabad District. *Management Dynamics*, 17(2), 38–50.
- [22] NGO Darpan. (2022). <https://ngodarpan.gov.in/index.php/home/sectorwise>
- [23] Oleas, S. E. C. (2015). Case study: A sustainable livelihoods analysis of a non-governmental organization working with quinoa producers in the province of Chimborazo, Ecuador.
- [24] Pandey, N. (2019). Role of NGOs in Promoting Women Empowerment: Evidence from Delhi based NGOs. *Journal of Development Research*, 11(4).
- [25] Parambil, G. D. (2016). Agripreneurship: A conceptual framework of agricultural entrepreneurship in India. *Bharat Mata Journal of Multidisciplinary Studies*, III(II), 64.
- [26] Pegu, A. (2013). Role of NGOs in Economic Development: A Case Study of Majuli. Assam University.

- [27] Schoch, K. (2020). Case study research. In *Research Design and Methods* (pp. 245–258). SAGE Publications.
- [28] Scoones, I. (2009). Livelihoods perspectives and rural development. *Journal of Peasant Studies*, 36(1), 171–196. <https://doi.org/10.1080/03066150902820503>
- [29] Scoones, I. (2015). *Sustainable Rural Livelihoods: A Framework for Analysis* (Issue October).
- [30] Serrat, O. (2017). *The Sustainable Livelihoods Approach*. Knowledge Solutions, Asian Development Bank, 21–26. <https://doi.org/10.1007/978-981-10-0983-9>
- [31] SeSTA. (2021). *SeSTA Annual Report 2020-21*.
- [32] SeSTA. (2022). *Annual Report 2021-22: Progressing Towards Sustainable Rural Development*.
- [33] Singh, R., Nain, M. S., Sharma, J. P., & Mishra, J. R. (2016). Developing Agripreneurship for Sustainable Farm Income: Action Research Developing Agripreneurship for Sustainable Farm Income: Action Research Study on Women Farmers of Hapur District, Uttar Pradesh. *Journal of Community Mobilization and Sustainable Development*, 11(1), 127–135.
- [34] Surudhi, M., & Jayakumar, N. (2018). Role of Local NGOs in promoting Agricultural Sustainability. *Indian Journal of Social Research*, 57(2), 217–222.
- [35] UN. (2022). *The Sustainable Development Goals Report 2022*. In United Nations publication issued by the Department of Economic and Social Affairs. <https://unstats.un.org/sdgs/report/2022/%0Ahttps://www.un-ilibrary.org/content/books/9789210018098%0Ahttps://www.un-ilibrary.org/content/books/9789210478878>
- [36] Uplaonkar, S. S., & Biradar, S. S. (2015). Development of agriculture in India through agripreneurs. *International Journal of Applied Research*, 1(9), 1063–1066.
- [37] Vidani, J., Jagruti, L., Institutes, K., & Plaha, N. (2017). Agripreneurship: A Reincarnation of Indian Agricultural Sector. *International Conference on Enhancing Economic Productivity and Competitiveness through Financial and Monetary Reforms*, SSRN Electronic Journal, 154–159. <https://doi.org/10.2139/ssrn.3840667>
- [38] Wondim, A. K. (2019). Determinants and challenges of rural livelihood diversification in Ethiopia: Qualitative review. *Journal of Agricultural Extension and Rural Development*, 11(2), 17–24. <https://doi.org/10.5897/jaerd2018.0979>
- [39] Zhang, C., Fang, Y., Chen, X., & Congshan, T. (2019). Bibliometric Analysis of Trends in Global Sustainable Livelihood Research. *Sustainability*, MDPI, 11(4), 1–28. <https://doi.org/10.3390/su11041150>

