Advances in Bioresearch Adv. Biores., Special Issue (1) 2024: 01-10 ©2024 Society of Education, India Print ISSN 0976-4585; Online ISSN 2277-1573 Journal's URL:http://www.soeagra.com/abr.html CODEN: ABRDC3 DOI: 10.15515/abr.0976-4585. SPL1.110

Advances in Bioresearch

# Women in Agriculture Entrepreneurship: A Systematic Literature Review

Anupama<sup>1\*</sup>, Nidhi Gupta<sup>1</sup>, Simran<sup>3</sup> and Prerna<sup>4</sup>

<sup>1</sup>School of Management, Geeta University, Naultha, Gohana Road, Panipat, Haryana, India 132107

\*Corresponding Author

Anupama

Asst. Professor, School of Management, Geeta University, Naultha, Gohana Road, Panipat, Haryana, India 132107

Mail id: anupamaaashi29@gmail.com

#### ABSTRACT

The agriculture sector provides several potentials for employment development, long-term growth, and women's empowerment. Academics and governments have both expressed an interest in women in agriculture entrepreneurship. The major purpose of this article was to perform a thorough systematic review of the literature to assess the current knowledge of agricultural entrepreneurship principles, agripreneurial possibilities, and obstacles that impact women's agripreneurial growth. The evaluation includes research articles that were indexed in the Scopus database and released between 2014 and 2023. Using the keywords "woman entrepreneurship in agriculture," "agripreneurship," "woman agripreneurship," and "agripreneurship opportunities," 69 research papers were included in the study's initial phase. In order to ensure the review's quality, the author restricted the topic area to the social sciences, agricultural and biological sciences, economics, econometrics, and finance, as well as business management and accounting. Press articles, book chapters, and non-English publications were also omitted. Based on the goals and parameters of the study, the author carefully reviewed each record before selecting 47 research articles for this review. It appears from this study that women in agriculture entrepreneurship have a lot of promise when it comes to technical support and skill development. The report points out a number of obstacles to the expansion of agriculture in developing countries, such as a dearth of official support, resistance from intimate ties, poor infrastructure, and so forth. Nevertheless, the investigation was limited to specific databases and periods, which could offer chances for more research.

Keywords: Agripreneurship, Woman Agripreneurship, Agriculture Entrepreneurship, PRISMA, Systematic

Received 09.08.2024

Revised 21.10.2024

Accepted 20.11.2024

How to cite this article:

Anupama, Nidhi Gupta, Simran and Prerna. Women in Agriculture Entrepreneurship: A Systematic Literature Review. Adv. Biores. Special Issue [1] 2024. 01-10

#### INTRODUCTION

The term "agripreneurs" refers to entrepreneurs engaged in agriculture. These individuals require support from government officials to acquire new skills that lead to commercialization. Agripreneurs take on the responsibility of managing the business, taking calculated risks, and organizing agribusiness activities for economic gains. Additionally, they contribute to the manufacturing and processing of agricultural produce. Women farmers play a vital role in sustaining agriculture, yet their contributions are often undervalued. Their needs and rights are frequently neglected, leaving them in a situation similar to agricultural laborers. To achieve sustainable development, it's essential to actively involve women farmers in development initiatives and fairly compensate them for their hard work. Addressing the specific challenges faced by women in agriculture is critical for building a more equitable and sustainable development in both urban and rural areas of the country. These women play a crucial role in driving sustainable development and fostering economic growth within the agriculture sector [1]. Globally, women contribute significantly to employment, accounting for 66 percent of all jobs, and produce 50 percent of the world's food supply.

According to a report by the National Sample Survey Office (NSSO), approximately 46.0% of the agricultural workforce in India comprises females. However, the report also highlights that only 13.0% of

rural women are engaged in entrepreneurship within the agricultural sector [2]. Despite their substantial contributions to society and the economy, women face considerable disparities in income and property ownership. The key challenges faced by women entrepreneurs in rural India, including a lack of clear life goals, difficulties balancing family and career responsibilities, limited financial independence, inability to own property directly, inadequate understanding of their own capabilities, restricted access to resources for risk-taking, and a lack of self-confidence [3]. Agripreneurs face numerous challenges due to factors such as the absence of an entrepreneurial culture, insufficient infrastructural development, inadequate institutional support, and unfavourable government policies [4]. These factors collectively hinder the growth and success of agripreneurship initiatives. The gender gap in agricultural entrepreneurship in India stems partly from limited educational and financial opportunities available to women. Many rural women lack access to education, which hinders their ability to acquire the necessary expertise for successful agricultural ventures.

The traditional societal structure exhibited significant gender bias, leading to detrimental effects on women's productivity. This bias manifested through the unequal distribution of women's time, burdensome responsibilities, and limited access to essential resources, including education and knowledge. Factors such as lack of education and social barriers perpetuated this inequality, as highlighted [5]. The inefficiencies that hinder economic growth is due to gender-based barriers impede the development of women's entrepreneurship [6]. When women face obstacles such as unequal access to resources, limited opportunities, and societal biases, their entrepreneurial potential is stifled, preventing them from fully contributing to economic progress. Additionally, the financial constraints they face make it challenging for them to invest in their farms. To empower women in agripreneurship, initiatives and programs are crucial. These efforts should focus on providing women with access to tailored education and training opportunities in agriculture. Moreover, financial support and resources should be made available to enable women to invest in their farms and businesses. Rural entrepreneurs encountered challenges primarily related to financial crises, as well as issues concerning the selection, collection, and storage of raw materials, along with marketing difficulties. As the recognition of women's vital role in agriculture continues to grow, an increasing number of women are assuming leadership positions within the industry. These pioneering women are spearheading efforts in sustainable farming practices, advocating for gender equality, and empowering fellow women farmers. Through their leadership, women in agriculture are making significant contributions to the global economy. Women, despite facing discrimination and stereotypes, have demonstrated their leadership prowess in business, particularly through effective communication. Studies have shown that prioritizing communication helps women build strong relationships with employees [7], while women entrepreneurs excel in networking through relational approaches [8]. By encouraging and supporting women agripreneurs, we can unlock significant potential for advancing sustainability and achieving economic upliftment in agriculture.

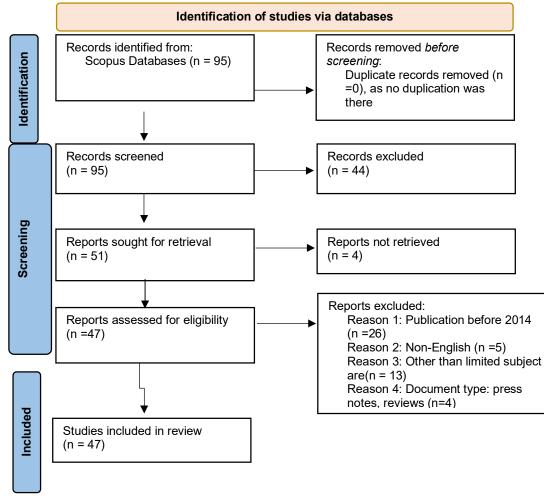
Underlying a methodical mapping, this project investigates the subsequent research questions: What constitutes the present level of understanding in agribusiness studies? What are the barriers to women's agri-entrepreneurship development in both developing and developed nations, and what are the future possibilities for women agripreneurs? This study's contributions involve ideally twofold. In theory, the research recognised and analysed streams of agribusiness publications. It answers to an early call for more exploratory research on agricultural entrepreneurial activity, as conventional entrepreneurship overlooks this industry [9]. The second step by employing a systematic mapping approach, the study advances to a current knowledge of the concept of agripreneurship and women agripreneurs in agriculture. In reality, our analytical technique allows us to compare the results we obtained to those of other research and detect gaps. The remaining section of the work is organised in the following format: It starts by explaining the approach, which covers the data source and search algorithms. The screening method and appropriateness for inclusion and exclusion are then examined. The main findings were described in the results section, which was adjacent to the screening techniques. The last portion discusses constraints, future opportunities for women agripreneurs, and future research goals.

## MATERIAL AND METHODS

The study used a systematic literature review approach related to agripreneurship research in both developed and developing nations. Systematic mapping is often employed in the medical profession, software engineering [10], [11] and [12] but it is unusual in agri-entrepreneurship research [13]. A systematic review (SR) analyses primary reports, describing their methodology and findings. Earlier studies in agri-entrepreneurship rely on a systematic review [9] and [14]. The phases of the systematic connecting operations are depicted in Figure 1. The review follows PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) systematic review procedures [15]. The study was also

influenced by the reporting guidelines for systematic evidence analyses concerning environmental research [13].

**Database source and criteria for search**: The analysis was carried out utilizing the Scopus database owing to its wider coverage of publications across fields. The keywordsand article titles were utilized in the search operations, for instance "woman entrepreneurship in agriculture", "agripreneurship", "woman agripreneurship", and "agripreneurship opportunities". At the initial stage, 95 articles were generated. The search was confined to articles between 2014 and 2023, and included journals articles, book chapters and books published in English language only.



# **Fig. 1: PRISMA 2020 flow diagram for systematic reviews** *Source: Author's data*

**Screening**: The selection parameters centred upon the PRISMA statement [15]. The study focused on research that evaluated agricultural entrepreneurship principles, along with possibilities and difficulties for women in agribusiness in nations that are both developed and developing. The investigation concentrated primarily on identifying existing literature on women agripreneurs and was limited to the subject areas of business management and accounting, social sciences, agricultural and biological sciences, economics and econometrics, and finance. The search ranged from 2014 until 2023. The search eliminated any non-English language research publications published before 2014. At this point, 44 research publications have been eliminated. A total of 51 records retrieved at this point. Finally, the document types were confined to articles, book chapters, and books. In the end, 47 research papers were retrieved.

**Quality Assessment**: The study relies solely on original research publications, review papers, conference papers, book chapters, and books. To ensure the review's quality, any duplications were extensively scrutinised. Abstracts of papers were thoroughly examined for analysis and purification to verify the calibre and appropriateness of academic material incorporated into the review procedure. Each study report was carefully evaluated at a later point. Furthermore, papers not in English were omitted from the

research. After reviewing each article using the previously stated inclusion and exclusion criteria, 47 publications were determined to be appropriate for further investigation.

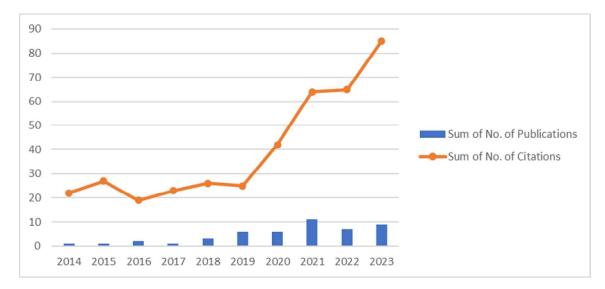
*Data Extraction*: During the data retrieval phase, 47 articles were chosen based on their characteristics, such as being original, review, conference, or book chapters.

- Published case studies and press notes were eliminated.
- The essay must be written in English and cover business management, accounting, social sciences, agriculture, biology, economics, econometrics, and finance.

Extracted papers were published during 2014-2023.

#### **RESULTS AND DISCUSSION**

Records distribution across time: A descriptive analysis of the data revealed that interest in women agripreneurship research has progressively increased in recent years, despite the fact that mainstream agricultural entrepreneurship studies are restricted [9]. The number of articles published on woman entrepreneurship in agriculture between 2014 and 2023 has progressively grown in the latter few years of the decade, as shown by the figure 2. Nonetheless, a deeper look at the figures reveals an apparent lack of published material in the field (Figure 2). While just one article was registered in 2014, 2015, and 2017, by 2023 this figure had increased to nine, with the largest publication in 2021 reaching eleven. For its part, the change in citations revealed that there exists no immediate association between citation and number of publications [16].



**Fig. 2: Trends in Research Publications in Woman Agripreneurship** *Source: Author's calculation* 

Country-specific distribution: Figure 3 depicts the top ten countries based on the number of research conducted in both developed and developing nations. Of the 47 research, 26 (55%) were done in Asia. 45% of the 21 studies came from different continents. This means that agripreneurship studies are progressively rising in Asia, but the notion is still relatively new in other continent nations. This indicates a severe need for more research on agripreneurship in the region.

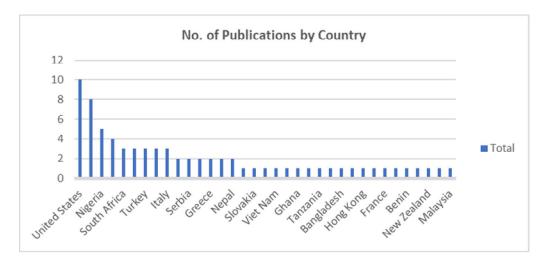
Most cited records: Table 1 displays the 10 most referenced publications from the articles analysed, with 127 cumulative citations, or 64% of the total. The subjects covered were the obstacles and possibilities for female entrepreneurship in agriculture [17], [18], [19], [20], [21], [22], [23] and [24], examination of sustainable women entrepreneurial performance towards agriculture [25].

#### Challenges confronted by Women in Agripreneurship Developments

Today's women have shown themselves in nearly every sector. Still, the path to this transformation has not been smooth [26]. In reality, beginning a company is not as simple as it appears [27]. Women continue to fall behind in entrepreneurial spirit, and much work need to be carried out in this area. There are various obstacles to agripreneurship and agricultural growth which are as follows:

1. Lack of Property Rights: In underdeveloped nations, women entrepreneurs often lack property rights on land, making it difficult to get financing from banks or additional amenities owing to a lack of land documentation [26] and [27].

- 2. Lack of money: Access to money is a major barrier for entrepreneurs, particularly for women who lacks possession of property and require their husband's signature on paperwork. Furthermore, in India, parental property is generally passed down to male children. Another reason why women struggle to get finance for their own businesses [28] and [29].
- 3. Scarcity of resources: Women farmer must also deal with a scarcity of knowledge regarding availability of raw materials and other critical inputs which are considered as the basic requirement to run a business. Preferably, the root-level market linkages are required to establish a successful venture. Need of knowledge about availability and a linkage for continuous supply has to be triggered for setting up food processing and related business. So, lack of all these factors affects women entrepreneur's business adventures [27], [28] and [30].
- 4. Worklife Balance: Mostly, women take care of family and works under bound circumstances which reduces the chances of taking part in decision making or such activities. Women carry the dual burden of responsibilities i.e. managing a home and profession. Due to the dual responsibility, women are unable to organise their work effectively as she has a lack of time, attentiveness and overburdened personal obligation. The necessary infrastructure to support the women in organising their work like dependable childcare, creches, help from a spouse, instruments to make housework easier, is still not in place [29].
- 5. Literacy rate: Lack of quality education to women in agriculture has been a problem leading to less or nil knowledge of business strategies, technology interventions. As a result, failure is no wonder in setting up or running business or existing ventures. These all factors diminish women's ability to deal with the risks and uncertainties that come on the path of self-sufficiency [27], [28], [31] and [32].
- 6. Lack of Family support: Sometimes the family may make the women feel guilty of neglecting household duties in her pursuit of business obligations. Cultural traditions may hold back a woman from venturing into her own business [27] and [29].
- 7. Unavailability of required equipments: Majority of the small entrepreneurs don't have the capacity to buy the costly equipment to start up their units [30].
- 8. Climate Change: India is mostly dependent on Monsoon rains for agriculture and due to climate change, rains have become irrational and difficult to predict. India will not make sustained progress in agriculture unless and until more than half of the planted area is irrigated [30].
- 9. Credibility: The financial institutions are doubtful about the entrepreneurial abilities of women. The bankers put unrealistic and unreasonable securities to get a loan to women entrepreneurs [27] and [29].
- Lack of marketing and management skills: Farmers are dependent on local traders and middlemen to sell their agriculture produce because of less awareness of price and negligible market and industry linkages. Women entrepreneurs have low-level management skills. They have to depend on office staffs and intermediaries, to get things done, especially, the marketing and sales side of business [27], [29] and [30].
- 11. Lack of Storage & Transportation facilities: In remote places or small-scale entrepreneurs, storage facilities are not available, agriculture growth is poor, road and transportation facilities in rural and remote areas are poor which leads to spoilage of the products [29]. Similarly, long distance between farms and markets in the area as impediments for agripreneurs [28].
- 12. Lack of dispersion of knowledge: Although there is reach of social media in all countries, lack of proper guidance through online mode is still a challenge to overcome in rural and far-flung areas. Mostly women groups receive information about the latest technologies through middlemen/ growers. They should directly approach R&D institutes for better development and pricing of the end product [28].
- 13. Low level risk taking the attitude: Low-level education provides low-level self-confidence and self-reliance to the women folk to engage in business. Investing money, maintaining the operations and ploughing back money for surplus generation requires high risk-taking attitude, courage and confidence [28].
- 14. Weak linkages between the women entrepreneur and government agencies: The government of India in its annuals often announces special growth and provision to assist self-employment in women. But it has not worked out effectively and very few women entrepreneurs are able to avail them. Despite the efforts the problem still exists as most of the women entrepreneurs in the region have neither approach nor aware about these policies due to low education level. Women engage in this venue are unhappy with support system due to harassment from the officials and high corruption. There is a strong need to establish linkages between the women entrepreneur and government agencies [29]. Unfriendly government policies affect Agripreneurs [4]



**Fig. 3: Number of Publications by Country** *Source: Author's data* 

Table 1: The top 10 most cited publications				
Citations	Author (Year)	Title	Journal	
26	[22]	Impact of rural women's traditional economic activities on household economy: Changing economic contribution through empowered women in rural Pakistan	Sustainability (Switzerland)	
18	[17]	Small women's cooperatives in less favored and mountainous area under economic instability	Agricultural Economics Review	
17	[20]	Gendered processes of agricultural innovation in the Northern uplands of Vietnam	International Journal of Gender and Entrepreneurship	
16	[21]	Farms in progress-providing childcare services as a means of empowering women farmers in South Tyrol, Italy	Sustainability (Switzerland)	
12	[19]	Handbook of Research on Entrepreneurship in the Contemporary Knowledge-Based Global Economy	Handbook of Research on Entrepreneurship in the Contemporary Knowledge-Based Global Economy	
10	[28]	Female Access and Rights to Land, and Rural Non- farm Entrepreneurship in Four African Countries	African Development Review	
10	[23]	Determinants of smallholders' entrepreneurial drive, willingness and ability to expand farming operations in KwaZulu-Natal	Development in Practice	
6	[33]	Tempered disruption: Gender and agricultural professional services	Gender, Work and Organization	
6	[24]	Anticipating gender impacts in scaling innovations for agriculture: Insights from the literature	World Development Perspectives	
6	[25]	Mediation-Moderation Model: An Empirical Examination of Sustainable Women Entrepreneurial Performance towards Agricultural SMEs in Ivory Coast	Sustainability (Switzerland)	

Table 1: The top	10 most cited	publications
Table 1. The top	10 111000 01000	Pasineaerens

Source: Author's data

### Prospects for Women in Agriculture Entrepreneurship

With vast opportunities for employment generation agriculture sector is future to feed a large population. Technology interventions to enhance the level of production and boost farmers' income can shift their

method of traditional farming to commercial production of crops leading to economic gains and adoption of agripreneurship [34]. Agripreneurship among women is a major agenda of the government for better balance in society and women's empowerment. Technical handholding and skill development can enhance the quality and quantity of farm produce. Women Agripreneurs can play an important role in agriculture sector through updating their knowledge about the latest packages and practices in agriculture and value addition of the farm produce. Women entrepreneurship is key for the achievement of sustainable development across the globe. Globally, 66 percent of the employment is generated by women. They produce 50 percent of food globally. Many opportunities abound in agriculture [35]. Agripreneurial opportunities can be derived from several sources such as exposure to information, role models, social networks, close families, and friends. More specifically, business opportunities are considered critical in entrepreneurship development [36]. For an agripreneur to recognize business opportunities requires demonstrating a unique skill that symbolizes an entrepreneur. Such specific skills critical to an agripreneur include innovativeness, pro-activeness, curiosity, risk-averse attitudes, and resource management aptitude [35]. The agriculture sector is embedded with abundant untapped opportunities [37] and [38]. For instance, [39] identified that agricultural inputs, technology, food processing, floriculture, and organic food production are lucrative areas for potential agripreneurs. At the input level, opportunities can be derived from bio-fertilizers, bio-pesticides, soil improvement, agricultural tools, irrigation accessories, production of cattle feed concentrate, agricultural tools, irrigation accessories, production of cattle feed concentrate, mineral mixture, and complete feed [35]. It would take women with the required agripreneurial skill not only to identify their potential for success to determine which area to venture into; but when the appropriate time to launch themselves. Besides, backward and forward linkages related to production, processing, marketing, trade, and distribution of raw and processed foods, feed, and fiber is an agripreneurial avenue for potential agripreneurs [40]. In summary, the review identified various agripreneurial opportunities for the self-employed. It ranges from input, production, processing, marketing and service sectors. This says that agripreneurship remains a fertile ground capable of providing decent and sustainable employment opportunities for the women and anyone desirous of tapping into the opportunity. The foremost thing that needs to be done is land entitlement in the name of female members of the household so that women will become self-sustained, independent in decision-making, and most importantly get easy access to benefit from banks and many other schemes which demand land ownership. In many developing countries, women work individually, often isolated, in the informal economy, operating at a low level of activity and reaping marginal income. loining forces in small-scale cooperatives can provide them with the SHG - Self-help groups, are small voluntary associations of people preferably from the same socio-economic background based on the concept of solving common problems through self-help and mutual help. This existing concept of SHG can be rejuvenated with a focus on the empowerment of women through Agripreneurship. MSMEs in the agriculture sector can play a crucial way in promoting women's economic empowerment while fighting against poverty and gender inequity. They have been identified as engines of growth by many governments, and their promotion has led to the creation of new jobs for developing countries and to drive innovation and economic dynamism [41]. Nowadays ICT tools have been popularized and have multifarious uses such as a medium to inform, aware, educate, dissemination of new technologies, assessment of new technologies, audience poll, the platform for discussion among experts and farmers, information on the market i.e. market price, market demands, weather forecasting, etc. Mobile phones are one of the easily accessible ICT tools also being used by most of the rural population. In the current decade, the government has launched many schemes for supporting and handholding women agrientrepreneurs enabling them to participate in countries economy at larger scale. Some of these schemes are Women's Development Programmes (WDCs), Marketing of Non-Farm Products of Rural Women (MAHIMA), Assistance to Rural Women in Non-Farm Development (ARVIND), Working Women's Forum, Mahila Vikas Nidhi, Rashtriya Mahila Kosh, Mahila Samiti Yojana, SBI's Stree Shakti scheme and Mahila Kisan Sashakti Karan Pariyojna (MKSP), DEDS (Dairy Entrepreneurship Development Scheme, etc.

# CONCLUSION AND FUTURE RECOMMENDATIONS

Women agripreneurs can prove a milestone and show their worth in the agriculture sector. In India, the past image of restricted and homebound women is slowly changing. The Indian women, even after facing many challenges, is now trying to become economically independent. The government has come forward with many facilities, concessions, and incentives exclusively for women entrepreneurs. The study provided a systematic mapping of research related to agripreneurship concepts, challenges and future prospects for women agripreneurial in both developed and developing nations. The objective was to offer an overview of the research gaps and recommend future research direction. The study applied a

systematic mapping approach to assess how the concept of agripreneurship evolved at the local and international levels. The authors followed guidelines for systematic reporting since there is no specialized approach in our disciplined. The search strategy was properly planned; all screening and eligibility criteria were followed. As the search was limited to studies in English, so the studies from non-English versions were not captured and it is most likely that studies from other languages could give additional knowledge of the concept. It would be appropriate for future researchers to apply a systematic mapping approach and compare developed and developing countries regarding agripreneurship. Next, they can discover the impact of entrepreneurship on women's families and the larger communities in which they reside. Most importantly, how does this effect vary between countries throughout the world? Furthermore, the essential need is to promote independent business for women alongside other improvements in the country.

**Declaration of Conflicting Interests:** The author(s) declared no potential conflicts of interest concerning this article's research, authorship, and/or publication.

Acknowledgements None

**Conflict of Interest** None

**Authors Contributions Statement**: Dr. Anupama conceived the idea, designed the study, wrote and edited the article, Ms. Nidhi Gupta: supported her in writing introduction part of the review article and helped in editing the review article, Ms. Nidhi Tushir: assisted in editing the review article.

**Funding** None

**Ethics Statement** Not applicable

Informed Consent

Not applicable

#### REFERENCES

- 1. Dev, S. M. (2014). Small farmers in India: Challenges and opportunities. *RePEc: Research Papers in Economics*. http://oii.igidr.ac.in:8080/xmlui/bitstream/handle/2275/262/WP-2012 014.pdf?sequence=1
- 2. HL, P. K. (2019). THE ROLE OF WOMEN: IN INDIAN AGRICULTURE SECTOR. *Journal of Emerging Technologies* and Innovative Research, 6(10), 1–6. <u>https://www.jetir.org/papers/IETIR1912001.pdf</u>
- 3. Kumbhar, V. M. (2013). Some critical issues of women entrepreneurship in rural India. *European academic research*, 1(2).
- 4. Verma, RK, Sahoo, AK, & Rakshit, S. (2017). Opportunities in agripreneurship in India: need challenges and future prospects. *Rashtriya Krishi*, 13 (1), 71-72.
- 5. Garg, S., & Agarwal, P. (2017). Problems and prospects of woman entrepreneurship–a review of literature. *IOSR Journal of Business and Management*, 19(1), 55-60.
- 6. Kabeer, N., & Natali, L. (2013). Gender equality and economic growth: Is there a win-win? *IDS Working Papers*, 2013(417), 1-58.
- 7. Werhane, P. H. (2007). Women leaders in a globalized world. *Journal of Business Ethics*, 74, 425-435.
- 8. Buttner, E. H. (2001). Examining female entrepreneurs' management style: An application of a relational frame. *Journal of business ethics*, 29, 253-269.
- 9. Fitz-Koch, S., Nordqvist, M., Carter, S., & Hunter, E. (2017). Entrepreneurship in the Agricultural Sector: A literature review and future research opportunities. *Entrepreneurship Theory and Practice*, 42(1), 129–166. https://doi.org/10.1177/1042258717732958
- 10. Kitchenham, B. & Charters, S. (2007). Guidelines for performing systematic literature reviews in software engineering, Technical Report EBSE-2007-01, School of Computer Science and Mathematics, Keele University.
- 11. Dyba, T., Kampenes, V. B., & Sjøberg, D. I. K. (2006). A systematic review of statistical power in software engineering experiments. *Information & Software Technology*, *48*(8), 745–755. https:// doi.org/ 10.1016/j.infsof.2005.08.009
- 12. Hannay, J. E., Sjoberg, D. I. K., & Dyba, T. (2007). A Systematic review of theory use in software engineering experiments. *IEEE Transactions on Software Engineering*, *33*(2), 87–107. <u>https://doi.org/10.1109/tse.2007.12</u>

- 13. Schoneveld, G., Di Matteo, F., Brandão, F., Pacheco, P., Jelsma, I., & Jarnholt, E. D. (2015). A systematic mapping protocol: what are the impacts of different upstream business models in the agriculture and forestry sector on sustainable development in tropical developing countries? *Environmental Evidence*, 4(1), 1. <a href="https://doi.org/10.1186/2047-2382-4-1">https://doi.org/10.1186/2047-2382-4-1</a>
- 14. Dias, C., Rodrigues, R. G., & Ferreira, J. J. (2019a). Agricultural entrepreneurship: Going back to the basics. *Journal of Rural Studies*, *70*, 125–138. <u>https://doi.org/10.1016/j.jrurstud.2019.06.001</u>
- 15. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann T, Mulrow CD, Shamseer L, Moher D. Mapping of reporting guidance for systematic reviews and meta-analyses generated a comprehensive item bank for future reporting guidelines. Journal of clinical epidemiology. 2020 Feb 1;118:60-8.
- 16. Dias, C., Rodrigues, R. G., & Ferreira, J. J. (2019b). Agricultural entrepreneurship: Going back to the basics. *Journal of Rural Studies*, *70*, 125–138. <u>https://doi.org/10.1016/j.jrurstud.2019.06.001</u>
- 17. Chatzitheodoridis, Fotios; Kontogeorgos, Achilleas; Liltsi, Petroula; Apostolidou, Ioanna; Michailidis, Anastasios; et al. Agricultural Economics Review; Thessaloniki Vol. 17, Iss. 1, (2016): 63-79.
- Efobi, U., Beecroft, I., &Atata, S. N. (2019). Female access and rights to land, and rural non-farm entrepreneurship in four African countries. *African Development Review*, 31(2), 179–189. <u>https://doi.org/10.1111/1467-8268.12376</u>
- 19. Baporikar, N. (2016). Handbook of Research on Entrepreneurship in the Contemporary Knowledge-Based Global Economy. In *Advances in business strategy and competitive advantage book series*. <u>https://doi.org/10.4018/978-1-4666-8798-1</u>
- Kawarazuka, N., & Prain, G. (2019). Gendered processes of agricultural innovation in the Northern uplands of Vietnam. *International Journal of Gender and Entrepreneurship*, *11*(3), 210–226. <u>https://doi.org/10.1108/ijge-04-2019-0087</u>
- Gramm, V., Torre, C. D., & Membretti, A. (2020). Farms in Progress-Providing childcare services as a means of empowering women farmers in South Tyrol, Italy. *Sustainability*, 12(2), 467. <u>https://doi.org/10.3390/su12020467</u>
- 22. Jabeen, S., Haq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of Rural Women's Traditional Economic Activities on Household Economy: Changing Economic Contributions through Empowered Women in Rural Pakistan. *Sustainability*, *12*(7), 2731. <u>https://doi.org/10.3390/su12072731</u>
- 23. Cele, L., & Wale, E. (2020). Determinants of smallholders' entrepreneurial drive, willingness and ability to expand farming operations in KwaZulu-Natal. *Development in Practice*, *30*(8), 1028–1042. https://doi.org/10.1080/09614524.2020.1764501
- 24. McGuire, E., Rietveld, A. M., Crump, A., &Leeuwis, C. (2022). Anticipating gender impacts in scaling innovations for agriculture: Insights from the literature. *World Development Perspectives*, *25*, 100386. https://doi.org /10.1016/j.wdp.2021.100386
- 25. Assamala, I. R. E., Li, W., Ashraf, S. F., Syed, N., He, D., & Nazir, M. (2022). Mediation-Moderation Model: An Empirical Examination of Sustainable Women Entrepreneurial Performance towards Agricultural SMEs in Ivory Coast. *Sustainability*, *14*(10), 6368. <u>https://doi.org/10.3390/su14106368</u>
- 26. Welsch, H. (2003). Entrepreneurship. In Routledge eBooks. https://doi.org/10.4324/9780203356821
- 27. Shambunath, N. (2021). Women Entrepreneurship In Rural India: Key To India's Economic Growth. *IJRAR International Journal of Research and Analytical Reviews (IJRAR), 8*(1), 10–17. <u>https://www.ijrar.org/download1.php?file=IJRAR1BXP002.pdf</u>
- 28. Esiobu, N., Onubuogu, G., & Ibe, G. O. (2015). Analysis of Entrepreneurship Development in Agriculture among Arable Crop Farmers in Imo State, Nigeria. *International Journal of African and Asian Studies*, *7*, 92–99. https://iiste.org/Journals/index.php/JAAS/article/download/19578/19446
- 29. Manjot Kaur, Sukhdeep Kaur Mann and Kanwaljit Kaur. 2018. Agripreneurship A Tool to Empower Rural Women. *Asian Journal of Agricultural Extension, Economics & Sociology*, 27(3): 1-8.
- 30. Sreedhar, C. J., & Kanta, T. S. S. M. (2022). PROBLEMS AND PROSPECTUS OF AGRIPRENEURS-AN EMPIRICAL STUDY. International Journal of Innovative Research in Engineering and Management, 210–215. https://doi.org/10.55524/ijirem.2022.9.5.29
- 31. H. K. Dash and Krishna Srinath. (2013). Promoting agricultural education among rural women: a critical intervention for sustaining farm and home. *Current Science*, 105(12), 1664-1665.
- 32. Verma, J. K. (2013). CHALLENGES AND OPPORTUNITIES FOR RURAL WOMEN ENTREPRENEURS. International Journal of Research in Commerce, Economics and Management. <u>http://ijrcm.org.in/download.php?name=ijrcm-3-IJRCM-3 vol-3 2013 issue-7-art-14.pdf&path=uploaddata/ijrcm-3-IJRCM-3 vol-3 2013 issue-7-art-14.pdf</u>
- 33. Sheridan, A., & Newsome, L. (2021). Tempered disruption: Gender and agricultural professional services. *Gender, Work & Organization, 28*(3), 1040–1058. <u>https://doi.org/10.1111/gwao.12623</u>
- Singh, S. C., Rana, A., Sharma, N., & Kumar, M. (2022). A Review on Women Agri- Entrepreneurship: Roles and opportunities in Agriculture for Sustainable Growth in India. *Shanlax International Journal of Arts, Science and Humanities*, 10(2), 56–67. <u>https://doi.org/10.34293/sijash.v10i2.5117</u>
- 35. Nwibo, S. U., Mbam, B. N., &Biam, C. K. (2016). Determinants of Agripreneurship among the Rural Households of Ishielu Local Government Area of Ebonyi State. *Journal of Biology, Agriculture and Healthcare, 6*(13), 3–10.
- 36. Dahalan, N., Jaafar, M., &Rosdi, S. a. M. (2015). Attitude and Entrepreneurial Intention Among Rural Community: the Mediating Role of Entrepreneurial Opportunity Recognition. *SHS Web of Conferences, 18,* 01005. https://doi.org/10.1051/shsconf/20151801005

- 37. Barau, A. A. and Afrad, M. S. I. (2017). Potentials of Rural Youth Agripreneurship in Achieving Zero Hunger. World Rural Observation, 9(2):1-11
- Mahmoud, A. E. (2018). Addressing Challenges and Seizing opportunities in Agripreneurship: Successful Stories of Women in East Region in Cameroon. *Alexandria Science Exchange*, 39(3), 444–449. https://doi.org /10.21608/asejaiqjsae.2018.13573
- 39. Bairwa, S. L., Kushwaha, S. S., & Sen, C. (2015). Problems faced by agripreneurs in starting and operating agriventures under ACABCs scheme in Rajasthan state. *International Journal of Agricultural Science and Research*, *5*(2), 203–207. <u>https://www.cabdirect.org/abstracts/20153189470.html</u>
- 40. Kuckertz, A., Hinderer, S., &Röhm, P. (2019). Entrepreneurship and entrepreneurial opportunities in the food value chain. *Npj Science of Food*, *3*(1). <u>https://doi.org/10.1038/s41538-019-0039-7</u>
- 41. Drucker, P. F. (1985). Innovation and entrepreneurship: Practice and principles. *Social Science Research Network*. https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1496169

**Copyright:** © **2024 Author**. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.