

E-ISSN: 2708-4523 P-ISSN: 2708-4515 Impact Factor (RJIF): 5.61 AJMC 2025; 6(2): 1774-1779 © 2025 AJMC

www.allcommercejournal.com

Received: 12-09-2025 Accepted: 20-10-2025

Dr. Rajeev Kumar

Assistant Professor of Commerce, Rajiv Gandhi Government College Chaura Maidan, Shimla, Himachal Pradesh, India

Anita Verma

Research Scholar, Himachal Pradesh University Business School, Shimla, Himachal Pradesh, India

Sustainable entrepreneurship in the hills: A study of eco-friendly startups in Himachal Pradesh

Rajeev Kumar and Anita Verma

DOI: https://www.doi.org/10.22271/27084515.2025.v6.i2s.911

Abstract

Sustainable entrepreneurship is emerging as a transformative force in addressing the dual challenges of ecological preservation and economic development in fragile hill ecosystems. The present study seeks to explore the evolving landscape of green startups in the state. The research identifies and classifies the top ten eco-friendly ventures across critical sectors such as sustainable tourism, organic agriculture, traditional handicrafts, renewable energy, and waste management. These enterprises not only demonstrate innovative business models but also highlight the capacity of grassroots entrepreneurship to address pressing environmental concerns.

The study assesses the environmental, social, and economic contributions of these startups, including their role in reducing ecological footprints, generating livelihood opportunities, empowering local communities, and promoting sustainable consumption practices. It further analyzes the motivations, challenges, and success factors that drive entrepreneurs toward sustainability in a resource-sensitive hill context, ranging from personal ecological values and market opportunities to barriers such as regulatory hurdles, financial constraints, and infrastructure limitations.

In addition, the paper critically evaluates the role of state government initiatives, funding mechanisms, and institutional support systems-such as incubation centres and rural development programs-in nurturing sustainable entrepreneurship in Himachal Pradesh. The findings aim to provide insights into how eco-friendly startups contribute to inclusive development while safeguarding fragile mountain ecosystems.

Keywords: Sustainable entrepreneurship, eco-friendly start-ups, green innovation, organic agriculture, sustainable tourism, renewable energy, waste management

Introduction

Entrepreneurship has undergone a significant transformation in recent years, evolving from a profit-driven activity into an approach that incorporates social responsibility and environmental sustainability. This shift is particularly vital in fragile ecosystems such as the Himalayas, where development must balance economic growth with ecological preservation. Himachal Pradesh, with its rich biodiversity, cultural heritage, and scenic landscapes, has emerged as a hub for sustainable entrepreneurship. Growing public awareness, rising demand for eco-friendly products, and government support for green initiatives have encouraged local entrepreneurs to adopt environmentally conscious business practices. These ventures are redefining success by creating economic value while simultaneously contributing to environmental protection and community welfare (Cohen & Winn, 2007; Khalid, 2022) [5, 12].

Sustainable entrepreneurship in Himachal Pradesh reflects a unique blend of traditional wisdom and modern innovation. Entrepreneurs are increasingly focusing on organic farming, herbal products, handicrafts, renewable energy, eco-tourism, and waste management-sectors that are highly relevant in hill regions where livelihoods are closely tied to natural resources. These initiatives not only reduce ecological damage and conserve local resources but also create sustainable livelihood opportunities for rural communities. They stand as models of development that balance ecological resilience with socio-economic growth in mountain ecosystems (Hall, Daneke, & Lenox, 2010; Khalid, 2022) [9, 12].

Several factors explain the rise of eco-friendly startups in the state. High literacy levels, better human development indicators, and improved healthcare provide a strong foundation for skill-building and innovation.

Corresponding Author: Dr. Rajeev Kumar Assistant Professor of Commerce, Rajiv Gandhi Government College Chaura Maidan, Shimla, Himachal Pradesh, India The cultural closeness of local communities to nature also inspires sustainable practices, while the increasing inflow of tourists has generated opportunities in eco-tourism, handicrafts, and organic foods. However, these enterprises face challenges such as inadequate infrastructure, limited financing options, weak market linkages, and the difficulties of operating in mountainous terrains-all of which restrict scalability and long-term growth (Sharma, Thakur, & Verma, 2025)^[15].

Support systems including government policies, self-help incubation centers. and non-governmental organizations have played a critical role in strengthening this ecosystem. Initiatives promoting organic agriculture, renewable energy, and waste management have created platforms for experimentation with green business models. Furthermore, the rise of digital platforms and e-commerce has enabled local entrepreneurs to expand their reach to national and global markets. Despite this, many enterprises remain small-scale, highlighting the need for stronger policy incentives, better access to finance, and expanded marketing networks to enhance competitiveness (Bansal & Kapoor, 2023) [1].

Eco-friendly startups in Himachal Pradesh are important not only for their innovative business models but also for their broader impact on society and the environment. These ventures have the potential to generate employment, empower women, preserve cultural traditions, and conserve natural resources. By encouraging local participation and raising awareness about sustainability, they act as catalysts for community-based development. At the same time, they highlight the inherent challenge of balancing economic aspirations with ecological sustainability in fragile hill environments (Thakur & Negi, 2024) [18].

Examples from Himachal Pradesh demonstrate the diverse momentum of sustainable entrepreneurship. Agritech ventures such as ItsHemp in Dharamshala leverage hemp cultivation to create farm-to-market value showcasing both diversification opportunities and regulatory challenges (ITSHEMP, n.d.). Waste management initiatives like Waste Warriors operationalize circular economy principles by running Materials Recovery Facilities (MRFs) in tourist towns, integrating community engagement with scalable solutions (Waste Warriors, 2021) [26]. Eco-tourism enterprises such as NotOnMap promote cultural and community-based tourism, diversifying rural incomes while conserving intangible heritage (YourStory, 2019) [30]. Similarly, digital platforms like HimalayanKraft provide market access to artisans and self-help groups, preserving handloom traditions (YNOS, n.d.), while regenerative agriculture models such as Swaastik Farms focus on organic farming and permaculture, linking biodiversity restoration with premium market value (Times of India, 2025).

Literature Review

Khalid (2022) [12] indicates that Himachal Pradesh's strong human development indicators such as health and literacy provide a favorable base for small-scale entrepreneurship. However, infrastructural and fiscal constraints restrict the scaling of eco-startups. The study highlights the need for effective policy support, incubation, and market linkages to foster sustainable entrepreneurship in fragile mountain ecosystems.

Bhardwaj and Kumar (2021) [3] examine micro-entrepreneurship in Himalayan regions and conclude that it

sustains heritage and livelihoods. Nevertheless, stakeholder perceptions emphasize persistent challenges related to market access, design, and product innovation. Their findings underscore the need for participatory models to strengthen heritage-based eco-enterprises.

The Development Commissioner (2017) on Handicrafts highlights that the Geographical Indication (GI) status for products like Kullu shawls has helped protect cultural heritage and enhance artisan incomes. Yet, cluster-level challenges such as quality control, design innovation, and limited digital presence continue to constrain growth.

Verma and Sharma (2024) [25] further argue that traditional Himachali handicrafts can achieve global reach through branding, storytelling, and digital aggregation. Still, logistical constraints hinder small entrepreneurs unless cooperative business models are adopted.

Sharma *et al.* (2025) [15] analyze the role of Self-Help Groups (SHGs) in promoting cultural entrepreneurship in Himachal Pradesh's handicrafts and handlooms sector. Their findings reveal that SHGs significantly enhance local income and social capital. However, gaps in technology adoption, design innovation, and digital marketing continue to limit scalability and global competitiveness.

Bansal and Kapoor (2023) [1] examine agroecology initiatives in Himachal Pradesh and find that natural farming projects empower women by enhancing decision-making roles and income opportunities. Farmer groups and model farms demonstrate that eco-agriculture startups generate both economic and social sustainability.

Singh and Pandey (2024) [17] study Himalayan rivers and highlight their significant micro-hydropower potential. However, challenges such as sedimentation and silt management reduce efficiency. The authors recommend hybrid models and technical innovations as crucial for the success of renewable energy startups in the region.

Thakur and Negi (2024) [18] focus on tourism in Himachal Pradesh's mid-hill regions. Their study emphasizes that strict regulation is necessary to prevent ecosystem degradation. For sustainability, ecotourism startups must integrate visitor limits, waste management practices, and local benefit-sharing mechanisms.

Waste Warriors (2024-25) [27], a case study from Dharamshala, demonstrates the social and environmental benefits of material recovery facilities (MRFs), including waste diversion and local employment creation. Despite these achievements, the study highlights funding limitations and seasonal tourism pressures as major hurdles.

Jangra (2024) [11] investigates village and homestay-based waste initiatives in Himachal and Uttarakhand. The findings show that decentralized composting, segregation workshops, and user-fee models are effective approaches. However, cold climate conditions and behavioral challenges restrict long-term sustainability.

Chauhan (2023) [4] surveys youth in Himachal Pradesh and finds that entrepreneurial aspirations are largely driven by autonomy and local opportunities. Nonetheless, barriers such as inadequate mentorship, funding constraints, and weak infrastructure persist, underscoring the importance of supportive incubation ecosystems.

Research methodology

This research is based on qualitative analysis of secondary data collected from journals, newspapers, company websites, and conference proceedings, with emphasis on recent studies on eco-friendly startups in Himachal Pradesh. Adopting a descriptive and exploratory design, the study uses government reports, policy documents, academic literature, institutional publications, and credible news sources to identify and classify such startups.

Objectives of the study

- To identify and classify eco-friendly startups operating in Himachal Pradesh.
- To assess the environmental, social, and economic impact of these startups on local communities and hill ecosystems.
- To evaluate the role of government policies, funding mechanisms, and institutional support in promoting sustainable entrepreneurship in the hill state.

Data analysis and interpretation 1. ItsHemp (Dharamshala, Kangra)

ItsHemp, founded in 2019 by young entrepreneurs Srijan Sharma and Apurva Sheel from Dharamshala, is recognized as Himachal Pradesh's pioneering hemp-based online marketplace. The startup connects eco-conscious customers with a wide range of hemp and cannabis-derived products, including apparel, footwear, accessories, and wellness goods. Hemp is celebrated for being a low-input crop-it requires far less water, little to no pesticides, and produces durable fibers that serve as sustainable alternatives to cotton and synthetics. ItsHemp has collaborated with multiple Indian brands, thereby giving visibility to small hemp businesses and artisans while simultaneously building awareness among consumers about the environmental advantages of hemp. With over 15,000 customers and revenues crossing ₹1 crore in FY24, the company is gradually mainstreaming hemp culture in India. However, it continues to face regulatory uncertainties due to evolving cannabis laws, and ensuring a steady supply chain for hemp raw material remains a challenge.

2. Make My Hut (Palampur, Kangra)

Make My Hut, a Palampur-based startup, is redefining sustainable construction in Himachal Pradesh. The venture specializes in vernacular and eco-friendly building techniques such as rammed earth walls, dhajji-dewari (a Himachali earthquake-resistant structure), bamboo slabs, and stone masonry. Unlike conventional reinforced concrete (RCC) buildings, which are highly carbon-intensive, these designs reduce embodied energy by nearly 40-60% and ensure climate-resilient architecture suited for hilly terrains. Make My Hut also integrates passive solar design, natural ventilation, and daylighting, significantly lowering operational energy use in buildings. Beyond construction, the startup is also preserving Himalayan cultural heritage while generating livelihood opportunities for local artisans, masons, and carpenters. Its eco-lodges, homestays, and residences have gained recognition as sustainable models for the hill state. Despite these achievements, scalability remains constrained due to building code compliance and the need for specialized skills in seismic detailing for earthen structures.

3. Anandita Plastic Recycling (Kangra)

Anandita Plastic Recycling in Kangra district has emerged as a key player in Himachal Pradesh's waste-to-wealth ecosystem. The startup addresses one of the most pressing environmental challenges-plastic waste-by transforming it into durable products such as paver blocks, roof tiles, and industrial flooring tiles. By diverting tons of plastic waste away from landfills and incineration, Anandita contributes to a circular economy while offering municipalities and private contractors a cost-effective alternative to cement-based materials. Its recycled tiles are resilient, water-resistant, and well-suited for hilly terrains prone to heavy rainfall. The company also works with local urban bodies to streamline plastic waste collection and segregation, thereby creating employment opportunities in the green economy. While the business has strong potential, challenges remain in ensuring consistent quality of segregated plastic feedstock and competing with cheaper virgin material alternatives.

4. Attune Food Forest (Dehra, Kangra)

Attune Food Forest in Dehra, Kangra district, represents a pioneering experiment in regenerative agriculture and permaculture in Himachal Pradesh. Founded by Shikha and Deepak in 2017, the initiative has transformed a four-acre degraded patch of land into a thriving food forest. Today, it hosts over 2,000 trees across 350 species, combining fruitbearing trees, medicinal plants, shrubs, and non-timber forest products (NTFPs). The model is rooted in ecological principles: soil regeneration, mulching, water conservation, and habitat creation for pollinators and birds. Attune doubles as a learning center, offering workshops on permaculture, natural farming, and regenerative landscape design for students, farmers, and eco-enthusiasts. Its potential lies in replicating this living laboratory across other fragile Himalayan landscapes. However, like many regenerative enterprises, it faces monetization challenges as well as risks from unpredictable climate events that threaten long-term ecological restoration.

5. Swaastik Farms (Himachal Pradesh)

Swaastik Farms is an emerging organic horticulture venture in Himachal Pradesh that emphasizes healthy food systems and sustainable farming. The startup cultivates fruits and vegetables without the use of chemical fertilizers or pesticides, ensuring soil health and long-term fertility. Its farm-to-table model supplies fresh produce directly to consumers, bypassing middlemen and ensuring better margins for farmers. By shortening supply chains, the company not only offers fresher produce but also reduces the carbon footprint of food distribution. It also raises consumer awareness about the benefits of chemical-free diets and is gradually diversifying into organic processed products. The venture provides farmers with an incentive to switch to agroecological practices, thereby creating a small but growing ecosystem of sustainable farming. Despite these successes, Swaastik Farms struggles with organic certification challenges and the logistical complexities of distribution in hilly regions.

6. Hemp House (Dharamshala)

Hemp House is a Dharamshala-based lifestyle startup dedicated to sustainable fashion and accessories. The brand produces hemp-based apparel, bags, and eco-accessories that are durable, biodegradable, and stylish, positioning them as alternatives to synthetic fibers and cotton. With Dharamshala being a global tourism hub, Hemp House also markets its products as unique souvenirs for eco-conscious travelers. The venture collaborates with local artisans to

integrate traditional Himachali craft skills with modern sustainable design. By leveraging hemp's low water and pesticide requirements, the brand highlights its environmental advantages while appealing to a niche audience of environmentally responsible consumers. Hemp House's products are available through e-commerce platforms such as ItsHemp, allowing it to tap into pan-India demand. The key challenge for the startup is securing a consistent hemp raw material supply chain and educating consumers about the long-term value of hemp-based products.

7. Himachal Organic Bee Products (HPRABI Incubated)

Himachal Organic Bee Products is an apiculture startup incubated under HPRABI at CSK Himachal Pradesh Krishi Vishvavidyalaya. The enterprise focuses on producing organic honey and value-added bee products such as pollen, propolis, and royal jelly. By promoting natural beekeeping practices, the startup not only generates income but also enhances pollination services critical for local horticulture. Apiculture in Himachal contributes to biodiversity conservation, improves crop yields, and supports ecofriendly livelihoods in rural areas. The startup trains farmer groups and self-help groups (SHGs) to adopt organic practices and ensures quality control in honey processing and packaging. Packaged in eco-friendly containers, the products appeal to health-conscious urban consumers. While the startup contributes to climate-positive livelihoods, it is vulnerable to challenges such as changing flowering cycles, colony health issues, and adulteration risks prevalent in the honey industry.

8. EcoCraft Ventures (Kangra)

EcoCraft Ventures from Kangra district is modernizing Himachal Pradesh's traditional bamboo and natural fiber crafts. The enterprise reimagines the iconic Kangra kilta (a woven bamboo basket) into contemporary home décor items such as lampshades, planters, and trays. Using bamboo, cane, and grasses-rapidly renewable raw materials-the startup offers eco-friendly alternatives to plastic and metal household products. In addition to creating sustainable products, EcoCraft Ventures plays a vital role in reviving artisan traditions and generating livelihoods for rural craftspersons. By adapting local crafts to modern design and e-commerce channels, it reaches new consumer bases, including urban households and tourists. The enterprise contributes to cultural preservation, environmental sustainability, and economic inclusion. Its growth, however, is limited by market access, price competition with machine-made products, and quality durability in humid climates.

9. Shoolini Saffron (Solan)

Shoolini Saffron, founded by Gaurav Sabharwal in 2023, is a breakthrough agricultural innovation in Himachal Pradesh. Using aeroponic and controlled-environment techniques, the startup grows saffron in Solan district-far from the traditional saffron fields of Kashmir. In its first harvest, a 300-square-foot farm produced 500 grams of high-quality saffron, proving the viability of cultivating the world's most expensive spice in non-traditional geographies. This method drastically reduces water consumption, eliminates pesticide use, and ensures year-round production in climate-controlled spaces. Shoolini Saffron also trains local farmers

in aeroponic saffron cultivation, creating pathways for highvalue crop diversification in the state. The enterprise positions its saffron as a premium, "Mountain Grown" brand, appealing to health-conscious and luxury consumers. However, the startup's success depends on overcoming challenges of high capital expenditure, energy requirements, and maintaining consistent premium demand.

Environmental, Social, and Economic Impact of these Startups on Local Communities and Hill Ecosystems Environmental impact of Eco-friendly Startups: Ecofriendly Startups in Himachal Pradesh have emerged as crucial agents of environmental sustainability, particularly in the fragile hill ecosystems where ecological balance is essential for survival. These startups are actively engaged in promoting organic and sustainable farming practices, which reduce dependence on chemical fertilizers and pesticides, thereby improving soil fertility and preventing land degradation. Many ventures focus on renewable energy solutions such as solar, wind, and small-scale hydro projects, helping rural households reduce their reliance on non-renewable resources and cutting down carbon emissions. Waste management startups are contributing to cleaner surroundings by introducing innovative recycling, composting, and upcycling techniques, thus minimizing landfill pressures and preventing pollution of rivers and forests. Eco-tourism initiatives are promoting responsible travel, raising awareness about biodiversity conservation, and reducing the ecological footprint of tourism activities in the state.

Social impact of Eco-friendly Startups: Eco-friendly startups in Himachal Pradesh significantly enhance social empowerment and community resilience. By fostering chemical-free and sustainable farming methods, these ventures help rural households build economically viable livelihoods-particularly empowering women. For instance, natural farming under the state's PK3Y (Prakritik Kheti Khushal Kisan Yojana) has been embraced by over two hundred thousand farmers, with women forming a majority and gaining both income and confidence (The Times of India, 2025). A remarkable case is Anita Negi from Kullu, whose success in organic farming not only earned her about ₹40 lakh annually, but also enabled her to mentor nearly 200 women to adopt entrepreneurial practices (Outlook India, 2023). Furthermore, the formation of women-led Farmer Producer Companies (FPCs) has transformed farmers into entrepreneurs. In Solan, women's FPCs now collectively market chemical-free produce, gaining better prices and strengthening social cohesion (The Times of India, 2022).

Economic impact of Eco-friendly Startups: Eco-friendly startups in Himachal Pradesh generate substantial economic impact by creating sustainable livelihood opportunities and diversifying local income sources. By promoting organic farming, renewable energy, eco-tourism, and waste management, they help farmers, artisans, and entrepreneurs access new markets and earn higher returns. These ventures attract green investments and government support, boosting rural entrepreneurship and reducing dependence on traditional agriculture. Notably, the state's Eco-Tourism Policy 2024 plans development of 77 eco-tourism sites across 14 districts-expected to generate ₹200 crore over five years-while training local youth as eco-guides and multi-

purpose workers (The Times of India, 2024). Additionally, initiatives like astro-tourism in Spiti Valley aim to empower tribal entrepreneurs through innovative, high-value tourism product. Trout farming illustrates another success: in Bageshwar (Uttarakhand, but geographically analogous to Himachal's hill economies), trout cooperatives have revitalized incomes, doubled production, and reduced migration-underscoring the transformative potential of niche agri-ventures (The Times of India, 2025). By linking economic growth with sustainability, eco-friendly startups strengthen financial resilience in hill communities while preserving ecological balance.

Role of Government Policies, Funding Mechanisms, and Institutional Support

The Government of Himachal Pradesh has played a pivotal role in fostering sustainable entrepreneurship by creating a favorable policy and institutional framework. The Himachal Pradesh Startup Policy (2017, revised 2022) provides financial incentives, such as seed capital, reimbursement of patent costs, and marketing support, to encourage ecofriendly and innovative ventures. The Himachal Pradesh Industrial Policy and the Eco-Tourism Policy 2024 further aim to balance economic development with environmental protection by supporting green industries, organic farming, and sustainable tourism projects across the state. Funding mechanisms, including venture capital assistance, subsidies under the Pradhan Mantri Formalisation of Micro Food Processing Enterprises (PM-FME) Scheme, and grants from agencies like the Himachal Pradesh State Industrial Development Corporation (HPSIDC), provide critical financial backing to entrepreneurs. Similarly, schemes under NABARD and SIDBI support rural and women entrepreneurs engaged in eco-friendly businesses such as natural farming, handicrafts, renewable energy, and agroprocessing.

I) State Government Schemes for Startups

- Chief Minister's Startup/Innovation Project/New Industries Scheme (2017): This scheme provides a sustenance allowance of ₹25,000 per month for one year to budding entrepreneurs. It offers plug-and-play incubation facilities, mentoring, and technical guidance to startups. Financial assistance is extended for patent filing, marketing support, and interest subvention. Additionally, entrepreneurs receive concessions in land allotment and stamp duty to ease business establishment.
- HIMSUP Yojana (Himachal Pradesh Startup Fund Scheme): HIMSUP is a ₹10 crore seed fund initiative designed to support startups through equity and loanlike funding. The scheme helps incubators and accelerators strengthen their capacity to nurture innovative ventures. It focuses on providing early-stage capital for scaling business ideas into sustainable models. By bridging funding gaps, it encourages young entrepreneurs to experiment with new solutions.
- Mukhya Mantri Swavlamban Yojana (MMSY):
 MMSY provides subsidized loans, offering 25-30%
 subsidy to promote micro and small enterprises in the
 state. It primarily targets youth and first-generation
 entrepreneurs to foster self-reliance. The scheme
 motivates individuals to pursue entrepreneurship rather
 than depending solely on government jobs. By reducing

- capital constraints, it supports sustainable business ventures in rural and semi-urban areas.
- Mukhya Mantri Yuva Ajivika Yojana (MMYAY): This scheme extends financial support and interest subsidies to young entrepreneurs for setting up enterprises. Under the program, loans up to ₹30 lakh are made available with substantial government subsidy. It aims to empower youth by creating livelihood opportunities within their native regions. The scheme not only generates employment but also encourages innovation-led development in the hills.
- Cluster Development & Tourism Startup Support:
 The scheme promotes MSME and startup clusters by providing grants for collaborative business models. Financial aid is extended to tourism-related initiatives like eco-tourism, homestays, and mobile food vans. Such ventures enhance local employment and showcase Himachal's cultural and natural heritage. The program also strengthens rural entrepreneurship by linking communities with sustainable tourism practices.
- Agri & Food Processing Policy (2018): This policy focuses on supporting agro-based and food processing startups with capital subsidy up to ₹5 crore. It encourages value addition in agricultural produce, ensuring higher income for farmers. Special incentives are provided for cold storage units, food vans, and processing facilities. The scheme plays a vital role in reducing post-harvest losses while promoting agribusiness entrepreneurship.

II) Loan and Credit Linked Schemes

- Udyogini Scheme: The Udyogini Scheme provides loans up to ₹1 lakh with a 30% subsidy exclusively for women entrepreneurs. It aims to encourage women's participation in entrepreneurship and self-reliance. By easing financial barriers, the scheme promotes gender-inclusive business development in Himachal Pradesh.
- PMEGP (Prime Minister's Employment Generation Programme): PMEGP is a central government scheme that offers margin subsidies up to 35% for eligible projects in rural areas. It supports new enterprises by reducing the initial financial burden on entrepreneurs. The program plays a key role in promoting self-employment and rural industrialization.
- NSIC Subsidy (National Small **Industries Corporation):** Registered MSMEs can avail up to 15% subsidy on machinery purchases under the NSIC scheme. This financial aid encourages modernization and adoption of new technology in small industries. By scheme reducing capital costs, the boosts competitiveness of emerging enterprises.

CGTMSE Reimbursement

Under this scheme, the state government reimburses guarantee fees for collateral-free loans provided to startups. It ensures easier credit access for first-time entrepreneurs lacking security. This support reduces risk for borrowers while motivating innovation and business creation.

III) Institutional Support & Incubation

• IIT Mandi Catalyst & iHub: IIT Mandi Catalyst, the first Technology Business Incubator (TBI) in Himachal Pradesh, provides a strong platform for startups. It

- offers funding support, structured mentorship, and incubation facilities for innovative ventures. The iHub adds further strength by fostering entrepreneurship in technology-driven sectors.
- Biotechnology Incubation Centre (HPU, Shimla):
 The Biotechnology Incubation Centre at Himachal Pradesh University, Shimla, supports startups in biotech and rural technology. It provides access to advanced laboratory facilities, technical mentoring, and research collaboration. The center promotes innovation in health, agriculture, and environment-related domains.
- Enabling Women of Kamand (EWOK), IIT Mandi: EWOK is a unique incubation program at IIT Mandi designed to empower women-led rural startups. Supported by NABARD and the Himachal government, it provides skill development, mentoring, and business support. This initiative enhances women's participation in entrepreneurship and rural development.
- Startup Yatra Himachal Pradesh: Startup Yatra is an outreach and awareness initiative to promote entrepreneurship across the state. It conducts bootcamps and workshops in schools, colleges, and rural areas to identify and mentor budding entrepreneurs. The program bridges the gap between youth talent and startup opportunities.

References

- 1. Bansal S, Kapoor R. Agroecology and women's empowerment: lessons from natural farming initiatives in Himachal Pradesh. J Rural Dev Stud. 2023;39(2):112-128.
- 2. Bansal S, Kapoor R. New possibilities for women's empowerment through agroecology in Himachal Pradesh, India. Sustainability. 2024;16(1):140.
- 3. Bhardwaj P, Kumar R. Microentrepreneurship in Himalayan region: drafting heritage sustenance through stakeholders' perception. J Entrep Innov Emerg Econ. 2021;7(2):1-14.
- 4. Chauhan V. Perspective of youth towards entrepreneurship in Himachal Pradesh. J Entrep Res. 2023;12(1):89-102.
- 5. Cohen B, Winn MI. Market imperfections, opportunity and sustainable entrepreneurship. J Bus Venturing. 2007;22(1):29-49.
- Department of Environment, Science Technology and Climate Change, Government of Himachal Pradesh. Green growth and sustainable development - HPDPL. Shimla: Government of Himachal Pradesh; 2025 Aug 7.
- Development Commissioner (Handicrafts). GI book: compendium of Indian handicrafts and handlooms. New Delhi: Ministry of Textiles, Government of India; 2017.
- 8. Energetica India. HP aims to be India's first green energy state by 2026. 2025.
- Hall JK, Daneke GA, Lenox MJ. Sustainable development and entrepreneurship: past contributions and future directions. J Bus Venturing. 2010;25(5):439-448.
- 10. ITSHEMP. ITSHEMP: hemp and cannabis products in India.
- 11. Jangra R. Tackling the waste dilemma in ecologically sensitive areas: an analysis of solid waste management in homestay tourism. J Mt Sustain. 2024;6(2):45-56.
- 12. Khalid AM. Developmental success and the

- sustainability challenge in a mountain region: case of Himachal Pradesh in India. Int J Reg Dev. 2022;9(1).
- 13. Khalid M. Entrepreneurship in fragile mountain ecosystems: evidence from Himachal Pradesh. Asian J Dev Sustain. 2022;15(4):56-72.
- 14. Outlook India. How Anita Negi's natural farming revolution is empowering women. 2023.
- 15. Sharma P, Thakur N, Verma A. Self-help groups and cultural entrepreneurship: insights from handicrafts and handlooms in Himachal Pradesh. J Soc Econ Dev. 2025;27(1):65-82.
- 16. Sharma V, Kumar S, Nag A. Exploring the role of self-help groups promoting cultural entrepreneurship in Himachal Pradesh. Int J Adv Manag Econ. 2025;14(1):18-28.
- 17. Singh R, Pandey P. Sediment handling and management in Himalayan hydropower projects. Int J Renew Energy Eng. 2024;12(3):221-232.
- 18. Thakur P, Negi A. Carrying capacity assessment of ecotourism sites in mid-hills of Himachal Pradesh. Int J Sustain Dev Res. 2024;8(2):60-72.
- 19. Thakur R, Negi V. Ecotourism and sustainability in mid-hill regions of Himachal Pradesh: a policy perspective. J Mt Tourism Stud. 2024;9(1):33-49.
- 20. The Times of India. Himachal Pradesh women farmers set to become change makers in agro-marketing. 2022.
- 21. The Times of India. A food forest takes root in Dehra. 2025.
- 22. The Times of India. Eco-tourism initiatives for sustainable development: CM Sukhu's vision. 2025.
- 23. The Times of India. Over two lakh farmers and horticulturists adopt chemical-free farming in Himachal Pradesh. 2025.
- 24. The Times of India. Trout turn tides in Bageshwar's rural economy.
- 25. Verma S, Sharma K. Traditional handicrafts and handlooms of Kullu district, Himachal Pradesh: challenges and opportunities. J Rural Dev Stud. 2024;15(2):145-160.
- 26. Waste Warriors. Dharamshala annual report and material recovery facility overview. Dharamshala: Waste Warriors; 2021.
- 27. Waste Warriors. Annual report 2024-2025. Dharamshala: Waste Warriors; 2025.
- 28. World Bank. India: sustainable solid waste management in mountain areas. Washington (DC): World Bank; 2021.
- 29. YNOS. HimalayanKraft: Kullu handloom marketplace.
- 30. YourStory. Meet the 10 startups working on sustainable tourism. 2019.
- 31. 30 Stades. Himachal farmer grows saffron using aeroponics and sells at premium prices.
- 32. Anandita Plastic Recycling. Company profile.
- 33. Indoor Saffron Farming. Indoor saffron cultivation in Himachal Pradesh.
- 34. Make My Hut. NITH alumnus' startup redefining eco-friendly construction.
- 35. Startup Pedia. Wipro technologist converts barren land into fruit farm with high annual returns.
- 36. Village Square. Coming up: a food forest in Himachal's Kangra.