



POLICY SUPPORT AND INSTITUTIONAL FRAMEWORK FOR IKS-DRIVEN STARTUPS

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ABSTRACT

Indian Knowledge Systems (IKS) represent a rich repository of indigenous, time-tested knowledge spanning healthcare, agriculture, architecture, metallurgy, ecology, mathematics, astronomy, crafts, and social organization. In recent years, there has been renewed policy interest in leveraging IKS for innovation, entrepreneurship, and sustainable development. IKS-driven startups offer culturally rooted, environmentally sustainable, and inclusive solutions aligned with national priorities such as Atmanirbhar Bharat and the Sustainable Development Goals (SDGs). However, such startups face unique challenges related to validation, intellectual property protection, funding, regulatory compliance, and market integration. This paper examines the existing and emerging policy support mechanisms and institutional frameworks enabling IKS-driven startups in India. It analyzes governmental, academic, financial, and community-based institutions, identifies gaps, and proposes an integrated ecosystem model to strengthen IKS-based entrepreneurship.

Keywords: Indian Knowledge Systems, Startups, Policy Support, Institutional Framework, Indigenous Innovation, Sustainable Entrepreneurship.

INTRODUCTION

Innovation ecosystems globally are increasingly recognizing the value of indigenous and traditional knowledge in addressing contemporary challenges such as climate change, public health, and sustainable livelihoods. In India, Indian Knowledge Systems (IKS) embody centuries of experiential knowledge transmitted across generations through texts, practices, and community traditions. IKS-driven startups aim to translate this knowledge into scalable products and services across sectors such as AYUSH, organic agriculture, natural materials, water management, education technologies, and wellness industries. Despite their potential, these startups often struggle to fit within conventional innovation and startup frameworks that prioritize high-technology, rapid scalability and venture-capital-driven growth.

CONCEPTUAL UNDERSTANDING OF IKS-DRIVEN STARTUPS

Indian Knowledge Systems (IKS)-driven startups represent an emerging and strategic segment of India's innovation ecosystem, drawing upon centuries-old indigenous knowledge in domains such as health (AYUSH), agriculture, ecology, architecture, crafts, water management, and wellness. These startups offer sustainable, affordable, and culturally embedded solutions that align with national priorities such as Atmanirbhar Bharat, inclusive development, and the Sustainable Development Goals. However, unlike conventional technology startups, IKS-based enterprises face distinct challenges including limited formal recognition, difficulties in scientific validation, intellectual property protection, regulatory compliance, access to finance, and ethical

commercialization. Therefore, a dedicated policy support structure and a robust institutional framework are essential to enable their growth and long-term viability.

IKS-DRIVEN STARTUPS ARE ENTERPRISES THAT:

- Derive core value propositions from traditional or indigenous knowledge
- Integrate modern science and technology where appropriate
- Emphasize sustainability, affordability, and cultural relevance
- Often operate at the intersection of community knowledge and formal markets

CHARACTERISTICS OF IKS-DRIVEN STARTUPS

Policy support for IKS-driven startups begins with formal recognition of Indian Knowledge Systems as legitimate sources of innovation within national startup and innovation policies. Recent initiatives such as the establishment of the IKS Division under the Ministry of Education and the emphasis on IKS in the National Education Policy 2020 have laid a strong foundation for mainstreaming traditional knowledge into education, research, and entrepreneurship. Startup-friendly policies must explicitly include IKS-based enterprises, providing them with tailored incentives, simplified procedures, and preferential access to government schemes. Financial support mechanisms such as seed funding, grants for proof-of-concept, subsidies for field trials, and access to impact investment and CSR funding are particularly crucial, as many IKS startups are knowledge-intensive and community-based rather than capital-intensive.

- Knowledge-intensive rather than capital-intensive
- Validation through experiential and empirical methods
- Community participation in innovation
- Long-term social and ecological impact orientation

NEED FOR POLICY SUPPORT FOR IKS-DRIVEN STARTUPS

A critical dimension of policy support is the protection and ethical commercialization of traditional knowledge. Instruments such as the Traditional Knowledge Digital Library (TKDL), Geographical Indications (GI) tagging, and community-owned intellectual property frameworks play a vital role in preventing misappropriation and biopiracy. Policies must promote benefit-sharing mechanisms that ensure traditional knowledge holders—such as farmers, artisans, healers, and local communities—are active stakeholders and beneficiaries in the entrepreneurial process. At the same time, regulatory frameworks need to be adaptive and supportive, especially in sectors like AYUSH, organic agriculture, and natural products, by providing clear quality, safety, and efficacy standards along with fast-track approval mechanisms.

While India has a vibrant startup ecosystem, existing policies are often ill-suited for IKS-based enterprises due to:

- Lack of tailored funding mechanisms
- Inadequate intellectual property frameworks
- Regulatory complexity in AYUSH and agro-based products
- Limited institutional recognition of traditional knowledge holders

Therefore, targeted policy interventions are required to mainstream IKS-driven entrepreneurship.

POLICY SUPPORT MECHANISMS FOR IKS-DRIVEN STARTUPS

Recognition and Mainstreaming

- Inclusion of IKS in national innovation and startup policies
- Alignment with NEP 2020 and National Education Policy mandates
- Dedicated IKS chapters within Startup India initiatives

Financial Support and Incentives

- Seed grants and early-stage funding for proof-of-concept
- Support for field trials, pilot projects, and community validation
- Access to CSR funds and impact investors

Intellectual Property and Knowledge Protection

- Use of Traditional Knowledge Digital Library (TKDL)
- Geographical Indication (GI) tagging for region-specific products
- Community-based IP ownership and benefit-sharing mechanisms

Regulatory and Standardization Support

- Fast-track approval mechanisms for IKS-based products
- Development of safety, quality, and efficacy standards

- International harmonization for export markets

INSTITUTIONAL FRAMEWORK SUPPORTING IKS-DRIVEN STARTUPS

The institutional framework supporting IKS-driven startups is multi-layered and involves coordinated efforts from government bodies, academic institutions, research organizations, incubation centers, industry, and community institutions. Ministries such as Education, AYUSH, Science and Technology, and Agriculture, along with agencies like CSIR, ICAR, DST, and DBT, play a central role in policy formulation, funding, validation, and technology support. Academic and research institutions contribute through IKS centers, interdisciplinary research, documentation, and scientific validation of traditional practices, bridging the gap between classical knowledge systems and modern scientific methodologies. Dedicated incubators and accelerators provide entrepreneurship training, mentorship from domain experts and traditional practitioners, market linkages, and commercialization support.

Government Institutions

Equally important are community and practitioner institutions, which ensure that innovation remains grounded in lived knowledge and local contexts. Participatory and co-creation models involving artisans, farmers, and healers strengthen authenticity, sustainability, and social impact. Industry and market institutions, including MSMEs, export promotion councils, and public procurement agencies, facilitate scaling and global outreach of IKS-based products and services. Despite these developments, challenges such as fragmented institutional coordination, limited investor awareness, and tensions between traditional epistemologies and modern validation frameworks persist. Addressing these gaps through an integrated national ecosystem approach, ethical governance, and sustained policy commitment can enable IKS-driven startups to emerge as powerful engines of sustainable innovation, cultural preservation, and inclusive economic growth, both nationally and globally. Key ministries and agencies play a central role in policy formulation, funding, and regulation.

Table 1: Government Institutions Supporting IKS-Driven Startups

Institution	Role
Ministry of Education (IKS Division)	Policy guidance, curriculum integration
Ministry of AYUSH	Validation, regulation, and promotion
DST / DBT	Research funding and incubation
CSIR / ICAR	Scientific validation and technology support
Startup India	Startup recognition and incentives

Academic and Research Institutions

- Establishment of IKS Centers in universities and IITs
- Interdisciplinary research bridging modern science and IKS
- Documentation, digitization, and validation of practices

Incubation and Entrepreneurship Institutions

- Dedicated IKS incubators and accelerators
- Mentorship from traditional practitioners
- Market access, branding, and commercialization support

Community and Practitioner Institutions

- Engagement with artisans, farmers, healers, and craftsmen
- Co-creation and participatory innovation models
- Cooperative and producer-company frameworks

Industry and Market Institutions

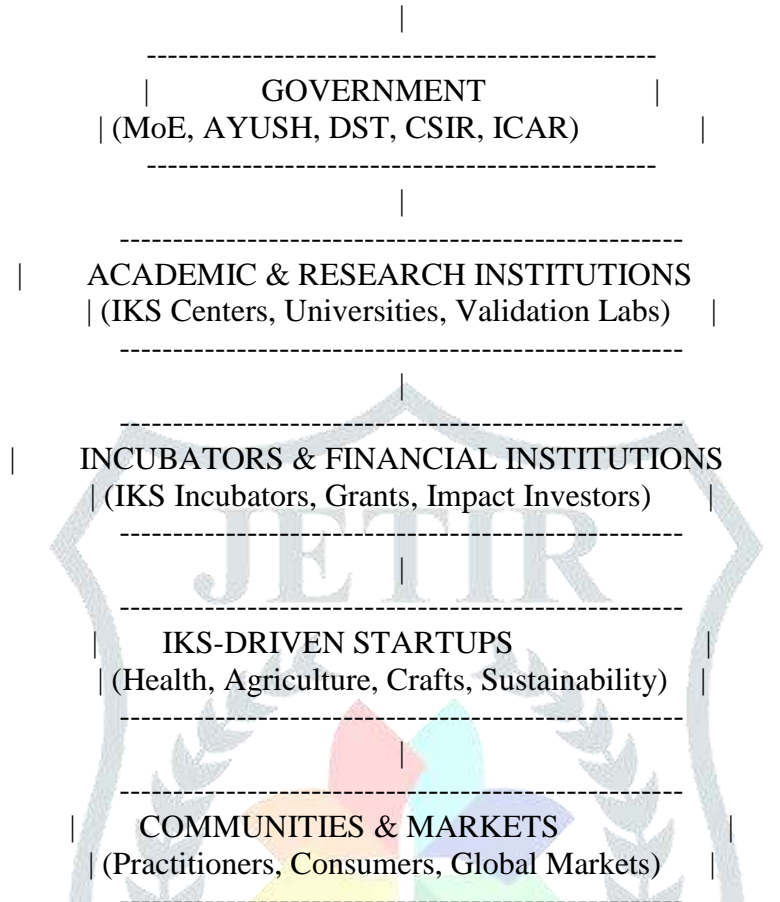
- Public procurement policies favoring IKS-based solutions
- Export promotion councils
- Partnerships with MSMEs, NGOs, and social enterprises

INTEGRATED INSTITUTIONAL ECOSYSTEM MODEL

Conceptual Diagram: IKS Startup Ecosystem

POLICY FRAMEWORK

(IKS Policy, Startup India, NEP 2020)



CHALLENGES IN EXISTING FRAMEWORK

- Fragmented institutional coordination
- Overemphasis on scientific validation ignoring traditional epistemologies
- Limited awareness among investors and policymakers
- Risk of commodification without community benefit

RECOMMENDATIONS AND WAY FORWARD

- Creation of a **National IKS Startup Mission**
- Unified regulatory framework for IKS-based enterprises
- Ethical commercialization and mandatory benefit-sharing
- Global branding of IKS innovations as sustainable solutions
- Strengthening academia–industry–community collaboration

CONCLUSION

IKS-driven startups represent a unique pathway for inclusive, sustainable, and culturally rooted innovation. While India has made significant strides in recognizing the importance of Indian Knowledge Systems, a coherent policy and institutional framework is essential to unlock their entrepreneurial potential. By integrating policy support, institutional coordination, community participation, and ethical governance, IKS-driven startups can emerge as a transformative force in India's innovation ecosystem and global knowledge economy.

References

1. Ministry of Education (2020). *National Education Policy 2020*.
2. Ministry of AYUSH. *National AYUSH Mission Documents*.

3. Startup India. *Startup India Action Plan*.
4. UNESCO (2017). *Indigenous Knowledge and Sustainable Development*.

