



*Accelerating your Innovations to Market*



15 years

# IMPACT REPORT

*18 December 2006 - 18 December 2021*







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**15 years**

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*18 December 2006 - 18 December 2021*



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# Celebrating 15 years of service to the nation

## *A message from our founding director*



**Dr. V. Premnath**

Founder Director

**Venture Center is not only recognized for its high quality startups but also for thought-leadership in innovation management, the missionary zeal in championing the cause of startups, sincere and no-nonsense approach to incubation, high quality and relevant events, excellence in services, professional project management and great operational discipline.**

### Dear Stakeholders and Wellwishers

Venture Center has finished 15 years of service to the nation and the world at large! It is important that we acknowledge and celebrate the journey so far and take stock of what the organization has achieved. There are many reasons to be proud and many people to thank. It is also time to renew our energies for the journey ahead.

The year 2006 was a very different world in India. The buzz around “startups” was still a whisper. Building startups was not the trending career choice. Science-based startups were an even more unlikely occurrence. A non-profit organization that spoke of how startups from India will deliver the benefits of science and technology to the world and hence transform the nation was a curiosity and rarity. It was in this backdrop that Venture Center began an uphill journey to the peak and against the force of the wind like any other startup. There was ambition, hope and expectation but the future was far from clear. Today, in 2021, we have reached the first peak and resting spot. We can proudly say that we have delivered on a promise in significant measure and the future looks promising. This is truly a milestone to celebrate.

We present here this Impact Report which is a whirlwind tour of some highlights to mark this milestone. Our startups and our team has made us all very proud. In the last 15 years, Venture Center has established itself as the leading science-business incubator in India. The quality, scope and scale of its initiatives has few parallels. The Venture Center team is not only recognised for its high quality startups but also for thought-leadership in innovation management, the missionary zeal in championing the cause of startups, sincere and no-nonsense approach to incubation, high quality and relevant events, excellence in services, professional project management and great operational discipline. This is a great foundation to build further and there is every indication that Venture Center can be a key contributor to India’s destiny as a leading innovation economy of the world. We call upon all stakeholders and well wishers to please continue to support us in this effort!

## Who we are

Entrepreneurship Development Center (trademarked and famously known as Venture Center) hosted by CSIR-National Chemical Laboratory (NCL) in Pune is India's largest inventive enterprises and science business incubator. Venture Center strives to nucleate and nurture technology and knowledge-based enterprises by leveraging the scientific and engineering competencies of the institutions in the "Pune region" in India, and aims to empower and enable scientists and engineers in pursuing technology, innovation and entrepreneurship objectives.

We are home to more than 75+ resident start-ups at any given time, and in the last 15 years, Venture Center has supported 650+ entrepreneurs through our various incubation programs.

Venture Center was founded with support from NSTEDB, Department of Science and Technology, Government of India. Venture Center is a NIDHI Center of Excellence, national implementation partner for the NIDHI-Entrepreneur in Residence Program and NIDHI Prayas Center. Venture Center also hosts a BIRAC BioNest (Bioincubator), BIRAC Regional Bioinnovation Centre, Center for BioPharma Analysis and Technology Transfer Hub. Venture Center is a BIRAC-Biotechnology Ignition Grant partner and home to NIDHI Seed Support System of DST-NSTEDB and BIRAC Seed and LEAP fund. In 2021, Atal Innovation Mission has joined hands with Bill & Melinda Gates Foundation (BMGF) for the nationwide AIM-PRIME program which is being implemented by Venture Center.



Venture Center is a CSIR initiative, DST-supported NIDHI Centre of Excellence and BIRAC BioNEST.



Venture Center is the winner of the National Award for Technology Business Incubator 2015, Asian Association for Business Incubation (AABI) Incubator of the year 2018 & the National Entrepreneurship Award (for Eco-system Builder 2019).



Dr V. Premnath receiving the National Award for TBI 2015 from former President of India - Shri Pranab Mukherjee





Receiving the AABI Award for Incubator of the Year from Mr. Huang Chingyao, President of AABI and Mr. Philip Kemp, Vice President of AABI



Receiving the National Entrepreneurship Award 2019 from former Union Minister of Skill Development & Entrepreneurship Dr. Mahendra Nath Pandey

  
**Venture Center**  
-Entrepreneurship  
Development Center-

  
**CENTER OF EXCELLENCE**  
Initiative of  
  
Government of Karnataka  
@ वेंचर सेंटर





# STARTUP IMPACT

*Find out how some of  
the brightest startups  
are changing India for  
the better*

# Highlights: Startup Impact

₹ 500,00,00,000\*

Total risk capital mobilized by our startups (residents, & associates) in the last 6 years during residency

42%\*

of all residents, associates, & incubateessupported since inception are generating revenue

55%\*

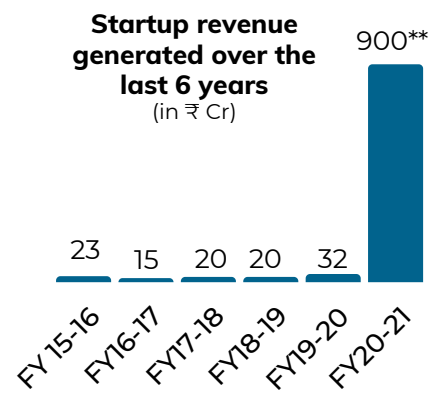
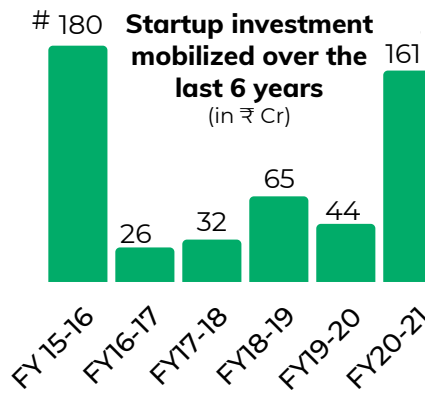
of this risk capital was raised as equity, 43% as grants, with 2% of the total investment raised as awards

₹ 1000,00,00,000\*

Total revenue generated by our startups (residents & associates) in the last 6 years during residency

100+

Unique patent families filed by Venture Center incubatees in the last 5 years



# Significant contribution from a few companies who received large value investments

\*\* Significant contribution from a few companies who experienced high success during the pandemic

165+

designs and trademarks filed by our startups since inception

700+

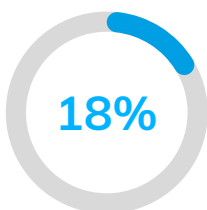
direct employees of current resident and associate incubatees

34%

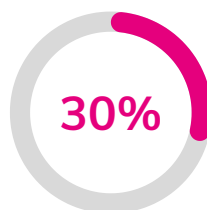
of startup employees have a PhD / MTech/MBA

5

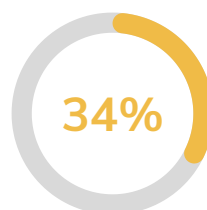
average number of employees per startup



of our startups are women-led enterprises in FY 20-21



of our founders are women in FY 20-21



of our startup employees are women in FY20-21



of our startups have at least one women founder, in FY 20-21

\*current residents and associates supported through each year



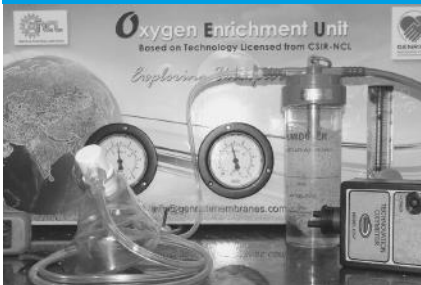
Biomedical  
Devices and  
Implants



Diagnostics



Biopharma



Bio-IT

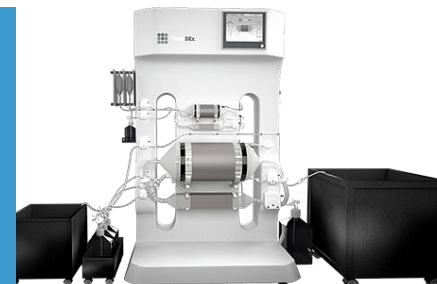


76+ technologies launched and already in the market across 8 domain areas

14,00,000+ beneficiaries of our startup products and services in FY2020 -21



Engineering



Agriculture



Industrial Biotech



Environment and  
sustainability



# Our startups are saving and improving the quality of life



## Ahammune Biosciences

1st targeted treatment for vitiligo

Ahammune is working on drug discovery for new and comprehensive treatment strategies for skin diseases

**They have recently received approval for Phase I human trials of AB1001**



## Dee Dee Labs

Next generation bionic limbs

Building the next generation of assistive devices for people with locomotor disability, starting with a bionic prosthesis for upper limb amputees

**ProGrasp was the recipient of two design awards and ProKid was selected in the Top 150 at the Global Grad Show**



## Jeevtronics

A defibrillator that never fails!

World's first dual powered (hand-cranked+grid powered) defibrillator

**Over 255 of their defibrillator devices have been deployed with over 62 defibrillators deployed at COVID centers. These devices have successfully saved the lives of more than 290 cardiac arrest patients.**





## Indius Medical Technologies

India's first US FDA approved spinal implants company

Indius Medical Technologies is a global medical technology company developing end-to-end solutions from AI based diagnostics to implant based therapeutics for the treatment of patients suffering from spinal disorders

**They are India's 1st & only spine company selling in USA. They have successfully treated 1500+ patients in India and USA**

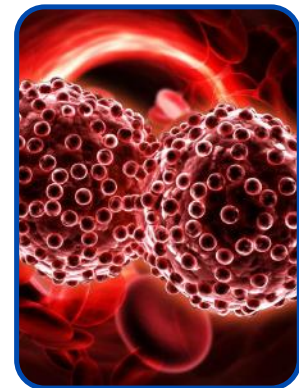


## Actorius Innovations

India's first CDSCO approved circulating tumor cell diagnostic solution

A proprietary circulating tumor cell (CTC) test in monitoring early detection of cancer and disease progression

**OncoDiscover is the 1st indigenous medical device to get DCG(I) approval. They have completed 2,000+ clinical tests & 20,000+ CTCs have been detected. The clinical study was performed on 500+ patients**



ADIUVO  
DIAGNOSTICS

## Adiuvo Diagnostics

World's first AI-enabled multispectral imaging device

ILLUMINATE® is the world's first, AI-enabled, rapid, label free multi-spectral imaging device to detect and classify pathogens on wounds

**Illuminate® has been commercialized in India with 10+ installations with over 1449 patients screened**



# Our startups are contributing to and delivering solutions for public health impact



## Mylab Discovery Solutions

India's first RT-PCR & antigen tests for COVID-19

Diagnostic kits and equipment for applications in clinical diagnostics, drug discovery



**First Indian company to develop RT-PCR kit for COVID-19 at one fourth the price of imported solutions. These kits have impacted 50 million lives**

## Periwinkle Technologies



An end-to-end solution for digital examination of uterine cervix

Design, manufacture, and market technologies that enable screening and treatment of cervical abnormalities



**They have commercialized Net4Medix® and Smart Scope® CX. Over 1 Lakh women have been tested and counseled. They have Generated employment for more than 50 skilled people**



## Module Innovations

Breaking new ground in rapid and point of care diagnostics

A deep-tech healthcare startup working in the area of rapid and point of care diagnostics for UTI and AMR



**First Asian diagnostics company to receive CARB-X funding of 3.2 M US\$. They have invented the world's first 2 hour phenotypic test to determine antibiotic susceptibility to uropathogens**

## Blackfrog Technologies



Solving the last mile cold chain problem for vaccines


Last-mile refrigeration technology, Emvolio, for safe transport and storage of vaccines and other critical biologicals



**Developed Emvolio which has doubled the vaccine outreach capacity in tribal regions due to longer cold-life. They have been delivering vaccines to remote and inaccessible areas in North-East India.**



# Our startups are partnering or serving global and marquee companies



## Tridiagonal Solutions

Helping achieve manufacturing excellence

Advanced modelling methods, automation and unique data analytics techniques for the process industries



**Achieved 3-5% improvement in process efficiency**



## Helium Consulting

Optimization for Refining, Materials, Chemical industries

Plant optimization and operational excellence consulting via Software, Algorithms and Industry Domain Knowledge



**They have achieved upto 2% energy savings in multiple facilities which amounted to INR 20 Cr. They have increased production upto 3% in 25+ production facilities**




## FlytBase Labs

World's First Internet-of-Drones Platform

An enterprise drone automation platform for deploying fully automated & cloud-connected commercial drones at scale for various drone applications



**They have made 1500+ drones with over 750k combined flight minutes. Their drones are deployed in 180 countries & are used by more than 14000 users**



## Helios IoT Systems

Helping to achieve net zero emissions everyday

Suite of enterprise applications for the renewable energy industry




**Their efforts have enhanced the overall performance of solar power plants & reduced carbon emission**

# Pioneering Technology Solutions

Our startups are working on path breaking, first-of-its-kind technology innovations, and we are thrilled to be backing some of the most promising innovations and startups of the future:

**World's first**



Dual-powered hand-cranked defibrillator

**World's first**



Smokeless sanitary pad disposal & recycling system

**World's first**




Internet-of-drones platform

**World's first**



AI-enabled, comprehensive wound infection assessment and monitoring device

**World's first**



Sample-to-RT-PCR ready automation system

**World's first**



fully patient personalized intraocular lenses

**India's first**



CDSO-approved Circulating Tumour Cell diagnostic solution

**India's first**



India's first and largest compressed biogas plant

**India's first**



India's top Process Modelling & Simulation Experts

**India's first**




bioactive glass company offering synthetic bone graft substitutes

**India's first**



Disposable bioreactors for biopharma

**India's first**



CDSO approved indigenous RT-PCR and Antigen Test for COVID19

# Building Award Winning Technologies

Our thriving start-up community is often recognized at prestigious national and international platforms, and many of our entrepreneurs have been a part of leading global accelerators.



# Contributing to Nation Building

Some of the top national priorities as outlined by various national and ministerial missions include health and sanitation, clean and safe water, skill development, and building sustainable cities. Venture Center and its startups are aligned with and contribute to various important national missions, and are operating in line with 14 of the UN's 17 Sustainable Development Goals



75% of Venture Center's incubatees are product companies and will eventually be manufacturing in India. Our soft landing program encourages foreign companies to explore Pune as a destination for their R&D and manufacturing activities. Of the 25 sectors identified under the "Make in India" initiative, our incubatee companies are contributing to 12 sectors.

Venture Center offers a rich innovation ecosystem with the widest array of service offerings to support early stage entrepreneurs working in chemical, materials and biological sciences and engineering. Venture Center is also the pioneer in India with regards to the creation of spin-off entities from publicly funded research organizations.



Venture Center is actively engaged in training and skill development in domains such as entrepreneurship, innovation and scientific techniques, through mentoring, training programs and workshops. Our incubatee companies Swayam Shikshan Prayog and Villagineer promote grass root entrepreneurship by women entrepreneurs and rural entrepreneurs, respectively.

Many of our incubatee companies are contributing to the Swachh Bharat Abhiyan. Padcare labs is helping recycle menstrual waste. Noble Exchange operates food waste management plants for Bengaluru and Pune. VIVIRA and REVY are helping improve effluent treatment plans in various industries. Venture Center also supported and mentored 4 BIRAC Social Innovation Fellows working on the theme of waste-to-value.



Many of Venture Center's startups are contributing to the sustainable agriculture mission by making agriculture more productive and sustainable. Bioprime Agrisolutions is making crops climate resilient using targeted physiology modulating biomolecules. Leancrop is developing technology that offers preventive protection against pests & diseases in crops to reduce the losses and increase the yields.



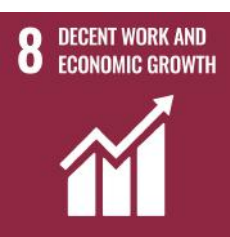
Venture Center has been actively building and supporting incubatee companies that are developing technologies for the elderly and disabled: Proactive Technical Orthopaedics is making artificial limbs, Nayam Innovations is working on next generation intra ocular lenses for cataracts, and DeeDee Labs is working on a non-invasive multigrasp myoelectric prosthetic arm for the transradial amputee population in India and the subcontinent.

The Atal Innovation Mission was set up by NITI Aayog to actively support innovation in the country. In a major push towards deep technology, Venture Center has partnered with Atal Innovation Mission to promote and support science-based deep-tech startups & ventures across India. As a part of this program, Venture Center offers in-depth learning via a comprehensive lecture series, live team projects, exercises, and project-specific mentoring.



Venture Center is contributing to these missions through various technology interventions that address key urban problems: BitChem is deploying CSIR-CRRI's cold mix road laying technology in rural India. Noble Exchange operates food waste management plants for Bengaluru and Pune. FUMA Labs is addressing the problem of crop burning by developing crop-residue based particle boards that can be used in place of plywood.

Venture Center is contributing to this mission in unique and distinct ways. Our incubatee companies Tridiagonal Solutions and Helium Consulting are providing simulation and optimization solutions to a wide variety of industry sectors such as chemicals and energy. NavStik is building the brains and operating systems for drones. Other incubatees are also developing technologies and apps for connected and personalized healthcare.







# INCUBATION IMPACT

*Leveraging Venture  
Center's rich innovation  
ecosystem to create  
maximum impact*

# Highlights: Venture Center Incubation Impact

650+

total entrepreneurs supported since inception

~200

entrepreneurs supported through our resident and associate incubation programs

84%

of them were resident incubatees, while 16% were associates

9

unique resource centers

50,000 sq. ft.

of incubation space with hot desks, lab spaces, shared lab facilities, advanced scientific and prototyping facilities

85%

of our startups are still active

75+

startups with inventive products



29

companies in our equity portfolio, with 1 exit

15+

CSR partners to create impact



90%

Startups at concept, PoC or prototype

11

spin-offs from publicly funded R&D labs

200+

events organized every year

6000+

event beneficiaries every year



40+

immersion visits for BIRAC SIIP fellows



200+

mentors and subject matter experts





4+ startups deploy their technology on our premises



85 incubator managers trained or mentored

65 incubator centers mentored across 16 states in India

3 E-cells supported at NCL, IISER Pune, and IISER Kolkata

100% utilization rate of our center for mass spectrometry

500+ beneficiaries of our scientific facilities



3 COVID product prototypes built using our protoshop facilities

129 beneficiaries of our hotlabs service since 2009

62 protoshop clients since 2016

31 corporates engaged with TechEx

11 strategic technology partners with TechEx

350+ IP filings, including patents, trademarks, copyrights, designs

14 CBA clients across 3 geographic locations

# From BIG Ideas to Prototypes



## Biotechnology Ignition Grant (BIG)

BIRAC's Biotechnology Ignition Grant is the largest early stage biotech funding programme in India. Venture Center has been a BIG partner from Round 4, helping with contract management and project monitoring of successful BIG grantees, along with offering extensive mentoring support.

103

grantees supported from Rounds 4 to 18

75

products launched by our BIG grantees

137

IP filings including patents, copyrights, and trademarks

22%

of our BIG grantees are female founders

5Cr+

average BIG funds disbursed per year over rounds 4 to 17

60%

of our BIG grantees have raised their first follow-on funding



## Social Innovation Immersion Program (SIIP)

Venture Center executes BIRAC's SIIP fellowship program for early stage social innovators. Venture Center has the distinction of being the only implementation partner selected for all four SIIP programs: SIIP 2014, SIIP 2017, SIIP 2018 and SIIP 2020.

14

social innovators supported. More than 50% of them have now formed startups.

2Cr+

total follow-on funding raised immediately after SIIP

100+

mentoring hours over all four cohorts, with over 50 immersion visits



## AIM PRIME Program

The AIM PRIME Program is a 9 month training and mentoring program for science based startups, faculty entrepreneurs and incubator managers where they are working on progressing their idea by teaming up with an incubator while going through a blended learning curriculum.

64

participants and 40 organizations

23

cohort represents 23 cities across 7 states

17

global faculty members with 5 in-house mentors

24

PRIME classroom sessions

330+

hours spent on mentoring

400+

participants over 11 PRIME events



## NIDHI PRAYAS PROTOTYPING GRANT

As a PRAYAS implementation partner, we support innovators with physical infrastructure, technical guidance, and business mentorship. The program supports idea-stage entrepreneurs with a physical product offering, with creating a prototype.

18

grantees supported under PRAYAS rounds 1-2

18

total MVPs developed and under commercialization

5Cr+

funding raised by 8 grantees with 24 lacs generated in revenue

# Boosting the spirit of entrepreneurship



## NIDHI Entrepreneurs-in-Residence (PIP) #

NIDHI EIR is India's pioneering program to support young budding entrepreneurs in exploring and fleshing out a new business idea with the help of mentors. The programme is being implemented through Venture Center as the Programme Implementation Partner (PIP) and nodal agency.

32\*

program execution partner incubators

237

EIR fellows supported across 22 states

70%

of the fellows are under 30 years of age

185

prototypes developed by EIR fellows

167

new companies / LLPs formed by EIR fellows

800+

jobs created by EIR fellows

5X

DST's disbursal raised as follow-on funding

137

IPs generated, including patents, trademarks and copyrights

42Cr+

follow-on funding raised by EIR fellows

#Data shown on this page is from rounds 1-2 unless specified otherwise. Rounds 3-4 are in progress and have not been considered during impact analysis

\*Data from rounds 1-4 of NIDI EIR



## NIDHI Entrepreneurs-in-Residence (PEP) #

As a DST-approved execution partner, Venture Center supports young entrepreneurs by providing extensive mentoring and networking opportunities, to help them pursue a promising technology business idea. Venture Center has so far executed 3 rounds of NIDHI EIR.

18

EIR fellowships successfully completed

14

EIR fellows at Venture Center have formed companies

20%

EIR fellows are women entrepreneurs

20  
lacs+

total revenue generated by EIR fellows

6Cr+

total follow-on funding raised from various sources

10

EIRs raised funding from schemes other than NIDHI

20

jobs created by EIR fellows

13

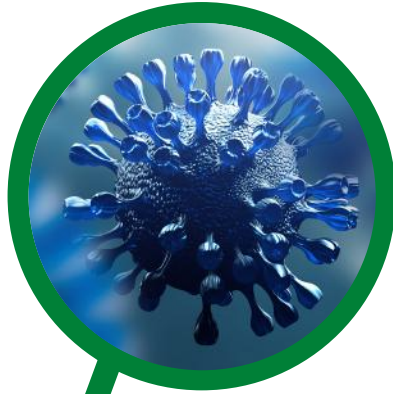
IPs generated, including patents, trademarks and copyrights

16

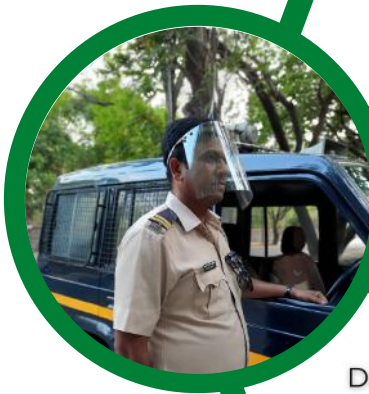
prototypes developed by EIR fellows

#Data shown on this page is from rounds 1-2 unless specified otherwise. Rounds 3-4 are in progress and have not been considered during impact analysis

# Creating Impact with CSR Partners



Support extended to various COVID technologies being developed by our startups

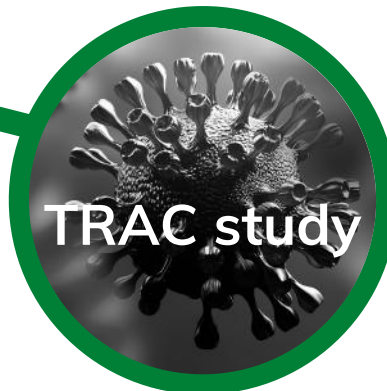


Venture Center's war against COVID

Donated over 1 lakh face shields to front-line warriors



Donated over 1 lakh MH12 N95 face masks to front-line warriors



TRAC study

Retrospective Assessment of Treatments of Hospitalized Covid-19 Patients

Total Funds  
₹ 518 Lakhs

Venture Center  
Infrastructure



First of its kind ISO 13486:2016 certified Med-tech Cleanroom



Solar plant to reduce Venture Center's carbon footprint

Venture Center  
Programs &  
Activities

Funding  
Database

Startup 101

Grants

CSR Partners



Enriching Lives





**NCL  
INNOVATION  
PARK**

[www.innovationpark.org](http://www.innovationpark.org)



**ADMINISTRATION MAHARASHTRA**

*Welcomes You*







# TRENDS AND TOP 3 PICKS

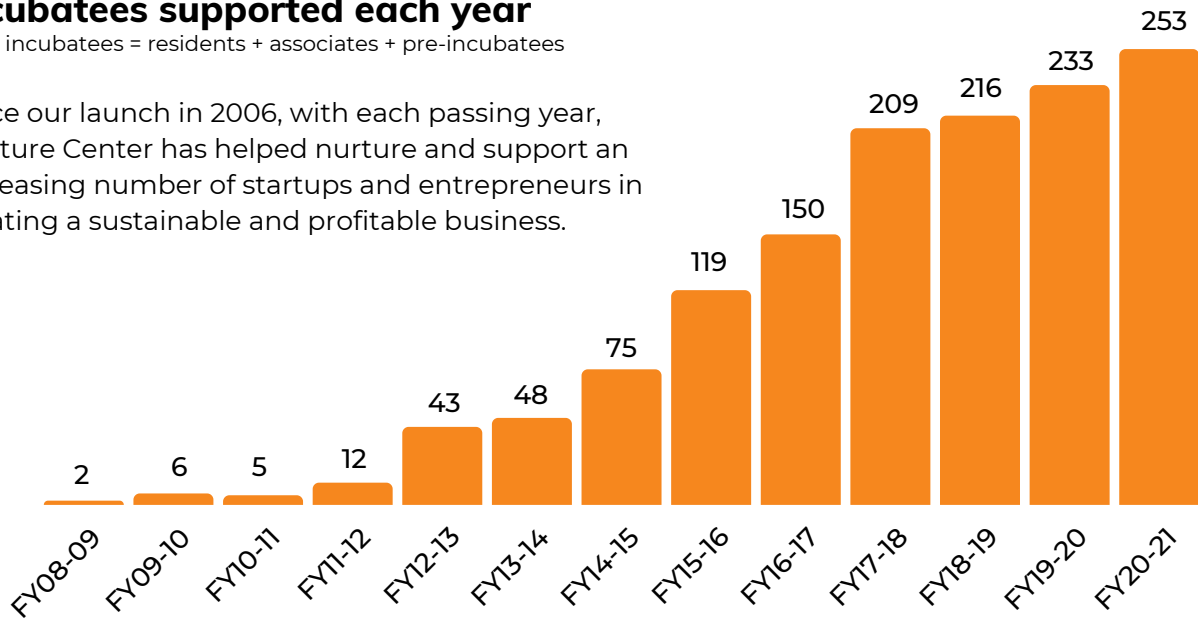
*Top takeaways  
from our 15 years  
in service*

# Venture Center Snapshot: Year on Year

## Sustained growth in the total incubatees supported each year

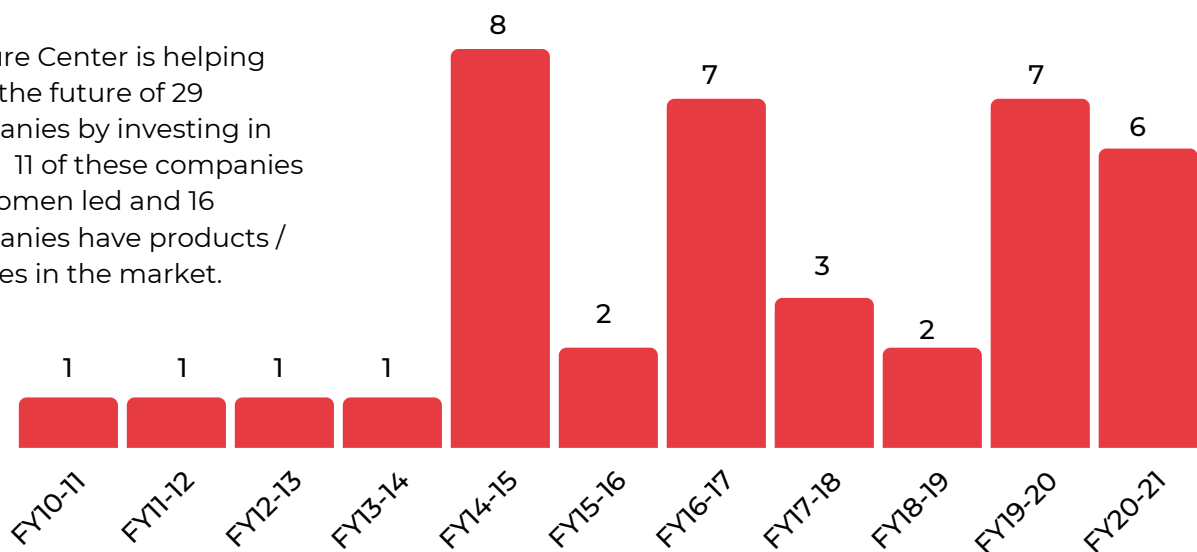
Total incubatees = residents + associates + pre-incubatees

Since our launch in 2006, with each passing year, Venture Center has helped nurture and support an increasing number of startups and entrepreneurs in creating a sustainable and profitable business.



## Year-wise breakup of portfolio investments by Venture Center under seed fund programs and the pioneering Lab2Mkt program

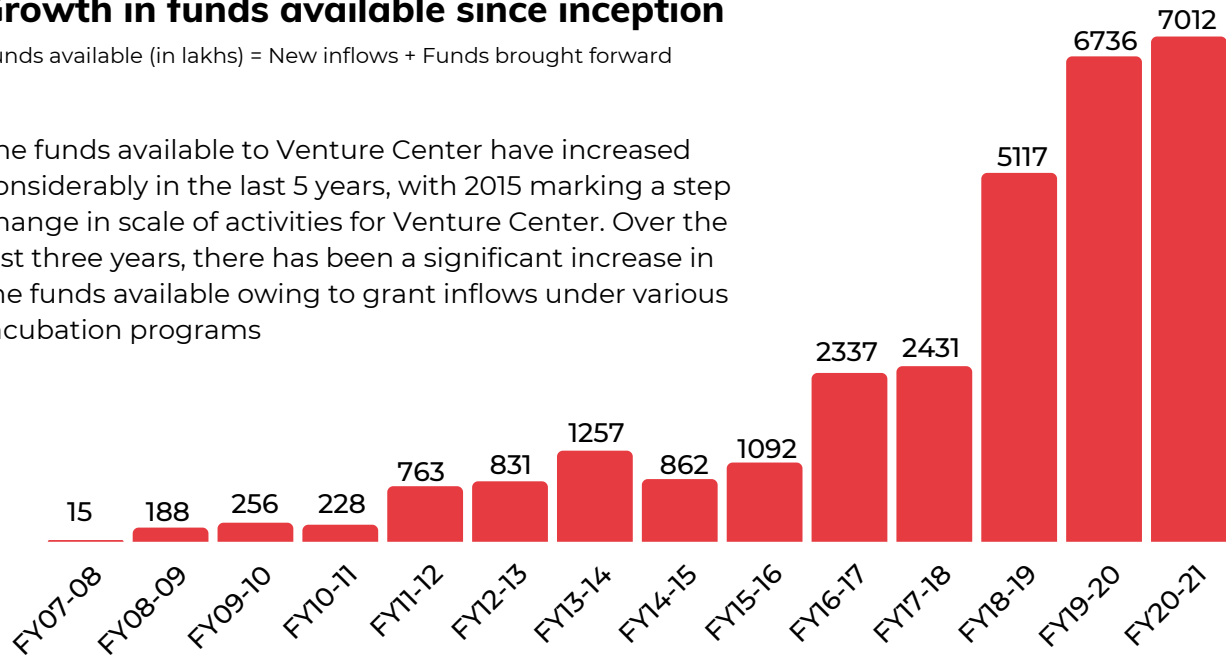
Venture Center is helping build the future of 29 companies by investing in them. 11 of these companies are women led and 16 companies have products / services in the market.



## Growth in funds available since inception

Funds available (in lakhs) = New inflows + Funds brought forward

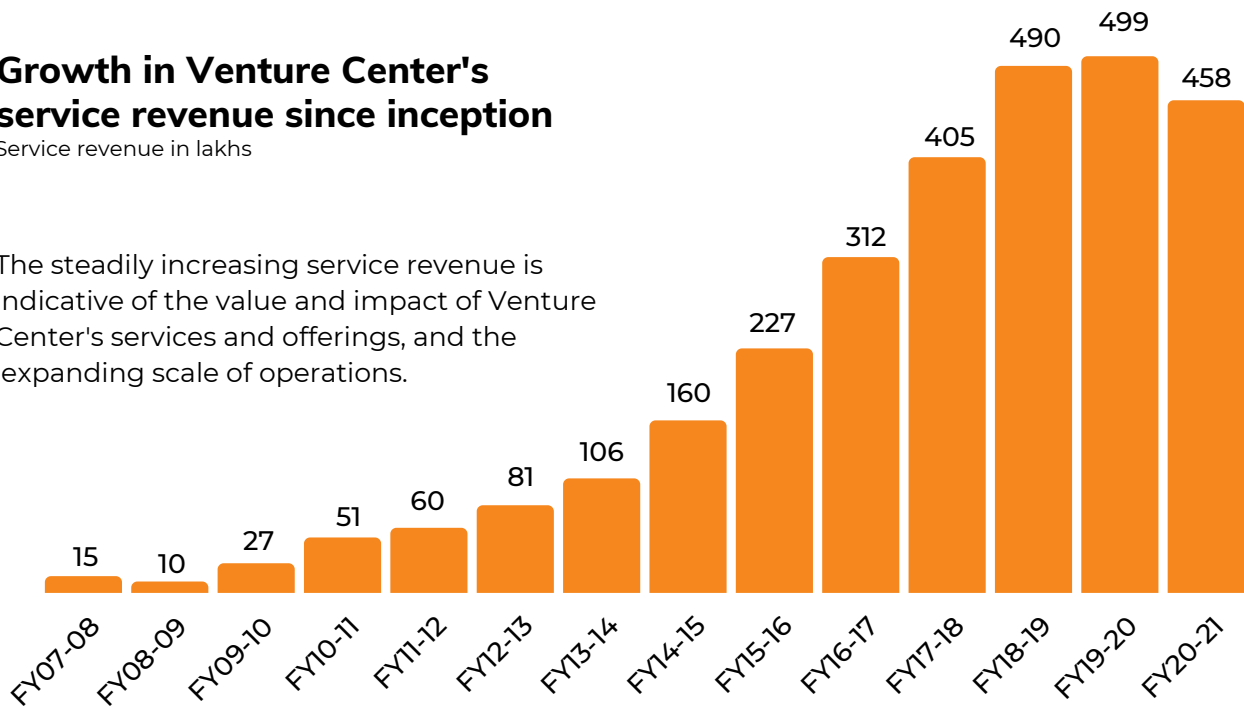
The funds available to Venture Center have increased considerably in the last 5 years, with 2015 marking a step change in scale of activities for Venture Center. Over the last three years, there has been a significant increase in the funds available owing to grant inflows under various incubation programs



## Growth in Venture Center's service revenue since inception

Service revenue in lakhs

The steadily increasing service revenue is indicative of the value and impact of Venture Center's services and offerings, and the expanding scale of operations.



# Venture Center Top 3

Startups by  
Funds Raised



Startups by  
Turnover

Technologies  
in health



Technologies  
in Agriculture



Technologies in Energy

Startups by number of awards



Startups by lives impacted

Rapidly growing startups



Female-led startups

It has been a long and exciting 15 year journey. It would not have been possible without the support from all our stakeholders and well-wishers. We look forward to your support in helping us contribute to and shape India's innovation ecosystem for years to come!

**Thank-you!**





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