

All India Agri Startup Convention 2018

Session: Technology to Startups: Role of Universities and R & D Institutions

Agri-Innovation to Agribusiness : Connecting the Dots

Dr. Neeru Bhooshan
Principal Scientist & In-charge,
ZTM & BPD Unit ,New Delhi



Presentation Overview

1

Objectives

2

Technology Commercialization

3

Incubation

4

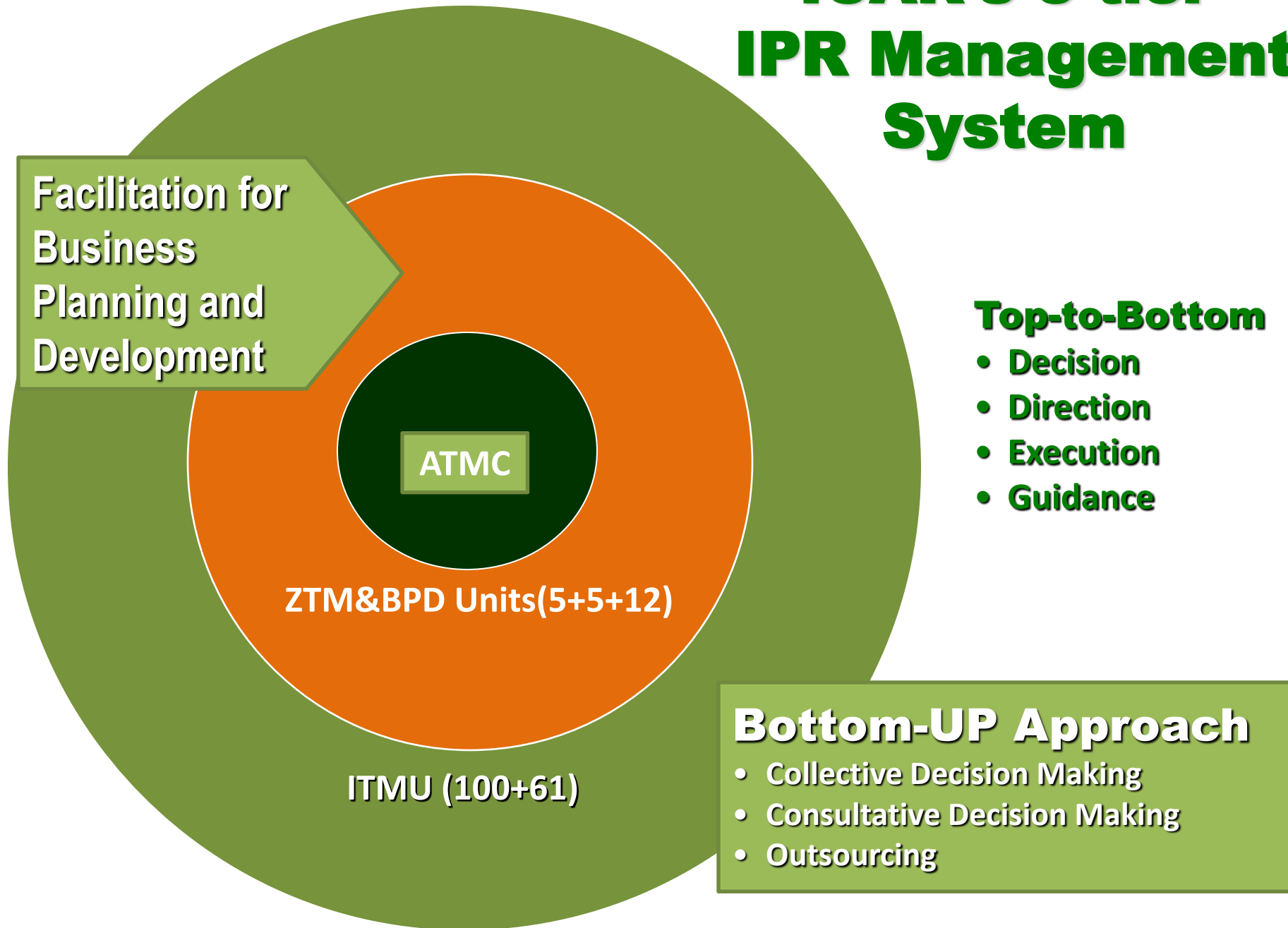
Success Stories

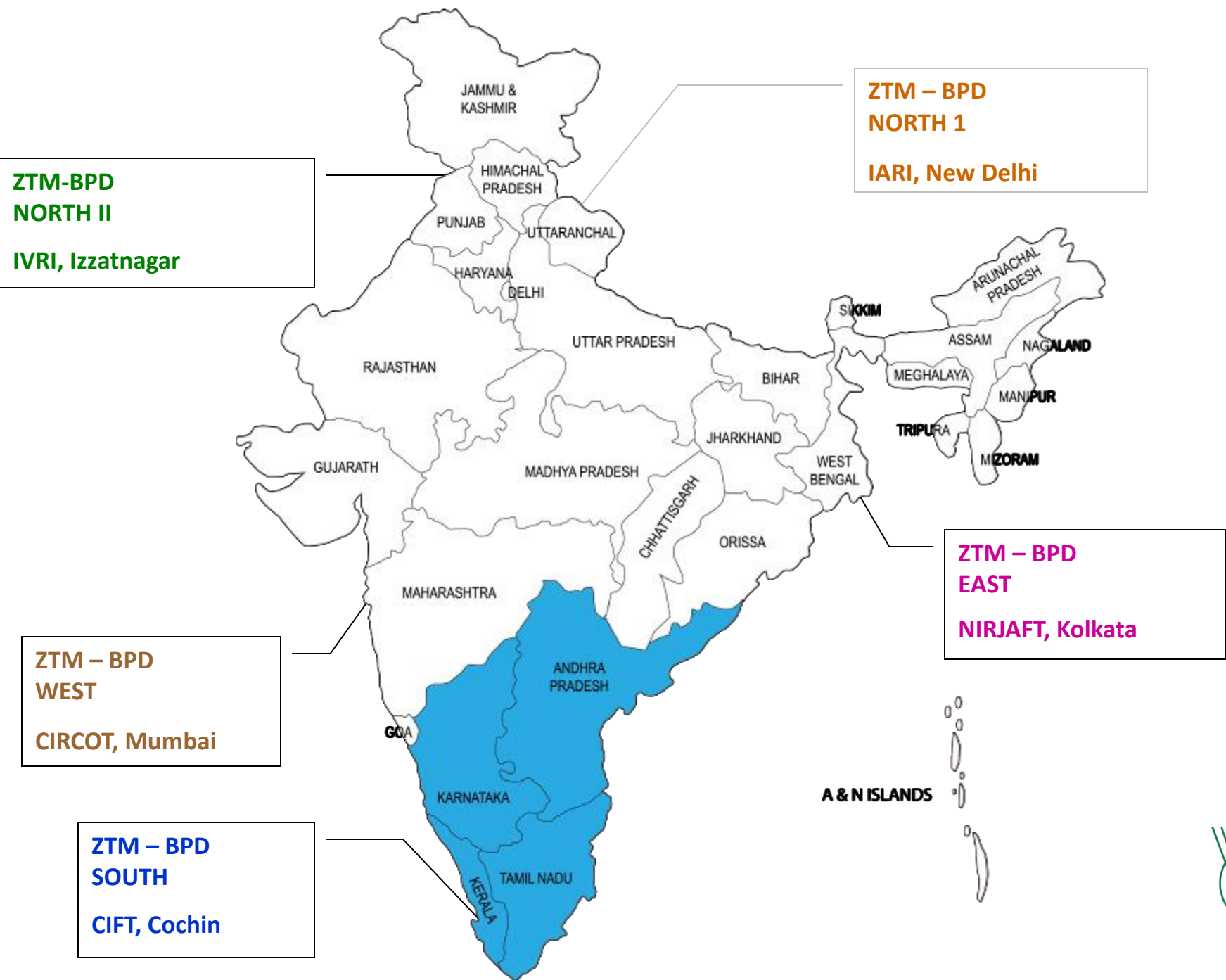
5

Challenges

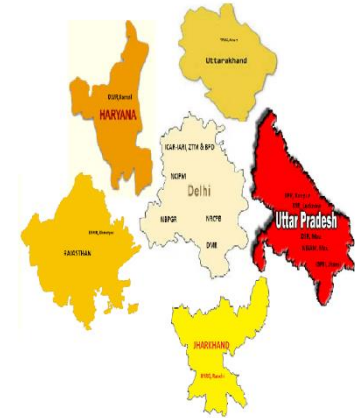


ICAR's 3-tier IPR Management System





“Translating Research into Prosperity”



- IPR management
 - Tech Transfer
- Agri Business Incubation
 - EDP/ADP

Objectives

- **Commercialization of technologies** from IARI/ zonal institutes to public /private sector using R&D backup of the institute
- **To promote and incubate** Innovative technology/ knowledge based startups
- To provide cost effective , **value added services to startups** like mentoring, legal, technical, IP related, marketing platform Financial linkages etc.
- Capacity Building of prospective entrepreneurs
- To build a vibrant ecosystem by developing network among academia, industry, other institutions , financial institutions etc.

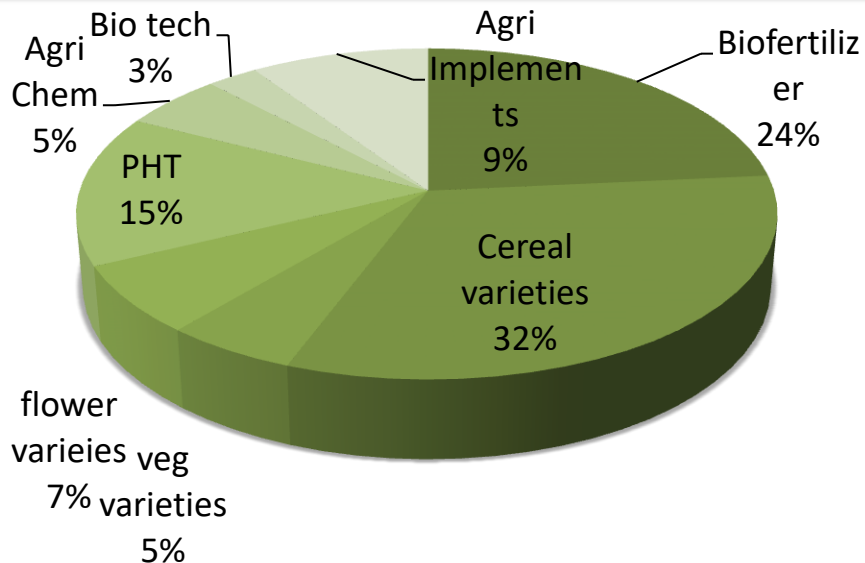
Technology Commercialization /Licensing @ZTM& BPD Unit IARI: A few key numbers

Active patent cases - 56

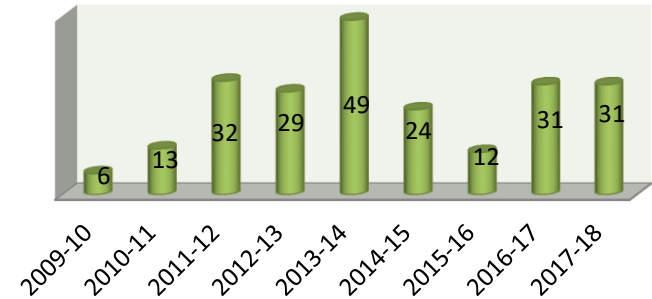
New Start-ups: 5-8/year

Licensing revenues : 1-2 cr/year

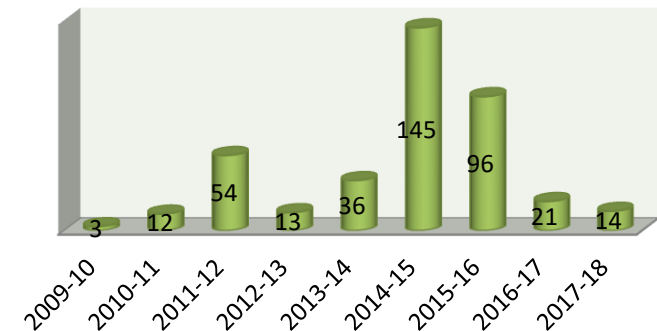
Active licenses /TT agreements: 256



No. of Technology

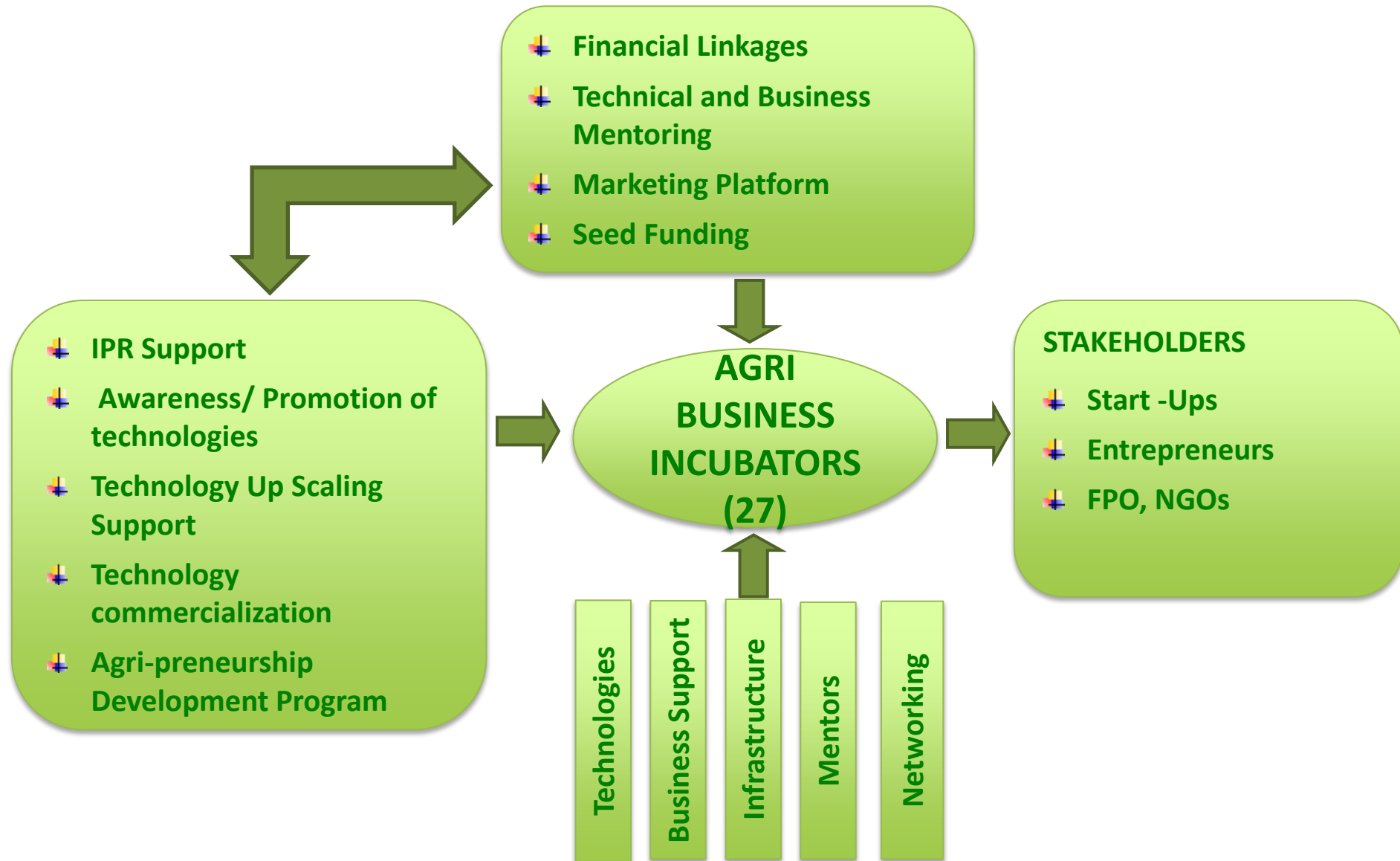


No. of Industry Partners



Sector wise: Technologies Commercialized

ABIC: Science to Start ups



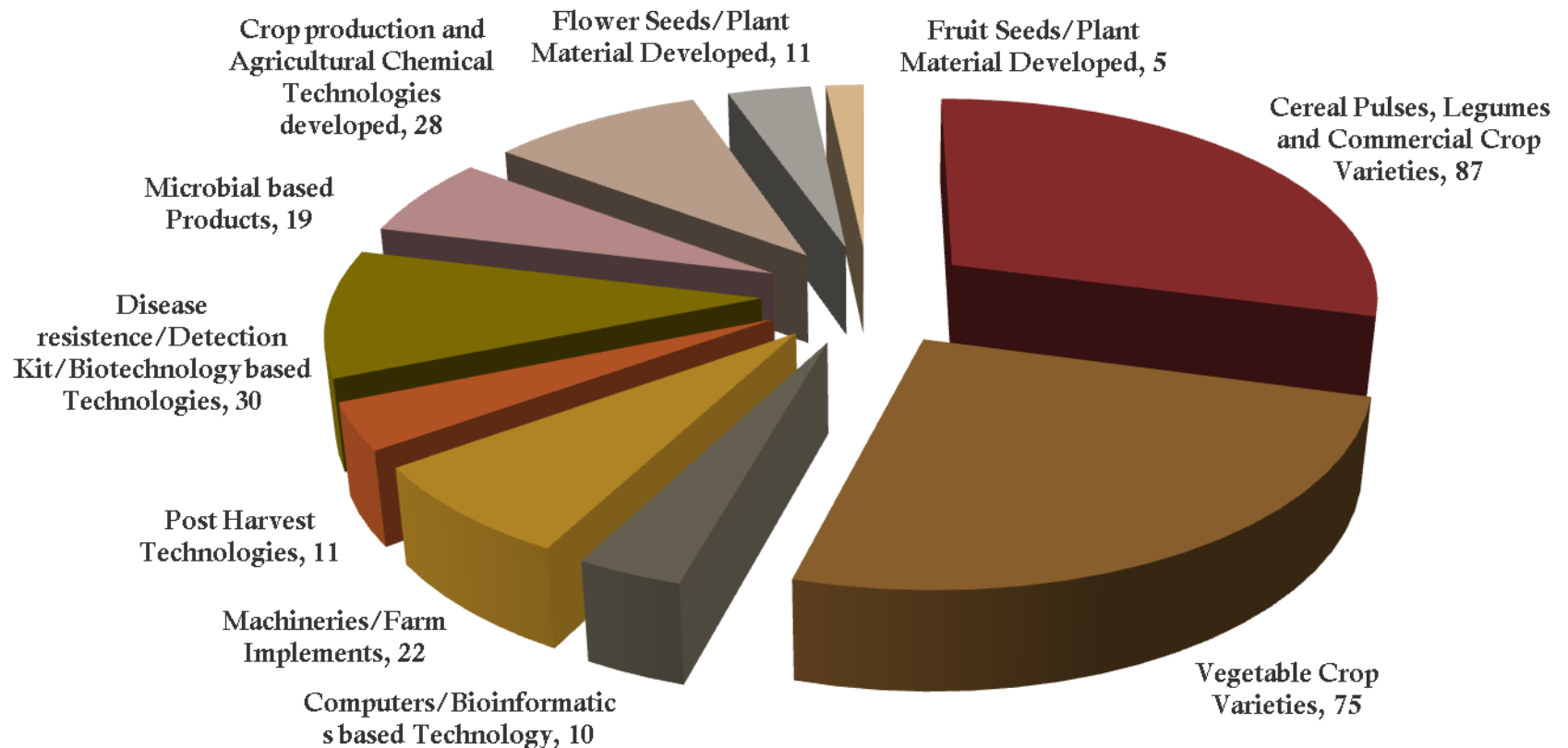
Incubation Support

A. TECHNICAL SUPPORT

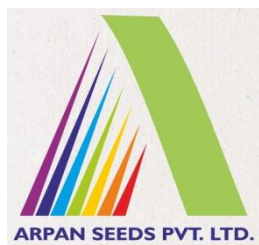
- Technology Commercialization
- Technology Development (Collaboration
- Technology Validation and Field Trials
- Technology Up scaling
- Technical Mentoring and Backstopping
- Agripreneurship Development Programs (ADPs)



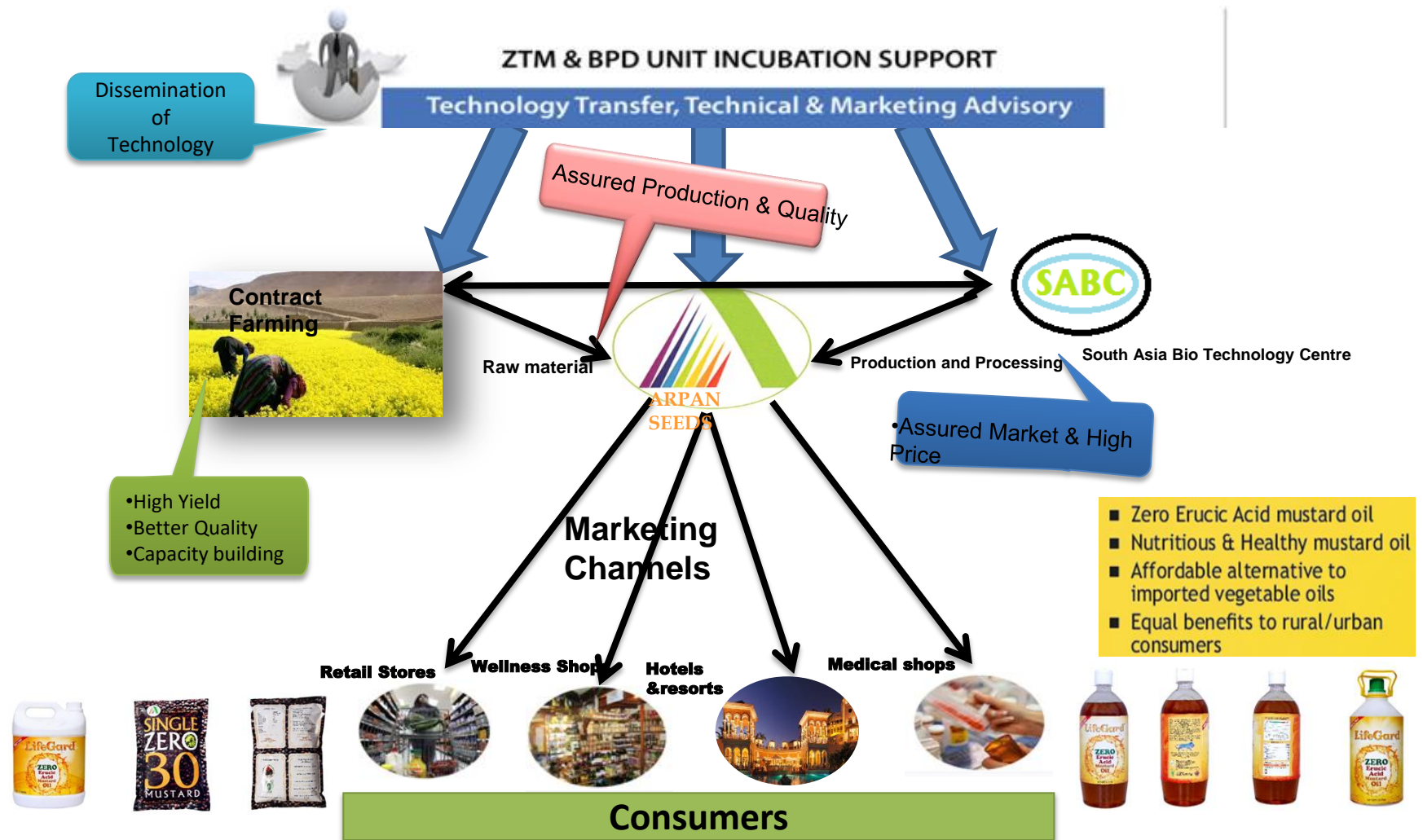
Technology Portfolio







Integrated Seed to Oil Approach



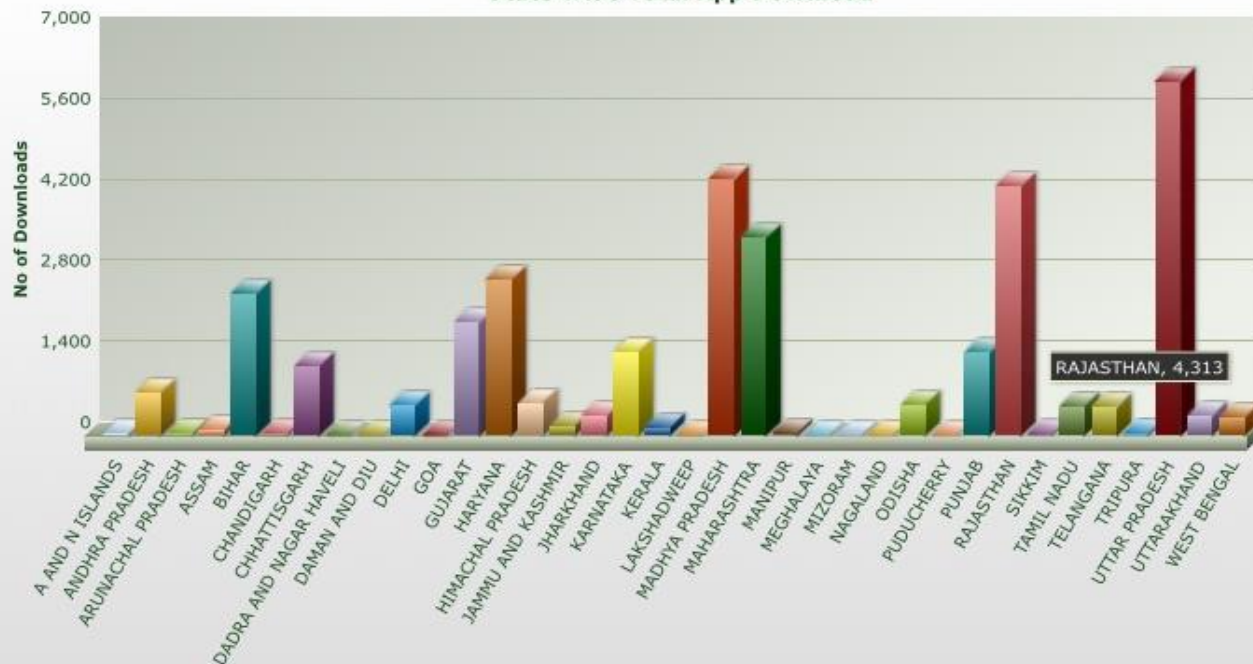
Access to Knowledge and Information

PUSA KRISHI : Technology Mobile App



To disseminate information under “Lab to Land”
in a big way to all stakeholders on
Technologies Ready for Commercialization

State Wise Total App Download



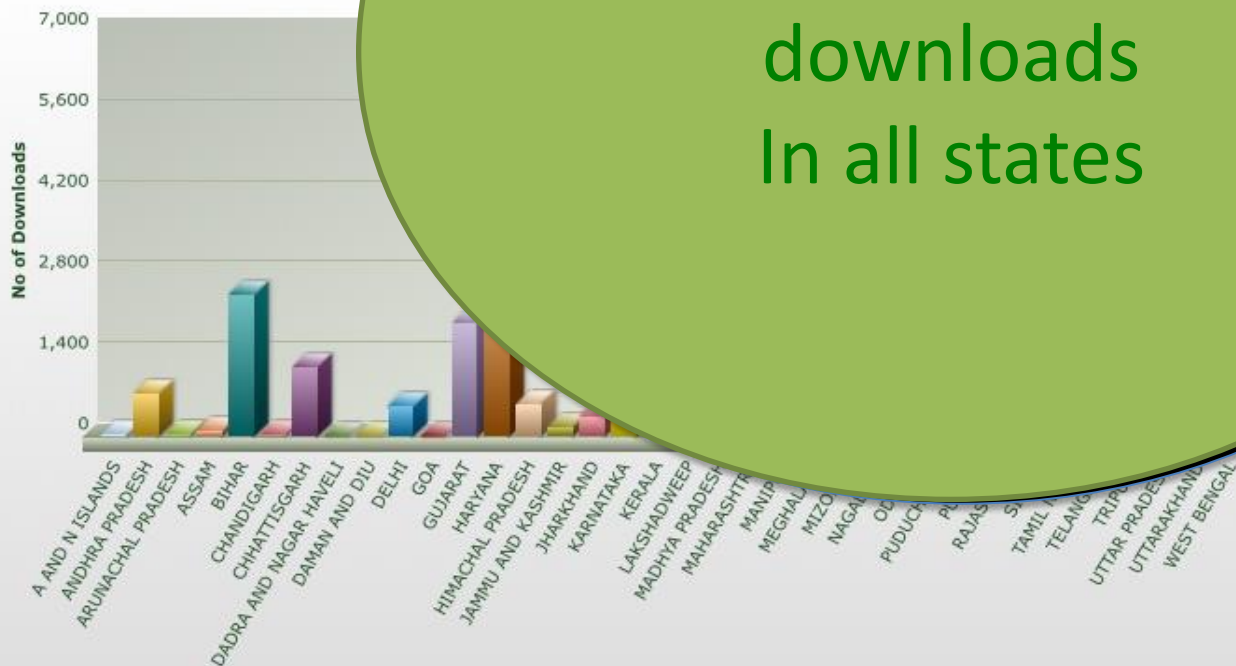
Access to Knowledge and Information

PUSA KRISHI : Technology Mobile App

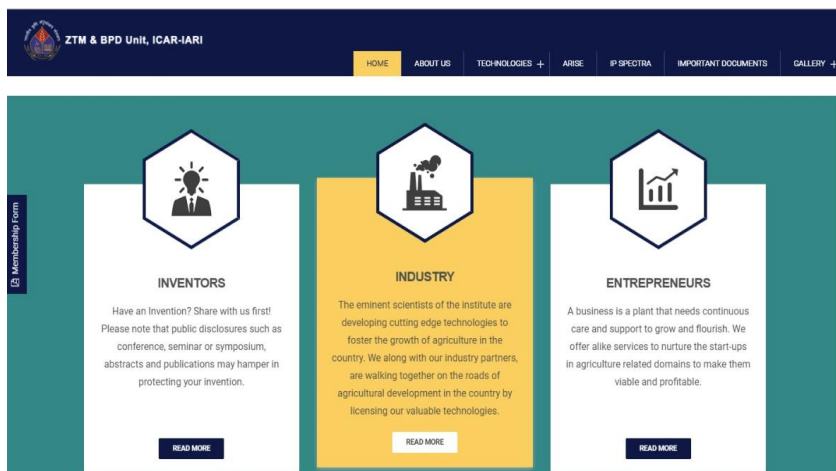


To disseminate information
in a big way
Technology

More Than 35000
downloads
In all states



Access to Knowledge and Information



www.ztmbpd.iari.res.in



www.ipspectra.ztmbpd.iari.res.in

Technology Manual
Innovative Technologies for Agribusiness

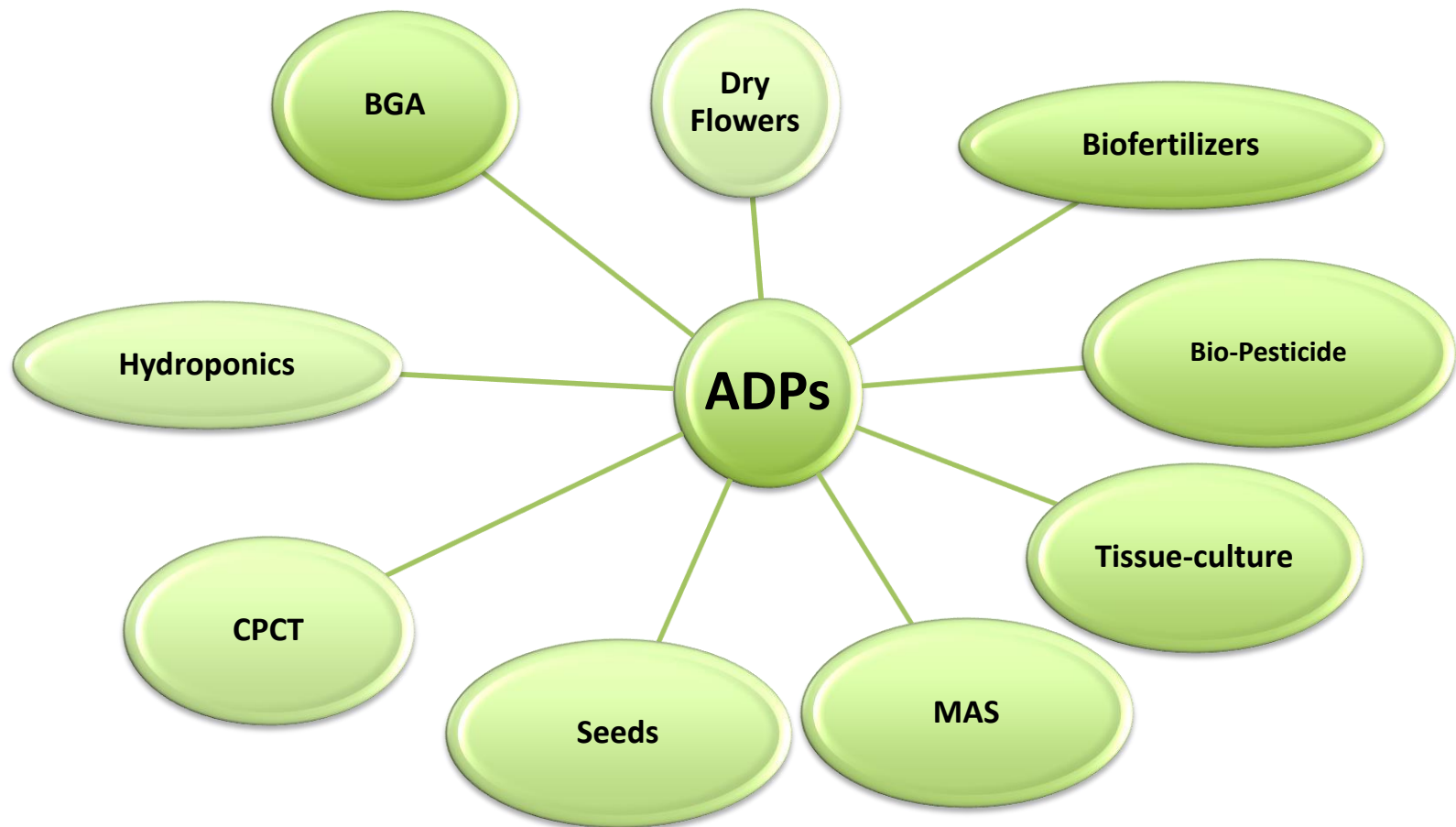
Incubation Support

A. TECHNICAL SUPPORT

- Technology Commercialization
- Technology Development(Collaboration)
- Technology Validation and Field Trials
- Technology Up scaling
- Technical Mentoring and Backstopping
- Agripreneurship Development Programs (ADPs)



Agripreneurship Development Programs (ADPs)



Women Empowerment through ADPs

ADP on Dry Flower Making for Women from J & K



Glimpses of ADPs



Incubation Support

B.INFRASTRUCTURE SUPPORT

- Incubation Office space
- Training Room
- Meeting Room
- Conference Room
- Internet and communication facility
- Video conferencing facility
- Well equipped Laboratories: Biotechnology, Tissue Culture and PHT



Incubation Support

B.INFRASTRUCTURE SUPPORT

- Leveraging of the Institute Strength
- Access to State of Art Facilities of the Institute
- Training to use them
- Networking with other institute



Incubation Support

C. BUSINESS SUPPORT

- Pre-incubation consultation
- B Plan Development facilitation
- Training to develop business skills
- Business Mentoring
- Secretarial Services
- Market Assessment / research
- IP Services
- Fund Facilitation



Incubation Support

D. IP SUPPORT



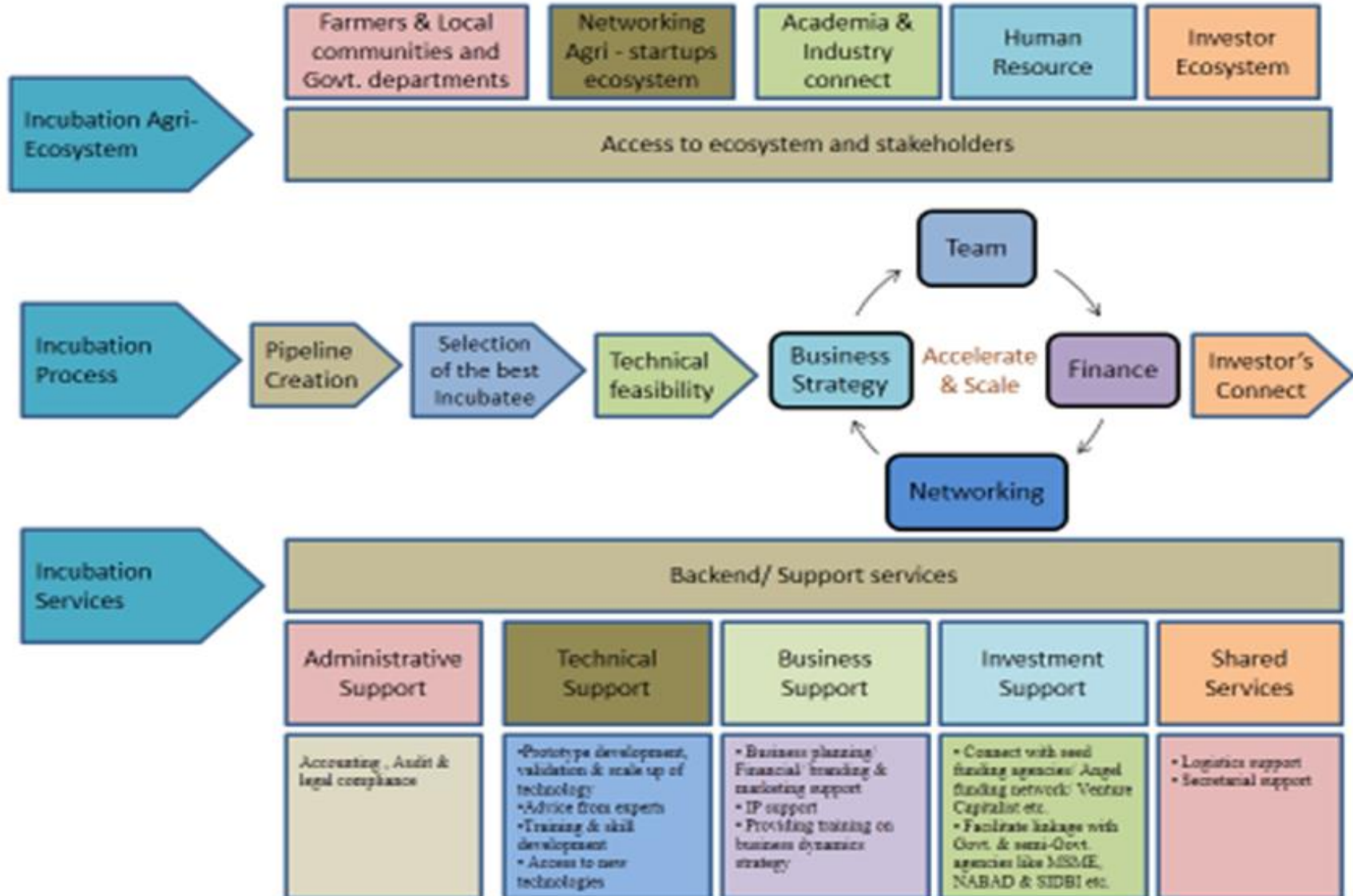
IP Spectra

Intellectual Property Facilitation Centre for Agro based MSMEs

Mission

Provide Complete, Cost effective & Quality Intellectual Property services
to Agro based MSMEs
to safeguard their innovations and business strategies.

Incubation Model



Agriculture Accelerator Programme

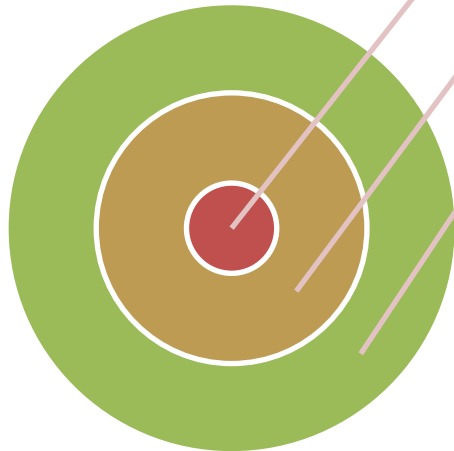


Launch Pad for Agri-Startups

Arise: Milestones



22 final
proposals
60 Proposals
selected
after first
screening
650
Applications
Received



Six days
Extensive
Business
Incubation
Workshop

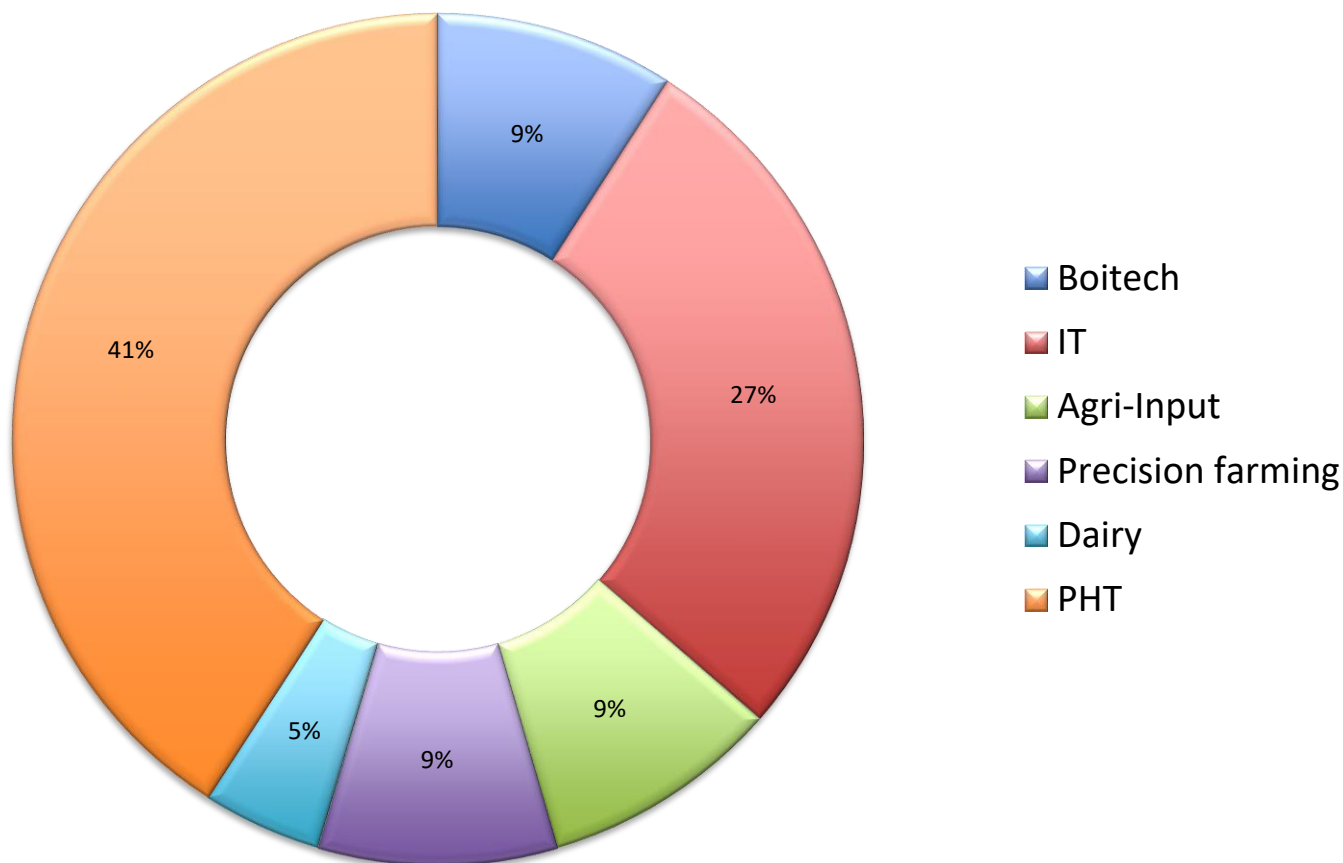
One on One
Mentoring
Sessions

Fund
Facilitation

Sector Wise : Incubatees Presence



Launch Pad for Agri-Startups



Agricultural Research Innovations for Sustainable Enterprises

Incubatees' Portfolio

Incubates

47

Graduated

12

MSME grant
facilitated: 9

- Pre incubation consultancy =102 individuals/ startups
- Guided, Supported & commercialized technology = 57 startups

Post Harvesting Technology



Agri-Inputs

AGPULSE ORGANICS



Precision Farming/Farm Mech



ICT in Agriculture



Glimpses of Business Incubation Workshop



Glimpses of Arise Programme



E. Marketing Platform to Incubate Companies



AM visiting INCUBATEES stall



9. Successful Business Ventures: Sickle Innovations



Journey: Rs 5 Lakh (2014)--1.5 Cr. 2017 (Three Quarter)

Developed and tested: Cotton Picking Machine

Launched :4(Cotton picking, Mango picking, apple picking and transplanter)

Established: Manufacturing Unit (Ahmedabad)

Operational Area: North India

Employment: 10, farmers connect 2500, Distributor:3
Dealer: 150

Financial: MSME Grant, CIIE: 10 lakhs



Handheld Cotton Picking Machine

**Design Farming
Technology**



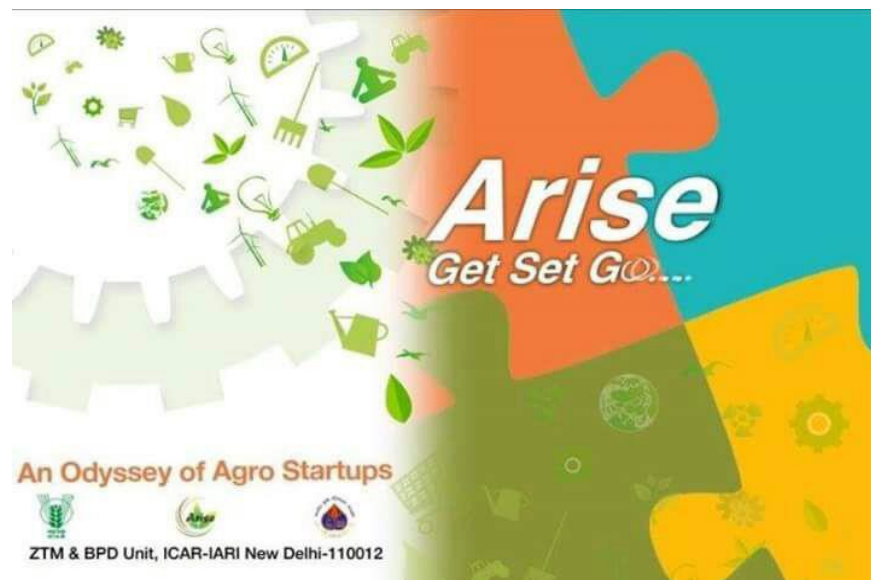
PM Interacting with Our Incubatees



Arise... Get Set Go....!



Launched by
Hon'ble President of India
during 56th Convocation of ICAR-IARI
on 9 Feb, 2018



F. Fund Facilitation to Incubates



Grant of INR 63 Lakhs has been facilitated to 9 Incubates



One Incubates received 50 Lakhs from BIRAC

Venture capital



Two Incubates received around 3 Cr from Private Investors



NATIONAL BANK FOR
AGRICULTURE AND RURAL
DEVELOPMENT

Connected for funding



प्रौद्योगिकी विकास बोर्ड
TECHNOLOGY DEVELOPMENT BOARD
DEPARTMENT OF SCIENCE & TECHNOLOGY

Challenges

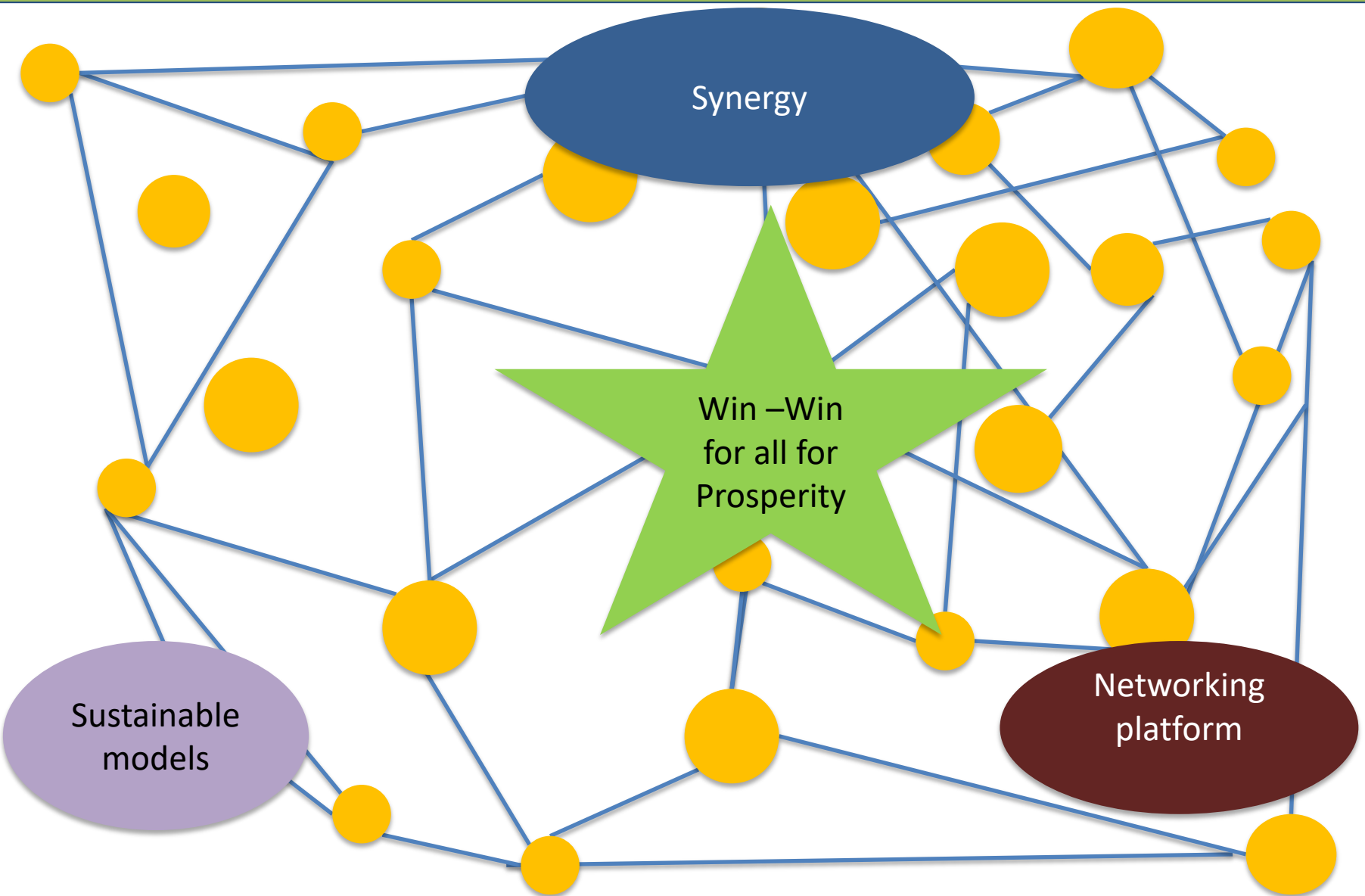
- Novelty of the Idea, Nascency of entrepreneurs
- Consistency in products quality
- Startups Focus drift towards on funding
- Lack of appropriate and on time seed funding
- Lack of funding to Business Model related Startups
- Recognition of FPO as startup
- Real Time Industry Connect
- Trained Professionals at incubator level
- Identification of mentors
- Sustainability of Incubator

Way Forward

- Strengthening & Sustainability of Incubator
- Industry Incubator Entrepreneurs Connect
- Testing and Pilot Plant Facilities
- Incubator & funding agency connect
- Capacity building of the incubates at all levels
- Recognition and Reward for Tech Comm & Incubation

Role of ZTM & BPD Unit (Business Incubator & TTO)

“Connecting the Dots”



Thank you



www.ztmbpd.iari.org

zonaltech@gmail.com

ps.ztmiari@gmail.com

neeru.bhooshan@icar.gov.in