

# Capacity Building for Entrepreneurship

## development through business incubation

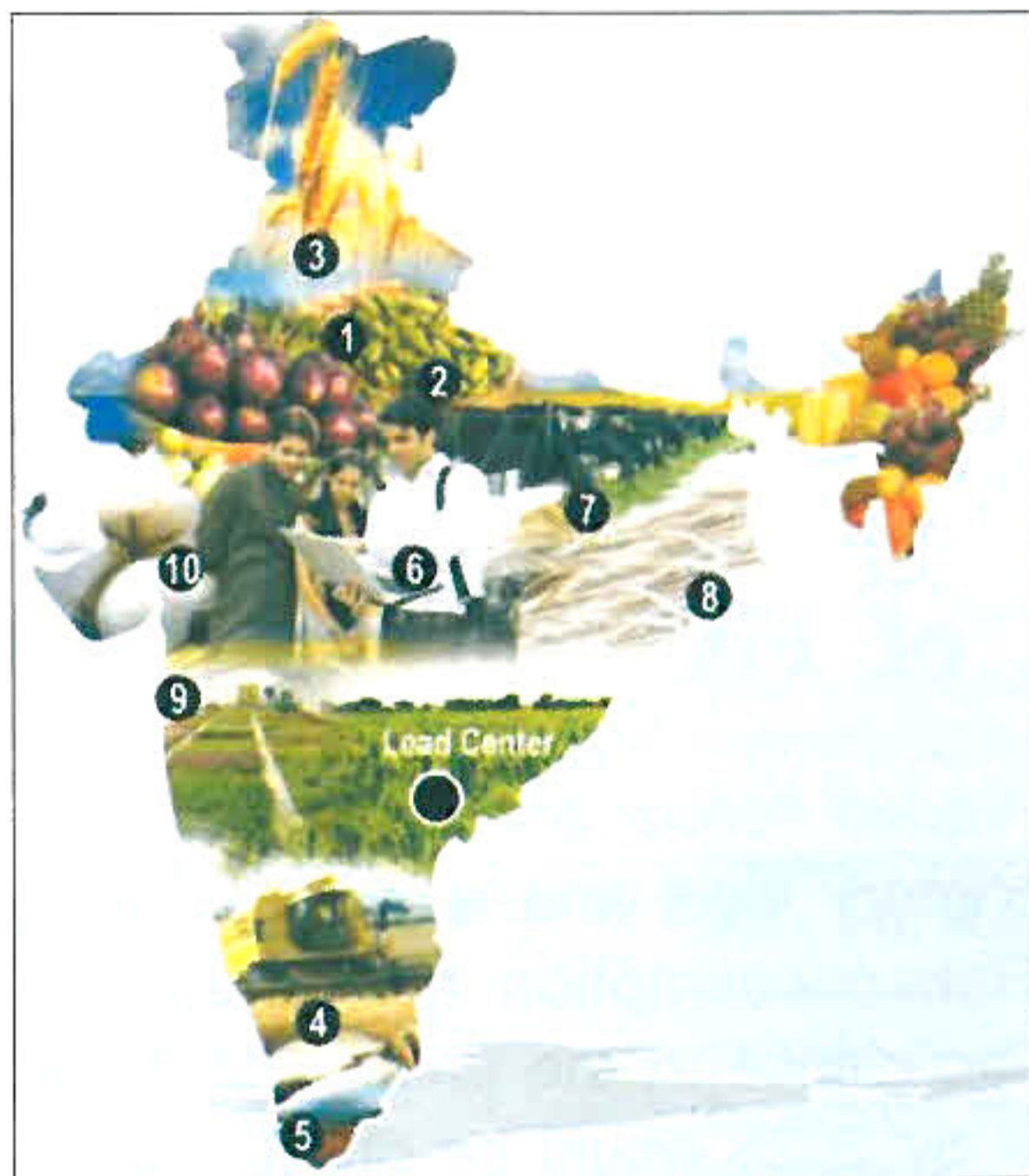
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**T**HE National Agriculture Policy announced on July 28, 2000 seeks to actualise the vast untapped growth potential of Indian agriculture, strengthen rural infrastructure to support faster agricultural development, promote value addition, accelerate the growth of agro business, create employment in rural areas, secure a fair standard of living for the farmers and agricultural workers and their families, discourage migration to urban areas, and face the challenges arising out of economic liberalization and globalisation. Development of rural entrepreneurship is inextricably linked to these objectives.

To fulfil the requirement of these new challenges, five Zonal Technology Management – Business Planning and Development (ZTM-BPD) Units with business incubation facilities were set up by the ICAR and strengthened through National Agriculture Innovation Project (NAIP) at National Institute of Research on Jute and Allied Fibres Technology, Kolkata (East zone); Central Institute for

Research on Cotton Technology, Mumbai (West zone); Indian Agricultural Research Institute, New Delhi (North-I zone); Indian Veterinary Research Institute, Izatnagar (North-II zone); and Central Institute of Fisheries Technology, Kochi (South zone).



These incubators have been instrumental in formulating business plans and developing models for technology commercialization for the institutes where they are located and also for other identified

institutes in the respective zone. In addition, taking a holistic view, five such Business Planning and Development (BPD) Units have also been established under NAIP in five State Agricultural Universities, namely, Anand Agricultural University, Anand; Birsa Agricultural University, Ranchi; Chaudhary Charan Singh Haryana Agricultural University, Hisar; Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur; and Tamil Nadu Agricultural University, Coimbatore.

These Agri Business incubators established by ICAR and financed under NAIP have been successful in creating an institutional mechanism for commercialization of agriculture research products/technologies generated from public research institutions. These units have been adequately provided with the physical infrastructure necessary for technology incubation and to launch new business, including offices and lab space and shared resources such as specialized equipments and technical support services. Appropriate capacity

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*Various initiatives have been taken by Government of India to realize and fulfil the importance of entrepreneurship development and training for development of micro and small enterprises (MSEs), particularly, the first generation entrepreneurs. The Prime Minister's Task Force on Micro, Small and Medium Enterprises in its report provides a roadmap for the development and promotion of MSMEs. It states that despite efforts, institutional linkages of research and development institutions and industry have not developed. Also in spite of India having the advantage of a large pool of human resources, the industry continues to face deficit in manpower possessing the right skills for manufacturing, service, marketing, etc. It recommends setting up of Business Incubators that would assist entrepreneurs in further development of their new/innovative ideas.*

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building in terms of human resource has also been undertaken by engaging/contracting professional help and providing required national and international trainings to the existing inter-disciplinary professionals in the area of technology management and enterprise creation.

### Why Agri Business Incubators?

The Agri Business Incubators are designed to create an entrepreneur friendly atmosphere in the ICAR research institutions through inculcating a corporate business culture within the existing R&D system. This platform is to help in a speedy commercialization of the technologies developed by the system by creating an interfacing and networking mechanism among the R&D institutions, industries and financial institutions.

The basic purpose of business incubation programmes is to provide necessary stimulus to starting and growing companies by extending the entrepreneurs with management expertise, proper planning networks and access to seed capital. Agri Business Incubators provide physical infrastructure necessary to launch new business, offer lab space, experiment facility, office facilities, and common shared resources in the form of equipment and support services. With proper planning and nurturing, these new initiatives can take root and eventually flourish.

### Opportunities for Agripreneurs

While there is no dearth of knowledge and innovative technologies being created in the ICAR institutes, the BPD units focussed on the need to explore the potential of the generated technologies and their transfer to market at a faster rate. The initiative of establishing the incubation facilities has shown considerable promise for enhancing the agri-business opportunities in diverse sectors of agriculture research. The technological assets in ICAR institutes that can be transferred through the Agri Business Incubators include:

- High yielding and resilient crop varieties and planting materials
- Animal and poultry breeds and fish strains
- Biotechnological products, diagnostic kits, biofertilizers and bionutrients
- Vaccines and diagnostics, animal and avian nutrition, fish feed, livestock products technologies and veterinary medicine
- Improved tools, equipment and farm machinery
- Improved dairy, poultry and fisheries technologies
- Post harvest technologies and value added products
- Natural resource management technologies
- Computer software and data sets
- Processes and products of agriculture and the allied sectors

### Objectives

The Agri-incubators helps to provide the innovators, unparalleled access to a variety of technology and management centres and experts. Each innovator is supported by a mentor group of technical experts in the institutes, who provides the technical backstopping and monitor the innovator's progress. In addition to the expertise available in the ICAR institutes, the incubator also develops network of people and institutions that helps the incubation projects with technology support, testing facilities, materials, prototyping facilities etc. The network also include lawyers, patent filing experts, venture capitalists, etc. who acts as catalysts to help commercialize the innovations.

Overall, the objectives of the Agri-Business incubation centres

### Service Offerings

#### SERVICES OFFERED

##### Technical Services

- Pool of Entrepreneur ready Technologies
- Technical Assistance/Training
- Product Development Support
- Quality/Packaging improvement

##### Access to facilities

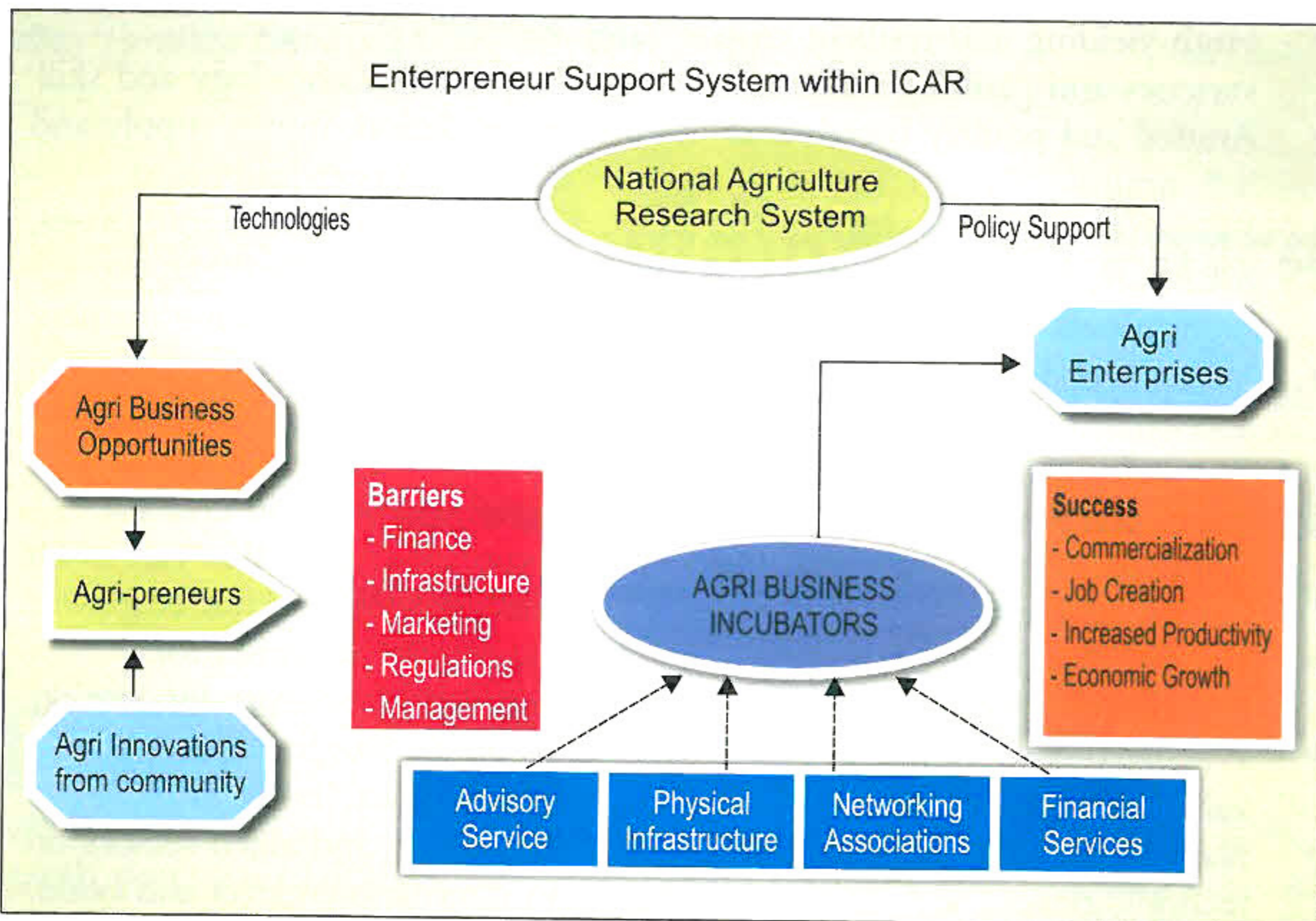
- Incubator Office and Conference Facility
- Pilot Plant for Processing Agricultural commodities
- Laboratories

are:

- To provide technology and skill up gradation, inputs supply and market support leading to promotion of viable enterprises, sustainable employment, to entrepreneurs including farmers' and grassroots innovators.
- To develop and implement new services, organizational transformation and create a corporate culture that can foster entrepreneurship, and empower agricultural scientists for stimulating business innovation
- To popularize the ICAR technological assets in agriculture and allied sectors on an international level and build intensive partnerships with the private industry and entrepreneurs for ensuring a competitive presence
- To impart training and capacity building programme for, creating prospective entrepreneurs and generating value added manpower to compete effectively, create jobs, open up new economic opportunities for small and medium scale industries

### ICAR: Responding to Agripreneurs need

The Indian Council of Agricultural Research through Agri business incubators has contributed toward this objective by targeting innovative growth oriented entrepreneurs who are pursuing business opportunities based on technologies available within ICAR institutes. It provides these entrepreneurs with a holistic service offering that accelerates their growth and increases their sustainability. In the process of



doing so, BPD units engage all stakeholders along the value chain, thus strengthening the innovation and entrepreneurship ecosystem affecting the start-up and growth of innovative agribusiness enterprises. Relatedly, the BPD's strive to have a demonstration or catalytic effect, encouraging a new generation of entrepreneurs to enter, grow, and advance the industry.

The Agri Business Incubator services are designed to increase a client's likelihood of successful development and growth beyond what the entrepreneurs could achieve on their own. Offering value-added services is key to the incubator's ability to successfully spin out the start ups into big company, generate jobs and contribute to the economic development in the region.

The service offerings can be divided into four categories:

- Direct Business Development Assistance
- Professional Network and Relationship Support
- Educational Programs Facility-Based Services

### Direct Business Development Assistance

Business development assistance is the direct support provided to clients/entrepreneurs from the time of registration through graduation. The incubator provides oversight and facilitate access to resources that meet client needs as those

needs arise over the course of their incubation. This is the ongoing process of evaluating client business plans, identifying areas of need, developing a work plan to address those needs including identifying expertise and services needed to move the business plan forward, and timeframes for major tasks to be completed. The initial assessment would occur upon acceptance to the incubator and follow on an annual basis or as business issues dictate. The final assessment would be a graduation transition plan that links the start up company to appropriate resources in the community.

### Professional Network and Relationship Support

Networking and relationship support describes the active role an incubator takes to develop connections to resources that the entrepreneurs might not otherwise have access to as small, emerging businesses.

*Mentoring:* The incubator's Manager develops a pool of experienced individuals willing to serve as mentors and business consultants/ advisors for client companies. Mentors are selected based on their experience with the client's industry sector and stage of development. The Manager meets with mentors on a routine basis to stay abreast of the development and suggest resources that would help the mentor best serve the client

business.

*Professional Network:* The incubator provides a broad-based pool of high-quality professionals that have the technical and business skills needed to support client businesses. The incubator screens such service providers, facilitates the interaction between the service provider and the client, and establish means to assess client progress and satisfaction.

*Capital and Financing Network:* The incubator has established a network of financial institutions including banks, NABARD, MSME, angel investors, venture capitalists, and corporate equity investors. The incubator provides introductions between incubator clients and appropriate investment resources.

*Program Referral Service:* The incubator maintains up-to-date knowledge of and relationships with established resources and programs in the area and provide referrals and information to incubator clients.

### Capacity Development Programs

*Seminars:* Seminars emphasizing topics of special interest to emerging businesses can be provided on a regular basis. Many incubators host such seminars on a monthly basis. The manager would identify topics based on an understanding of incubator client needs and invite guest speakers with expertise in the topic area.

*Business Topics Trainings:* The incubator works with other specialized institutes to provide incubator clients with access to the range of general business-related topics that are applicable to any start-up operation including financial, legal, organizational, marketing, insurance, etc. Depending on client demand and needs these offerings could be provided on-site at the incubator or off-site.

*Commercialization/Licensing workshop:* The incubator also hosts several business meets for innovators to create technology awareness for licensing the technologies.

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he food industry and the consumer has increased access to nutritionally superior food products.

The value chains developed and the interventions made resulted in economic benefits to all stakeholders. To highlight the kind of increased income that can come from effective technological interventions, the example of a value chain on flowers is illustrated here. This value chain covering jasmine, marigold, carnation and dry flowers was developed under a NAIP sub-project led by Dr Jawaharlal of Tamil Nadu Agricultural University, Coimbatore.

### Pilot projects

Several technologies were scaled-up and pilot plants were set up in value chain sub-projects. Some of the major ones being, Biomass Briquetting Plant, Biomass Based Power Generation Plant, Sorghum Biscuit Plant, Linseed Oil Extraction Unit, Activated Carbon

from Coconut Shell Plant, Gingerol Extraction Plant, Kokum Liquid Concentrating Unit, Pig Slaughterhouse and Processing Unit, Pollution Preventing System in Cashew, Shell Fish Value Added Production Unit, Organic Liquid Fertilizer from Banana Pseudostem Sap Unit. These pilot plants have demonstrated the commercial viability of technologies developed under the NAIP and can be replicated by entrepreneurs interested in these technologies.

### SUMMARY

Prior to the implementation of the component -2 sub-projects, a few agricultural value chains existed in the country and they too were not well organized. They were mostly fragmented with no continuity as a value chain. Research organizations in the National Agricultural Research Systems worked independently and were not market driven. The NAIP

sub-projects under component-2 helped establish an institutional mechanism to work with private partners in a consortium mode. As a result of this initiative several strong public-private partnerships were established, which helped in the development of many successful value chains with linkages to national and international markets. Successful and sustainable value chains developed under the NAIP include Agro-forestry, flowers, guava and mango, banana, custard apple, ginger, saffron, coconut, protected cultivation, sorghum, bioethanol, millets, linseed, prosopis, natural dyes, biomass, pashmina, meat, milk, dairy products, small pelagics, oysters, and tuna fish. It is hoped that these value chains will remain sustainable and will serve as an inspiration for the development of several more agricultural value chains in the future.

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*Library:* The incubator maintains up-to-date information resources for technology start-ups including resource directories, business form templates, and checklists.

### Facility-Based Services

Facility-based services involve flexible leases and other site-based services that are included in the basic rental package.

*Space:* The incubator provides access to office space that includes telephone, local area network, high-speed Internet access, and basic office furniture. Incubator clients would have access to shared conference rooms, restrooms and a kitchen/lounge. Security, janitorial, landscaping, and parking would be included in the rent.

*Rent:* The BPD unit will determine rental policy in the business plan's financial analysis and would conservatively fix rents that would be offered at the low-end of market for comparable space initially, and would escalate on a planned schedule. Escalating rental

rates are intended to foster client orientation toward growth and graduation at a predetermined point in time.

*Shared Office Systems Support:* Incubator clients would have access to a common copier, fax, and postage meter, and be billed a usage charge only. In addition to this they will also have access to pilot plant, laboratory, training hall and other available infrastructure.

### Facilities for Clients

The Agribusiness incubator facilities are located in the campuses of identified ICAR Institutes and are designed to meet the needs of new and emerging businesses that represent a mix of technologies, and sited to allow for expansion to accommodate expected overall growth in the region's technology sector.

### SUMMARY

With the aim of improving its R&D system by incorporating new ways of doing business in

agriculture and related fields, to achieve the objectives of increased productivity, employment generation and building a strong national economy, the ICAR has initiated a business incubation drive designed for the Indian agricultural sector to promote agribusiness, by utilizing the vast research and development facilities and knowledge available with its research institutions.

The ICAR seeks to advance new approaches to accelerating the growth of innovative, technology-enabled agri business, while creating powerful demonstration cases that illustrate how engagement of farmer associations, industry, financiers, and government in creating innovation and market-driven shared value can catalyze the green growth of an inclusive and job creating, competitive Agri sector.

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