ICRISAT is a non-profit, apolitical, International Agricultural Research Institute

Established in 1972, operating with an annual budget of US$ 83 million (2013)

Member of the Consultative Group on International Agricultural Research (CGIAR)

Our mandate crops: Sorghum, Pearl millet, Pigeon pea, Chick pea, & Groundnut

Our Vision

A prosperous, food-secure and resilient dryland tropics

Our Mission

To reduce poverty, hunger, malnutrition and environmental degradation in dryland tropics
To serve as a mechanism for agro technology exchange from ICRISAT and its partners to the private/public sector

To identify and promote innovations and handhold entrepreneurs to establish sustainable agri enterprises

To act as a catalyst for Inclusive Market Oriented Development (IMOD) by linking the smallholder farmers to different stakeholders across the agricultural value chain, by providing new products and services

To facilitate socio economic development, especially promoting new livelihood opportunities for women and youth.
Our Vision

- Enhancing agricultural development through entrepreneurship, innovation and partnerships

Our Mission

- To create, leverage and aggregate programs and services to promote agribusiness and enhance partnership through entrepreneurship development, innovation and value addition for accelerated agricultural growth

Outcome

- Agro-enterprise development
- Value-added food products
- Prosperity through partnerships
**AGRI-BUSINESS INCUBATION (ABI) program**
Improving well-being of poor farmers through the creation of competitive agribusiness enterprises by technology development and commercialization.

**NUTRIPLUS KNOWLEDGE (NPK) program**
Value addition and post harvest management in agri-food sector through innovative processing and product development enabling achievement of ICRISAT’s vision.

**INNOVATION AND PARTNERSHIP (INP) program**
Developing collaborative research partnerships with public, private and allied sectors to benefit the small holding farmers of dry land tropics across the Agricultural and Agribusiness Value Chain.
### Key Partners & Programs

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<th>Key Partners &amp; Programs</th>
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“How does Innovation and Entrepreneurship lead to Vibrant Agriculture Development”?

**Innovation:** The process of creating new goods and services that provide unique value for demanding customers who are willing to pay for that value.

**Entrepreneurship:** The creation and growth of new businesses.

**Innovation and entrepreneurship create prosperity by:**

- Increasing wages by creating continuous demand and competing for human capital, knowledge and resources.
- Reducing unemployment.
- Connecting local economies to the global economy.
- Facilitating clusters and knowledge/technology transfer.

“I+E increase the rate of economic growth”

“Invention and entrepreneurship are at the heart of national advantage”

- M. Porter

22 January 2015
Commercialization: A sequence of strategic and tactical actions intended to achieve market entry and sustained competitiveness of new innovative technologies, products, and/or services.
## Agri Business Incubation

A **selective**, comprehensive **service** offering that aims to accelerate the **growth** of SMEs

<table>
<thead>
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<th>Services</th>
<th>Value to the Entrepreneur</th>
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<tr>
<td><strong>Business Services:</strong></td>
<td><strong>Accelerates business development activities, saves time and money</strong></td>
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<tr>
<td>Registration, licenses, QM, technology transfer, accounting, strategy,</td>
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<td>marketing, export/import, etc.</td>
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<tr>
<td><strong>Financing:</strong></td>
<td><strong>Leveraging the credibility of the incubator &amp; the portfolio of entrepreneurs to overcome financing gaps</strong></td>
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<td>Brokering financial services and/or providing them i.e. equity, credit,</td>
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<td>guarantees, etc.</td>
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<tr>
<td><strong>“Networking and capacity building”</strong></td>
<td><strong>Learning, exchange of ideas, partnerships, business relationships etc.</strong></td>
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<tr>
<td>Mentoring, coaching and networking with fellow entrepreneurs (a micro</td>
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<td>cluster), market linkages</td>
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<tr>
<td><strong>Infrastructure:</strong></td>
<td><strong>Economies of scale decreases the cost of starting a business</strong></td>
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<tr>
<td>Lab and production facilities, Office space, meeting rooms, electricity,</td>
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<td>phone, Internet, etc.</td>
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Agribusiness & Innovation Platform (AIP)
Client Facilities

Green Houses / Poly Houses

Lab Facilities

Office Spaces & Lab facilities
Food Testing and Product Development Lab facilities
Other Facilities

Open access Library

Services

Video Conferencing

Conference Hall

Cafeteria

Promotion

Partnerships

Mentoring

Industry Networking

Library

Conference Hall

Cafeteria

Open access

Video Conferencing

Conference Hall

Cafeteria

Promotion

Partnerships

Mentoring

Industry Networking

Library

Conference Hall

Cafeteria
**Agri-Business Incubation (ABI) program**

**Mission**
Improving well-being of poor farmers through the creation of competitive agribusiness enterprises by technology development and commercialization.
ABI Developmental Strategy

Service strategy

ABI will promote ventures directly through its service strategy. The identified new strategic services of ABI are in the areas of:

- Innovative Ventures
- Seed ventures
- Bio-fuel Ventures
- Farm Ventures
- Agri-Biotech Ventures

Outreach strategy

To partner with Institutes /organizations globally on Business Incubation to promote these ventures and enhance technology commercialization

- 22 BPD Units
- IIAM, AREU- Mauritius, STEP- Thapar and others
Our Key Services

**TECHNOLOGY DEVELOPMENT**
- Scientific support
- Liaisoning and networks
- Licensing
- Technology validation
- Lab space and equipment
- Testing and trials

**CONSULTANCY**
- Technology
- Business
- Legal/ IPR
- Market Research
- Training programs
- Techno-Economic feasibility studies
- Softlanding

**FUNDING**
- TePP
- TDB
- MSME
- SFAC
- Venture capital
- Loans
- Angel Investors
- Funding directory

**MENTORING**
- Business plans
- Business meetings
- Action plans and reviews
- Trainings and workshops
- Mentors network

Mentors Network
Funding
Funding Assistance to Entrepreneurs

- Technology Development Board – DST Seed Grant Funding (Rs. 1-25 lakhs)

- Promotion of Innovation in Individuals and SME’s (PRISM) - Outreach Centre (Rs. 2 to 75 lakhs)

- MSME scheme “Support to Entrepreneurial and Managerial Development of SMEs through incubators” – Rs. 6-8 lakhs

- Small Farmers Agribusiness Consortium – Venture Capital Assistance scheme – max Rs. 75 lakhs

- Social VC funding / angel investors

- Bank loans facilitation
Seed Ventures

An initiative to develop and promote rural seed business ventures at village level in order to bridge demand and supply gap of open pollinated quality seeds through public, private and people partnership (PPPP)

Pre production stage
- Business plan
- Training and capacity building on seed production
- Escort services (liaison e banks, market yards and APSSDC)

Production stage:
- Foundation seed/breeder seed
- Quality control
- Processing of seeds and storage access

Post production stage:
- Branding and post sales support
SBV Model

- A replicable model seed system
- Farmer entrepreneurs as stakeholders
- Establish PPP mode for sustainable seed system in AP & TN
- Quality control
- Seed processing, packing and branding
- Infrastructure (for seed processing, QC and storing the produce)
- Availability of seed of improved cultivars from ICRISAT, NARS and other Research stations
- Capacity building (training of farmer entrepreneurs at ICRISAT)
- Focus of agricultural development (efforts to promote awareness of both improved varieties and improved cultural practices, encouraging uptake of both)
Innovative Ventures

ABI promotes innovative ventures in agri-business which are proprietary products or novel service that has good market potential.

Services provided

- Technical consultancy through ICRISAT & co-business incubation partners
- Prototype development
- Quality/Test certification of finished products
- Business development through publicity and promotion
- Access to infrastructure and facility on need basis
- Assist in obtaining financial assistance from Banks / VCs
- Access to seed grant funds of TDB- DST & TePP-DSIR, Govt. of India
BR Cooking Sprays

- Novel dispensing mechanism for cooking oil in Aerosol form
- Formulated cooking oil is packed in Tin can and pressurized with food grade propellant.
- Dispensing as a thin spray effectively utilizes the oil and reduces the oil consumption in cooking
- Aerosol container with Oleoresin Capsaicin (OC) under very high pressure.
- Dual Use product, Both as Food and for Personal Security

**ABI Supported with**
- Funding Assistance
- Networking in the industry
- Technology/Testing Support
- Visibility
- Office Space
- Legal and Patent advise
- Documentation
- Marketing promotion & publicity
Farm Ventures

ABI promotes innovative ventures in agri-business which are proprietary products or novel service that has good market potential.

Services Provided

• Technical consultancy on crop production
• Farm business consultancy on planning and management
• Training and capacity building
• Market assistance through network partners
Srestha Organic foods

Positioned to be a leader in the Organic food market in and from India.

**Domestic**
- Branded
- Pure / Tasty
- Products – Cover a large share of the plate.
- Easy & Consistent availability
- Affordable premium

**International**
- Value added products / Brand
- Authentic Ethnic Products
- Customization
- Reliability – Quality / supply

**Farmers**
- More Net returns
- Lower risk
- Better Soil
- Better Health
- Strong & stable market linkage

ABI- ICRISAT support - Funding assistance
Siddhivinayaka Agri

Specialized in building & operating supply chain for agricultural commodities especially perishables i.e. Potato, Banana, Amla, Onion

**Services Provided**

- Funding of US$1.5 million facilitated through Song Investors

**Hyglass Chemicals**

- Promoter: Kumar
- Area of business: Fermentor marketing
- ABI support: Fermentor design, QC, partnership arrangement and business facilitation
Biotech Ventures

ABI-ICRISAT promotes seed companies in the emerging area of agri-biotech in developing Transformation protocol for commercial crops, Marker development for traits of interest for seed producers, and Tissue culture of medicinal, horticultural, and tree crops

Services Provided

• Technology consultancy
• Facilitate technology transfer
• Capacity building
• Consultation on bio-safety issues
• Biotech lab facility
• Green house facility
Bioseed

Bioseed Research India Pvt. Ltd. (BRI) is a research company with a focus on developing value added hybrid seed products based on superior genetics for the farmers

Incubation support from ABI-ICRISAT

- Bioseed became a member of Agribusiness Incubator @ ICRISAT in 2004 and got approval for its first Bt Cotton hybrid in 2007
- Currently Bioseed is ranked among the top five companies in India

“Our fast tracking of trait introgression in the incubator coupled with excellent breeding efforts enabled us to create a very strong brand among the farmers”

Dr. Dwarkesh Parihar, Chief Scientist, Bioseed Research India Pvt Ltd
Bio-fuel ventures

Services provided

• Business consultancy through Project report and feasibility study
• Turnkey project execution through partners
• Supply-chain management solutions through contract farming and decentralized unit models
• Sweet sorghum parental lines for seed production
• Capacity building of extension officials and farmers
Co-Business Incubation

Benefits

- Handholding and mentoring of business incubators
- Standard operating procedures (SOPs)
- Enhanced support and services to more number of entrepreneurs
- Access to physical, technical and other facilities for clients on co-business incubation basis
- Inclusive growth through focused implementation of new venture creation and technology commercialization
- Enhanced benefits to the incubatees through technical and market access
- Promotion of cross border ventures, biz dev
- Common branding

Services

- Planning, development and implementation of business incubator
- Facilitating Coordination and operations
- Capacity building and training on business incubation operations
- Business consultancy support services
- Access to seed capital funding to TDB
- Development and implementation of incubation service modules like Seed, Agri Biotech, Innovative, Farm and Biofuel ventures etc.
- Business Facilitation support and co-branding with ABI-ICRISAT.
- Making the system Successful & self sustainable through monitoring & evaluation.
Network of Indian Agri-Business Incubators (NIABI)
Six Value-chain based Agri-Business Incubators in Africa

- With FARA (Forum for Agricultural Research in Africa), handholding and mentoring its UniBRAIN (Universities, Business and Research in Agricultural Innovation) initiative supported by DANIDA.

- Six Agribusiness Innovation and Incubation Consortia (AIIC) under UniBRAIN being supported in five African countries (Ghana, Mali, Uganda, Kenya & Zambia).

- ICRISAT and FARA along with its local African Partners are helping in setting-up of these incubator consortia addressing value chains like sorghum, banana, fruits, livestock and agroforestry.
FPBICs in Africa

Setting up of 5 Food Processing Business Incubation Centres (FPBICs) in Africa under India-Africa Forum Summit (IAFS-II)
Innovation & Partnership (INP) program

To develop collaborative research partnerships with public, private and allied sectors to benefit the small holding farmers of dry land tropics

Focus areas

- Strategic partnerships for enhancing IMOD
- Co-creation of institutional innovation models
- Collaborative research and PPP projects
- Common Infrastructure & facilities creation.
Key Achievements

• Established Food Safety laboratory, P2 Glass house and AIP building (funded by Govt. of AP- G.O. MS No. 238 Dt 10.09.2007)

• Developed collaborative research agreements with the private sectors

• Housed 9 partners and helped them in establishing their R&D centers

• Organized Global events like AgBioAsia & ICPN (International Plant Nutrition Conference) in collaborative with AIC partner

• B2B meetings organized for African partners

Key Partners
NutriPlus Knowledge (NPK) program

Value addition and post harvest management in agri-food sector through innovative processing and product development enabling achievement of ICRISAT’s vision of “a prosperous food secure and resilient dry land tropics”
Facilities at NPK

Existing facilities

- Product development laboratory with capability for formulation development and shelf life studies
- Analytical laboratory

Scope for expansion:

- Sensory science laboratory
- Food safety laboratory
- Food processing pilot plants for supporting start-ups and entrepreneurs
Value-added products ready for commercialization through partners

- Energy Dense Peanut Spread
- Sweet sorghum syrup based Multi-grain cookies
- Energy bar
- Tamarind-Sweet Sorghum Sauce
- RTS Beverage
- Sorghum and Millet Flakes
- Sorghum Crispies
- Instant Millet Porridge
- Waffle Syrup
- Healthy Nut treat
- Sweet Sorghum Jam
- Sweet Sorghum Toffee

- Value-added products for commercialization
- R&D for post-harvest and value addition
- Service set up for food QC

Launch of Smart Brkfast- Ready-to-eat-breakfast cereal by Dr.MS Swaminathan and Ms Saina Nehwal on 14 July 2014
Setting up of 5 Food Testing Laboratories (FTLs) in Africa under India-Africa Forum Summit (IAFS-II) in:

- Nigeria
- Republic of Congo
- Rwanda
- Zimbabwe
- Gambia
An initiative of NutriPlus in partnership with ASSOCOM to create “Opportunities for R&D, Entrepreneurship and Markets” with a promise of better, healthier and safer convenience food for the consumers through R&D and more market opportunities and enhanced entrepreneurship within the food industry.
“First ICC India Grains Conference Organized in Association with the International Association of Cereal Science and Technology”

First international grains conference

Aiming to open up new challenges and opportunities towards improving the quality, safety and nutritional value of grain-based foods, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) has teamed up with the Vienna, Austria-based International Association for Cereal Science and Technology (ICC) to conduct the first ever ICC India International Grains Conference.

Specific reference

With the theme “Developments in grain science and technology to ensure high quality, safe and healthy grain-based foods,” the conference brought together grain scientists and technologists, breeders, millers, bakers, cereal and grain food processors, suppliers and traders to discuss the quality, safety and nutritional value of grain and foods made from cereals, with specific reference to the needs of India and the Indian subcontinent.

Growing demand

“The demand for grains is growing as a number of major global issues continue to impact the world’s food security,” says ICRISAT Director General William D Dar.

He pointed out that grain science and technology has become vital in addressing major concerns such as minimizing grain post-harvest losses, providing people access to quality and safe food, fighting hunger and malnutrition, and improving livelihoods of resource-poor households in the semi-arid tropics.

ICC Secretary General and CEO Mr. Roland E Poms, said that while focussing on the Indian context, the program is also globally relevant as it covers such areas as crop improvement, storage, and nutrition, processing and analysis for all major cereal grains and products.

The NutriPlus Knowledge (NPK) Program of the Agribusiness and Innovation Platform (AIP) of ICRISAT is coordinated the event.

Knowledge sharing

During the conference, renowned speakers from international and national research institutes, multinational and domestic food companies, entrepreneurs, and food research and consultancy organizations shared knowledge and information on grain and food quality.

An expert panel discussion followed a technical trade exhibition, and a poster paper program was also presented.
Entrepreneur development workshop (EDW) was conducted for 25 prospective entrepreneurs from Andhra Pradesh and Maharashtra. The workshop focused on Establishing and managing a commercial Sweet Sorghum Syrup enterprise for Food Applications.
On World Heart Day, ICRISAT comes up with healthy snack foods

- NutriPlus new variety of healthier and safer nutritious snacks made of sorghum and millet for the fast food consumers

- These cereals have higher nutrition value than rice and wheat besides being rich in dietary fibre, a quality that makes them diabetic friendly
Specific Case Study Initiatives at ICRISAT

AgriBusiness Incubation (ABI) Program
“Creating Competitive Agri-enterprises through ABI”
Specific Case Study Initiatives at AIP ICRISAT

AIP-ICRISAT collaboration with Vennala Educational Society (VES)

“Promoting agribusiness entrepreneurship among youth”

With the intention of promoting youth in agribusiness, AIP-ICRISAT is facilitating students of VES for technical support on:

1. Production and cultivation of vegetables, hybrid seed production of Pigeonpea, other crops and Dairy.

2. Access to scientists of NARS/ CG Centers as and when required.

3. Facilitate access to breeder seed on need basis and tech transfer on hybrid seeds and seed production technology from NARS.

4. Assist in farm planning and resource management, Legal advice and assistance for Farmer Producer Organization formation

5. Providing business incubation services to the student entrepreneurs after completion of their course.
Specific Case Study Initiatives at AIP ICRISAT

AIP-ICRISAT collaboration with ALEAP

“Creating Opportunities For Women Entrepreneurs In Food Processing Business”

- The Association of Lady Entrepreneurs of Andhra Pradesh (ALEAP) was established with an aim to bring together women entrepreneurs trying to help each other and work in collaboration for welfare maximization.

- AIP-ICRISAT provides agribusiness incubation support, facilitate technology transfer, facilitation in incubation process and training and support to entrepreneurs and innovators.

Success:

- Trained over 150 Women Entrepreneurs through different training programs.

- Organized over 10 training sessions on Food Processing opportunities.

- Successfully Incubated 2 women entrepreneurs in food processing, few are in pipeline.
Specific Case Study Initiatives at AIP ICRISAT

**Network of Indian Agri-Business Incubators (NIABI)**

“Promoting start up agri-business ventures in India for the benefit of the farmers”

- To develop a roadmap to revitalize agriculture and allied sectors through agribusiness.

- To promote agriculture and its allied sectors as a potential, remunerative livelihood option for the rural youth, women and deprived class while addressing the challenges in agribusiness and business incubation.

- To be the platform that identifies and nurtures innovations in agriculture.
Specific Case Study Initiatives at AIP ICRISAT
Six Value-chain based Agri-Business Incubators in Africa
“Promoting agri business opportunities for youth in Africa”

With FARA (Forum for Agricultural Research in Africa), handholding and mentoring its UniBRAIN (Universities, Business and Research in Agricultural Innovation) initiative supported by DANIDA.

UniBRAIN funds are committed to the principles of creating jobs and wealth especially for the youth, proactively promoting gender equity, and conserving natural resources and adapting to climate change.

ANAFE – help determining how to use the incubator to strengthen agribusiness education, achieve curricula change and develop contextually appropriate teaching and learning materials and approaches.
AIP Impact & Achievements

**Impact**

- Farmer beneficiaries: 2,21,500
- Facilitated technology commercialization: 331
- Business ventures supported: 180
- Investment mobilized: USD 18 m
- Employment generated (direct): 832
- Products introduced in the market: 82

**Key Achievements**

- Best Technology Incubator 2005 by the DST-GoI
- Asia Pacific Association of Business Incubation (AABI) Award, 2008
- Villgro award 2009
- FICCI Food 360 best Incubator award, 2013
- Dr. Palaniswamy, client of ABI won Entrepreneur of the nation in 2006
- Mr. Subbarao, received FAPCCI Award in 2007 from CM-AP
- BioSeed Research India Pvt Ltd, client of ABI won ISBA 2013 Performance Award
- FICCI Food 360 Best Incubator Award
Way Forward

IMPACT PATHWAYS

✓ Nurture innovations in agriculture and food processing and commercialization
✓ Encourage youth to enter agriculture / Agribusiness
✓ Support MSME nationally through NIABI Network
✓ Setting up and handholding of new agribusiness incubators
✓ Creating a Global Agribusiness Incubation Network
✓ Scaling up of AIP programs to have wider outreach

ACTIONS

➢ Development of AIP Agribusiness Innovation cluster (pilot plant for Food Processing Business Incubation centre / Center of Excellence in Food Safety/Biotechnology business incubator / Technology commercialization cell)
➢ Setting up of IP Facilitation cell
➢ Agribusiness fund management for entrepreneurs funding
Thank you!