Business enterprises can be change agents for sustainable agricultural development and Food Security

Jain Irrigation Systems Limited

...a case study

Dr. Dilip Kulkarni
President- Agri Food
Socially Oriented & Environmentally Conscious Business can turn every possible Business Opportunity into a Change Agent to minimize the impact of Climate Change and Sustainable Development to solve Food Security Issues.
Perspectives from innovation prospects

Irrigation through piped conveyance and application of water with drip system

- Indian success with small and marginal farmers
- Water is not only linked to food but have nexus with energy
- The Indian model of drip irrigation is replicable in Africa
- Use of solar pumps in remote areas with drip irrigation
- Use of nano-carbons in drip line manufacturing and fertigation.

Use of biotechnology with good irrigation-agronomy

- Enhance local agricultural biodiversity
- Maximum yield is per m$^3$ and per acre area on sustained basis
Why sustainable agriculture

• A more productive and sustainable agriculture is vital to food security and poverty alleviation
• Increased food production will have to be provided through higher productivity of existing resources
• The scope for expanding cultivable land is extremely limited and increased population pressure and urbanization will result in greater competition for resources currently used by agriculture
Secure resources required for agricultural productivity

- Land security
- Water security
- Energy security
- Biodiversity Conservation
Newer approaches through High-Tech Agriculture

- Vertical cultivation
- Climate independent cultivation
- Use of micro irrigation
- IPDM and INM
- Application of biotechnology
- Energy efficient agri and food processing
- Modern food processing
- Infrastructure and logistics
- IT&C and Knowledge Input at all levels
India is a country of Smallholders

Technologies have to be Smallholder Compatible
Challenges of the Future

• Food Security
• Nutrition Security
• Health Security

This is possible only if the economic condition of the small holder improves.

This is possible if his Agri-productivity increases
Science and Technology Needs For Sustainable Agriculture

• Development of drought resistant and high temperature tolerant varieties
• Identification and testing high yielding cultivars from the genetic resource
• Use of biotechnology for crossing the critical crop yield potentials
• Environmental friendly post harvest and food processing technologies
Corporate Philosophy

• **Mission**
  Leave this world better than you found it

• **Vision**
  Establish leadership in whatever we do at home & abroad

• **Credo**
  Serve & strive through strain & stress
  Do your noblest, that’s success

• **Goal**
  Achieve continued growth through sustained innovation for total customer satisfaction and fair return to all other stakeholders. Meet this objective by producing quality products at optimum cost and marketing them at reasonable prices

• **Guiding Principle**
  Toil and sweat to manage our resources of men, material and money in an integrated, efficient and economic manner. Earn profit, keeping in view of commitment to social responsibility and environmental concerns

• **Quality Perspective**
  Make quality a way of life

• **Work Culture**
  Experience: ‘Work is life, Life is Work’
Completing the Agricultural Value Chain

We help farmers to produce more and better

- Bio-Fertilisers & Microbial Cultures
- PVC, HDPE Piping Systems
- Drip & Sprinkler Irrigation Systems
- Tissue Cultured Plants & High Quality Seeds
- Controlled Agriculture
- Research & Development
- Training & Extension
- Turnkey Project
- Wasteland Transformation

We purchase fruits & vegetables from farmers

Finally, we process these for export and domestic markets

- Onion & Vegetable Dehydration
- Fruit Processing
Hi-Tech Agricultural Products / Services

- Integrated Watershed Development
- Water Source Development
- Water Supply Networks
- Micro Irrigation Systems
- Bio Fertilizers
- Tissue Culture Plants
- Greenhouses & Shade houses
- Farm level Safety and Traceability
- Hybrid Seeds & Planting Material
- Renewable Energy
Thank You