

To Feed the Future,
we must first seed the future!



Manjit K Misra
Director



Celebrating over 100 years of Excellence in Seed Testing, Research, and Outreach

A Global Center of Excellence
in seed science, technology, and systems

Iowa State University

First Land grant university (1858) , Birth place of extension (1903)

Worlds first electronic digital computer (1937)

Over 36,000 students from all 50 states and 100 countries

Seed Science Center



Samples Tested
Annually, on



Congratulations to eminent hunger fighters:

Prof. Swaminathan
Ambassador Quinn
Dr. R B Singh
and all other recipients



Recent high level delegations from India and other countries



IOWA STATE UNIVERSITY

Seed Science Center

Global Food and Nutrition Security

- A hungry, thirsty, warm and crowded planet...will continue to pose a critical challenge for years to come due to climate change



Quality Seed is a solution . . . not just a planting stock, but conveyor of new technology also

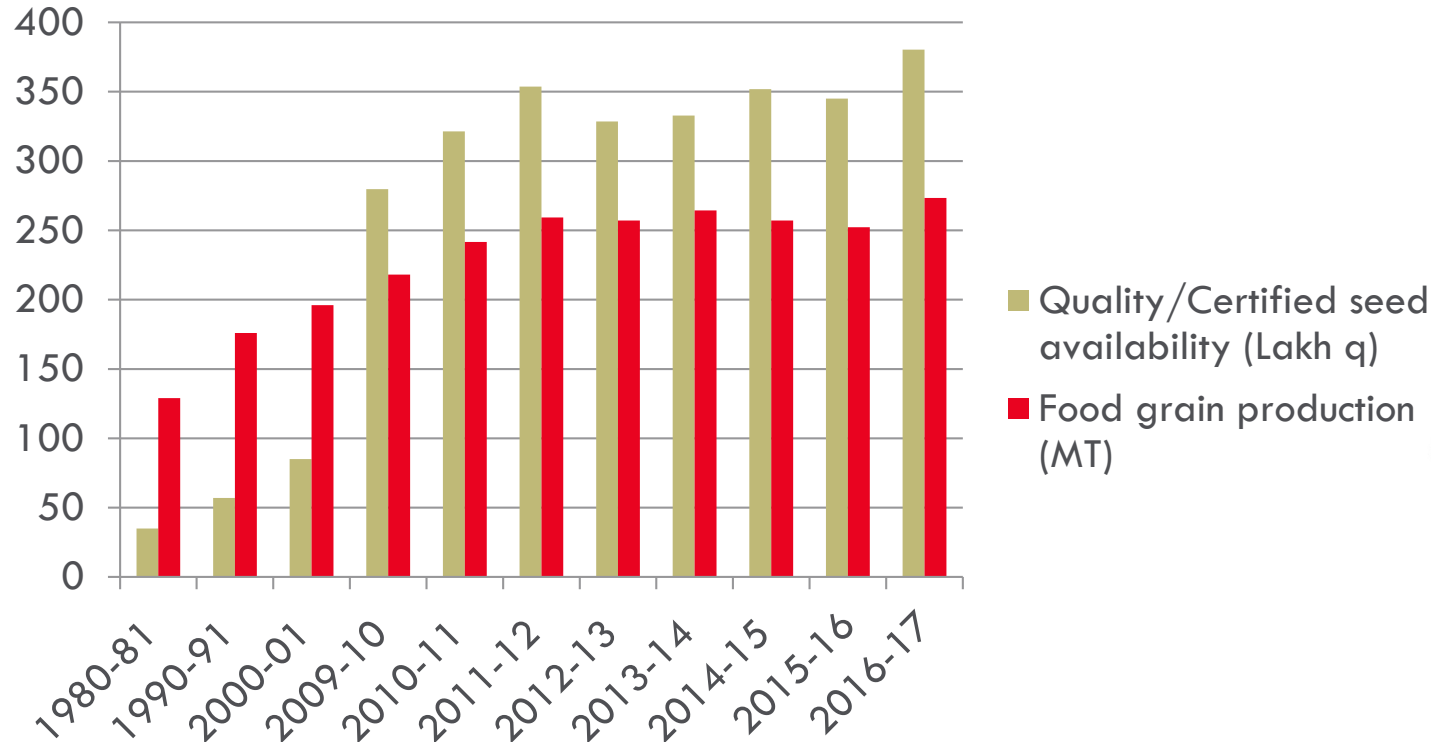


*“I have great faith in a seed.
Convince me that you have a
seed there, and I am prepared
to expect wonders”*


—Henry David Thoreau

Food Security Vs Seed Security

..... there is a strong co-relation between quality seed availability and yield per se



Per Seed More Yield



*“All the flowers
of tomorrow are
in the seeds of
today.”*

Quality Seed Statistics

- 80% of farmers in many developing countries are not using quality seed (India seed replacement rate is 25%)
- Average yield of maize in Africa is 1.5 tons/hectare compared to 5 times as much in developed countries, with the difference largely attributable to not using quality seed
- Almost 50% of the farmers are women, yet they earn 10% of the income and receive 5% of all technical assistance in agriculture



VISION:

“Quality Seed for *All* farmers”

to ensure food security of the world...with particular sensitivity to women and children



Workforce development

Capacity and Skill Development Activities (Conducted 700 workshops to train over 15,000 Seed professionals in 25 years)

- Seed Corn Quality
- Soybean Quality
- GMO
- Purity Short Course
- Germination
- PCR
- Organic Products Quality
- Seed Corn Conditioning
- Soybean Seed
- Gravity Table
- Color Sorter
- Variety Release
- Seed Certification
- Seed Testing
- Quality Manual Development
- Plant Variety Protection
- Phytosanitary Measures



IOWA STATE UNIVERSITY

**ONLINE GRADUATE PROGRAM
IN SEED TECHNOLOGY & BUSINESS**



"If you want to increase your knowledge and understanding of the seed business in a flexible and engaging environment then I would highly recommend the Seed Technology and Business program through Iowa State."

**YOUR EDUCATION.
YOUR WAY.**

Ph.D., Masters and Undergraduate Programs

Seed Technology and Business On-line Degree

- Integrates business and technology courses
- Delivered through distance education
- “Masters” and “Certificate” program
- Prepares for seed industry management
- 108 graduate students (50th graduation this Fall)

IOWA STATE UNIVERSITY

GRADUATE PROGRAM IN SEED
TECHNOLOGY AND BUSINESS



College of Agriculture and Life Sciences
College of Business

PROGRAM CURRICULUM

INTRODUCTION TO THE SEED INDUSTRY

SEED SCIENCE			
quantitative methods for seed	crop improvement	seed health management	seed physiology

SEED TECHNOLOGY			
seed production	seed & variety testing	seed conditioning & storage	quality, production & research, management

BUSINESS ADMINISTRATION		
accounting & finance	strategy & planning	organizational behavior
information systems	marketing & logistics	seed policies, regulations, & trade

CREATIVE COMPONENT
independent project

Seed Enterprise Management Institute (SEMI)
Funded by Alliance for Green Revolution in Africa (AGRA)



IOWA STATE UNIVERSITY

Seed Science Center

Dedication of the New Seed Laboratory in Ghana



***We must first invest in
science, in agriculture,
and in the development
of the seed technology
and industry.***

***We must have good
seed, good people and
compassion***



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Thank you