

GENERATION CHALLENGE PROGRAM

**Workshop on
“PRODUCT MANAGEMENT AND DELIVERY”**

Bangkok, 6-8 November 2007

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Executive Director, Barwale Foundation
&
Coordinator, IFSSA**



What is Barwale Foundation?

- Barwale Foundation is a non-profit, non-government, non-political organization for public benefit
- Established in December, 1986
- Research and Knowledge promoting Organization



M I S S I O N is to **PROMOTE** Research,
Technology and Knowledge in the areas of
Agriculture, Healthcare and Education for
HUMAN WELFARE

V I S I O N is to work for the **ALLEVIATION**
of Poverty and **IMPROVED** Livelihoods by
increased **FOOD SECURITY**



Facilities

- Research and Training Centre at Hyderabad
- Knowledge and Study Centre at Jalna

and

a RESEARCH FARM at Hyderabad





Our Primary focus

**Hybrid Rice Research for
improving rice PRODUCTION,
PRODUCTIVITY and contribute
to FOOD SECURITY**



Our Strengths

Research Programs

RICE IMPROVEMENT

Improving Hybrid Rice Seed
Production Technology

Enhance Hybrid Rice Yield

Germplasm Distribution



Our Strengths

Research Programs

Resistance to Stresses

Biotic stress (BLB, Blast & BPH)

Abiotic stress (Drought)



Our Strengths

Research Programs

**Nutritional Quality
Enhancement**

High Digestibility Sorghum



Our Strengths

Marker Technology

**Development of DNA markers
for**

Marker Assisted Breeding

Genetic / Seed Purity Tests

Screening of Breeding Populations



In nutshell

Barwale Foundation's CORE strength & areas of collaboration focuses on

- **Product/Marker Development**
- **Technology Transfer**
- **Capacity Building**
- **Trainings/Seminars/Workshops**
- **Germplasm Distribution**



Effective Links between Private-Public



Indian Foundation Seed & Services Association

- **IFSSA is a non-profit, non-government, non-political organization for the benefit of public-private sectors AND farmers**
- **Established in June 2005**
- **Seed Industry friendly organization**
- **Supported by Barwale Foundation**



IFSSA
a
“Public - Private Partnership”
Endeavor



Our Core Objectives

- ❖ **Produce, Maintain and Deliver Quality Seeds**
- ❖ **Provide Molecular marker services to the seed industry**



Our Services

- ❖ **Promotion of public bred hybrids**
- ❖ **Maintenance breeding**
- ❖ **Quality Parental line Seeds**
- ❖ **Molecular marker services for MAB, Characterization & Seed Purity tests**
- ❖ **Human Resource Development**



Our Strengths



Successful PPP model

Maintenance breeding

Markers' laboratory

Technical expertise

Associations & Collaborations

Memberships

Quality Seed Supply

- Maintenance breeding
- FS multiplication
- A & R seed distribution
- Purity tests



BS

FS

MoU
/
MTA



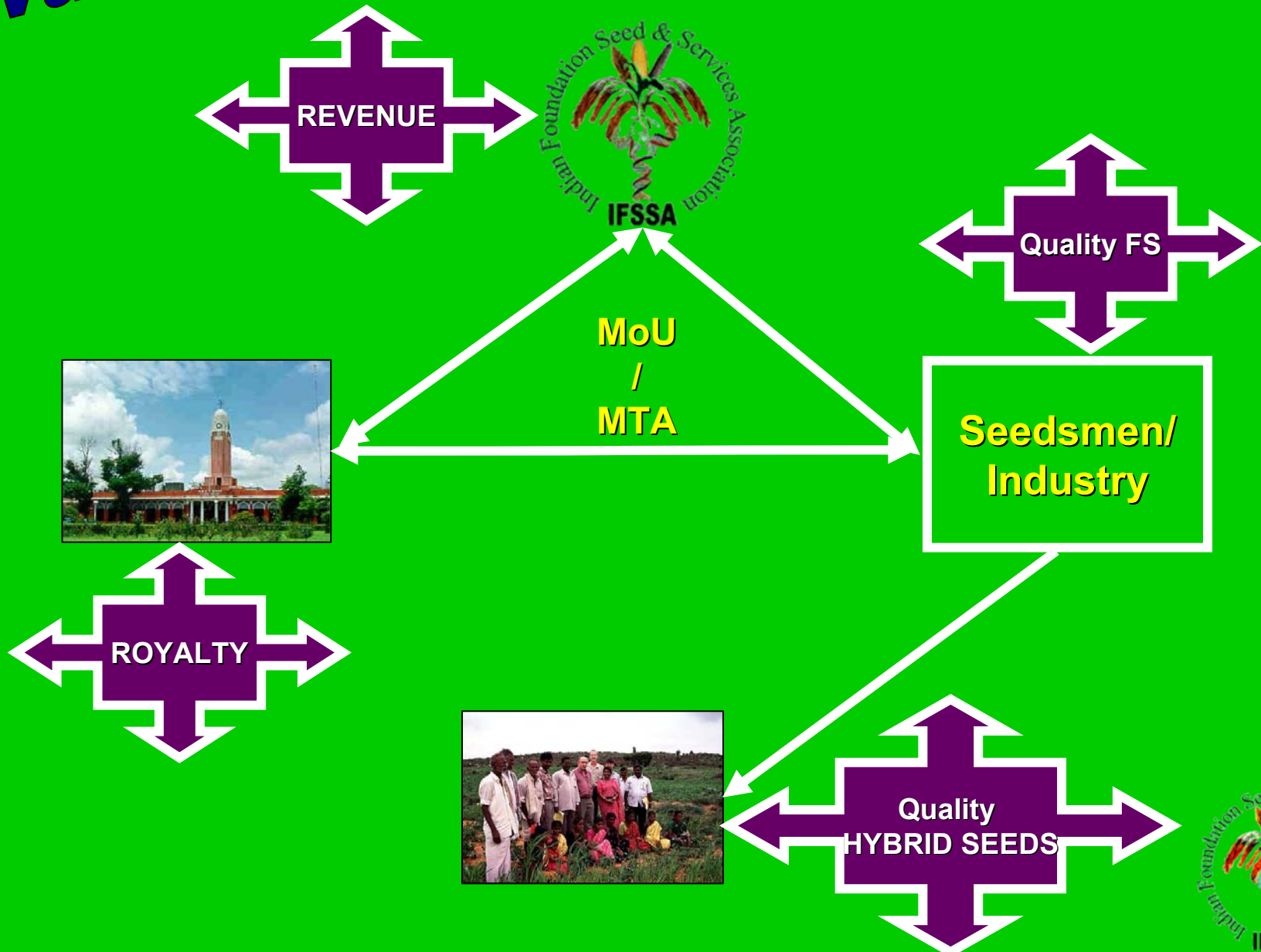
Seedsmen/
Industry



F₁
Seeds



Advantages



IARI-IFSSA PPP model



- For Pusa RH-10, aromatic rice hybrid
- IARI is originating breeder
- IFSSA is sponsored breeder
- IARI gets royalty @ INR 360/- (US\$9.0) per kg of female parent
- IFSSA charges @ INR 195/- (US\$5.0) per kg
- Achievements during Winter (Rabi) 2007:
Produced and distributed 6000 kg of female parent (US\$54,000 for IARI & US\$30,000 for IFSSA)

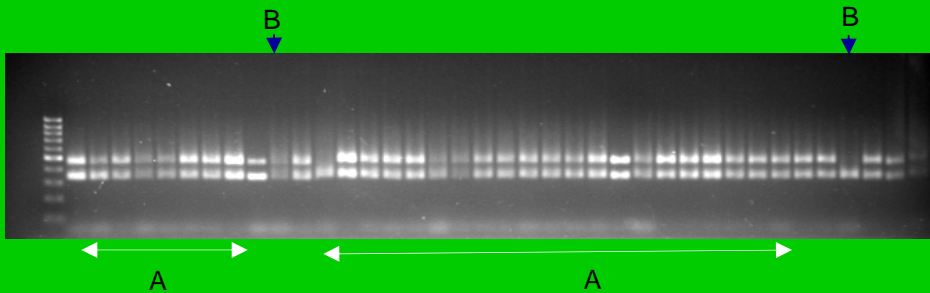
ICRISAT Consortium model

- Consortium for sorghum, pearl millet & pigeonpea
- ICRISAT is originating breeder
- ICRISAT offers released, pre-breeding and selected germplasm to members
- PRIMARY members (INR 500,000 or US\$13,000/annum) : MORE choice
- PROMOTIONAL members (INR 250,000 or US\$7,500/annum), have to become primary member after 2-3 years : LESS choice
- Members develop hybrids/cultivars, not always ready-made cultivars for sale

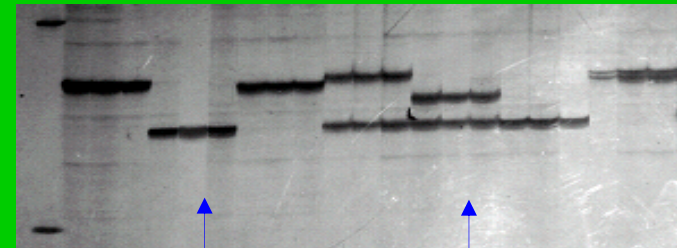
Marker Services

Seedsmen/
Industry

MoU



Genetic purity tests



P2
(Recurrent parent)
P1
(Donor)
Heterozygote

Screening for Xa4 gene in breeding progenies

Advantages

- **Quick assay of Genetic Purity**
- **Supplement / Complement / Replace GOT**
- **Helps in Decision making**
- **Hastens breeding programs**



IFSSA members

- **Founder members**
- **Honorary members**
- **Patrons**
- **Institutional members (08 No.)**
- **Associate members (16 No.)**



ASSOCIATE MEMBERS

1. Mr. Yaaganti Venkateswarulu, Yaaganti Seeds Private Limited
2. Mr. K. G. Kishan Rao, Mrigashira Seeds Private Limited
3. Mr. Kollipara Niranjan Kumar, GARC Seeds Private Limited
4. Mr. Krishan Chandra Upadhyay, VNR Seeds Private Limited
5. Dr. P. L. Gautam, UASTDC Limited
6. Mr. Surendra Pratap Singh, Aishwerya Seed Company
7. Mr. Anil Kumar Goyal, Krishna Seed (P) Limited
8. Dr. Akash Kumar, Errika Seeds Private Limited
9. Mr. Kadiyala Prakash Babu, Vikky's Agrisciences Private Limited
10. Mr. Sunil Kumar Deshpande, Metahelix Life Sciences P. Ltd
11. Dr. K. Govinda Raj, Pioneer Overseas Corporation
12. Mr. Ponugoti Venugopal Rao, Pradham Biotech Private Limited
13. Mr. Abhimanyu Prasad, Orissa Bionex Pvt. Ltd.
14. Dr. Ramesh Singh, Dhanuka group
15. Dr. Paresh Verma, Bioseed Research Pvt. Ltd.
16. Dr. Sudesh Sharma, Nodai Seeds Pvt. Ltd.

INSTITUTIONAL MEMBERS

- 1. Mr. Sushil J Karwa, Krishidhan Seeds Limited**
- 2. Mr. M. Ramasami, Rasi Seeds (P) Limited**
- 3. Mr. PV Rama Rao, Manisha Agri-Biotech Pvt. Ltd.**
- 4. Mr. G.D.V. Ramana Rao, SPRIHA Biosciences Pvt. Ltd.**
- 5. Dr. F.B. Patil, Ajeet Seeds Pvt. Ltd.**
- 6. Mr. Virendra P. Rathod, Excel Crop Care Ltd.**
- 7. Dr. Sukhpal Singh, DevGen Seeds & Crop Technologies Pvt. Ltd.**
- 8. Mr. Raman Modi, Zuari Seeds**

Demonstrations

- **Demonstration of Promising Cultivars/Hybrids**
- **For Performance of Hybrid & also, Parental Lines**
- **For almost all Economical Traits**
- **Across Ecology, Seasons and Other Conditions**
- **On-spot Evaluation and Adoption**



IFSSA: seed materials

**R
I
C
E**

CMS/R lines

IR 58025A
IR 68888A
IR 62829A
Pusa 6A
IR 79156A
IR 68897A
IR 75596A
IR40750
KMR-3
BR-827-35
PRR-78
NDR-3026

**P
e
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t**

CMS/R lines

843-22A
H 77/833-2-202



What NEXT !!!!!

- **More MoUs with more Public sector institutes**
- **More crops.... More hybrids.... More cultivars.... More technologies**
- **More members (≠ 50)**
- **International collaboration/linkages**



Please visit us @



www.barwalefoundation.org



www.ifssa.org.in



Thanks...