BUILDING CAPACITY IN SEED QUALITY ASSURANCE IN DEVELOPING COUNTRIES

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1-Introduction

- Importance of good quality seed in the changing global condition
- "seed quality assurance" implies that agencies charged with seed quality cooperate with and support other areas of the seed industry stakeholders to assure quality products.
- The rationale for the seed quality assurance system
The rationale for the seed quality assurance system includes:

- Ensure that the best quality seeds are produced and sold to farmers
- Prevent the spread of weeds, pests and diseases
- Meet consumer demands for specified qualities
- Cater for the need of specialized farming
- Comply with mechanization of agriculture
- Provide basis for healthy competition among seed traders
What is seed quality?

- Genetic Purity
- Physical Purity
- Physiological conditions
- Seed Health Status
2- State Of Quality Assurance Systems in Developing Countries

- In the 1970s through the late 80s, the green revolution of Asia spurred donors to fund a wide range of seed projects in developing countries.
- In recent times there is a variation in the status of the seed quality assurance amongst countries.
- Weak components of seed quality assurance in developing countries.

Graph: A measure of progress in aspects of Seed Quality Assurance in 22 countries of Africa

- Trained inspectors and lab technicians
- Official seed testing laboratories
- Seed quality control and certification
- Seed Conditioning plants available
- Variety Release committee
- Variety Release system
- Availability of Variety Development programme
- Seed legislation
- Existence of National Seed Policy
3- FAO’s Capacity-building Activities in Developing Countries

- Emergency seed relief and rehabilitation
- Seed programme development
- Harmonization of quality assurance system
- Development of Biosafety programme
- Development of certification schemes for vegetatively propagated crops
- Training of seed industry stakeholders
Three steps to take into account for achievement of a holistic development

► Development of physical structures/facilities,
► Human Resource Development and deployment,
► Formulation/review of Policy, Legislation, Guidelines, Standards etc.
FAO’s core activities relating to capacity building

► National varietal release system
► National system for limited-generation seed production
► Structured training programme for stakeholders of the seed sector
► Review and drafting of appropriate seed legislation and regulations
► National seed policy
► Harmonization of seed rules and regulation
► Seed quality control scheme e.g. Quality Declared Seed (QDS) and Quality Declared Planting Materials (QDPM).
Over the past 10 years, FAO has executed 897 seed-related projects in which capacity building was a major theme, at a total cost of US $822.5 Million.
4- Constraints of Capacity Building

➢ Lack of resources especially for the provision of necessary infrastructure.
➢ Lack of interest by many countries to providing necessary financial support for seed-related training and studies.
➢ Declining interest of many donors to fund projects aimed at capacity building of seed technology institutions.
Future Considerations

► Need for long term sustainability of project outputs
► Appropriate Infrastructure
► Training
► Regional networking and Coordination in laboratory seed testing
► Policy and legislation in relation to quality assurance
► Cost effective methodologies for seed quality assurance in the informal sector, participatory breeding