



# **BUILDING CAPACITY IN SEED QUALITY ASSURANCE IN DEVELOPING COUNTRIES**

**By  
Michael Larinde**

Senior Agricultural Officer (Seed Production)  
Plant Production and Protection Division (AGP), FAO, Rome.




# Contents


The background of the slide is a close-up photograph of two small green seedlings growing out of dark, rich soil. The seedlings have thin green stems and small, rounded green leaves. One seedling is slightly taller and has a small, brown, textured seed head at the top of its stem. The soil is dark and appears moist, with some small, light-colored organic matter visible.

1. Introduction
2. State of Quality Assurance Systems in Developing Countries
3. FAO's Capacity-building Activities in Developing Countries
4. Constraints of Capacity Building and Future Considerations

# 1-Introduction

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- ▶ 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

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- ▶ 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





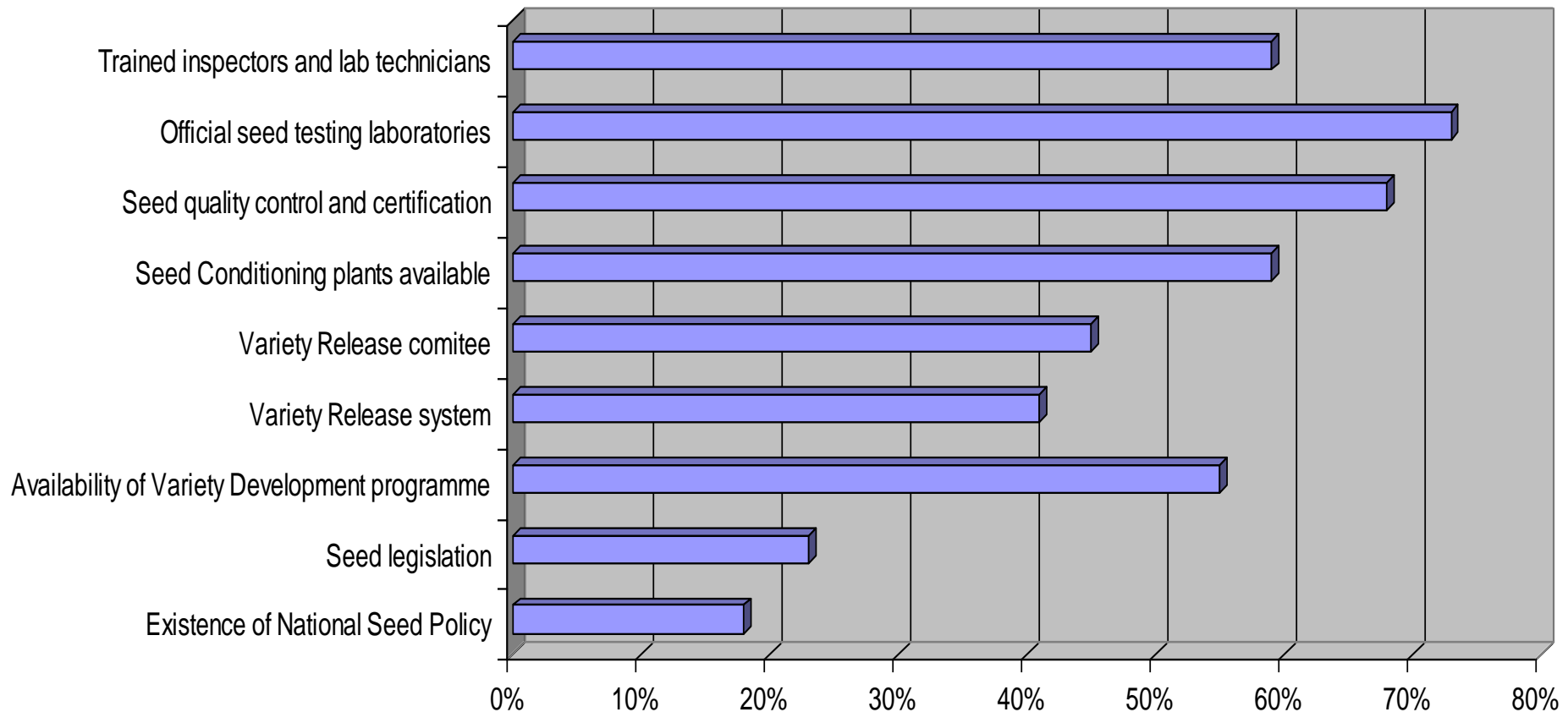
## 2- State Of Quality Assurance Systems in Developing Countries

- ▶ 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



# Stage of Development in Seed Quality Assurance: A survey in Africa.

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





# 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

A young green plant with two leaves is growing out of dark brown soil. The plant is positioned in the center-right of the frame, with its stem and leaves clearly visible against the dark background of the soil. The lighting is soft, highlighting the texture of the soil and the vibrant green of the plant.

- ▶ 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).



# How many activities?

- ▶ 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

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- ▶ **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**



**THANK YOU !!**

