

Why is quality seed important ?

- ♦ Quality seeds have high germination percentage, hence require less seed rate and therefore lowers seed cost for the producer
- ♦ It requires less replanting and results in growth uniformity
- ♦ It ensures better emergence and vigorous crop growth which helps to increase resistance to pests and diseases, leading to higher yield (by 5-20%) and production

Four quality seed attributes

1

Physical qualities of a seed in a specific seed lot, characterized by minimum of damaged seed, minimal weed seed or inert matter, minimum of diseased seed, near uniform seed size and non-discoloured seeds which can be detected by visually inspecting seed samples

2

Physiological qualities referring to aspects of performance of the seed include high germination and vigour of a seed in which the seed should emerge from the soil to produce a plant under normal conditions and have the capacity to emerge from the soil and survive under potentially stressful field conditions and to grow rapidly under favourable conditions respectively

3

Genetic quality which relates to specific genetic characteristics of a seed variety and constitutes high yielding ability, pest and disease tolerance as well as adaptation to local conditions

4

Seed Health which refers to the presence or absence of disease-causing organisms, such as fungi, bacteria and viruses, and animal pests, including nematodes and insects

Why is capacity building in QSP important?

Building farmer capacity to produce good quality seed will enable them to be self sufficient and meet their seed requirements

It will support production of quality seed by other actors to supplement the formal seed system and improve farmers' seed security.

It can support seed entrepreneurship among interested farmers

(FAO and Africa Seeds. 2018. Seeds Toolkit, Module 3: Seed Quality Assurance.)

Whose capacity can be built?

Individual women, men and young farmers, Farmer collectives like co-operatives, FPOs and FPCs and, SHGs who want to produce quality seeds formally or informally for their own use or exchange or sale.

This is helpful for those farmers who produce quality seeds as a registered grower of state seed corporation, following seed certification manuals of state seed certification agencies. They generally receive no formal training.



Orientation program on quality seed production for women farmer

How can capacity and knowledge in QSP be built?

Interested individuals/organizations can design and deliver training programs, after being trained. The trainings could be:

- ◆ Short training and follow up: One day practicum, followed by provision of manuals and other IEC material for production guidance and technical hand holding as needed
- ◆ Season long training: The participants attend sessions at regular intervals through the crop growth period and necessary technical support is provided. It is a hands on training and uses a dedicated plot for the training through the season. This is cost and time intensive but much more effective.

Who can lead the training programs?

Research professionals

Departmental technical experts

Domain experts from research institutes, SAU, KVK

Any QSP-trained personnel from NGO, SHG, FPC

Supporting technical materials

- ◆ The IRRI-Seed production manual in English and Odia, with technical content simplified and presented in a clear and user-friendly manner and with visualization, that can be used by grassroot level trainers, farmer leaders. These are available at www.rkbodisha.in
- ◆ A visual flip book developed by IRRI on quality seed production, targeting non-literate or semi-literate women and men
- ◆ Standard seed production manuals prepared by the government, research institutes, SAUs, KVKs etc.



Orientation program on quality seed production for women and men

What makes a QSP training program successful?

- ◆ Appropriate selection of trainees who have interest and motivation to produce seed
- ◆ A skilled trainer with deep knowledge about local seed systems
- ◆ Thoughtful design of the training program based on local traditional seed production practices to capitalise on existing knowledge and skills
- ◆ Engagement of local seed stakeholders in training program (e.g AAOs, Seed certification officer, Krushi Mitra etc.) so that they can get technical advice and develop linkages with key stakeholders who can facilitate production, certification etc. as needed when they start seed production
- ◆ Hands-on practical training sessions which allow trainees to practice skills
- ◆ Use of pictorial IEC materials and interactive sessions, rather than series of classroom type lectures
- ◆ A structured discussion and development of plans for farmer-farmer sharing of QSP practices to widen the knowledge and skill base

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