

PRACTICAL GUIDELINES: *Choosing varieties for a participatory experiment/ test*

To achieve an interesting experiment/ test with good prospects of identifying a new and better performing variety for the farmers, it is necessary to incorporate the following steps:

- Clarify the conditions being targeted and the adaptations necessary for a variety to succeed
- Verify available information on the different varieties, such as:
 - Adaptation to local climatic conditions
 - Adaptation to relevant soil conditions
 - Resistance to insects/ diseases common to the target zone
 - Compatibility with local usage: grain quality, stem quality
 - Yield amount in similar situations
 - Market price in the target zone
 - Quality of flavour for principal dishes of the region

Varieties implemented for testing must show promise of being able to perform better than the local varieties under the target conditions.

- Explain advantages and disadvantages: what are the strengths and weakness of the varieties already being used by the farmers?
- Make sure the range of varieties is reasonably varied so that the farmers are presented with real options
- Ensure that the seed for the tests/ experiments is of good quality – healthy, able to germinate, varietal purity
- Varietal seed implemented for testing must be available the following year for dissemination; researchers/ breeders must therefore multiply the seed of all varieties being tested.

Choice of control cultivar

1. Research check: For specific objectives or for comparing all experimental sites.
2. Village check: The experimenting farmers and other interested farmers choose the village check. The check needs to represent one of the best performing options in the village for the target conditions i.e. the best local seed source must be exploited.
3. Farmer check: it could be advantageous for each farmer to use his own variety as a control cultivar, depending on the objectives.