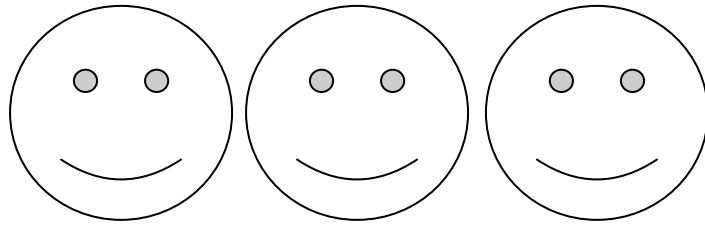


## Stages of variety selection

### 1. Priorities?

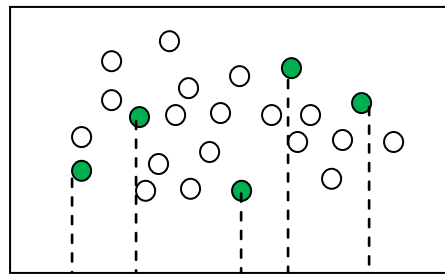
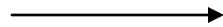
- Climate
- Constraints
- Growing conditions
- Preferences



### 2. New diversity

What is the source of diversity in the projects?

- Different origins
- Introduced varieties
- Crosses
- Diverse populations
- mutagenesis



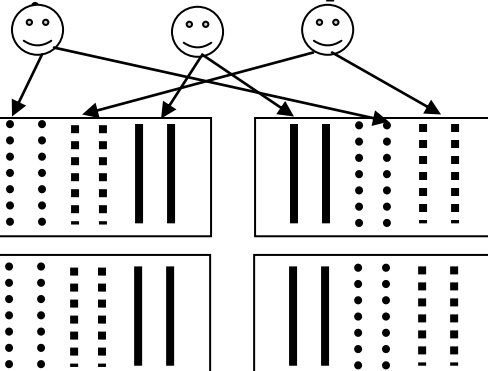
*To find adapted varieties, conduct field experiment under target conditions!*

*Choose best panicles to be grown as a row the next season*

### 3. Experimental varieties

#### Nursery

- Selection of panicle lines
- Each panicle becomes a line in the next year
- Little available seed, few experimental sites



*Conduct nurseries under the identified target conditions*

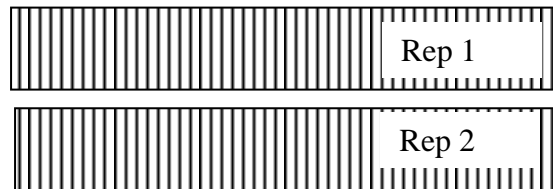
#### Progeny tests (trials in rows)

- The variety is sufficiently homogenous for all the panicles of the preferred lines to be used as seed



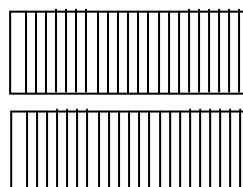
### 4. Variety evaluation

**Preliminary trials** (16 or 32 varieties, or more), 2 to 6 rows per entry, sufficient seed and several sites



**Advanced trials** (3 to 6 varieties)

3 to 20 rows per entry  
Plentiful seed and sites



Rep 1  
Rep 2

*Numerous farmers are giving their reasons for choosing a variety for diffusion*

## 5. Production of seed

The following table shows the evolution of seed quantities per variety, the number of varieties and the number of selection sites in the selection process.

Type of trial	Seed quantities per variety	Number of varieties	Number of selection sites
Population	*	*****	<b>1</b>
Nursery	**	*****	**
Progeny trial	***	*****	****
Preliminary trial	*****	***	*****
Seed production	*****	*	*****