Managing and Assessing a Pre-breeding Project

Aim of the module

At the end of the module, we should be able to:

- identify what is required to keep a pre-breeding project running
- describe the process of monitoring and evaluation of a pre-breeding project

Day-to-day management

- Resources
  - Human
  - Material
  - Financial
- Science
- Partnerships

Day-to-day management

Typical items to be accounted for in budget: Materials

- Field
  - Screening germplasm
  - Screening segregating populations
  - Producing seed of selected lines
- Greenhouse
  - Maintaining pest colonies for infestation
  - Seedling tests
- Laboratory
  - Studies on host-pest relationship at whole plant and molecular level

Day-to-day management

- Staff
  - Field labour, Greenhouse and Laboratory technicians
  - Students
- Services
  - Field preparation
  - Molecular characterization of materials
  - Data analysis
  - Publication assistance
- Contingencies
  - Reserve funds to cope with unforeseen circumstances, e.g. adverse weather conditions

Day-to-day management

- Personnel
  - Team work; ownership
- Time
- Communication
- Science
- Risk
- Quality

Monitoring and Evaluation

- Monitoring is the continuous assessment of project implementation in relation to agreed schedules and the use of inputs, infrastructure and services by project beneficiaries.
- Evaluation is the periodic assessment of the relevance, performance, efficiency and impact (both expected and unexpected) of the project in relation to stated objectives.

Monitoring

Monitoring should be carried out ideally with reference to baseline information

Indicators

Databases

Data quality

Reporting

Evaluation

Could comprise three components -- effectiveness of:

- identifying pest resistance among wild relatives
- transferring the identified resistance into cultivars of the crop
- the transferred resistances in the crop cultivars.

Evaluation

A series of questions based on indicators:

- How many accessions of the wild relatives were screened?
- What percentage of the screened accessions was ‘resistant’ to the pest?
- How many resistances were you able to transfer from wild relatives into crop cultivars?
- How well did the transferred resistances perform when exposed to pest pressure?

Summary

- Keys to good management:
  - be well organized, think through and communicate
  - Same principles as any other type of project.
  - make good decisions on how to use the resources -- materials, finance, personnel and time.
  - Knowing ultimate aims allows one to work backwards
- Project monitoring allows one to assess the extent of progress being made
- Evaluation will provide recommendations and direction for further work.
- Ultimately success depends on management and scientific skills