2 years

Discovery –
Environment characterization / Yield gap analysis / Trait potential analysis / nutritional trait analysis

Characterization of potential wild parents

Cross with promising wild with elite parents

Functional population genetics analysis of relevant mutation / resistances

Breeding –

Populations available that could be tested for traits of interest (yield potential, AB, etc..

Crossing of pre-breeding lines

5 years

Discovery –

BCNAM populations available in several elite backgrounds of different countries involved in the IL

Mapping population development

QTLs mapped for traits of interest

Breeding –

Pre-breeding lines available for multi-location testing

Linked markers deployed in breeding

10 years

Breeding –

Release of varieties with tolerance to key constraints

Diagnostic markers for key constraints

Partners engaged and able to develop and use new/ better crop packages (bio-fortified seeds, etc…)

Discovery –

Modern phenotyping support to breeding (HTP, databases,

A new farming system – GxExM packages? (early soil cover, resistant to density, etc…