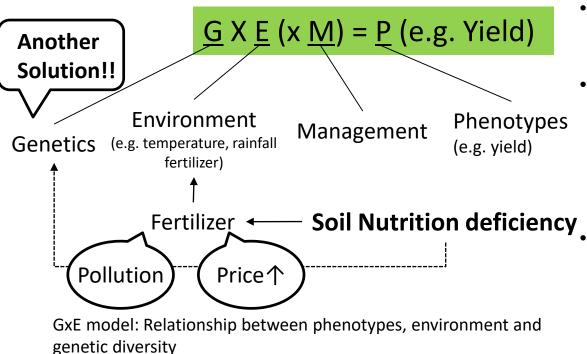


## Genetic research and field application using advantageous wheat genetic resources to improve tolerance to soil phosphorus deficiency

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Wheat as one of the most important crop, grown in many different environments of all over the world.

- Usually, optimization of soil environment by fertilizing increase yield. But price of fertilizer is skyrocket in the last 20 years. Also, usage of too much fertilization causes water pollution in the area.
- Beside changing Environments, Genetic diversity of wheat also can be solution to the nutrition deficiency in soil, especially in marginal region.

## Selection for adaptable wheat lines under phosphorus deficiency

- Screening MSD wheat lines containing genome derived from wild wheat grown in different environment
- Evaluation phenotypes; e.g. yield, biomass and nutrition absorption from soil
- Identification of the genes involved in the adaptation
- Final goal is adaptation of tolerant wheat lines into severe soil environment.