

## AlleleShift: an R package to predict and visualize polulations level changes in allele frequencies in response to climate change

**Project Title:** P801 - 1. Restoration (forest and landscape restoration)

**Description of the innovation:** <Not Defined>

**New Innovation:** Yes

**Stage of innovation:** Stage 3: available/ ready for uptake (AV)

**Innovation type:** Research and Communication Methodologies and Tools

**Geographic Scope:** Global

**Number of individual improved lines/varieties:** <Not Applicable>

**Description of Stage reached:** Database and AlleleShift (on allele frequencies and climate change and surface diagrams) available for use

**Name of lead organization/entity to take innovation to this stage:** ICRAF - World Agroforestry Centre

**Names of top five contributing organizations/entities to this stage:** <Not Defined>

### Milestones:

- Policy-makers have incorporated appropriate certification standards into delivery systems in two countries. Changes in policies and strategies by national governments and implemented by national extensions services have resulted in entrepreneurial suppliers becoming more engaged in delivery in three countries. The role tree nursery operators within efficient tree seed and seedling systems will be understood and demonstrated. Tools will be available to account for the potential effects of climate change when planning for national and regional tree seed production and distribution.

### Sub-IDs:

- 8 - More efficient use of inputs
- 12 - Increased conservation and use of genetic resources

### Contributing Centers/PPA partners:

- ICRAF - World Agroforestry Centre

### Evidence link:

- <https://peerj.com/articles/11534/>
- <https://rpubs.com/Roeland-KINDT/792916>

**Deliverables associated:** <Not Defined>

**Contributing CRPs/Platforms:**

- FTA - Forests, Trees and Agroforestry