

## **Supplementary Material S1. Search strategy and record management**

Searches were conducted in Web of Science Core Collection and Scopus in July 2025. The search strategy combined terms related to agricultural systems, farming systems, design, redesign, systems approaches, climate, and agro-related terminology. Searches targeted titles, abstracts, and keywords. In Web of Science, the search was implemented using the Topic field; in Scopus, the same conceptual search string was adapted to the TITLE-ABS-KEY field.

### Web of Science Core Collection search string

```
TS = (  
  "Agricultural system* design*" OR  
  "Agricultural system* redesign*" OR  
  "Design* agricultural system*" OR  
  "Redesign* agricultural system*" OR  
  "Farming system* design*" OR  
  "Farming system* redesign*" OR  
  "Design* farming system*" OR  
  "Redesign* farming system*" OR  
  "Design* scien*" OR  
  "System* design" OR  
  "System* approach" OR  
  "Design"  
)  
AND TS = ("clima*")  
AND SU = (Agriculture)
```

### Scopus search string:

```
TITLE-ABS-KEY (  
  "Agricultural system* design*" OR  
  "Agricultural system* redesign*" OR  
  "Design* agricultural system*" OR  
  "Redesign* agricultural system*" OR  
  "Farming system* design*" OR  
  "Farming system* redesign*" OR  
  "Design* farming system*" OR  
  "Redesign* farming system*" OR  
  "Design* scien*" OR  
  "System* design" OR  
  "System* approach" OR  
  "Design"  
)  
AND TITLE-ABS-KEY ("clima*")
```

Records were exported from both databases to Zotero for reference management and initial de-duplication. The database searches yielded 4,605 records. Before screening, 1,198 duplicate records were removed and 225 records were removed for other reasons, corresponding to records that did not meet the eligible publication-type criteria. This resulted in 3,182 records for title, keyword, and abstract screening.

Eligible publication types included peer-reviewed journal articles, conference papers/proceedings papers, review articles, and book chapters. No records were excluded by automation tools. Non-English records were not removed before screening; non-English reports were excluded at the eligibility stage when applicable.

Backward and forward citation tracking was used to check the completeness of the corpus, but did not add additional records to the final screening set.