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DESCRIPTION

*Agricultural Systems* is an international journal that deals with interactions - among the components of *agricultural systems*, among hierarchical levels of agricultural systems, between agricultural and other *land use systems*, and between agricultural systems and their *natural, social and economic environments*. Manuscripts submitted to *Agricultural Systems* generally should include both of the following:

- substantive natural science content (especially *farm- or landscape-level* biology or ecology, sometimes combined with social sciences), and
- substantive analysis and discussion of the *interactions* within or among agricultural systems components and other systems.

Preference is given to manuscripts that address whole-farm and landscape level issues, via integration of conceptual, empirical and dynamic modelling approaches.

The scope includes the development and application of systems analysis methodologies (*diagnosis, simulation and mathematical modelling, participatory modelling, multi-criteria assessment, trade-off analysis, participatory design*, etc.) in the following areas:

- agroecology and the *sustainable intensification* of agriculture as well as transition pathways for sustainable intensification;
- decision-making and *resource allocation* in agricultural systems;
- the *interactions* between agricultural and non-agricultural landscapes;
- the multiple services provided by *agricultural systems* from *food security* to *environmental services*;
- adaptation and transformation of *agricultural systems in the era of global change*;
- development and application of *tools and methods* for agricultural systems *design, assessment and management*;
- innovation systems and multi-stakeholder arrangements that support or promote change and/or informs policy decisions; and
- *big data* and the *digitalisation of agriculture* and their effects on agriculture.

The following subjects are *discouraged*:
• econometric, descriptive or other statistical analyses that exclude systems considerations, landscapes, land use change studies, or other economic analyses without substantive natural science content;
• development of typologies unless the typology developed forms the basis for further systems analysis;
• results from crop or livestock trials unless from systems trials or the results address systems issues;
• studies focusing on social or political outcomes that lack a clear systems framework and direct application to agricultural systems (i.e. the farm production system or landscape, their activities or components, their interactions or synergies);
• conceptual frameworks without empirical implementation (unless submitted as a short communication);
• studies focusing on specific chemical constituents of plant or animal species or their products;
• studies of the operation or efficiency of agricultural or food processing machinery, or of agricultural supply chains without a substantive biological component;
• life cycle analysis (LCA) studies that are primarily descriptive unless LCA is combined with other types of methods that address interactions within agricultural systems or between those systems and their environment.

Such subjects are not considered for publication unless they clearly provide substantive and highly generalizable new insights regarding processes operating at farm or landscape levels or describe novel analytical methods applicable to a wide variety of agricultural systems.

The journal publishes original scientific papers, short communications, reviews, perspectives and comments. Review perspective articles and book reviews should only be submitted after consultation with the editors. Review papers generally should focus on the application of specific methods rather than descriptive analyses of agricultural production systems or supply chains.

"Perspective" articles are intended to provide a forum for authors to present a novel viewpoint on any topic falling within the journal's scope. The key feature of Perspectives is that they are future focused and are expected to stimulate discussions within the community. They may build on recent developments (e.g. published articles, conference highlights, or discuss the implications of new concepts and/or methodological approaches) but other topics will be considered. Perspectives are expected to be relatively short (the guideline length is 2000 words) and should include a short abstract, highlights, main text, references) and one figure summarizing the viewpoint or one table supporting the arguments. Perspectives should have an incisive title. Perspectives are primarily submitted following invitation from an Editor, but volunteered articles will be considered. Authors interested in submitting a Perspective article should seek pre-submission advice through the Agricultural Systems journal home page. All Perspective articles will be rigorously peer reviewed under a rapid review process to ensure short a duration between submission and publication.

Responses to Perspectives may be submitted as "Comment" articles. Comments will be published at the discretion of the Editors. They will be sent to the authors of Perspective articles to provide the opportunity to reply. Comments should not exceed 1000 words and their core message must be clear and directly related to the Perspective article. Comments are not intended to promote the writer's own research but to stimulate constructive comments, amplifications and discussion within the Agricultural Systems community.

AUDIENCE

Agriculturalists, biologists, veterinarians, economists, social scientists and those interested in management and resource use.

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To find out more, please visit the Preparation section below.

INTRODUCTION
Agricultural Systems is an international journal that deals with interactions - among the components of agricultural systems, among hierarchical levels of agricultural systems, between agricultural and other land use systems, and between agricultural systems and their natural and social environments. In particular, its aim is to encourage integration of knowledge among those disciplines that underpin agriculture. Many contributions will therefore be multi- or inter-disciplinary. Papers generally focus on either methodological approaches to understanding and managing interactions within or among agricultural systems, or the application of holistic or quantitative systems approaches to a range of problems within agricultural systems and their interactions with other systems. Because of the nature of the readership of Agricultural Systems, the contents of papers should be easily accessible (properly introduced, presented and discussed) to readers from a wide range of disciplines.

The scope includes the development and application of systems methodology, including system modelling, simulation and optimization; ecoregional analysis of agriculture and land use; studies on natural resource issues related to agriculture; impact and scenario analyses related to topics such as GMOs, multifunctional land use and global change; and the development and application of decision and discussion support systems; approaches to analysing and improving farming systems; technology transfer in tropical and temperate agriculture; and the relationship between agricultural development issues and policy.

Types of paper
The journal publishes original scientific papers, short communications, reviews, perspectives, and comments. Reviews and perspectives should be submitted only after consultation with the Editors via the journal's home page.

Length of Papers
Although there is no absolute word or page limit for manuscripts submitted to AGSY, a recommended maximum is 8000 words for research papers, 4000 words for short communications, 2000 words for perspectives, and 1000 words for comments. Contributions longer than these recommendations may result in a request for modifications to bring the manuscript within these limits.

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- Title
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- Highlights
- Introduction
- Material studied, area descriptions, methods, techniques
- Results
- Discussion
- Conclusion
- Acknowledgements and any additional information concerning research grants, etc.
- References
- Appendices
- Tables
- Figures

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Define abbreviations that are not standard in this field in the text at first use. Ensure consistency of abbreviations throughout the article.

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Collate acknowledgements in a separate section at the end of the article just before the References section. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc. ans institutions that provided funding for the research.

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All biota (crops, plants, insects, birds, mammals, etc.) should be identified by their scientific names when the English term is first used, with the exception of common domestic animals.

All biocides and other organic compounds must be identified by their Geneva names when first used in the text. Active ingredients of all formulations should be likewise identified.
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Present simple formulae in the line of normal text where possible. In principle, variables are to be presented in italics. Subscripts and superscripts should be clear.

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Give the meaning of all symbols immediately after the equation in which they are first used. For simple fractions use the solidus (/) instead of a horizontal line.

Equations should be numbered serially at the right-hand side in parentheses. In general only equations explicitly referred to in the text need be numbered.

The use of fractional powers instead of root signs is recommended. Also powers of e are often more conveniently denoted by exp.

Levels of statistical significance which can be mentioned without further explanation are: *P <0.05, **P <0.01 and ***P <0.001.

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Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

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