Overview
The following guidelines have been developed to help the IFRI-FLARE team maintain transparency and fairness in the publication process and in authorship decisions. The recommendations presented here are flexible, and as new issues arise, this document will be updated to reflect the needs of the team. Revisions to this document require approval of the IFRI-FLARE Coordinator, Arun Agrawal.

All IFRI-FLARE team members are asked to follow these guidelines for any publications involving IFRI-FLARE-related research and information, whether publishing with fellow IFRI-FLARE team members or with external colleagues. In the latter case, team members should provide a copy of these guidelines to external collaborators.

Both internal IFRI-FLARE team members and external collaborators should receive, read, and agree to (via signature, electronic/email is acceptable) these guidelines before initiating jointly-authored works. It is the responsibility of the lead author(s) to distribute these guidelines and obtain agreement.

Product Planning
It is advisable to develop and maintain a list of planned products (reports, briefs, peer-reviewed publications, etc.) including a tentative list of potential authors.

Notification
Product leads should assess interest among the wider IFRI-FLARE team, though they are not required to include all interested parties. Should a new product be developed from a previously unpublished product, it is the responsibility of the new product lead(s) to contact previous contributors concerning authorship and responsibilities. At the same time, individuals who are aware of and interested in participating in a particular product, who have not been contacted yet, should make their interest clearly known to the lead author(s) as early as possible.

If anyone feels like they should be included as a co-author on a product (e.g. they fulfill the authorship criteria below), they should feel free to make that known to the lead author(s) without any
awkwardness and with the understanding that there may be differing opinions of what merits co-authorship. Any disagreement or misunderstanding should be resolved through frank and open conversation and with respect.

This notification process is especially critical when initiating unplanned or spin-off publications with external colleagues that draw from unpublished work (see Starting a New Project section, below).

**Lead Author Responsibilities**
The lead author is responsible for:

1. Initiating and maintaining communication with co-authors and other contributors;
2. Ensuring timely progress of the publication
3. Ensuring acknowledgements are included (of both grant and of team members who are not co-authors but contributed in some other way)
4. Making a final decision on author order
5. Finalizing and submitting publication materials

**Manuscript Authorship Criteria**

1. Make substantial contributions to (a) research conception and design, or (b) data processing, analysis, or interpretation
2. Assist in drafting the article or revising it critically for important intellectual content.
3. Provide final approval of the version to be published

Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship.

Contributors with involvement in fewer than all three of the above criteria should be named in the acknowledgement section (with their acceptance and approval). Examples of those who might be acknowledged include a person who provided purely technical help, writing assistance, or a department chair who provided only general support. Financial and material support should also be acknowledged.

**Poster or Conference Presentation Authorship Criteria**
To be included on professional conference/meeting presentations, posters, etc., the author should meet both of the following conditions:

1. Make substantial contributions to (a) research conception and design, or (b) data processing, analysis, or interpretation.
2. Contribute to the actual development of the presentation, poster, and/or text.

These criteria are similar to those recommended for refereed publications with the exception of final approval/review of the finished version, as this is not always feasible.
**Additional Author Responsibilities**
Each author must:
1. Be able to scientifically defend the complete contents of the paper
2. Be responsible for falsification
3. Be responsible for plagiarism
4. Ensure that the same data is not used in additional publications (copyright)

**Order of Authors**
For each new product, the lead author(s) should be clear and upfront with additional authors regarding the author order protocol. There is no universal rule in our interdisciplinary field and the chosen protocol must be clear.

Examples include:

1. Weighted by substantial intellectual contribution (decided either upfront or later)
2. Led by initial project/idea lead(s)
3. Alphabetical
4. A mix of the above (e.g. First two lead authors, followed by all others in alphabetical, or by weighted contribution)

However, authorship order may be renegotiated should an individual’s responsibilities substantially change, or should an individual fail to perform their role as per the protocol. Once the authorship order has been established, it should be stated correctly when cited, including CVs.

**Removal of Authors**
Team members may voluntarily remove themselves from the project, and from co-authorship at any point if they no longer have time for the project or they disagree with some aspect of the project or paper. If a team member voluntarily leaves the project or is asked to leave the team because they are opposed to the paper being published, the team members and lead author will need to discuss with the dissenting member if his/her contributions can still be used, or if they will need to be removed from the manuscript. Should content from a removed author be used, his/her contribution must be described in the Acknowledgements.

**Conflict of Interest**
All Team members will disclose to the team any real or perceived conflicts of interest related to this project and paper. It is better to err on the side of disclosing information.

**Conflict Resolution**
While it is ultimately the decision of the lead author(s), team members should try as best as they can to discuss authorship concerns openly and collectively. If the team members cannot agree upon how to treat authorship and/or acknowledgement for a product, each member involved in the conflict must
write a conflict report that details 1. The conflict in question, 2. The individual’s contribution to the product in question, and 3. The individual’s proposed alternative. The team may decide to use a scoring system to help assess contributions (see Optional Scoring System, below). These reports will then be submitted to the lead author(s) and reviewed by all co-authors. The lead author will facilitate a discussion among the authors, although authors should feel free to seek advice from colleagues and mentors to inform their stance. Lead author(s) may also bring the conflict to the IFRI-FLARE team members for input, if desired.

Starting a New Project
Team members are free to develop their own collaborations and directions using the ideas and data in the paper, once it is published. Team members should make every reasonable effort to inform each other when starting new collaborations and spin-off projects that result from this paper. In practice, the team members may continue to work together on follow-up projects, but this needs to be discussed among the group, and should not be assumed.

Optional Scoring System
(Nature 352, 18 July 1991)

In the event of authorship dispute, the team may choose to use the scoring system below to assess contribution:

- Maximum score = 100 points
- Five categories of contribution types
- Each potential author is awarded the highest realistic score in each category
- A total of 25 points indicates authorship
- Authorship is given in rank order of total score

1. INTELLECTUAL INPUT (planning / designing / interpreting)
   - No contribution 0 p
   - One detailed discussion 5 p
   - Several detailed discussions 10 p
   - Correspondence or longer meetings 15 p
   - Substantial liaisons 20 p
   - Closest possible involvement 25p

2. PRACTICAL INPUT: DATA CAPTURE (setting-up / observing / recording)
   - No contribution 0 p
   - Small contribution 5 p
   - Moderate indirect contribution 10 p
   - Moderate direct contribution 15 p
   - Major indirect contribution 20 p
   - Major direct contribution 25 p
3. PRACTICAL INPUT: BEYOND DATA CAPTURE (data processing / organizing)
   - No contribution 0 p
   - Minor or brief assistance 5 p
   - Substantial or prolonged assistance 10 p

4. SPECIALIST INPUT FROM RELATED FIELDS
   - No contribution 0 p
   - Brief or routine advice 5 p
   - Specially tailored assistance 10 p
   - Whole basis of approach 15 p

5. LITERARY INPUT (contribution to first complete draft of MS)
   - No contribution 0 p
   - Edited others’ material 5 p
   - Contributed small sections 10 p
   - Contributed moderate proportions 15 p
   - Contributed majority 20 p
   - Contributed virtually all 25 p