

Tool 4: Matrix Ranking

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Matrix Ranking is a tool for quantitatively assessing and comparing the importance of a range of strategies or actions that might be taken within a research partnership. Each activity is scored against numerous equity and non-equity criteria, agreed by the partners. The scores for each criterion are totalled up to provide a quantitative comparison of importance. This can be used as a basis for selecting and prioritising actions.

Why use the Matrix Ranking tool?

The Matrix Ranking tool can be used to ensure equity is systematically and explicitly considered, when determining the best course of action within a research partnership. This tool addresses equity by:

- 1. Quantifying and counting the contribution of different activities to enhancing equity in the partnership.
- 2. Ensuring that the equity-related impacts of proposed actions are considered.

When to use the Matrix Ranking tool?

| Phase | Rating | Descriptions |
|--|--------|---|
| Planning | ••• | Matrix ranking should be used in the planning stage, to assess macro-level actions that might be taken throughout the research process. |
| Implementing | •• | Use matrix ranking in the implementing stage by entering actions and criteria specific to this stage. |
| Disseminating | •• | Enter actions that occur in the disseminating stage and relevant criteria into the matrix ranking template to use in this stage. |
| Sustaining | ••• | The tool can also be used to assess actions related to sustaining a partnership, against relevant criteria. |
| Ratings ••• Designed for this stage •• Can be used as is in this stage •Can be adapted for use in this stage | | |



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How long does it take to use the Matrix Ranking tool?

Rapid approach

- A rapid approach to using the tool might involve a single researcher completing the template and then sharing this with others for their feedback and considerations.
- Focus the matrix ranking on just one stage (planning, implementing, disseminating or sustaining) of the research partnership.
- The tool could also be implemented rapidly to assess and compare a small number of actions, for example, two competing possibilities. This approach could take as little as 30 minutes.

Intensive approach

 An intensive approach to implementing matrix ranking would involve the action, criteria and rankings all being determined through group discussions. This could be conducted face-to-face or virtually. This approach would likely take two to three hours, depending on the number of actions assessed.

What other resources do you need to use the Matrix Ranking tool?

- The Matrix Ranking Form template
- Face-to-face or virtual meeting space
- Facilitator and notetaker
- Projector or screen sharing facility to display the Matrix Ranking template as it is completed

How to use the Matrix Ranking tool?

- 1. Determine the actions and criteria you want to rank and compare.
 - a. For a rapid approach this might involve:
 - i. Using predetermined actions and criteria such as those in the Matrix Ranking Form completed example.
 - ii. Agreeing on actions and criteria through an email exchange
 - iii. Nominating one member of the partnership to develop the actions and criteria.



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- b. For an intensive approach, actions and criteria would be decided by majority group consensus. This would be reached via discussion and/or a vote.
- 2. Download the Matrix Ranking Form template.
- 3. Select the Actions and Criteria sheet (bottom left corner), if it is not already selected.
 - a. In the Actions column, enter up to 10 actions that might be taken during the four stages of a research partnership.
 - b. Enter up to ten criteria in the Criteria column.
 - i. These should include up to five equity, and up to five non-equity criteria.
 - ii. Ensure that the criteria are all worded in the positive or the negative. For example, 'more equitable' is a positive reason and 'less equitable' is a negative reason.
 - iii. You may wish to use the same or different criteria for different stages of the research partnership. If you decide to use the same criteria for more than one stage, copy and paste the criteria for each stage.
- 4. Agree on a numeric scoring method, for example using 0-4 where 0 = strongly disagree and 4 = strongly agree.
- 5. Go to the Planning sheet of the template.
 - a. Delete any unused Action rows and/or Criteria columns. For example, if you only intend to assess eight actions, delete Action rows nine and 10.
- 6. Ask the participants to collectively score each action against each criterion. The totals for equity, non-equity and all other criteria will automatically calculate.
- 7. Discuss the equity, non-equity and total scores and their implications for action planning (see below for suggested questions).
- 8. Decide on actions that will be taken in the partnership and/or included in the funding proposal, as well as who should take responsibility for implementing these actions.
- 9. You may wish to repeat steps five to eight for the Design and Implementation, Dissemination and Impact and Evaluating and Sustaining sheets, or you could conduct a separate matrix ranking activity for these stages later in the partnership.



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Suggested questions to explore when using the Matrix Ranking tool

- How do the equity and non-equity scores for each action differ?
- Should/can actions that score high for equity, but low for non-equity considerations, be implemented?
- Should/can actions that score low for equity, but high for non-equity considerations, be implemented?
- What other actions could/should be taken to better balance equity and non-equity considerations?

Expected outputs and outcomes from using the Matrix Ranking tool

- Using this tool will produce:
 - A complete matrix, visualising and enabling comparison of scores for different possible actions.
 - Quantitative data on the equity and non-equity scores for different actions.
 Implementing a matrix ranking exercise should enhance participants' understanding of:
 - a. The equity and non-equity implications of taking a variety of actions
 - b. How equity and non-equity considerations could best be balanced in the partnership.

Completed example of the Matrix Ranking tool

Download the Matrix Ranking completed example.

Partnership description

The completed example is based on a hypothetical partnership to assess the biochemical properties of medicinal plants, as traditionally used in South-East Asian countries to treat conditions of ageing such as arthritis and dementia. The aim of the research is to develop and commercialise pharmaceutical products to treat conditions of ageing. The partner leading the research is a university based in a Globally Northern country with a rapidly ageing population. The proposed funder for the research is based in the same country as the institution in the Global North. They have a funding stream for Global North-South partnership research. However, the funder does not have specific requirements for what the partners involved must do, other than a requirement for partners based in the Global South to demonstrate 'ownership' through in-country contributions.



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The university in the Global North has invited universities based in Vietnam, Malaysia and China to the partnership. Each has a strong track record of working with Indigenous knowledge holders to identify and assess traditionally used medicinal plants. The Globally Northern university believes the partnership is necessary as they could not effectively conduct the research without tapping into their partners' network of Indigenous knowledge holders, most of whom do not speak English, nor read or write in any language. Through the partnership arrangement, the Globally Southern universities will receive funding to purchase laboratory equipment that they require to advance their biochemical analysis techniques. They cannot access the funding stream without working in partnership with an institution from the Global North, and therefore see working in partnership as essential.

Actions and Assessment Criteria

Partners have developed a list of up to 10 possible actions or outcomes to be taken at each stage of the research partnership. They have agreed to assess each proposed activity, in each stage, against five equity and five non-equity criteria. Each item will be scored 0-4, where 0 = strongly disagree, 1 = Disagree, 2 = Neither agree nor disagree, 3 = Agree and 4 = Strongly Agree. Therefore, the maximum possible equity and non-equity scores are each 20, and the maximum possible total score is 40.

Results

The results of the completed example show that actions that score highest for equity, often achieve relatively low scores for non-equity considerations, such as research rigour or ethics. For example, actions that are essential for achieving equity, such as recognising the contributions of traditional knowledge holders, receive minimal scores against non-equity criteria. This indicates that if equity is not explicitly considered and valued, actions that enhance equity within a partnership may not be considered or included in the funding proposal.

References and further reading for the Matrix Ranking tool

- This tool has been informed by Tool 63 Matrix Scoring, which can be found on Page 63 of International HIV/AIDS Alliance, 2009. Tools together now! 100 Participatory tools to mobilise communities for HIV/AIDS: United States Agency for International Development.
- Good preparation reading: The Global Code of Conduct for Research in Resourcepoor Contexts and/or Mapping experiences and perspectives of equity in international health collaborations to inform the development of equity criteria.