Worksheet Participatory action research: Matrix ranking

Matrix ranking will help you to create insight in and make participatory decisions about possible interventions in the community. Ranking methods include:

* Preference Ranking
* Pair wise Ranking
* Direct Matrix ranking .
* Wealth Ranking

Preference ranking

* Adopt the exercise to local conditions and choose a topic, preferably one which is related to the fieldwork. For example: what are the main problems affecting the growth and development of crop husbandry / animal husbandry / fishery / fisheries / agro-forestry in your area?
* Preference ranking allows you to quickly determine the main problems or preferences of individual villagers and enables the priorities of different individuals to be easily compared.

**It has logical steps to be followed:**

* Decide upon a set of problems or preferences to be explored.
* Interact with the person and set his / her favoured items in order of priority .
* Repeat this exercise with a good number of people.
* Tabulate the responses.

Pair wise Ranking

**Steps to be followed:**

1. Identify a set of problems, or preferences, to be prioritised. For example, farming problems, preference for tree species, water management issues, education issues, health issues.
2. Identify six or less solutions. Note each solution on a separate card.
3. Place two of these cards in front of the community member and ask him/her to choose most preferred one with reasons for choice. Mark the response in the appropriate box in the priority ranking matrix.
4. Follow the procedure for rest of the species. Each time the criteria should be noted.
5. Present a different pair and repeat the comparison
6. Repeat until all possible combinations have been considered.
7. List the problems / preferences in the order.
8. Repeat the pair wise ranking exercise for a number of individuals and tabulate their responses.

**Prepare a pair wise comparison table as below:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Technology | T1 | T2 | T3 | Total (Rank) |
| T1 | - | T2 | T3 | 0(III) |
| T2 | T2 | - | T3 | 1(II) |
| T3 | T3 | T3 | - | 2(I) |
| Total (Rank) | 0(III) | 1(II) | 2(I) |  |

Matrix Ranking

This method is often used for scoring and ranking, for systematic comparison of technologies or other interventions, according to locally generated criteria. Various matrix rankings and scoring are used to understand community decision-making processes, comparing preferences for different options between individuals and between different groups and eliciting decision criteria.

Matrix Ranking

Team Leader:

Team Members:

Instructions:

1. Write down your goals for making the matrix ranking in the box given below:
2. Select five community members who have experience with the problems of proposed solutions to be matrix ranked on a set of agreeable indicators as key informants.
3. Select about five important indicators like costs, income, employment generation, time consumption etc.
4. Do separate matrix ranking for problems or solutions, so that finally there will be 4 matrix ranked tables.
5. Select comparable problems or solutions, practices, etc. for matrix ranking as perceived important by the key informants.
6. Mention the indicators in rows and problems or solutions to be compared in columns.
7. Please note that the ranks are given with respect to each indicator for all the problems or solutions compared, e.g., if there are 5 solutions for comparison, then there shall be only 5 ranks.
8. After giving the ranks, convert the ranks to rank values, e.g., if there are five ranks, first rank will have a rank value of 5 and so on.
9. Add the rank values in each cell and sum it up row-wise and column-wise.
10. Higher column-wise totals indicate that the solution in question has been adopted, rejected and over-adopted to a higher level as the case may be.
11. Higher cell totals indicate the higher importance of indicator in question.

Insert text here

Please record your observations on matrix ranking with reference to the following points in the box below.

1. What are the problems and solutions selected for comparison?
2. What were the agreeable indicators?
3. What do the column and row totals indicate?

Insert text here

Table format: Matrix ranking of solutions to a problem

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Indicators**  **/** | **Ranks & Rank - values for the Indicators** | | | | | |
| **1.** | **2.** | **3.** | **4.** | **5.** | **Total rank value of cells** |
| 1. | KI-1 | KI-1 | KI-1 | KI-1 | KI-1 |  |
|  | KI-2 | KI-2 | KI-2 | KI-2 | KI-2 |
|  | KI-3 | KI-3 | KI-3 | KI-3 | KI-3 |
|  | KI-4 | KI-4 | KI-4 | KI-4 | KI-4 |
|  | KI-5 | KI-5 | KI-5 | KI-5 | KI-5 |
|  | Total | Total | Total | Total | Total |
| 2. | KI-1 | KI-1 | KI-1 | KI-1 | KI-1 |  |
|  | KI-2 | KI-2 | KI-2 | KI-2 | KI-2 |
|  | KI-3 | KI-3 | KI-3 | KI-3 | KI-3 |
|  | KI-4 | KI-4 | KI-4 | KI-4 | KI-4 |
|  | KI-5 | KI-5 | KI-5 | KI-5 | KI-5 |
|  | Total | Total | Total | Total | Total |
| 3. | KI-1 | KI-1 | KI-1 | KI-1 | KI-1 |  |
|  | KI-2 | KI-2 | KI-2 | KI-2 | KI-2 |
|  | KI-3 | KI-3 | KI-3 | KI-3 | KI-3 |
|  | KI-4 | KI-4 | KI-4 | KI-4 | KI-4 |
|  | KI-5 | KI-5 | KI-5 | KI-5 | KI-5 |
|  | Total | Total | Total | Total | Total |
| 4. | KI-1 | KI-1 | KI-1 | KI-1 | KI-1 |  |
|  | KI-2 | KI-2 | KI-2 | KI-2 | KI-2 |
|  | KI-3 | KI-3 | KI-3 | KI-3 | KI-3 |
|  | KI-4 | KI-4 | KI-4 | KI-4 | KI-4 |
|  | KI-5 | KI-5 | KI-5 | KI-5 | KI-5 |
|  | Total | Total | Total | Total | Total |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 5. | KI-1 | KI-1 | KI-1 | KI-1 | KI-1 |  |
|  | KI-2 | KI-2 | KI-2 | KI-2 | KI-2 |
|  | KI-3 | KI-3 | KI-3 | KI-3 | KI-3 |
|  | KI-4 | KI-4 | KI-4 | KI-4 | KI-4 |
|  | KI-5 | KI-5 | KI-5 | KI-5 | KI-5 |
|  | Total | Total | Total | Total | Total |  |
| 6. | KI-1 | KI-1 | KI-1 | KI-1 | KI-1 |  |
|  | KI-2 | KI-2 | KI-2 | KI-2 | KI-2 |
|  | KI-3 | KI-3 | KI-3 | KI-3 | KI-3 |
|  | KI-4 | KI-4 | KI-4 | KI-4 | KI-4 |
|  | KI-5 | KI-5 | KI-5 | KI-5 | KI-5 |
|  | Total | Total | Total | Total | Total |
| Total rank value of the columns |  |  |  |  |  |  |

Key Informants: Date: