**EXERCISE 4. EXPLORING POSSIBLE SOLUTIONS**

|  |  |
| --- | --- |
| *OBJECTIVE*  **After this exercise the participants will be able to:**   * Explore possible solutions to their chosen problem. | |
| *EQUIPMENT NEEDED*   * Large sheet of paper, marker pens. | *EXPECTED OUTPUTS*   * A list of criteria to decide whether it is worth pursuing a potential solution to a problem. |
| *TIME*  1 hour | *PREPARATION*   * Complete Exercise 2C (Selecting Topics to Study) |

*This exercise helps participants explore possible solutions to their problems by identifying positive and negative characteristics. You can use this exercise for both all-or-nothing technologies and ones that participants can try out on a small scale.*

*SUGGESTED PROCEDURE:*

1. Remind participants of the problem they had chosen and the solutions they had identified (in Exercise 2c). Explain that they will now explore these solutions in more detail. Discuss why it is important to think of positive and negative consequences of an innovation before implementing it.
2. Ask the participants to think of the criteria they would use to judge an innovation: things like the cost, feasibility, effectiveness, amount of work needed, ease of use, benefits, problems it might cause, and so on. List these criteria on a large sheet of paper.
3. Divide the participants into groups, and ask each group to select a problem they want to solve.
4. Ask them to think of between one and three possible solutions to the problem. Get them to draw a table like Table 5 on a large sheet of paper, with one column for each potential solution.
5. Ask them to list the criteria from Step 2 (above) in the first column of their table.
6. Invite them to fill in the remaining columns in the table with the likely results and any comments (see Table 4 for an example). If the group is evaluating more than one potential solution, ask them to compare among them.
7. Invite the groups to report on their discussions to the plenary.
8. Highlight those considerations that the groups thought were most important. Which potential solutions appear to be the most promising, and why? Which ones would they reject, and why?
9. If the group evaluated more than one solution, ask them to select the one that they would like to pursue further.