Problem and Solution Trees

Problem Tree

The problem and solution tree approach (also known as the issue tree) is a participatory process of working through the layers of determinants for a specific issue or problem and then developing potential interventions or solutions designed to address the issue, using the available information and expertise from a group of people connected to the issue. It forms part of the systematic approach to community development used in the logical framework model.

This exercise is best done in a learning group where there are fewer Fellows than in the full plenary so that everyone has a chance to speak and ask questions. The first step in the process of developing a problem tree is to reach agreement on the specific starting problem to be addressed. Examples of problems are as follows:
(1) there are significant gaps in the soft skills of leadership and management in our organisation, or
(2) poor women in rural communities in our area struggle to build resilient and scalable businesses.
This is the trunk of the tree, and you draw it on a flipchart paper or whiteboard for everyone to see.

The main word used to aid the development of a problem tree is, “Why?” Why does this situation occur? Beginning with the starting problem, invite the group to identify factors that cause or contribute to the problem, and then what underlies these factors and so on as far as they can go. This builds up levels or layers of causes as underlying factors or determinants of the problem - represented as the roots. Draw and lable these roots below the trunk of your tree on the page or white board. The process can continue until the analysis reaches a point where solutions become apparent, or when you have gone as far as you can, usually about three layers.

Then invite the group to go on to the consequences or results of the problem. These will be the branches. To get there you will ask what happens or how are people affected by this problem. The impacts of the problem are secondary problems that occur because of the core problem, which is the trunk of the tree. Draw and label these as branches of the tree.

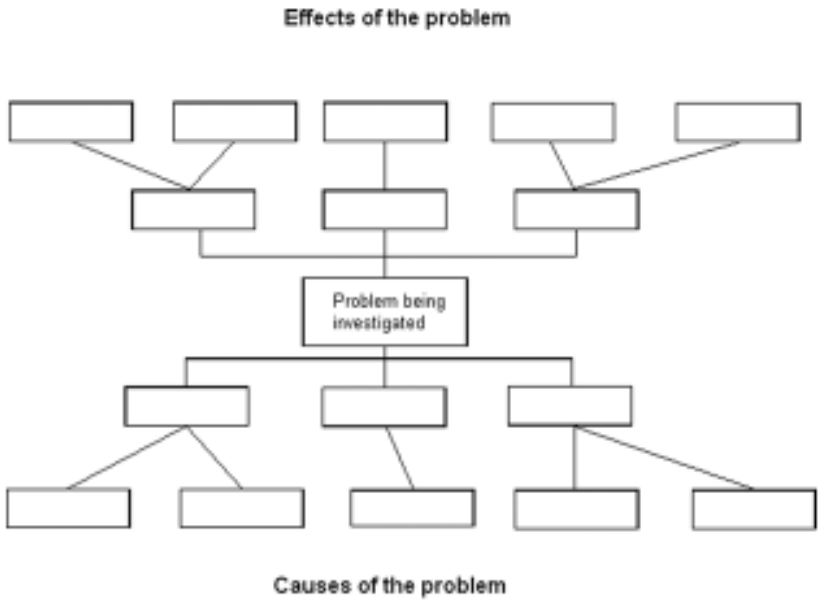
Once the roots and branches have been completed, the final check is done to ensure that it works, that the statements are logical and reasonable, and that identified factors do lead to the starting problem being discussed. Notice if any of the branches link directly to any of the roots although this is not necessary for the success of the exercise.

Four basic rules can help ensure that the tree works:

1. Consistently answer a "why" or a "how" question.
2. Progress from the starting problem to the analysis of causes and consequences.
3. Have roots and branches that are mutually exclusive (they don’t overlap or duplicate) and collectively exhaustive (you take the questions of why and how as far as you can down every root and branch).
4. Use an insightful breakdown.

The requirement for issue trees to be collectively exhaustive implies that divergent thinking is a critical skill.

Fig. 1: Classic problem tree.



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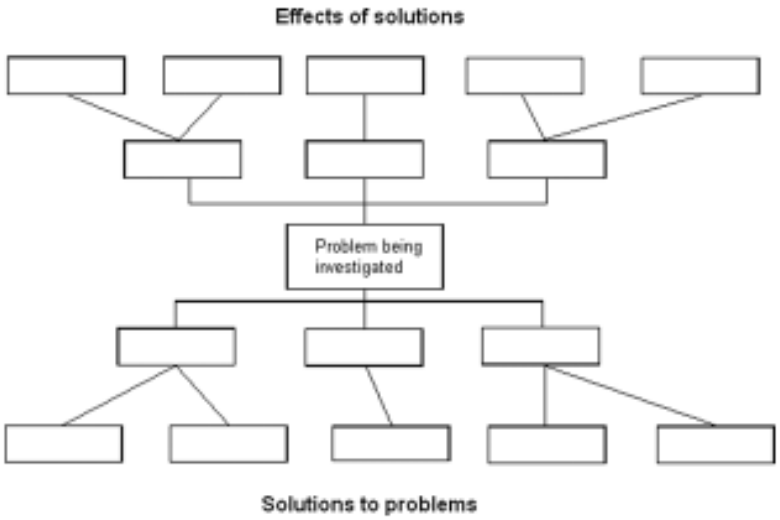
Solution Tree

The solution or objective tree uses exactly the same structure as the problem tree, but with the problem statements (negatives) in the roots and branches turned into objective statements (positives). Most simply you invite the group to do this by reversing the problem factor. An entire solution tree which has the same number of solutions as there were problems is developed, not just focusing on one area, so all the possibilities are included.

The next step in the exercise is for Fellows to priorities which solution or solutions they will focus on according to their capacity and they will do this in their Fellows pairs. This should form the basis of the design of their intervention and hopefully become their innovation.

Fig. 2: Classic solution tree.



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