**Tasks**

1. Working with the total group, help them identify criteria for setting objectives. (These are listed in the written materials.) While participants will be able to identify most of the essential criteria for determining objectives, you may need to complete the list based upon your own experience and those criteria outlined in the training manual. (I find getting the participants to identify the points one would cover in a lecture more effective than providing it for them).

2. Ask someone from the group to volunteer their problem statement. Still working in the plenary group assist the participant to translate the problem statement into an objective statement. The other participants should be encouraged to join the discussion.

3. After the plenary discussion, ask the participants to reconvene in the small groups they have been working with and spend a few minutes (no more than 20) writing an objective statement that meets the criteria defined in the plenary session. If you have been following the routine of working shared performance deficiencies in small groups of participants, ask them to write the objective based upon the performance deficiency they have agreed to work on.

4. Reconvene the total group, have each small group report their statement of the objective to be achieved, critique the statement and move quickly to the next task. Problem analysis exercise sheet: Part I should be completed by each participant to help them reinforce the points to be learned about setting objectives.

5. Demonstrate the use of the force field analysis technique. This can be most effectively presented by taking one of the group's stated objective and analysing it in a plenary session, soliciting ideas and comments from the participants. Follow up with questions for clarification about the process before moving to the next task.

6. Reconvene the small work groups to analyse the forces impacting upon the achievement of their stated objective. The workbook form, Problem Analysis. Part 2 (Exercise), is designed to help small groups and individuals work through this analytical process. Problem analysis can be a time consuming task, so plan accordingly. I hesitate to put specific time frames on each of these task since so many variables enter into the completion of training events. Just remember that time is a scarce commodity and the task ALWAYS expands to fill the time allotted!

**Step C: Analyzing the problem**

As suggested in Step B, there is a tendency in the problem solving process to pursue symptoms (mini-problems masquerading as the real thing) or to jump to conclusions (solutions). In the first case, the symptom may be solved but the problem continues to exist. When the solutions are defined as problems, they immediately eliminate all other options for problem solving. More importantly, jumping to solutions may have you chasing after the wrong problem - or no problem at all.

Analysis is the bridge between Step B (identifying the problem/opportunity) and Step D (planning a course of action). Talking to your problem as suggested in Step B begins the analysis stage of problem solving.

Identifying the problem, in a precise way, is half the challenge of problem solving. No one understands the importance of this better than Japanese managers. They have a tendency to spend, at least in the minds of many Western managers, an inordinate amount of time on “problem finding”. This means, more often than not, getting agreement on what the questions are that need to be asked. Implementation, in Japanese organizations, results from consensus decisions that emanate from in-depth discussions and reflections on the issues involved, starting with the all important step of defining, as precisely as possible, the problem they are confronted with.

By contrast, many Western managers, particularly Americans, have the tendency to rush into situations - to solve the “problem”. The rush to solution often has the American manager spending valuable time in what might be called backward planning. Backward planning, more often than not, has the manager redefining the problem to fit the solution. It is not a recommended approach to problem solving.

**Analysis is a two-step process**

Problem analysis, as I have defined it, is a two-step process: (1) translating the problem into an objective; and (2) analysing the forces working for and against that objective.
• Setting Objectives
One can view a problem as two split halves with a gap in between, as shown below. One half is where we are now, the other, where we want to be. The problem is the discrepancy between the two.

Problem solving is the art of closing that discrepancy:

Setting objectives may be the most difficult, certainly the dullest, part of the problem solving process. It requires a kind of discipline that some of the other steps do not. If you don't know where you want to go, it is impossible to decide how you want to get there or whether you are there when you think you have arrived.

An objective is a statement of where you want to go or what you want to accomplish. It is specific about who will do what, with whom, when, and how we will know it has happened.

**Some criteria for setting objectives**
For an objective to be well written (or stated) it should meet most or all of the following criteria:

(a) It is specific. It states what is to be accomplished in the shortest possible terms.
(b) It states an end result, not an activity.
(c) It must be something the individual, group, organization wants to do - otherwise it will have a tendency to slip away.
(d) It is measurable; we must be able to know when we reach it and be able to determine our progress toward it. Can we time it, count it, measure it, complete it?
(e) It has a target completion date. The absence of a date by which the objective is to be met is a license to ignore it.
(f) It is attainable within the time available.
(g) It is largely within our control. Without some control, it is difficult to assure that the objective will be accomplished. While it is recognized that many things about any objective may be outside of our control, it is important to minimize outside influence or interference.

The real problem in setting objectives is to state them in such a way that we will know whether or not we are moving toward them. Our tendency is too often to state objectives in a vague way, to make them “fuzzy”.

As you begin to write objectives, ask yourself are they:
• Measurable?
• Specific?
• Result oriented?
• Realistic and attainable?
• Time bounded?

You should also ask:
• What do I want done?
• Who will do it?
• Who will it benefit?
• When will it happen?
• How will I know if I have been successful? (What is the measure of success?)

When a man does not know what harbour he is making for, no wind is the right wind
Seneca

Once you have defined where you want to go (your objective), it is time to analyze the forces surrounding that objective and the changes you want to bring about.

**Force field analysis**

Force field analysis is a tool for assessing a potential change and the forces in the environment that influence that change. (It is important to remember that the solution to nearly every problem requires some change).

Again, we owe a debt to Kurt Lewin, its creator. Lewin discovered that you could take any situation that a group would like to change and identify a field of forces - political, Social, organizational - which keep the situation as it is. The forces are of two kinds: driving forces those that push us towards our objectives, and restraining forces - those that stand as obstacles. In the diagram below, these forces are displayed with different length arrows, which signify the relative strength of each force.

At the center of the field is the point of equilibrium (where we are now), which means the situation is held in tension by the opposing forces, but quite susceptible to shifts. An unbalancing of forces can cause the equilibrium to shift either in the direction of the objective or in the opposite direction, indicating slippage.

For example, if a local authority has as one of its objectives to allocate 500 low income housing plots per month in a housing project, instead of the present average of 300 plots, the force field would look as follows:

![Diagram of force field analysis]

The driving forces are the things the local authority has working for it to meet its objective. The restraining forces are obstacles that stand in the way.

Problem solvers need to determine how to unbalance the forces and shift the equilibrium in the desired direction. Three processes are involved:

(a) **Diagnosis:** Identify all the forces, driving and restraining, that are helping to maintain the current level of activity.
(b) **Unfreezing.** Changing the different strengths of the individual forces, both pro and con.

(c) **Redefining:** Stabilising the forces at a new, desired level.

Going back to the diagnosis, it is helpful to assess the relative strength of each force. One technique would be to give the driving and restraining forces each 100 points and then divide these 100 between the various forces on either side of the status quo.

Once their relative individual strengths have been assessed, there are three basic strategies for bringing about change.

(a) Add to the driving forces. This generally is less desirable since adding driving forces usually results in more opposing forces, which increases tension.

(b) Remove, or reduce restraining forces. This is usually more desirable and less obvious.

(c) Add driving forces and eliminate or reduce restraining forces. This is probably the most frequently used strategy.

**SOME GUIDELINES FOR USING FORCE FIELD ANALYSIS**

Not all forces are easy to influence or change. Some are so rigid that they are almost impossible to move. These factors need to be taken into account as you review:

(a) Which of the forces should you dismiss as being impossible to change?

(b) Which of the forces are most vulnerable to change? Which of those are also more important?

Once the forces have been identified as significant and vulnerable to change, consider which ones you want to attempt to change. In this process, it is helpful to ask the following kinds of questions.

(a) Who has access to the force you want to change?

(b) Which force, if we change it, will trigger other forces (for example, influencing a key leader may automatically influence his or her followers)?

(c) What are the resources we have available or can find to bring about the desired change?

(d) Where do we have the most leverage to influence the forces?

(e) What new resistances can be expected to develop as we begin to strengthen or diminish other forces? How can they be countered?

(f) Who needs to be involved or informed to either lessen the resistance to change or to provide support for the change?

The force field analysis prepares us to carry out our next step (Planning a Course of Action) because it begins to suggest various options - various ways to meet the objective.

**Exercise**

**Topic Problem Analysis**

**Topic:** Analysing the problem: Part 1

**Time required:** 15 minutes

**Defining objectives**

1. The problem to be solved is:
2. Given the problem, the objective is to:

3. Is the above stated objective:
   (a) Specific yes no
   (b) Measurable yes no
   (c) Realistic (within our resources) yes no
   (d) Attainable (within our will) yes no
   (e) Results oriented yes no
   (f) Related to the organization's overall mission yes no
   (g) Challenging enough to make it worthwhile yes no
   (h) Something you personally would like to be involved in yes no

If the answer to any of these questions is no, you need to continue to work on your definition of the objective.

Remember, a concrete, measurable, result oriented objective is not necessarily realistic

Exercise

Topic: Problem analysis
Topic: Analysing the problem: Part 2
Time Required: Approximately 1 hour

Force-field analysis
(a) State the current situation (where you are now) above Driving Forces on the following chart.
(b) State your objective (where you want to be at some future date) just above the Restraining Forces.

<table>
<thead>
<tr>
<th>DRIVING FORCES</th>
<th>CURRENT SITUATION</th>
<th>RESTRAINING FORCE</th>
<th>OBJECTIVE</th>
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(a) Identify the forces which will both help and hinder you in reaching your objective. Write them on the diagram above. Restraining forces block our progress; driving forces help us reach our goal.
(b) Identify the strength of each force by drawing arrows under each force. The length of the arrow should indicate the strength of the force.

(c) Identify the specific forces (restraining and driving) which you believe are most important. Once you have identified them, answer the following questions (criteria):
   (i) Can you realistically change this force? (Influence)
   (ii) Can it be changed to your advantage within the time required to help you meet your goal? (Time)
   (iii) Do you have the resources to bring about the change? (Resources)
   (iv) Will you be able to get the commitment of others needed to bring about the change?

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<thead>
<tr>
<th>(A) List of Restraining Forces</th>
<th>Influence</th>
<th>Time</th>
<th>Resources</th>
<th>Commitment</th>
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<th>(B) List of Driving Forces</th>
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(d) From the lists above and your assessment of how feasible it will be to either decrease the restraining forces or increase the driving forces, you can develop options that will help you reach your stated objective. Remember, removing restraining forces may be more effective than increasing driving forces. In many cases, the removal of restraining forces turns them into a driving force (e.g., lack of training may be a restraint but once people are trained, they becomes a driving force).

**PLANNING A COURSE OF ACTION**

Only that which is provisional endures
French proverb
Trainer's notes

Topic: Planning a course of action: Part I
Time Required. Approximately 4 - 5 hours

Following problem analysis, the participants are requested to generate a list of various options that might be considered in achieving the defined objective. These are ultimately narrowed to the best option with, perhaps, a back-up strategy. Once the best alternative is determined, the next step is to put together a plan of action. Three sessions (or 4.5 hours) have been allocated to carry out the option generating and narrowing processes. It could take less time, depending on the number of reports to be given and critiqued.

Tasks

1. Given the participants' understanding of the various forces that will work for and against the accomplishment of their objective (completed in the previous session), the next step is to consider various options available to accomplish the objective. If you have not used a brainstorming technique earlier in the course, this is a good time to introduce it. The objective is to generate as many ideas as possible that can be considered to accomplish the objective. (The brainstorming technique is outlined on pages 80-81 in the training materials.)

There are a number of ways to identify options and the task can be accomplished in different sized groups. Mould the process to your needs and those of the group. Be flexible.

2. Once your participants have generated a list of options to be considered in achieving the objective, it is time to narrow them down to the one to be ultimately implemented. This process can be achieved in two steps. First, eliminate the ideas that are clearly not achievable and choose the two or three alternatives that are obviously viable. Since the participants have given considerable thought to the problem and its environment (the force field analysis), the best alternatives will literally pop out for further consideration. This narrowing process can be done in the smaller work groups that have been working together during past sessions. When the possible options have been narrowed to two or three, the individuals in each small group should complete the questionnaire (Impact analysis: Narrowing the Options) which is included in the training materials. The Impact Analysis Exercise should be completed for each of the final options to be considered. (Make sure you have photocopied enough forms.) Impact analysis involves assessing 5 criteria and a number of consequences for each option. The assessment exercise results in a gross score for each option being considered. These can be summarized on the Summary of Impact Analysis sheets (also provided in the training materials). The higher the score, the better the option. While this exercise is unlikely to be used back on the job, it points out the criteria and consequences that are important to consider in assessing any potential course of action.

3. Ask each small group to prepare and present a short report to the total training group for critique. The report should briefly describe the final 3 or 4 options considered; the one ultimately selected for implementation; and a discussion of the process used to reach decisions.

Trainer's notes

Topic: Planning a course of action: Part 2
Time required: approximately 3 - 4 hours (depending upon the number of reports)

This session is a natural follow up to the Impact Analysis. Each small work group will design a plan of action to carry out their best option for achieving the objective determined earlier.

Tasks

1. Give a short lecture on the steps to be considered in putting together an effective action plan. These are outlined in the readings, under the section entitled, “A detailed plan” (p.83).

2. Have each small group prepare their plan of action using the forms available.

3. These plans should be reported to the total group for critique and discussion.

The forms designed for the action planning process (pages 85-91) are detailed and require one sheet for each task to be completed. This may seem a bit cumbersome (and probably not something that would be used often back home) but
certainly the substeps represent an important sequence of decision making thinking in formulating an action plan. While the process is detailed and may seem too time consuming it is worth pursuing for those who want to become better managers.

Overview
Step D: Planning a course of action
In the prior three steps, time has been spent defining problems and opportunities, establishing objectives to address these problems, determining the importance of various objectives and analysing the forces that influence the accomplishment of selected objectives. This phase of the problem solving cycle has three distinct steps designed to put the objective into action. These include: (A) generating and evaluating options; (B) narrowing the many options into one; (C) developing a detailed plan of action, and (D) determining a flow of activities.

A. Generating and Evaluating Options
At this point, it is desirable to generate as many options as possible to solve the problem and meet the objectives. As a start, it would be useful to look back at the “force field” created earlier. Options are often suggested by the forces in the field. Sometimes an option will focus on reducing one or two critical restraining forces. Sometimes it's a combination of reducing restraining forces and taking advantage of driving forces. This is the point in the problem solving process where creativity is important. The management team should be looking for new ways of thinking.

One approach to generating options for problem solving is “brainstorming”. Because Brainstorming has proven to be such an effective management tool for helping work teams be more creative, the process is described in the following paragraphs.

The Brainstorming Technique
A facilitator writes the topic or question to be brainstormed at the top of a large sheet of paper, then asks the group to call out their ideas in short phrases which can be written down quickly. In order to set a creative, high-energy tone, the following guidelines should be stated to the group from the onset.

- **No judgements.** No idea or suggestion, however unusual, is to be dismissed, or edited. (There will be a time to evaluate the ideas later.)
- **Anything goes.** Offbeat, unusual, humorous, and bizarre ideas are encouraged.
- **Go for quantity.** The more ideas, the greater the possibility for coming up with a winner.
- **Building on other people's ideas** is fine.

The facilitator of the brainstorming can help to keep ideas moving, if necessary, by: (1) setting a time limit - commonly 3 to 10 minutes, depending on the topic and size of the group - so that people will know they can't afford to sit on an idea; (2) giving a few examples to start things off; (3) coaxing (gently); or (4) asking for different sorts of examples if the group starts to develop a “one track mind”.

The conventional approach is to have one person record the group's ideas on newsprint or a blackboard for all to see. Sometimes, two recorders work as a team writing alternate items, so the group does not have to wait for the recorders to catch up.

Another variation that is especially useful if you have several topics to brainstorm is to write each topic on a separate sheet of newsprint or blackboard, and provide each participant with a marker or chalk so they can go up to the lists and record items “graffiti-style”.

Some researchers and trainers have suggested that brainstorming is not necessarily the best technique to generate lots of creative ideas. The problem seems to be that a group of people can go off on one tangent without exploring the full range of possibilities. This suggests several variations of the brainstorming process.

Variation 1
Instruct each group member to brainstorm individually on the topic, writing down ideas on a small piece of paper. Then, share the ideas by reading off the lists (or compiling the lists later).

Variation 2
Divide the group into two or more teams, each to brainstorm on the same topic. The “parallel groups” approach has some of the advantage of Variation 1, plus the sense of group cooperation which is an important side-effect of brainstorming.
Despite its limitations, brainstorming remains a popular technique. For many groups, it has provided a first view of their potential to think creatively together and to move off in new directions. It also lets everyone know where the ideas have come from, thus setting the stage for consensus and action.

Having many good ideas improves your chances of having a good one

**Synectics**

Synectics, another popular approach to creative thinking is a composite method, or series of methods, to help individuals and groups think more creatively - to generate new ideas - to unearth ways of doing things that are different and more productive. J. Cordon, author of the synectics approach, defines it as “the joining together of apparently different and irrelevant objects”. Synectics uses analogies, metaphors and similes to break out of the boundaries we often put on our own thought processes. These boundaries have a tendency to restrict our freedom to explore other possibilities as we continue to dig deeper into the routine of our experience.

Gordon suggests both learning (making the strange familiar) and innovation (making the familiar strange) as processes for fostering creative planned change. To better understand these processes, he defines four psychological states in the creative process:

(a) Detachment and involvement. Seemingly contradicting efforts to either get outside of the problem or deeply into it.
(b) Deferment: Tolerance for new ideas. In the case of problem solving deferring action until all reasonable (and some unreasonable) options have been considered.
(c) Speculation: Including a flurry of questions, suppositions, intuitive responses, “thinking the unthinkable”.
(d) Autonomy of object: Or, as Gordon suggests, the end product (goal) sought becomes the process experienced.

Synectics operates from the psychological stance that it is easier to solve other problems than it is to solve our own. We need to get “outside of our problem” so we can get deeper into it - to develop insight by using “outsight”. The key is to go beyond the boundary of our conventional experiences in order to understand day-to-day events.

Creating new options for problem solving is enhanced by the ability to:

(a) Suspend judgement
(b) Tolerate ambiguity and sometimes frivolity
(c) Give up treasured positions and attitudes
(d) Set aside position and authority so others can contribute freely
(e) Think intuitively in an environment that honours rational thought
(f) Turn things upside down and inside out
(g) Look over our own shoulder to process the process, and
(h) Always keep the big picture in mind, even when we are coping with the minute details.

Intuition is the subconscious accumulation of post experiences

**Satisficing optionization**

Generating options, as a manager, can sometimes become a trap. After all, it's fun trying to figure out all the various ways to solve a problem. It can also give the manager an excuse for indecision. (“I haven't looked at all the alternatives”.) The challenge is to open the door to new ideas, new ways of doing things, without becoming overwhelmed.

The manager is someone who must make decisions and solve problems in imperfect conditions. There is seldom time or resources available to find and implement the perfect solution. More often than not the manager is obliged to accept the first satisfactory solution, to not let the “best” become the enemy of the good.

Herbert Simon, who has written extensively about decision making in public settings calls this the “satisficing” solution. It is impossible to know all the options that are potentially available in any complex situation. It is also impossible to foretell future consequences accurately (although we must try to foresee the consequences of our decisions to the extent we can). Nor is it always possible to put values on events that have not yet occurred. So, all decision making is imperfect and subject to limits of rationality.

Having said this, and recognizing the reality of “satisficing” behaviour by managers, it is important to resist the pressures that often force us to take the first available satisfactory solution to a problem. Finding new options to old problems is how
the future gets invented. The effective manager is one who has one foot firmly planted in the present situation and the other gently searching for a solid piece of ground in the territory yet to be trod.

**B. Options to one**

While most problems can be solved in more than one way, the manager must “bite the bullet” and decide which option he or she is going to use. Sometimes the “best” option is obvious. Other times, it is more difficult to decide among various alternatives. These are the times when it is necessary to ask some fundamental questions about the various options so a reasoned judgement (decision) can be made.

(a) Will this option clearly help us reach our objective? (In other words, is it goal directed?)
(b) Is it feasible? Can we do it? Will it work?
(c) Do we have the resources to carry it out? People? Funds? Equipment? Time? Leadership? Organizational capacity? Motivation?
(d) Is it adequate to meet the challenge? Given the size of the problem, will this option result in change to make pursuing it worthwhile?

**C. A detailed plan**

Once the manager has decided on the “best” option, (one which satisfies the criteria stated above), it is time to put together a detailed plan of action. This plan should answer the following questions:

(a) What are the activities involved (steps to be taken)?
(b) Who will take primary responsibility for each action? (Someone needs to be in charge).
(c) Who else needs to be involved?
(d) What resources will be needed (people, materials, money, equipment, skills)?
(e) When will each action be complete? (Not only how much time will be required, but a realistic date of completion).
(f) How will we know progress is being made toward carrying out our option and meeting our objectives? How are we going to evaluate success? What are our verifiable indicators?

**D. Sequencing events**

The final stage of action planning is putting the various activities into sequence – some sense of what needs to be done in what order. Certain activities are dependent upon others and some activities are more critical than others.

A well known procedure for charting the sequence of activities is called PERT (Program Evaluation and Review Technique). Basically, in using the PERT procedure, one starts at the end point (the completion of a project) and works backwards through the activities and events that must occur in reaching that end point. For example, if the end point is a 3-session training program for homeowners to teach them building techniques, we can work backwards in this fashion:

- The week before the program, we will need to make sure last minute preparations (i.e., the training materials are ready, the instructors are ready, the list of homeowners is complete).
- Even before that, we need to secure a training site - e.g., a demonstration house in the initial stages of construction.
- To secure a site we will need to check out several possibilities.
- At about the same time, we will need to assemble training materials (a construction booklet, building materials, tools, etc.).
- Before all that, we will need a training design.
- And so forth until we arrive at the starting point.

Developing a PERT chart is generally a group activity. Each party to the project begins to see how his or her tasks fit into the overall plan. The group also begins to see how things could be done differently which would save time.

PERT is also a method that permits revisions in the plan when things don't work out like the original plan said they would. Plans never work out quite right. But the planning process is indispensable.

A low income housing management team in Zimbabwe developed a simplified version of PERT which helped them determine the sequence of activities to initiate a large complex shelter project. Once each work group within the team (e.g., building liaison officers, community development workers, administrative officers) decided what they needed to do over a set period of time to carry out their roles and responsibilities within the project, they put these tasks on 5x3 cards. These were attached (by using masking tape) to a large matrix, which covered an entire wall of a local community centre. The matrix listed all the various work groups, or individuals, responsible for carrying out various tasks on the vertical axis. On the horizontal axis (across the top of the chart) was listed a three and one half month timetable, week by week. After each of the critical actors on the implementation team posted their tasks in the sequence they believed they should carry them...
out, they negotiated with other individuals or work groups a sequence and timing which took into consideration the interdependency of their actions. The building liaison officers, for example, told the community development staff they needed to schedule their training two weeks earlier than planned so the building liaison officers could begin meeting with individual plot holders.

By the end of the negotiation session, the implementation team had created a 30 foot long PERT chart with over 200 individual tasks. Each of those tasks had been negotiated (in terms of the overall time frame) against all other interdependent tasks. More importantly, the individual work groups began to realize the importance of teamwork and communication.

PERT charts don't need to be fancy, they just need to work to the benefit of all concerned.

Good decisions are seasoned by projecting them into the future to see if they work.

Exercise
Topic: Impact Analysis: Narrowing the options: Step 1, Option No. ____
(Complete this form for each major option being considered.)

- The OBJECTIVE to be achieved is:

- The OPTION for achieving this objective is:

Assessment criteria
Check one numerical response for each of the following criteria:

(1) FOCUS:

  _4  option is focused directly on achieving the objective
  _2  option is focused more on another issue but will help achieve the stated objective
  _0  option is not focused on achieving the stated objective

(2) FEASIBILITY:

  _4  option is very feasible to implement
  _2  option is questionable in terms of its feasibility of implementation
  _0  it is highly doubtful that we could implement this option

(3) RESOURCE AVAILABILITY:

  _4  option can be implemented within the resources already available
  _2  resources could be garnered to implement this option but it would be difficult
  _0  it will be impossible to get all the resources required to implement this option

(4) ADEQUACY:

  _4  option is very adequate in meeting the challenge stated in the objectives
it is barely adequate to meet the challenge

option will not meet the challenge

(5) COMMITMENT:

- top leadership will commit immediately to this option

- getting leadership commitment is questionable

- top leadership will not make commitment to this option

Assessment Criteria: Record the number of: 4 scores \( \times 4 = \)

2 scores \( \times 2 = \)

0 scores \( \times 0 = \)

Total

| Potential Consequences: This option, if implemented, will have the following consequences (circle appropriate number): |
|---|---|---|---|
| Economic | Short-term | 2 | 1 | 0 |
| | Long-term | 2 | 1 | 0 |
| Social | Short-term | 2 | 1 | 0 |
| | Long-term | 2 | 1 | 0 |
| Political | Short-term | 2 | 1 | 0 |
| | Long-term | 2 | 1 | 0 |
| Environmental | Short-term | 2 | 1 | 0 |
| | Long-term | 2 | 1 | 0 |
| Cultural | Short-term | 2 | 1 | 0 |
| | Long-term | 2 | 1 | 0 |

Totals

Exercise
Topic: Impact Analysis: Summary of impact analysis: Step II

For each option being considered, transfer criteria and consequence values assigned earlier.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Feasibility</td>
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<tr>
<td>Resources</td>
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<tr>
<td>Adequacy</td>
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<tr>
<td>Commitment</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Consequences</th>
<th>short term</th>
<th>long term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
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</tr>
<tr>
<td>Political</td>
<td></td>
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</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Total points

It is possible to score a total of 40 points: Any option scoring less than 32 should be seriously reconsidered before any decision is made to implement it.

Any score of 10 or less (in either of the two categories) should prompt a reconsideration of the option. Low scores may require (1) new options be generated; (2) the expectations (objective) be readjusted to be more realistic, or (3) a redefinition of the problem.

Exercise
Topic: Action Plan: Step I

A. The objective to be realised is:

B. The best option for achieving the objective is:

C. The tasks required to carry out the options are (list all the tasks below):
   1. 
   2. 
   3. 
   4. 

Use an additional sheet, if necessary.

Exercise
Topic: Action Plan Step II

List each task to be completed below (from Step 1) and answer the following questions.

Task No.1 is:
________________________________________________________________________________________________
________________________________________________________________________________________________
________________________________________________________________________________________________
Which will be the primary responsibility of ____________________________  
   (be specific)

Who will also need to involve ____________________________

The total time required to complete the task is ____________________________  
   (in hours, days, weeks)

and it should be completed by ____________________________  
   (a specific date)

The following resources will be needed (funds, equipment, materials, manpower, etc.):
________________________________________________________________________________________________
________________________________________________________________________________________________
________________________________________________________________________________________________
The verifiable indicators of success in completing this task are (how will we know the task has been accomplished satisfactorily):

________________________________________________________________________________________________
________________________________________________________________________________________________
________________________________________________________________________________________________

Exercise
Topic: Action Plan: Step II

Task No. ☐

TASK
________________________________________________________________________________________________
________________________________________________________________________________________________

WHO:
________________________________________________________________________________________________
________________________________________________________________________________________________

WITH WHOM:
________________________________________________________________________________________________
________________________________________________________________________________________________

TOTAL TIME REQUIRED:
________________________________________________________________________________________________
________________________________________________________________________________________________

COMPLETION DATE:
________________________________________________________________________________________________
________________________________________________________________________________________________

RESOURCES REQUIRED:
________________________________________________________________________________________________
________________________________________________________________________________________________

VERIFIABLE INDICATORS:
________________________________________________________________________________________________
________________________________________________________________________________________________

Use an additional sheet for each additional task.