

# Project Management

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## 1 Introduction

*Projects represent the commitment of human and physical resources to produce specific outputs in a given time and budget framework.*<sup>1</sup> Projects have five main attributes. They are as follows<sup>2</sup>:

- *unique* in their specific end product such that each project is of a different nature, among others, including variations of scale, scope and resource demands;
- *temporary* with a definite beginning and end;
- *iterative* and developed during their progression when details become clearer or circumstances change;
- *funded* by a primary project sponsor providing direction to the project, who gives decision-making authority to the project manager; and
- *uncertain*, due to their interplay with reality and their uniqueness, as well as no certain best plan and no guarantee for steadiness of the environment and/or stakeholders.

Project management has several stages forming a continuous process within which one builds upon the other.<sup>3</sup> Ideally, the five stages should be carried out in the following order: needs assessment, project design and planning, proposal writing,

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<sup>1</sup>FA, Project Cycle Management Technical Guide, p. 11, <http://www.fao.org/docrep/012/ak211e/ak211e00.pdf>.

<sup>2</sup>Schwalbe (2009).

<sup>3</sup>United Nations Development Programme (2009).

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implementation, as well as monitoring and evaluation.<sup>4</sup> In reality, deviations are the norm, and thus over time, the subsequent stages will feed back into the former generating a feedback loop correcting for project changes.<sup>5</sup> The structure outlined above and applied in this chapter is also referred to as the PMC.<sup>6</sup> Each of its steps is discussed in more detail within this chapter.

The first stages of the PMC, i.e. from project identification up to and including proposal writing, are most crucial as only their successful completion can propel projects into the implementation phase. It is very important to note that every project exists to satisfy a certain need. Only where an assessment clearly points to the need for a specific project should subsequent PMC steps be conducted. Due to the highly dynamic environment prevailing in situations where humanitarian assistance is required, projects often fail due to incompetent needs analyses prior to implementation. An example where well-intentioned actions have had negative impacts is an NGO executing food for work programmes in Haiti with the aim of facilitating access to basic needs while unintentionally causing harm to the local economy.<sup>7</sup>

The latter stages of the PMC from implementation up to and including evaluation will show whether the project can achieve its milestones and develop an end product and sustainability objectives.<sup>8</sup>

Within the framework of project management activities, there are nine *knowledge management areas*, consisting of a set of competences and skills that must be brought to fruition during the project's life cycle and that occur during each stage of the PMC.<sup>9</sup> The knowledge management areas have been subdivided into four core and five facilitating knowledge management areas.

The four core knowledge management areas are as follows:

- *scope management*: entails describing the work required to complete a project successfully;
- *time management*: refers to translating the project scope into a timely schedule to guarantee on-time completion;
- *cost management*: refers to estimating costs, determining budgets and controlling costs; and
- *quality management*: refers to planning and establishing operational quality objectives and the assurance and control of their adherence throughout the project.

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<sup>4</sup>Bishop (2001).

<sup>5</sup>Richardson (2015).

<sup>6</sup>EuropeAid Co-operation Office (2002).

<sup>7</sup>CARE and Save the Children (2010).

<sup>8</sup>Bishop (2001).

<sup>9</sup>Schwalbe (2009), Richardson (2015).

The five facilitating knowledge management areas are the following:

- *Project management*: refers to the project manager's overall management, comprising of one united and cohesive plan. Since key management areas are intertwined, changes within one key management area will likely affect others too; thus, sound project management becomes vital to ensure cohesion. Part of the manager's plan is defining the project team, as well as developing and guiding it throughout the project.
- *Communication management*: since communication problems were recognised as a major reason for project failure, this process has recently received more attention. It entails processes of communication planning, management and control with external and internal parties.
- *Stakeholder management*: due to the special relevance of stakeholders in humanitarian aid, their identification and management becomes vital and is directly related to communication management.
- *Risk management*: to maximise project success and minimise threats, risk management becomes crucial. Throughout each step of a project, the project manager should always keep a backup plan in mind. Being ready to take an alternative route with the same or similar desirable results can prevent lock-in effects and project failure. Also, the team's risk exposure during the project execution is assessed here.
- *Procurement management*: this term describes the acquisition management of project-related services or products from third parties. It clarifies how resource needs will be met externally and from which vendors they will be procured.

The knowledge management areas outlined above will appear again within the different PMC stages. Due to its integrative nature, the issue of project management will not be mentioned separately while explaining the PMC stages. However, readers should keep it in mind as the most prominent component of each PMC aspect. We will return to it explicitly at the last section of this chapter when talking about the relevance of human relations in advancing projects.

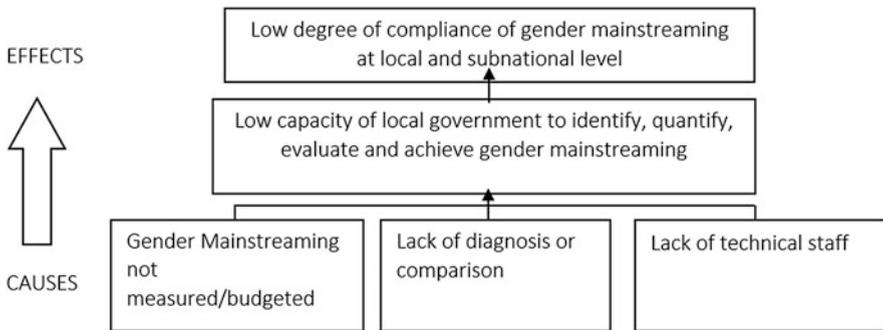
## 2 Project Identification or Needs Assessment

A project starts with identifying the main issue it seeks to address. Formulation of a specific problem usually relies on identifying an issue in which all symptoms are brought together and analysed in order to find causes and consequences as a way of structuring the problem.<sup>10</sup> Problems usually contain various levels from macro and

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<sup>10</sup>Bishop (2001).

A problem is best visualized in a problem tree which can take the following form:



**Fig. 1** Identifying problems. Developed by the authors, Sabrina Herold and Bartjan W. Pennink

very abstract to micro and less abstract. These levels are related, and it is necessary to address each one of them, as well as their interdependencies with regard to involved stakeholders.<sup>11</sup> Figure 1 illustrates the various elements of describing (and identifying) a problem:

## 2.1 *Situational Analysis*

A situational analysis comprises the active search for a problem, the uncovering of its possible causes and solutions and/or the validation of an already identified problem by other parties. Analysis needs to take into account socio-economic, political, environmental and cultural aspects.<sup>12</sup> These different aspects of the situational analysis can be worked out with the help of Heyse *et al.*<sup>13</sup>

Such an analysis ought to be conducted from two perspectives.

First, one should obtain an outsider's perspective so as to better uncover interdependencies and identify key indicators.<sup>14</sup> An analysis on the national level includes a review of policy objectives and current policies of the respective countries with the aid of key indicators (EuropeAid Co-operation Office 2002).<sup>15</sup> A more detailed explanation of indicators will be given in the section on

<sup>11</sup>*Ibid.*; EuropeAid Co-operation Office (2002).

<sup>12</sup>United Nations Development Programme (2009).

<sup>13</sup>Heyse *et al.* (2014).

<sup>14</sup>Bishop (2001).

<sup>15</sup>EuropeAid Co-operation Office (2002).

operationalisation. When selecting indicators, project management needs to bear in mind the cost and time to collect future data and the frequency of data collection necessary.

Second, an insider's perspective helps to investigate a situation from within the problem's context.<sup>16</sup> An example for such an inside view on a micro or community level is the execution of an activity analysis.<sup>17</sup> It clarifies responsibilities within a community, distinguishing between household, productive and community roles.<sup>18</sup>

Examples for the various facets of situational analyses include the following<sup>19</sup>:

- *political analysis*: investigating legal and institutional environment;
- *economic analysis*: investigating the overall (national) and specific (local) economic state;
- *sociocultural analysis*: investigating prevailing beliefs, norms, practices and attitudes; and
- *health and food analysis*: investigating the populations' access to food, (drinking) water, hygiene and overall health status.

## 2.2 Stakeholder Analysis

According to the United Nations Development Programme (UNDP), stakeholders are organisations or individuals directly or indirectly influenced by development policies and activities. These influences can have positive or negative effects on the parties concerned.<sup>20</sup> The latter are most commonly categorised in terms of primary or secondary stakeholders. Primary stakeholders are directly impacted by the project, while secondary stakeholders only experience an indirect effect.<sup>21</sup> Project managers for humanitarian aid should bear in mind that influence does not equal priority.<sup>22</sup>

Besides primary and secondary stakeholders, the concepts of target groups and beneficiaries also exist. The *target group* of a project is part of the set of primary stakeholders, whom the project addresses and aims to help. Beneficiaries, on the other hand, comprise all stakeholders who are positively affected by

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<sup>16</sup>Bishop (2001).

<sup>17</sup>*Ibid.*

<sup>18</sup>*Ibid.*

<sup>19</sup>For details, see Heyse et al. (2014).

<sup>20</sup>United Nations Development Programme (2009).

<sup>21</sup>Bishop (2001).

<sup>22</sup>United Nations Development Programme (2009).

the project.<sup>23</sup> One may sometimes also come across the term ‘direct beneficiary’, which refers to the target group.

Stakeholders also vary according to the scale of the issue.<sup>24</sup> Its nature determines whether they are involved on the macro, intermediate or micro level.<sup>25</sup> By identifying the stakeholder level of involvement, one also obtains insights into the channels (for example, central government, NGO) through which the problem is best tackled.<sup>26</sup> Stakeholders’ networks are important, too. Reach and depth of these networks can differ for each level of involvement. A stakeholder analysis thus ultimately provides answers to the following questions: which stakeholders are involved, who benefits and who is targeted?<sup>27</sup>

Stakeholders provide resources, represent the target group and the beneficiaries and engage in project implementation. They play a central role within project management as humanitarian aid projects would not go ahead without their time and commitment. Consequently, over the future course of project management, all relevant stakeholders should be consulted and integrated into the PMC.

Once the needs assessment is completed, it is reviewed in collaboration with stakeholders to serve the following purposes<sup>28</sup>:

- validation of data interpretation on the level the project ought to be carried out;
- identification of shortcomings and drawing up of new enquiry points (for example, discrepancies between situational perspectives or within);
- identification of development priorities;
- involvement of all relevant stakeholders;
- identification of any disadvantaged stakeholders and proposed actions for solutions;
- identification of conflicts between stakeholders and their remedies.

In order to investigate whether or not a project is feasible, the following questions should be considered<sup>29</sup>:

- What are the causes of crisis, and what will the project’s effects be?
- What are the possibilities to conduct the project successfully (money, time, other resources, end product)?
- What basic assumptions are associated with the problem?
- Were there similar problems and/or projects in the past, and what is to be learned from them?

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<sup>23</sup>European Neighbourhood and Partnership Instrument (2009).

<sup>24</sup>Bishop (2001).

<sup>25</sup>*Ibid.*

<sup>26</sup>*Ibid.*

<sup>27</sup>EuropeAid Co-operation Office (2002).

<sup>28</sup>Bishop (2001).

<sup>29</sup>EuropeAid Co-operation Office (2002), United Nations Development Programme (2009).

- Are cross-cutting issues (general criteria of equality and environment) considered?

Feasible project options remaining in the wake of the analysis are prioritised.<sup>30</sup> Several quality criteria help to assess the feasibility of project ideas<sup>31</sup>:

- Is the need assessment and problem analysis adequately comprehensive (on various levels and from different perspectives)?
- Are the project's end products in line with policy objectives for humanitarian aid?
- Are the major stakeholders clearly identified?
- Are the target group and beneficiaries clearly identified and their problems correctly described?
- Is the project's end product directly beneficial to its target group?

After finalising project ideas and selecting feasible options in collaboration with stakeholders, the possibilities of their contribution to the project are identified, an essential component of procurement management. Stakeholder contribution is vital not only from a budget perspective but also to increase their commitment and positive perception of project outcomes.<sup>32</sup>

### ***2.3 Results of the Project Identification Phase***

The outcome of any project selection analysis is a pre-feasibility study in consultancy with stakeholders in order to<sup>33</sup>

- identify the need for a project (Is there any? Has it been validated?);
- identify the end product and feasible ideas to achieve it;
- preselect best ideas for a more detailed investigation (past and comparable experiences in the region or with similar projects can be influential);
- suggest preferred option and future course of action; and
- draft a first rough cost and means estimate.

The pre-feasibility study is the first part in the process of finding a suitable project frame and thus the beginning of what is commonly known as scope management. Comparative Standards can be found in the latest publication of the Sphere Project (2015). Starting in 1997, this project has encompassed the combined

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<sup>30</sup>Bishop (2001).

<sup>31</sup>EuropeAid Co-operation Office, Eur02 N 1033, 2002.

<sup>32</sup>*Ibid.*

<sup>33</sup>EuropeAid Co-operation Office (2002).

knowledge of multiple humanitarian organisations, which define and refine standards on describing urgency. From then on till now, this project has resulted in valuable publications and work to assist the humanitarian organisations.<sup>34</sup>

### **Box 1: Insights from the Field**

We have generally experienced that projects were chosen for convenience reasons and in light of resource constraints. A project to be implemented in a *favourable* location was chosen over another one in a less favourable location, whereas the needs situation on the ground was the same. Sometimes NGOs also competed within one location so that inefficiencies were inevitable.

## **3 Project Design and Planning**

Project design and planning entail the conversion of ideas into a clear structure, including operational planning (for example, schedules), financials (budget) and the measurability of project outcomes and objectives.<sup>35</sup> It can therefore be directly translated into the four core knowledge management areas of scope, time, cost and quality management. The project plan should be accurate, workable and measurable.<sup>36</sup> It should take into account past experiences in the same geographic or thematic area in order to improve and support learning. Planning should always include efforts to maximise information sharing with relevant stakeholders.<sup>37</sup>

The first step within the design and planning phase is to clearly define the end product, together with its objectives. While the end product is the desired project output, it is framed around sustainability objectives to come into force after project determination. Milestones help humanitarians to work towards project goals during the operationalisation phase. All three of them need to be clearly stated. It is crucial to use the SMART formula in order to formulate specific, measurable, attainable, realistic and timely objectives.<sup>38</sup>

Outlining project outcomes is essential as it clarifies priorities, identifies beneficiaries and target groups and pinpoints the project focus and its borders.<sup>39</sup> To operationalise the end product, outcome indicators measuring short-term

<sup>34</sup>See also <http://www.spherehandbook.org/en/>.

<sup>35</sup>Richardson (2015).

<sup>36</sup>*Ibid.*

<sup>37</sup>EuropeAid Co-operation Office (2002).

<sup>38</sup>United Nations Development Programme (2009).

<sup>39</sup>EuropeAid Co-operation Office (2002).

consequences at the target group level are conducted at the end of each project (for example, number of patients treated or number of enrolments for school).<sup>40</sup>

End products can have one or multiple components and are ultimately designed to be sustainable, that is, they should further benefit the target group after project completion. Adherence to sustainable objectives is only possible through ex-post evaluation of effective goal attainment with the aid of impact indicators. The quick scan tool as introduced in Mulder and Pennink provides one such set of indicators measuring economic impact.<sup>41</sup>

**Box 2: Insights from the Field**

Completing a project with a certain set of end goals also raises questions related to the transition from emergency relief to rehabilitation and development. In this context, sustainability is crucial. All too often, NGOs do not manage to provide the necessary level of independence for vulnerable populations, creating increasing dependence on foreign aid.

Operational work plans are developed in order to achieve the end product. They provide specifications for required resource assistance (macroeconomic support, training, investment, equipment supply, etc.) and implementation ideas.<sup>42</sup>

Intermediate objectives or milestones track the progress towards a project's end product.<sup>43</sup> They are operationalised with output indicators showing the concrete and immediate impact of utilised resources during the project (for example, number of hospitals built). While output indicators measure the progress continuously, milestones warrant that progress towards a specific objective is made.<sup>44</sup> Figure 2 illustrates this process.



**Fig. 2** A process order of sustainability objectives, end products and milestones. Developed by the authors, Sabrina Herold and Bartjan W. Pennink

<sup>40</sup>*Ibid.*

<sup>41</sup>Mulder and Pennink (2014).

<sup>42</sup>EuropeAid Co-operation Office (2002).

<sup>43</sup>*Ibid.*

<sup>44</sup>Bishop (2001).

### 3.1 Operationalisation into Indicators

The Logical Framework or Log-Framework was established as a means to introduce greater structure into project design. It is useful due to its iterative nature and the inclusion of various project cycle stages: implementation, monitoring, evaluation and overall alignment of project steps up unto the end product.<sup>45</sup>

Its four-by-four matrix structure covers the core parts of the original framework. Here, we describe it as a five-times-six matrix structure. With the help of this structure, one can relate each of the activities undertaken to specific indicators in order to make visible what has been achieved and what remains to be established<sup>46</sup>:

- SMART results and objectives guiding the project downwards and upwards from aim to operationalisation and vice versa;
- SMART indicators giving measurable answers to when, where and who;
- a baseline indicating the state of the indicator before the project start and against which to measure progress;
- a target indicating the state the indicator aims for;
- means of verification providing information about sources for utilised indicators; and
- important assumptions necessary to be in place at every stage for achieving the end product. They reflect changes in the external environment, influencing project performance beyond the control of project management.

Besides assumptions, a fifth row for preconditions may be relevant to some projects, stating what is necessary to be in place in order for the project to initially start.<sup>47</sup>

The structure of the Log-Framework<sup>48</sup> is as follows: lower columns feed into the next higher one, while each column (sustainability objectives, end product, milestones, outputs, inputs) is supported by indicators, baselines, targets, verification means and important assumptions. In formulating this matrix, an iterative approach of testing and refining or revising stages is adequate throughout project planning and implementation. Only in- and outputs, also referred to as activities and results, are under the direct control of a project and comprise the building blocks for the work plan. *Inputs* comprise the tangible and intangible means with which *outputs* in the form of products or services are developed.<sup>49</sup> Milestones, end product and sustainability objectives lie outside the project boundary, so that activities and results work towards them and have a combined impact on them. This Log-Framework provides the basis for work plans.

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<sup>45</sup>*Ibid.*

<sup>46</sup>Bishop (2001).

<sup>47</sup>European Commission (2005).

<sup>48</sup>*Ibid.*

<sup>49</sup>*Ibid.*

The United Nations provides the following checklist of questions to ensure the smooth functioning of any Log-framework<sup>50</sup>:

- Is the reason why a project becomes necessary in the given situation clear?
- Is the end product identified correctly?
- Are linkages between inputs, outputs, objectives and end product logical and consistent?
- Are sufficient activities planned to obtain the end product, together with cost indications?
- Are appropriate indicators installed to assess project success?
- Did any killing factors arise in the course of project design? If so, what is the planned corrective action?

### 3.2 *Work Plans*

Work plans operationalise project activities and form the basis of a detailed project budget. They structure the implementation process while simultaneously providing monitoring possibilities.<sup>51</sup>

Work plans usually include the following three steps<sup>52</sup>:

- analysis of project activity and allocation of tasks in implementation schedules (identification of detailed components, duration of activities, allocation of personnel and scheduling);
- network analysis (network diagrams to represent duration of project activities sequentially and identify the critical path, that is, the timeliness of milestones in order to complete the project in a minimum of time); and
- developing a Gantt chart (in which the time frame of all activities is described in a standardised way).

### 3.3 *Financing Projects*

Financing should cover all aspects of the Log-Framework and set the goals for procurement management, which already begins to be enacted during the problem identification phase.

The European Commission, for instance, drafts a formal agreement with the respective project partner and sponsor (for example, government) and assesses project and financial needs through a list of criteria such as relevance, feasibility

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<sup>50</sup>United Nations Development Programme (2009).

<sup>51</sup>*Ibid.*

<sup>52</sup>*Ibid.*

and sustainability/quality. Generally, the financing budget should provide precise answers to the question of who is funding the project and where the resources acquired through funding are utilised.<sup>53</sup>

### ***3.4 Stakeholder Consultation***

During the planning phase, project management seeks to secure and confirm the stakeholders' interests, expectations and eventual project participation. Cooperation with beneficiaries and target groups, as well as project partners as the main focus groups, is essential to ensure the desired project outcome.

Stakeholder consultation can be clearly related to stakeholder management. Strong stakeholder management describes an open and creative dialogue between the project team and stakeholders, as well as among stakeholders themselves.<sup>54</sup> Ownership has been determined as important for humanitarian aid projects as commitment increases efforts and motivation to achieve the envisaged end product. Giving stakeholders the opportunity to organise themselves through meetings, such as planning workshops, encourages them to work towards project goals.<sup>55</sup>

On the other hand, increasing stakeholder participation also heightens the complexity of project management, with the potential to prolong communication and decision-making processes. While identification of all necessary stakeholders is essential, their participation throughout the project needs to be carefully selected based on their importance, not on their influence. Nevertheless, influence in the form of increased resource commitment to the project may leverage the importance of particular stakeholders.

### ***3.5 Impact Analysis: Ecology, Economics and Finance***

In line with quality management and sustainability objectives, a project should aim for the smallest possible ecological footprint. Analysing the impact of a project programme is crucial during the design and planning phase.

Attention should be paid to the direct and indirect impacts from selecting suppliers to the end product (for example, care for proper waste disposal when the end product is a hospital), and project inputs and outputs need to be selected with ecological criteria in mind.

One should also take into account economic and financial impacts. Albeit less extensive than the situational analysis, it is to be assessed on a broader spectrum

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<sup>53</sup>EuropeAid Co-operation Office (2002).

<sup>54</sup>United Nations Development Programme (2009).

<sup>55</sup>*Ibid.*

whether the planned project activities have negative impacts on any other economic or financial areas outside the project framework and, if so, how this can be prevented. Where a project has a dramatic negative effect on either one of these areas, its implementation becomes highly doubtful.

In the field and depending on the project, diverse social and cultural impacts may have to be considered besides the three impacts mentioned, for example inclusive development or gender mainstreaming.

### 3.6 On Risks and Indicators

Risk management, although already introduced as a specific knowledge management area, deserves special attention in the planning and design phase. Granted that a project team and especially the project manager should always have a plan B and a plan C in mind, balancing the risks that the project team and manager may be exposed to is most crucial for humanitarian aid projects. Thus, measures to minimise these risks need to be taken, which may, among others, include vaccination, considerations of lodging location and/or nutritional diets.

The United Nations distinguishes between quantitative and qualitative indicators, which are complementary to each other due to their differing strengths and weaknesses.<sup>56</sup> As it is not always possible to exactly measure each element, realistic proxies are commonly used. The data sources for indicators (especially qualitative indicators) are derived from either public databases or the field.<sup>57</sup> The following criteria are relevant for identification of indicators and proxies<sup>58</sup>:

- relevance to objectives;
- ease of collection, use and understanding;
- clarity of definition (reliable, accurate, unambiguous);
- sensitivity to changes caused by the project;
- mutual independence of indicators chosen; and
- smallest possible number of indicators.

By adhering to these criteria, the project also maintains high standards of quality management. The involvement of stakeholders in the indicator identification process is appropriate for strongly qualitative measurements and in the evaluation phase (see evaluation of strategic constituencies).

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<sup>56</sup>Bishop (2001).

<sup>57</sup>*Ibid.*

<sup>58</sup>*Ibid.*; United Nations Development Programme (2009).

### 3.7 *Project Review/Appraisal and Project Results*

The initial planning and design phase is followed by an appraisal phase. A project is reviewed from various perspectives to decide whether to proceed with implementation or not. Assessment takes place on a technical, financial, economic, social, institutional, environmental, political, sustainability and risk level.<sup>59</sup> It verifies project relevance; assesses the potential future of the project after its completion, based on formerly selected sustainability objectives and quality indicators; and reviews the entire Log-Framework.<sup>60</sup> That includes the implementation schedule with activities and resources, responsibilities and accountable persons and bodies.<sup>61</sup> Although the funding party evaluates the project proposal, the executing party should consider a similar review before handing in its proposal to enhance its chances of implementing the project. After completing this stage, answers to the following questions should emerge<sup>62</sup>:

- How is the project funded?
- Are beneficiaries and target groups clearly defined, were they consulted and do they have a sense of ownership towards the project?
- Does the project preserve the ecological environment?
- Does it benefit the economic and financial environment?
- Are project partners identified, and have they confirmed their role in supporting the project?
- Do you have clearly defined end product and objectives in place (milestones and sustainability)?
- How feasible is the end product, and are the objectives considering the programme and available resources?
- Have you allocated the necessary resources (budget funding, personnel) appropriately?
- Do you have sufficient indicators and information sources to measure outcomes?

In sum, a project should only be implemented if it is relevant, sustainable and feasible. Also, a clear programme makes it much more likely to achieve an anticipated project outcome. Once a project proposal has been reviewed and accepted, it may be implemented. Monitoring and evaluation are the two crucial tasks during the implementation phase of a project.<sup>63</sup>

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<sup>59</sup>Bishop (2001).

<sup>60</sup>EuropeAid Co-operation Office (2002).

<sup>61</sup>*Ibid.*

<sup>62</sup>*Ibid.*

<sup>63</sup>Bishop (2001).

## 4 Writing a Project Proposal

Proposals serve to attain the approval for a project and secure necessary funding. It thus essentially belongs to communication and stakeholder management. The views of prospective funders must be taken into account as they are likely to differ in terms of priorities and the kind of support they are likely to provide.<sup>64</sup> Correspondingly, proposals vary in form. No matter the format, five key points need to be addressed<sup>65</sup>:

- What are the project's end product and its sustainability objectives?
- What are project needs?
  - needs analysis;
  - project identification and selection process.
- What is the project about?
  - project end product and sustainability objectives;
  - stakeholders involved (target groups, beneficiaries, partners, . . .);
  - linkages between activities, results, objectives and end product;
  - procedures foreseen to monitor and evaluate project progress;
  - project in line with existing projects, the environment and/or other stakeholders.
- How is the project going to be operationalised?
  - project structure of Log-Framework;
  - work plan, including personnel and further resource requirements;
  - financing.
- What are the costs, and how is the project going to be financed?
  - financial feasibility;
  - project duration;
  - risk exposure.

Eligibility is key when writing proposals. Donors may refuse financing a project because it lies outside of their interest and/or due to specific expenditures, for example too much overhead.<sup>66</sup>

Besides covering the above points, proposals need to be well written and express a sense of purpose and urgency.<sup>67</sup> Writing a proposal is only possible once needs assessment and problem identification are completed, and with advanced projects,

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<sup>64</sup>*Ibid.*

<sup>65</sup>*Ibid.*

<sup>66</sup>*Ibid.*

<sup>67</sup>*Ibid.*

design and planning. The iterative nature of projects regarding needs assessment or project design and planning may trigger alterations in proposal design.

Experience from fieldwork shows that before a proposal can be handed in, the logical framework needs to be in place and the scope of the project, the major stakeholders, the project strategy and the budget need to be well defined.

## 5 Implementation with a Focus on Monitoring and Evaluation

Implementation is about working the plan against the budget while considering continuous feedback from the environment and stakeholders. It essentially comes down to cost, time, quality and communication management of activities in order to reach the end product. Since a project plan is only very rarely executed as planned, adjustments become necessary when there are deviations from the plan.<sup>68</sup> Also, requests to change project aspects from stakeholders will demand extra time and resources as they require approval from a board or resource supplier.<sup>69</sup> During the implementation phase, the formerly introduced Log-Framework becomes a relevant monitoring system and a framework for evaluation.<sup>70</sup> Systematic attention shall be paid to cross-cutting issues, conflict management and crisis management throughout implementation.<sup>71</sup>

### 5.1 Major Tasks Within the Project Implementation Phase

The following list is based on the EuropeAid Co-operation Office<sup>72</sup>:

- Ensure timely execution of plans.
- Ensure budget control entailing effective and efficient allocation of means.
- Ensure project quality throughout the process with monitoring so that
  - milestones are met and processes towards attaining them run smoothly; if they are not met, corrective measures are to be suggested;
  - good external and internal communication with clear decision-making lines takes place;
  - health and life risks for the project team and managers are feasible.

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<sup>68</sup>Richardson (2015).

<sup>69</sup>*Ibid.*

<sup>70</sup>EuropeAid Co-operation Office (2002).

<sup>71</sup>*Ibid.*

<sup>72</sup>*Ibid.*

- Ensure project effectiveness through evaluation.

Monitoring provides answers to the question ‘are we doing the project correctly’, while evaluation relates to ‘are we doing the correct project?’<sup>73</sup> Therefore, the former takes place continuously during the implementation of the project; the latter is of periodical nature, mostly ex ante, mid term, final and ex post.<sup>74</sup>

## 5.2 Implementation

Implementation is to be understood as a learning process involving the following<sup>75</sup>:

- *Planning and re-planning*: implementation, activities, resource schedules and Log-Framework are reviewed, refined and adjusted accordingly. Any adjustments need to be justified and fed back into decision-making.
- *Monitoring*: it involves continuous and systematic collection and analysis of information for management control, feeding back into decision-making.
- *Decision-making*: the project’s future course is charted by the project manager. While consulting other stakeholders and his team, he evaluates the project execution and makes decisions. The target groups influence a manager’s decision heavily. If they are not willing to contribute or are resistant to the project’s progression, the project fails. However, project managers do not hold absolute power as target groups and potential approval or disapproval of a project by donors inevitably influence decisions. Donors need to approve all major changes planned.
- *Reporting* is an essential part of communication and stakeholder management. It keeps responsible bodies and fund providers up to date with the progress made. Decisions about when and whom to report to are usually defined in the financial contract under which the project operates. Frequently, a quarterly time frame is employed.<sup>76</sup>

### Box 3: Insights from the Field

Projects with intangible goals are especially complex in nature. They are even harder to manage and accomplish when the end-product definition does not account for flexibility. Defining an intangible end product very precisely diminishes flexibility within the implementation phase as investors expect compliance with proposal agreements.

<sup>73</sup>Bishop (2001).

<sup>74</sup>*Ibid.*

<sup>75</sup>EuropeAid Co-operation Office (2002).

<sup>76</sup>*Ibid.*

### 5.3 *Monitoring*

Monitoring of daily management activities to identify and resolve any issues arising during the implementation phase answers the following questions<sup>77</sup>:

- Which activities are currently undertaken, and what is their progress (weekly)?
- What is the balance between resources that have been deployed and progress achieved (monthly)?
- Have milestones been accomplished (quarterly)?
- Are the results in line with the end product and sustainability objectives (half-yearly)?
- What is the reaction of the project environment (key stakeholders, local policies and strategies)? Do assumptions hold?
- Are the risks that the project team and manager are exposed to still reasonable?

Progress is reported in a standardised format to allow for comparisons over time. Reports give updates on achievements with indicators and milestones. Data regarding intended achievements in comparison with actual achievements identifies deviations from the initial plan and highlights problems and opportunities to take corrective action.<sup>78</sup>

To verify whether all monitoring activities are cohesively included, one may have recourse to the following questions, elaborated by the United Nations<sup>79</sup>:

- Are activities executed according to schedule?
- Are outputs achieved as planned?
- If not, what are the causes for the discrepancies?
- Are original milestones and expected end product feasible?
- Were major discrepancies integrated and reworked in the Log-Framework?
- Did any assumptions arise or new risks appear that are a project kill so that an evaluation is needed?
- Were corrective measures taken in case of deviations from the plan?
- What are the responses of the stakeholders (especially target group and beneficiaries)?

### 5.4 *Evaluation*

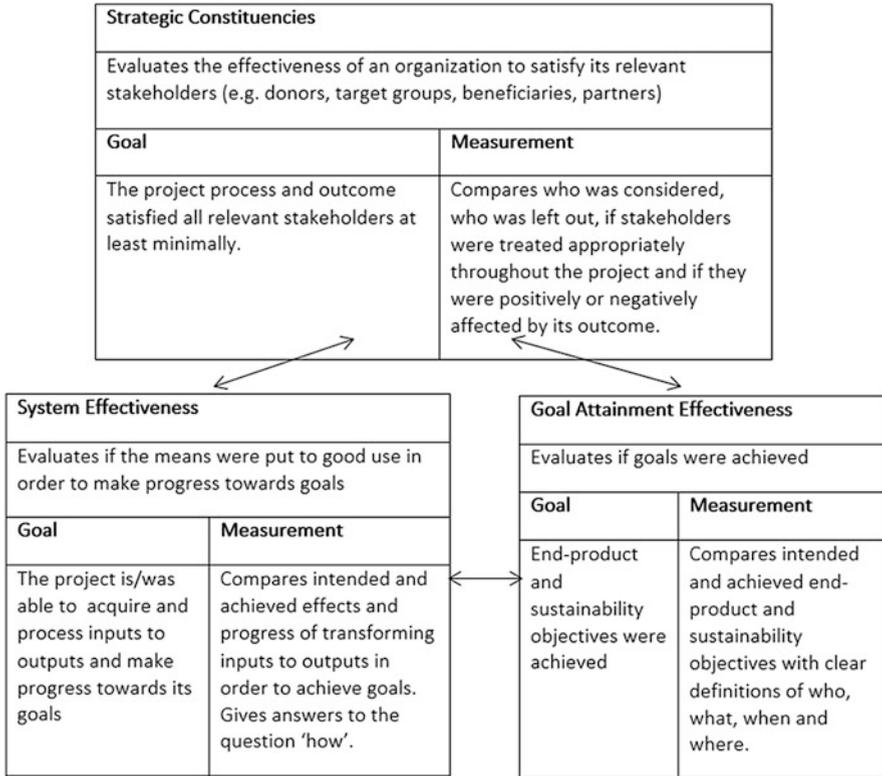
Evaluation is a systematic quality management assessment of an ongoing or finalised project as regards design, implementation and output, performed by an external party. *An evaluation should provide information that is credible and*

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<sup>77</sup>Richardson (2015).

<sup>78</sup>EuropeAid Co-operation Office (2002).

<sup>79</sup>United Nations Development Programme (2009).



**Fig. 3** Balanced evaluation card to project management evaluation. Developed by the authors, Sabrina Herold and Bartjan W. Pennink

useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors.<sup>80</sup> The *big five* evaluation criteria are efficiency, effectiveness, impact, relevance and sustainability and can be described as follows<sup>81</sup>:

- *Efficiency* refers to the degree to which inputs were used in a productive manner to create the largest possible amount of high-quality outputs.
- *Effectiveness* describes the degree to which the project achieves its end product and sustainability objectives through its outputs. Efficiency is thus a part of effectiveness. It can be measured on various levels (see Fig. 3).
- *Impact* refers to changes that a project has made to its surroundings, either of positive or negative nature. Environmental Impact Assessment and Economic

<sup>80</sup>*Ibid.*; OECD/DAC (1998).

<sup>81</sup>European Commission (2005).

and Financial Analysis similar to the Pre-impact Analysis conducted in the planning stage are relevant here.

- *Relevance* refers to the degree to which a project is needed and thus to the very first stage of the PMC.
- *Sustainability* refers to the degree to which a project's sustainability objectives have been met from an ex-post project perspective.

Effectiveness is further described in the balanced evaluation card (Fig. 3), which unites three different approaches of project effectiveness: *goal attainment*, *system* and *strategic constituencies*. As the United Nations Development Programme states correctly, it is important to balance between what has been done, how this has been done, what were the results and who was involved in relation to each other; while for different situations and in different types of evaluations (timing) each of the three components may have a different weighting, all of them are jointly important for final and ex-post evaluation of humanitarian aid projects.<sup>82</sup>

Depending on the purpose and use of an evaluation, timing can be determined.<sup>83</sup> Three different types of timing in an evaluation can be distinguished:

- *Ex-ante* evaluation includes feasibility studies in the selection of project options and the design and planning phase. Evaluations conducted during implementation are referred to as 'mid-term'. They review progress made and, if necessary, propose major alterations of project design. While changes in monitoring refer to fine-tuning or incremental change of action, evaluation may lead to a very novel way of thinking that may drastically alter project design for the remainder of the project implementation phase.<sup>84</sup>
- *Mid-term* evaluation proves if the project is still feasible and needed halfway to project completion.
- *Final* evaluation takes place at the very end of the project to document inputs, outputs and achieved result, which is most favourably the end product. This evaluation serves to draw general lessons from the project to be used in future projects.<sup>85</sup>

Often overlooked but crucial for later projects is a formal closing process regarding administrative, team and third-party components. As regards the latter in particular, it is important to have a final meeting so that the funding partners, target groups, organisations, suppliers and others may not cause future liability problems to the project initiator. For the team, a review is essential to the impact of their actions.<sup>86</sup>

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<sup>82</sup>United Nations Development Programme (2009).

<sup>83</sup>United Nations Development Programme (2009).

<sup>84</sup>EuropeAid Co-operation Office (2002).

<sup>85</sup>*Ibid.*

<sup>86</sup>Richardson (2015).

*Lastly, ex post* evaluation is carried out some years after project termination. It reviews the accomplishment of sustainability objectives.<sup>87</sup> Only after this evaluation is the Log-Framework completely filled in.

An evaluation checklist helps in carrying out assessments<sup>88</sup>:

- What was the project's intended achievement?
- Was the problem defined correctly?
- Is the end product still relevant for the problem?
- Was the programme appropriate to accomplish the end product?
- Are project outcomes and/or benefits sustainable?
- Who was the target group, and what were their expected benefits?
- Were there unexpected beneficiaries?
- What would have happened if the project did not exist?
- What were the anticipated links between outputs, milestones and end product?
- Were the milestones realistic?
- Were there unexpected outputs?
- Were Log-Framework assumptions relevant and did new risks appear?
- Which lessons are to be identified to learn for the future design of similar projects?

## ***5.5 Auditing Humanitarian Projects***

Auditing is meant to control whether operations and statements comply with contractual and legal obligations. An auditor is an external expert on the auditing topic. Traditionally auditing only included the oversight of financial or legal operations, for example compliance with accounting standards. Auditing now also entails performance audits, which concern efficiency and effectiveness of management.

While monitoring analyses the effectiveness and efficiency by comparing targets and actual progress as an organised management activity, an evaluation analyses the effectiveness, efficiency, relevance, impact and sustainability of actions. Auditing checks the compliance with financial and legal standard and sometimes also compares to performance best practices. Since monitoring is done continuously throughout the project, the actors can take immediate action to improve performance. Because evaluating is more thorough than monitoring, takes more time and is done only once or twice during the project and mostly after the project is terminated, it has less reactive potential during an ongoing project.

Auditing is done during and/or after a project and serves as the verification of financial records or certification of good management. It is an important activity to

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<sup>87</sup>EuropeAid Co-operation Office (2002).

<sup>88</sup>*Ibid.*

satisfy stakeholders but does not contribute to attaining the end product operationally.<sup>89</sup> Comparative Standards can be found in the latest publication of the Sphere Project.<sup>90</sup> The project started in 1997, bringing together a host of humanitarian organisations to create and develop minimum standards for humanitarian action processes. Sphere has resulted in many publications and generated valuable knowledge to assist humanitarian organisations in their work.<sup>91</sup>

## 6 Managing Human Relations

Successfully managing projects requires a range of soft skills.<sup>92</sup> These include motivation, negotiation, effective communication, a sufficient degree of influence within an organisation to complete matters, problem solving skills, along with conflict management and leadership abilities.<sup>93</sup>

Project managers play a crucial role in providing their teams with a vision, creating a positive and proactive work environment, delegating tasks and acting as a role model of appropriate behaviour.<sup>94</sup> Managers must be able to motivate different personalities and focus on team skills and their effective use. Building team spirit between the project management team and stakeholders is essential to driving the project towards its goal, while the relationship between the manager and sponsor is important for a project's overall success.<sup>95</sup>

Competencies and effective skills that project managers are expected to possess vary according to project situation and size. Although a theoretical distinction between managers and leaders exists, the literature agrees that project managers fulfil both roles simultaneously, balancing the need between visionary and focused action.<sup>96</sup> They employ a broad perspective on stakeholder needs and environmental changes while remaining focused on achieving an effective end result.

According to Cleland and King,<sup>97</sup> an effective project leader to a certain degree influences superiors, peers and subordinates and is able to cooperate with stakeholders and other parties involved. He needs to have conceptual, analytical and behavioural skills, which are reflected in his four major functions:

- effectively supervising resource application (human and conceptual skills);

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<sup>89</sup>*Ibid.*

<sup>90</sup>The Sphere Project (2015) Sphere for Monitoring and Evaluation.

<sup>91</sup>See for details <http://www.spherehandbook.org/en/>.

<sup>92</sup>Schwalbe (2009).

<sup>93</sup>*Ibid.*

<sup>94</sup>*Ibid.*

<sup>95</sup>*Ibid.*

<sup>96</sup>*Ibid.*

<sup>97</sup>Cleland and King (1983).

- perceiving and reacting to changes in the environment (behavioural, analytical, human and conceptual skills);
- facilitating a working environment wherein everyone can attain social, economic and psychological satisfaction (behavioural, analytical and conceptual skills); and
- setting up of strategies (analytical and conceptual skills).

## 7 Conclusion

This chapter has provided insights into the utilisation of the Project Management Cycle and pinpointed the relevant knowledge management areas prominent within the iterative project management process. It has highlighted the importance of identifying a particular project need and explained the possible alterations throughout project planning and implementation due to dynamic environments. Stakeholder engagement was another important focus guiding this chapter throughout project identification, design, planning, implementation, monitoring and evaluation. Finally, the chapter has addressed the project manager's relevance for developing human relations.

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