

TOPIC 5:

DESIGN (FORMULATION)

What do we have in mind? The project design or project formulation stage concerns the process of writing the project proposal, i.e. it usually implies the preparation of the narrative part, the budget (which may also include narrative clarifications) and the logic matrix, followed by other technical documents that donors may require already at this stage and that need to be provided together with the application (certificates, declarations, signed partnership agreements, letters of support, memoranda of cooperation, etc.).

The formulation of project proposals can be done in one or two steps, depending on the instructions provided in the call. If one step is all that it takes, the full project proposal is sent to the donor within the stipulated deadline. If, however, it is submitted in two steps, the first step includes merely a concept - a short version of the project that contains the basic elements of the logic matrix with the focus placed on relevance. This phase requires a lot of time, regardless of whether one prepares a *small-scale* or a *large-scale* project. It is especially challenging to prepare a project for a large consortium comprising partners which are not quite familiar with each other. On the other hand, the submission forms as well as the process of project submission itself can be quite demanding (which is an increasingly common case).

In addition to excellent written communication skills and usually high proficiency in English, at this stage of the PC it is necessary to have a relatively good grasp of the subject matter as well as sound understanding of budget forms and methods of financing and introducing costs. It is also necessary to logically connect all segments of the application, as well as relationships within the logic matrix.

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After the planning stage, i.e. at the beginning of the design stage, it is useful for the team representing the consortium or at least one delegated person to attend the info session offered by the donors after the announcement of the call - this especially applies to more complex projects or to people who do not have enough experience of writing project proposals. Likewise, the info session should be understood as a way of gaining insight into the expected competition within the framework of the call for project proposals.

Discussion. In continuation of the Handbook we will consider the content of an average project. The specific content of a project proposal always depends on the rules of the call and donor forms, but there are some rules that should be considered when formulating project proposals in different parts of the project application. The recommendation of the author of the Handbook is to first create a project logic matrix, followed by a detailed budget, and then to write the narrative part for which you need to allocate more time and bind it carefully with the LM and the budget proposal, i.e. make additional adjustments to these two documents if necessary, based on the project narrative.

Outcomes. The outcomes of the project proposal design/formulation stage are project proposals with a narrative, budget and LM, as well as prepared additional required documentation.

LOGICAL FRAMEWORK MATRIX (LFM)

What do we have in mind? Most donors, though not all, require that the LM is structured as a separate document representing the heart of the project or the project in miniature. The LM is a tool in the form of a table that contains the following:

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- The hierarchy of project goals, results and activities,
- Key external factors that have an impact on our project (defined as assumptions and risks),
- Measures that envisage the implementation of monitoring and evaluation (M&E) activities on the project,
- The basis of estimated necessary resources for the implementation of the project.

		INDICATORS	VERIFICATION SOURCES	ASSUMPTIONS AND RISKS
GENERAL OBJECTIVE	1	5	6	
SPECIFIC OBJECTIVES	2	7	8	11
RESULTS	4	9	10	12
ACTIVITIES	3	14 RESOURCES		13

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Table 4: LM – Recommended Order of Filling in/Defining Individual Segments

The authors' recommendation for filling in the LM (following the logic of the creation of the project) is according to the order shown in Table 4. We start from number 1, and go towards number 14.

We define the following:

- 1 General goal/goals of the project (previously identified in the Goal Tree),
- 2 Specific goal/goals of the project (identified in the Goal Tree),
- 3 Activities on the project - activities that should be grouped into work packages (a set of related activities that lead to the same result or results),
- 4 Project results,
- 5 Indicators for the general goal(s),
- 6 Sources of verification for the general goal(s),
- 7 Indicators for the specific goal(s),
- 8 Sources of verification for the specific goal(s),
- 9 Indicators for results,
- 10 Sources of verification for results,
- 11 Assumptions and risks for specific goal(s),
- 12 Assumptions and risks for results,
- 13 Assumptions and risks for activities,
- 14 Necessary resources for the implementation of activities (many LMs do not cover this category).

Discussion. The LM should contain as little text as possible in order to be readable and clear. Any additional clarifications can be presented in the narrative part of the

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application, usually in several different segments. The goal is for the reader to gain a good impression of what the project is about, how it is planned to be implemented, who the stakeholders are, how long it can last in relation to the complexity of the content and number of activities and results, whether the intervention is realistic in terms of achieving goals, etc. The only thing that an insight into the LM does not provide is the project relevance, so we deal with this segment in detail in the narrative part of the application, which will later be discussed more thoroughly.

A discussion about the elements of the LM follows.

About goals

Project goals are defined in the identification stage. There are general and specific goals and within a single project it is possible to define more than one general and more than one specific goal. In most cases, applicants usually define one general and one to four specific goals. One should not exaggerate when it comes to the number of defined goals. Otherwise, the project may immediately be considered too ambitious or unachievable.

Attainability of goals is often linked to the manner in which they are defined, which should be as clear and precise as possible. This is achieved by utilising the SMART (smart, measurable, attainable, realistic, time-bound) approach. In this respect, we carefully define each specific goal so that it contains several determinants, e.g. the number of the population it refers to, the place where the project intervention is carried out, or the point in time in which the goal is achieved (e.g. by a certain month or year).

The general goal of the project is set more broadly (but not too broad, e.g. we cannot say that the project teaches about world hunger!), and it should be linked to the

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call/competition by being aligned with the general goal of the call/programme within which the call was announced. The project contributes to some extent to the achievement of the general goal. The general goal is therefore defined as a contribution to some wider policy. Thus, quite often general goals result in being a contribution to some broader national, sectoral or international (UN) policy, i.e. the project contributes to the achievement of one or more goals of that policy. In this regard, the general goal is actually the perceived impact of the project and is realised at some point after the end of the project.

We define specific goals clearly and concretely so that each of them represents an individual contribution to the achievement of the general goal and clearly emanates from one or more project results. In fact, specific goals constitute a promise to the donor that they will be achieved by the time the project ends, and those promises result in the direct benefits for the defined target groups because they solve the main identified problem.

The use of different terminology to denote general and specific goals is noticeable. Thus, one can encounter expressions such as *general objective*, *general aim*, and *overall objective* to denote a general goal, while *purpose* or *specific goal* or *specific objective* refer to specific goals. We define goals by using the to-infinitive construction.

About the results

Each project produces results that can be measured (tangible) - everything that we can take in our hands, e.g. research on the use of pesticides in the country, the establishment of an agri-entrepreneurs' association, the purchase of a tractor or a new plant, etc. or non-tangible results which include changes in behaviour, knowledge, and skills.

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Each project result is a consequence of the implementation of one or more activities, and leads to the achievement of one or more specific goals.

When we think about the results, we should consider different formulations in English that are used in the practice of different donors. In order to be sure what is meant by the term *result*, we should look at the donor's instructions about filling in the forms for submitting the project proposal. We usually associate results with the terms *outputs*, *outcomes* and *deliverables*.

The achieved project results are presented to a wider audience through the dissemination process and are usually publicly available for further use, so it is necessary to assure their quality through monitoring and evaluation (M&E) activities. We usually define results in the form of nouns – e.g. improved training content for farmers, reduced use of pesticides, and the like.

About activities and work packages

Each project contains a plethora of activities that can be logically grouped into work packages, i.e. activity clusters, as referred to in some calls. Each work package contributes to the creation of one or more outputs.

We define activities as processes that are carried out for some period of time. For the sake of defining activities we use verbal nouns such as creating, planning, acquiring, evaluating, testing, and the like.

A project should not have too many work packages. A donor's tendency is that there are mandatory/or expected work packages on each project, and these are the ones whose activities last throughout the project - they unfold horizontally and simultaneously with the main activities grouped in other work packages.

Each project usually has five to eight defined work packages, two of which are mandatory horizontal work packages:

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- The first one concerns project management and quality assurance, and
- The second one deals with the project dissemination, communication and exploitation.

The remaining (so-called intervention) work packages can include the following:

- A work package concerning research activities and data management,
- A work package relating to capacity building (competent administrative bodies, advisory services, farmers, agri-entrepreneurs...) whose backbone consists of knowledge transfer activities,
- A work package relating to advocacy and public policies comprising such activities as designing public campaigns, writing recommendations, etc.,
- A work package concerning the creation of innovations and the procurement and testing of equipment.

Some project activities are marked as *milestone* activities. Usually, these activities contribute to a specific result without which further progress on the project would not be possible. Depending on the complexity, the project may have more (usually up to 5) identified activities of this type. They are also spread evenly across the work packages.

In some calls, activities are also referred to as *tasks*.

It is desirable to adequately name each work package.

Indicators

Indicators reveal the manner in which to measure the achievement of a certain result or a goal. Indicators can be quantitative, qualitative, and temporal. It is recommended to resort to a greater utilisation of quantitative indicators, either in the form of numbers or percentages (%), i.e. some unit of measurement.

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Sources of verification

Sources of verification indicate where the documentation corroborating the achievement of indicators is stored (where and how we can make sure that indicators have been achieved). The most common sources of verification are reports, registers, public policies, contracts, and other sources.

Risks and Assumptions

Risks and assumptions are most often associated with results and goals, but also with work packages in more complex projects. Risks represent external factors that we cannot influence directly, but which can affect the project's success.

Assumptions are the basis of every project idea, and by stating them we defend the possibility of reaching the desired goals through the project implementation. At the level of the general goal, the assumptions refer to the global, macro-economic political context that we believe must be provided. Furthermore, we ask ourselves what assumptions must be attained for the implemented activities to lead to results, for the results to lead to specific goals, and for the specific goals to lead to the general goal. In various donor forms, the risks and assumptions' segment can appear in different places – either in the narrative part, or as a part of the LM. So, it is necessary to take care of the coherence and consistency of the texts. In the narrative part, the definition of risks is followed by a suggested strategy to control their impact. Likewise, we estimate the probability of risk occurrence, and assess the level of impact. It is necessary to identify risks of a different nature – technical, organisational, socio-economic, political, financial, and the like.

Finally, it should be noted that some donors do not employ the LM as a tool in the preparation of project proposals which encompasses all aspects of implementation -

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activities and results - defined in advance. They rather utilise the concept of the Theory of Change (TP). The LM is used as a tool for project planning as well as for the subsequent M&E. On the other hand, using TP emphasises our understanding of how and why a certain change occurs through the creation of cause-and-effect relationships between required resources, activities, results, outcomes, and impacts. Multilateral donors like the EU or the UN favour the use of the LM in their calls, while bilateral donors (individual embassies) use the TP concept more often.

Outcomes and examples. The outcome of this segment of the formulation stage is a correctly and thoroughly filled in LM, according to the examples given in the table below. Some donors put a limit on the length of the LM (eg. three to five pages). It is a good practice to numerically and consistently state the results, activities and indicators in the LM, as well as in the budget table and the narrative part. We usually mark activities by using the capital letter A and adding an ordinal number to the number of the work package (thus, if we take the first package as an example, then the first planned activity on the project will be marked as A1.1. and so on). In the case of results and indicators, we follow the same principle, changing the initial letter to **r** or **i**, for example.

Table 5: LM - examples

	LM	INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
GENERAL GOAL	GG1: To contribute to the strengthening of cooperation between universities and businesses through a greater use of ICT in agriculture	3 annual national EXPO events for min. 100 participants from the field of ICT and agriculture Increased capacities of universities to use ICT in agricultural studies in 5 areas by 2023.	Project reports Cooperation agreements Alumni employment statistics Training reports	
SPECIFIC GOALS	SG1: To increase the capacity of ICT application in 4 segments in agricultural study programmes of 5 universities and in practice through cooperation between businesses and universities in the field of ICT and agriculture SG2: To increase the effectiveness and employability of 100 agriculture students coming from 5 institutions	<ul style="list-style-type: none"> • 24 professors trained in the application of robotics and IoT in agriculture • 5 university ToT teams • 7 courses based on ICT topics in agriculture for students • 200 students attend courses on ICT in agriculture • Handbook on the use of ICT in agricultural studies in 5 areas (80 pages). • 2 hackathons covering the topic of ICT application in agriculture with 100 participants - students of electrical engineering and agriculture 2 EXPO events with 16 members of the organising committee	Agendas from training sessions, lists of attendees, pictures, evaluation forms, reports Project website EXPO platform Media reports, reports from the EXPO event and hackathons Registration for fast courses for students	<i>Assumptions:</i> The country continues with the process of reforms in education and modernisation of study programmes and higher education institutions. The Country continue with the digitalisation process Higher education institutions continue to develop cooperation with business partners <i>Risks:</i> Slow acceptance of novelties and fear of digitisation in traditional agriculture and among professors Internal political instability that blocks the country's economic growth
RESULTS	Work Package 1: SITUATION ANALYSIS r1.1. Comparative analysis and report with recommendations on the observed needs of the university; r1.2. Web portal; r1.3. Introductory conference Work Package 2: CAPACITY BUILDING r.2.1 Improved competences of professors on the use of ICT in agricultural studies; r 2.2 Purchased and installed ICT	1 comparative analysis and needs assessment report (80 pages). 1 web portal with min 1000 visits 1 conference/50 participants 1 seminar/24 participants 20 sets of ICT equipment in agriculture 5 ToT teams	Web portal Agenda, reports, pictures from the event Decisions of higher education institutions for approved courses Media reports	<i>Assumptions:</i> Agriculture professors recognise a great need for additional ICT knowledge and are open to innovating the content of their lectures Universities and businesses have a mutual interest to cooperate Students are interested in learning through work and in a team and they are interested in entrepreneurship

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	LM	INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
	<p>equipment;</p> <p>r 2.3 5 university ToT teams created</p> <p>r 2.4 Handbook/manual on the use of ICT in agriculture;</p> <p>r 2.5 Fast courses for students;</p> <p>r2.6 National hackathons</p> <p>r2.7. EXPO platform</p>	<p>Manual - 400 copies, 80 pages</p> <p>Accelerated courses approved at 5 universities</p> <p>2 national hackathons with 100 participants each</p> <p>EXPO work plan</p> <p>2 EXPO with 200 participants</p> <p>17 EXPO organising members</p>		<p><i>Risks:</i></p> <p>Professors do not have enough time to devote it to professional development;</p> <p>Different public procurement systems in Bosnia and Herzegovina can slow down joint procurement and cause delays in the use of procured materials and equipment.</p> <p>Changes within the consortium may slow down the continuation of activities</p>
ACTIVITIES	<p>Work Package 1: SITUATION ANALYSIS</p> <p>A 1.1. Implementation and planning Research into the current situation and needs' analysis;</p> <p>A 1.2. Web portal design;</p> <p>A 1.3. Organising the Introductory Conference</p> <p>Work Package 2: CAPACITY BUILDING</p> <p>A 2.1 Organising the training for professors on the use of ICT in agricultural studies;</p> <p>A 2.2 Execution of public procurement with the aim of purchasing, installing and maintaining ICT equipment at universities;</p> <p>A 2.3 Creation and networking of 5 university ToT teams</p> <p>A 2.4 Developing a handbook/manual on the use of ICT in agriculture;</p> <p>A 2.5 Creation of quick courses for students on the use of specific ICT tools in agriculture;</p> <p>A 2.6 Organising national hackathons</p> <p>A 2.7. Creation and organisation of EXPO platforms and events</p>	<p>Resources/costs/inputs:</p> <p>Presentation of necessary resources according to budget categories - directly as stated in the budget:</p> <p>WORK PACKAGE 1:</p> <p>100 days of engagement; 1 subcontracting in the amount of EUR 2000 for the creation of a website</p>		<p>Partners engage experienced and credible project coordinators who will work on needs analysis</p> <p>The required data exist and are available to the public;</p> <p>All trainings are based on an assessment of real needs of the training participants</p> <p>Students are motivated to get involved because they recognise the importance of the project for their future careers, through networking, increased employability.</p> <p><i>Risks:</i></p> <p>Bureaucratisation of EXPO</p> <p>Partners are indifferent to the obligation to regularly update the website</p> <p>Poor English skills in the financial and legal services at the university.</p>

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Source: Erasmus+ CBHE Project: Vitalising ICT Relevance in Agricultural Learning - VIRAL

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