

Technical Note

Using Logical Models in Evaluation

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1. Introduction

1. This TN is intended for use by: i) WFP staff commissioning and/or managing a decentralized evaluation or conducting a review; and ii) evaluation and review teams conducting evaluations and reviews for WFP. In WFP, the dominant tool for logical modelling is the logical framework, although theories of change are increasingly being considered.¹
2. It complements existing guidance on these tools provided by WFP normative framework for monitoring namely: The corporate Results Framework (CRF) guidelines and indicator compendium; the corporate monitoring guidance, especially Chapter One on Logical Frameworks²; the standard operating procedures for project monitoring and the minimum monitoring requirements. This TN is particularly important in the first three phases of the evaluation process i.e. planning, preparation and inception.

2. Definition

3. A logical framework (Logframe for short) is a management tool used to design projects and programmes. It involves identifying inputs, outputs, purpose (outcomes), and goal (impact), and their causal relationships, related performance indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, implementation, monitoring and evaluation of a WFP interventions.
4. The Logframe provides a summary of the planned project intervention as set out in the project narrative. Logframes are characterised by their presentation in **matrix format**. They include quantitative and qualitative indicators to be measured at different levels and possible external factors (risks and assumptions) that can affect the delivery and impact of the intervention. For a WFP illustration, see Annex 1.
5. Overall, the Logframe succinctly presents **what WFP is trying to accomplish** with a particular intervention; **how success will be measured**; what **assumptions** must hold true for each level of the results chain. The Logframe establishes the expected results chain for a WFP intervention, indicating:

Outputs > leading to **Outcome** effects > which contribute to **WFP Strategic Objectives** and > which, over time, contribute to long-term effects or **Impact**.

6. Each of the arrows in the results chain above represents a change. The WFP interventions are expected to deliver the expected change. Also influencing movement along the results chain from e.g. output to outcome are a set of external considerations or factors, called **assumptions**, that must hold true in order for the intervention to deliver the desired level of change. For example, for an intervention to continue being implemented at the same level and to the same scale, stability in the operating area, sufficient funding and Government support may be some of the key assumptions. It is very important that the assumptions are well-formulated at intervention

¹ There is ongoing work on theories of change for the main areas of WFP interventions, and this TN will be updated in line with the results of this work.

² For detailed guidance on the logical framework refer to WFP Corporate Monitoring Guidance (Chapter 1).

design stage, since these are a key source for informing the design of an evaluation in terms of the causal links to be investigated.

7. **Indicators** (or **Performance Indicators**) are another essential element of a Logframe and are identified for each level of the results chain. They provide the means to measure achievements and changes brought about by WFP interventions at each different level of the results chain. Careful selection of indicators during the design stage is critical as this will largely determine what is tracked and the body of monitoring data that will be generated³. A Logframe should include a **baseline** and **of target** for each indicator.
 - The **baseline** represents the **starting point** before the intervention has begun. Baselines must be established either through primary data collection (baseline survey) or from synthesis of existing secondary data, or a combination. Baseline values must be established during the intervention design phase, or within three months of the commencement of project activities.
 - **Targets** are the **desired level of performance** to be accomplished within a specific period. Targets are required for every outcome and output indicator in the project Logframe.⁴

3. Using the Logframes in Decentralized Evaluations and Reviews – an Overview

8. Within programming, Logframes are used within project documents, to:
 - Clarify the intended logic of the design – e.g. the relationship between the activities of an intervention and the intended results (outputs, outcomes)
 - Make clear the assumptions which underlie the design i.e. must hold true for the results to be realised
9. Logframes in particular have three main uses in WFP:
 - a. **As design tools**, Logframes are informed by WFP's **Strategic Results Framework (2014-2017)**, which sets out Strategic Objectives to which all interventions⁵ must contribute. It also provides a set of minimum corporate outcome and output indicators which are required to be part of any WFP intervention and thus reflected in the Logframe. The Logframe sets out the main internal logic of the intervention, and the assumptions between the intervention and its intended results at different levels (Output, Outcome and sometimes Impact).
 - b. **As monitoring tools**, WFP's **corporate Monitoring Guidelines** then articulate the need to apply a Logframe in ongoing monitoring⁶ to assess progress against the intended results. In this regard the Logframe serves as the basis for preparation of performance monitoring plan.
 - c. **At evaluation or review stage**, the Logframe is used to support the evaluation or review through understanding the design of the intervention, its internal logic and assumptions, and progress in implementation as reflected in performance monitoring plans and corresponding performance monitoring reports.
10. Table 1 below provides an overview of how the Logframes are used in the different phases of an evaluation or a review. Key responsibilities, processes and products are identified.

As a general principle: Bearing in mind that the interventions can later on be evaluated or reviewed, the Logframe should be designed in a way that later provides a solid base for both types of exercises.

³ Guidance is provided by WFP on selection of indicators: The SRF provides a compendium of outcomes and outputs and accompanying corporate indicators. Additional indicators are also available in a project specific indicator compendium (see Standard Operating Procedures for Project M&E).

⁴ WFP Corporate Monitoring Guidance Chapter One: Logical Framework

⁵ This includes development projects (DEV), country programmes (CP) Protracted Relief and Recovery Operations (PPROs), Emergency Operations (EMPOs) and Special Operations (SOs).

⁶ The Strategic Results Framework guidelines require a simplified version of logical frameworks to be part of the project document. The Corporate Monitoring Guidance (Chapter One) gives detail on using the tool at the design stage. The Standard Operating Procedures for Project Monitoring and Evaluation provide further detail.

Table 1: Use of the Logframe in Evaluation/Review Phases

Phases	Roles and responsibilities	Processes	Products
Phase 1: Plan	To Note: the logframe is developed at the time of the intervention planning stage which is when an evaluation if needed should also be planned. Otherwise the planning phase here refers to the intervention planning		
	<p>Responsibility here rests with those staff charged with intervention design, who must also consider the plan for M&E. These include:</p> <ul style="list-style-type: none"> • The Programme Officer and staff assigned to design of an intervention lead the Logframe development. • The M&E Officer/Focal Point ensures that the Logframe is sufficiently detailed and complete to support future evaluation / review. • Responsible staff in HQ divisions provide inputs to the overall design of the intervention as well as the Logframe. The performance monitoring division checks that the Logframe is in line with the SRF 	<p>The Planning Phase is the optimal time to influence the development of the Logframe such that it will be useful for future evaluation or review. Essential elements of the Logframe to be clearly articulated include:</p> <ul style="list-style-type: none"> • Statements of results for expected outcomes and related outputs are contained in the first column of the Logframe. These are required to be linked to one or more of WFP Strategic Objectives. • Appropriate performance indicators, capable of measuring expected change by later evaluation and review, appear in the second column of the Logframe (see WFP Indicator Compendium). Corporate monitoring guidance is available to ensure that indicators meet expected criteria (SMART - specific, measurable, attainable, relevant and time-bound) • Other features: <ul style="list-style-type: none"> ○ Specifying the factors for disaggregation (e.g. school enrolment rate by grade and gender; or access to assets or services by gender, location, poverty status or other important variable in the context). ○ A sufficient number of indicators to measure key numerical values (quantitative) and key perception or process changes (qualitative), but not too many that it will be impossible to track them all ○ Non-directional indicators, allowing for the fact that change may be positive or negative. • Ensure that Assumptions are explicit and comprehensive. These are external factors or considerations that must be in place to enable the planned change to happen, and are key to later evaluation and review. Each level of the results chain must indicate the assumptions that relate to moving to the next level. • Check the internal logic of the Logframe. This requires asking questions about the extent to which a level of result (e.g. outputs) can reasonably be deemed as necessary and sufficient to collectively lead to the next level of result (outcome), when combined with the influence of the appropriate level of assumptions. 	<ul style="list-style-type: none"> • Logframe with all key elements clearly set out • baseline values for all outcome and output indicators • Key assumptions that underlie the logic • Monitoring plan to collect suitably disaggregated data

		<ul style="list-style-type: none"> ○ This test is sometimes described as the <i>if-and-then logic test</i>: <i>'If we deliver the outputs through our planned activities and using the planned inputs, and our assumptions at the output, outcome and impact levels hold true, then the desired outcome will occur and lead to the desired impact.</i> 	
Phase 2: Prepare	Responsibility here rests with the Evaluation Manager/Review Focal Point, whose task is to confirm the existence of the Logframe and make any adjustments required to make it suitable for use in an evaluation/review or, if necessary, reconstruct it from available data.	<p>During the Preparation phase, the Evaluation Manager/Review focal point:</p> <ul style="list-style-type: none"> • Confirms existence of the Logframe • If it exists identify any gaps e.g. in missing targets and baselines and check assumptions • Logframes are often adjusted over time. Once the evaluation or review team have been selected and contracted documentation of these changes, their justification, and copies of the original and amended project documents and Logframes should be provided to the evaluation/review team. • If it does not exist, construct a Logframe from project data and inputs of key programme staff and validate it with the CO management if not possible to have it validated during the preparation phase, indicates clearly in the TOR that it is a draft Logframe that the evaluation team will have to have it confirmed in the inception report. • Clarify in the terms of reference (ToR- Section 3: Subject of the evaluation) any limitations of the Logframe, in terms of gaps in logic as well as missing targets and baselines. Suggestions for addressing these are also proposed, for consideration by the evaluation/review team – who must double check this for themselves in the Inception phase. • Use the Logframe, in both evaluations and reviews, to help select criteria (in the case of an evaluation) and to identify evaluation and review questions. The Logframe in particular supports development of questions related to efficiency; effectiveness and impact of an intervention (see the Technical Note on Evaluation Criteria and Questions). The assumptions can also be possible trigger for evaluation questions. <p>TO NOTE: Thematic evaluations are unlikely to have a Logframe. The evaluation team will have to construct and validate one during the inception phase.</p>	<ul style="list-style-type: none"> • Logframe • Annexed to the terms of reference • Criteria and questions in ToR reflecting • Comprehensive set of documents itemizing any changes to Logframe and the rationale for this • Summary of gaps and limitations of the data and suggested mitigation measures
Phase 3: Inception	The Evaluation Team confirm understanding of the intervention logic as indicated in	<ul style="list-style-type: none"> • An Inception Phase is relevant for all evaluations, but not always for reviews (see DEQAS process Guide for Reviews). At Inception Phase the evaluation or review team interrogates the logic as presented in the Logframe, along with 	<ul style="list-style-type: none"> • An Inception Report with an assessment of the clarity of elements

	<p>the Logframe and identify any shortcoming, including proposed measures to address these; and align the evaluation/review approach towards investigating the efficiency, effectiveness and impact of the key results in the Logframe. They show how the evaluation's design, including the methodology, will test the intervention logic and show any change against what was reflected in the Logframe</p> <p>The Evaluation Manager/Review Focal point confirms the evaluation team's understanding of the Logframe and verifies that the evaluation design will allow its testing and for measuring change.</p>	<p>consideration of any identified flaws and suggestions for addressing these included in the ToR. They may propose a strengthened logic and/or fill gaps in the Logframe to guide the evaluation/review. If no Logframe was available at the outset and one was developed for the ToR, this is confirmed in the Inception Report. Otherwise the evaluation team has to build a Logframe and have it confirmed in the inception report before moving to the next phase.</p> <ul style="list-style-type: none"> • During the Inception phase the evaluation team considers how the intervention logic as reflected in the Log frame will be tested during the evaluation, in order to verify the assumptions, identify any significant ones overlooked and the extent to which they might provide explanations for the results achieved. Inception meetings allow for dialogue with relevant partners on this. • As the Evaluation Team translate the evaluation questions into a more detailed Evaluation Matrix (see Technical Note on evaluation matrix) also presented as part of the Inception Report, the Logframe will be a key point of reference, particularly for questions on effectiveness, efficiency and impact and for indicators and targets to be assessed. • Within the methodology, it is essential that the sampling approach used and the combination of data collection methods and tools deployed are capable of reliably measuring change at the different levels of the intervention logic as per the Logframe. 	<p>and strength of design logic and measures to address any shortcomings</p> <ul style="list-style-type: none"> • For evaluation – An Evaluation Matrix informed by the Logframe
Phase 4: Collect data	<p>The responsibility rests with the Evaluation/Review team, to ensure that the data collection phase includes:</p> <ul style="list-style-type: none"> • Use of data collection methods and tools that investigate the elements of Logframe and its logic; • Sufficient disaggregation of data to analyze differentiated effects of the intervention on key groups (e.g. women; age-group; location etc.). 	<ul style="list-style-type: none"> • The Logframe provides a key reference framework during data gathering. As the methodology is implemented, and data gathered to respond to the indicators (for evaluations in the Evaluation Matrix), the relevance and appropriateness of the Logframe is itself tested. • The accuracy and comprehensiveness of assumptions and how they were dealt with are also assessed as data is gathered. 	<ul style="list-style-type: none"> • Updates and end of mission/workshop presentation of findings geared to assessment of the results and the intervention logic as outlined in the Logframe

Phase 5: Analyze data and Report	<p>The responsibility rests with the Evaluation/Review team, for reporting geared to provision of information on relevant results at different levels of the results chain as outlined in the Logframe</p>	<p>The evaluation/review report should:</p> <ul style="list-style-type: none"> • Be clear about its findings about the logic of the intervention, as showed in the Logframe • Address the clarity and comprehensiveness of this logic, any shortcomings and their impact on implementation and results. • Highlight where the pathways of change differed from what was projected • Identify if any key assumptions about external factors were overlooked, or insufficiently addressed, and the implications of this for any relevant criteria or questions. <p>In some cases an evaluation or review report, utilising its findings, may include an alternative or more complete interpretation of the logic of intervention than that provided in the initial Logframe.</p> <p>Recommendations may also include—particularly for a mid-term evaluation or review – changes to the Logframe for example to explicitly reflect key assumptions to make the intervention more evaluable in future.</p> <p>In all cases, the Logframe should be presented in the evaluation/review report as an annex.</p>	<ul style="list-style-type: none"> • Evaluation/review reports with presentation of performance against the outputs and outcomes outlined in the Logframe as well as assessment of the factors affecting these results
Phase 6: Disseminate and follow-up	<ul style="list-style-type: none"> • The responsibility here rests with CO management, Evaluation Manager/Review Focal Point and the relevant Programme staff, who take responsibility for publication of the evaluation report. • For both evaluation and review, the responsibility is to follow up on the aspects of the report which contain (where appropriate) lessons for future strengthening of the intervention 	<p>For evaluations, the report is required to be disseminated beyond WFP (See Process Guide for Decentralized Evaluation). For both evaluations and reviews, however, a key follow-up task for Country Offices, Regional Bureaus and relevant Headquarters staff is to address any shortcomings in the intervention design as presented in the Logframe if applicable and use this learning for the development of new interventions.</p>	<ul style="list-style-type: none"> • Lessons on intervention logic and assumptions

Annex 1: Example of a Logical Framework for an Operation in WFP

Note: many logframe examples can be viewed in recent operations submitted to the board for approval. This example represents one part of the overall logframe for illustrative purposes. The operation addresses three Strategic Objectives, each of which is developed in a similar way to the one provided here. The full version can be found [here](#).

Extract from PRRO Senegal: Protecting Livelihoods and Promoting Resilience 2015-2016

Results	Performance Indicators	Assumptions
<i>Strategic Objective 3: Reduce risk and enable communities and countries to meet their own food and nutrition needs</i>		
<i>Outcome 3.1</i> Increased marketing opportunities for producers and traders of agricultural products and food at the regional, national and local levels	Food purchased from regional, national and local suppliers, as % of food distributed by WFP in-country; Food purchased from aggregation systems in which smallholders are participating, as % of regional, national and local purchases	Local production and marketing are efficient Market prices are stable Local products meet requirements
<i>Outcome 3.2</i> <i>Risk reduction capacity of countries, communities and institutions strengthened</i>	NCI: Food security programmes National Capacity Index Proportion of targeted communities where there is evidence of improved capacity to manage climatic shocks and risks supported by WFP	Technical staff are available
<i>Output 3.1</i> <i>National systems for monitoring trends in food security and nutrition strengthened</i>	Number of government counterparts trained in collection and analysis of food and nutrition security data Number of food security and nutrition monitoring/surveillance reports produced with WFP support	
<i>Output 3.2</i> <i>Increased WFP food purchase from regional, national and local markets and smallholder farmers</i>	Quantity of food purchased locally through local and regional purchases (mt) Number of smallholder farmers supported	

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<http://go.wfp.org/web/evaluation/decentralized-evaluations>

Or contact the DE team at: wfp.decentralizedevaluation@wfp.org