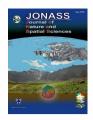


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#### **Review Article**



# A review of project planning using the Logical Framework Approach (LFA) and Participatory Rural Appraisal (PRA)

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#### ABSTRACT

**Background and objective:** Watershed implementation projects represent crucial infrastructure endeavors in many countries, demonstrating positive impacts in virtually all pilot regions. Each implementation project comprises planning, execution, monitoring, and assessment phases. In this context, the overarching goal of project planning is to enhance performance. However, there is no consensus on the best approach to project planning. Consequently, this study conducts a descriptive comparison of two methods: the Logical Framework Approach (LFA) and the Participatory Rural Appraisal (PRA). The aim is to assist planners in selecting the most suitable method according to their specific needs.

**Materials and methods:** Modern research and the examination of various methodologies have provided the means to plan projects for optimal performance. In this regard, a comprehensive analysis of the strengths and weaknesses of both LFA and PRA methods was conducted, drawing from an extensive body of literature.

**Results and conclusion:** In essence, there is no significant disparity between these two methods. The primary contrast between LFA and PRA lies in the fact that LFA anticipates external factors that may influence project success or failure. Furthermore, all stakeholders impacting the project play a role in pivotal decisions. Hence, it can be argued that LFA addresses the deficiencies and limitations of PRA, presenting itself as an ideal model for optimal decision-making. Consequently, it is recommended that this method be utilized in future research endeavors, particularly in assessing country watersheds.

# 1. Introduction

Planning, execution, monitoring, and evaluation are integral parts of the continuous project cycle. They hold particular significance as the experiences and lessons learned during project execution should provide feedback into the planning process. There are various challenges in project planning, and circumstances may arise where a project must be realized at all costs. Nevertheless, external

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factors can change during project execution, necessitating adjustments to the original plans (Hersoug, 1996). If these factors develop negatively during the project's course, it may be necessary to terminate or redesign the project to prevent their occurrence. External factors can also develop favorably and consequently create new opportunities.

Overly rigid planning and execution can overlook these opportunities. As a general rule, planners who have more information about external factors that can influence projects can plan in more detail. Additionally, project planners may encounter more realistic objectives during project execution (Aune, 2000). Studies show that when people participate in all stages of a program, from design to implementation and evaluation, the best results are achieved. Participation implies intentional activities in which members of a community participate in neighborhood, city, and village affairs, directly and indirectly contributing to shaping social life (Teodoro Carlón Allende, 2021; Zarei, 2021; Salahi Isfahani, 2018). Today, the participation of villagers and local communities is considered an inseparable and key component of the success of watershed management and rural development projects. Participation as a strategic approach in the historical process of rural development transformations emerged in the decades following World War II.

This concept, which coincided with a shift in focus from growth to social development and human development, carries the message that economic factors and centralized planning alone cannot contribute significantly to solving the development equation (Barghi et al., 2012). This approach has gradually expanded, and today, proponents consider the economy, humanity, and the environment as the three fundamental pillars of development. It is worth mentioning that any change and development in watersheds should begin through local communities, and all people should actively participate in project implementation. In fact, the participation of local communities ensures that individuals do not feel alienated from new plans and elements and that they are involved in the design, implementation, and maintenance of projects. They consider the project and its outcome as their own and contribute the most to its preservation. Furthermore, the participation of local communities can lead to decentralization and reduce top-down planning constraints (Heidari & Shakiba, 2021; Barghi et al., 2012).

In fact, one of the main issues and challenges in watershed projects in Iran is the lack of attention to the real problems and issues of local communities. In other words, the genuine non-participation of local communities, rural distrust of government institutions, rural engagement with livelihood issues, competition and conflicts of interest among different social groups in villages, conflicts of interest among government institutions themselves, and the destruction of watershed structures, among other factors, have led to the expectation that watershed and rural development programs in Iran may not succeed and may not be able to gain the trust of the people. Based on this, various tools and methods have been invented and employed for this purpose. Among these methods, we can mention the Logical Framework Approach (LFA) and Participatory Rural Appraisal (PRA) as two key approaches. In this regard, numerous studies by various researchers have focused on the importance and desirable performance of using the LFA method individually (NORAD, 1995; Jackson, 2000; Aune, 2000; Roduner et al., 2008; Jensen, 2010; Khademi et al., 2014; Heidari & Shakiba, 2021; Alvandi & Sadoddin, 2019; Karimi and Talebi, 2022a; Karimi and Talebi, 2022b; Teerakul et al., 2023) and the PRA method (Qarani Arani, 2013; Ahmad et al., 2018; Maulani et al., 2020; Khair et al., 2021; Deshmukh & Singh, 2022; Chakraborty et al., 2023) under different conditions and objectives for the evaluation and planning of projects.

However, a descriptive comparison and selection of the best approach between LFA and PRA have received less attention from planners. Therefore, in this study, an attempt has been made to describe the strengths and weaknesses of the two LFA and PRA methods comparatively and provide opinions and suggestions regarding the selection of the best planning tool. In this regard, the present research has sought to answer the following question: Has the performance of the two approaches, LFA and PRA, been effective in project evaluation and planning? In this context, a hypothesis has been proposed. It seems that the performance of the two LFA and PRA approaches in project evaluation and planning has been similar.

# 2. Materials and Methods

Nowadays, through research studies and an examination of various methods, project planning with optimal performance can be achieved. In this regard, a library-based approach was used by reviewing multiple articles to investigate the challenges, strengths, and weaknesses of the LFA and PRA methods descriptively. Subsequently, the two mentioned methods are explained and described.

# 2.1. Planning Based on LFA

Logical Framework Analysis (LFA) was developed in the 1960s by a team led by Leon Rosenburg at NASA (National Aeronautics and Space Administration) in the United States. Despite initial widespread criticisms of this approach, it gradually gained attention in various organizations and countries. In recent decades, it has become an integral part of program and project management practices and their evaluations. The Logical Framework Approach, often referred to as "logframe," is a widely used method for planning watershed and rural development projects (Steigerwald, 1994; Vanoppen, 1994; NORAD, 1995).

Reasons for Introducing LFA Systems:

- The introduction of Logical Framework Analysis (LFA) systems can be attributed to several reasons:
- Assisting projects in defining clear and realistic objectives
- Creating a framework for monitoring and evaluation, compelling planners to think in evaluation terms
- Encouraging planners to state their assumptions
- Encouraging people to consider their expectations
- Summarizing key information in a document

In essence, this approach is an analytical method in which long-term and short-term objectives, outputs, activities, and cause-and-effect relationships of programs and projects are identified. Additionally, the logical framework provides a structured and logical approach to setting priorities and determining the results and activities related to a project. It serves as a conceptual model that can represent the structure of the studied system at an acceptable level of detail while simplifying it (Kragt, 2009). In other words, the logical framework can depict the structure of the studied system in terms of cause-and-effect relationships, simplifying it while maintaining an acceptable level of detail (Badham et al., 2019).

Additionally, this approach identifies criteria that are monitorable. Moreover, it predicts external factors that can influence the success or failure of a project. When used creatively, the logical framework approach can be beneficial for project planning, design, implementation, and evaluation. It provides a structured and logical framework for setting priorities and determining the results and activities related to a project. Proper utilization of this approach can create a robust and effective mechanism for developing the concept of a project in all project-related documents. Furthermore, the logical framework can provide a foundation for evaluating the effectiveness, efficiency, and validity of a project (Alvandi & Sadoddin, 2019).

This approach helps in various ways:

- It allows for a systematic assessment of the current situation, including identifying the needs of stakeholders and defining the relevant objectives for examination and analysis.
- It establishes a causal relationship between inputs, processes, outputs, outcomes, and objectives in a vertical hierarchy.
- It defines assumptions to underpin the project's logic.

- It identifies potential risks that may hinder the achievement of objectives and outcomes.
- It establishes a system for monitoring and evaluating the project's performance.
- It fosters a communicative and learning process among stakeholders, including supervisors, designers, decision-makers, policymakers, and implementers.

The logical framework approach is a valuable tool for project planning and evaluation, providing a structured and hierarchical framework for understanding the relationships between various project components and their impact on achieving objectives and outcomes (Alvandi & Sadoddin, 2019).

## 2.1.1 LFA Stages

LFA proposes a seven-stage method for planning a watershed and development project (NORAD, 1995). These stages are typically carried out in an LFA workshop. In the following, each of these stages is explained.

# (1) Participatory Analysis:

Stakeholders (groups affected by the project) are referred to as groups that, without their support, the project cannot continue to exist. In other words, stakeholders can significantly impact the project's objectives and success. Stakeholder analysis during the project planning phase can contribute significantly to the development of effective strategies. In general, stakeholders are divided into three main categories:

Primary Stakeholders: Individuals, groups, or organizations that are directly affected by the project's outcomes and can influence it directly. Primary stakeholders can be categorized in society based on factors such as gender (male and female), socio-economic status (rich and poor), occupation (employed and unemployed), and more.

Secondary Stakeholders: Individuals, groups, or organizations that are indirectly affected by the project's outcomes and can have an indirect influence. These stakeholders often play a supportive or intermediary role.

Key Stakeholders: Encompass individuals, groups, or organizations that have a significant impact on the project's effectiveness, even though they may not be directly influenced by the project. These individuals may possess expertise and experience in the relevant subject matter.

In recent years, many researchers have concluded that project success is not solely determined by cost, time, and quality but also relies heavily on effective management and addressing stakeholder satisfaction. Project success is achieved by meeting the diverse expectations of stakeholders in various project phases (Altonen & Sivonen, 2009; Nguyen et al., 2009). Projects implemented in the natural resources sector encompass a wide range of stakeholders who impact the project in various ways. Dealing with these impacts through stakeholder management in alignment with project objectives is essential. The presence of diverse stakeholders with different interests and expectations in the execution of projects, particularly those involving interactions with multiple organizations, groups, and individuals, poses a significant management challenge for project managers. This issue is more critical in projects and initiatives related to natural resources and watershed management. Since meeting all stakeholder expectations is not feasible, prioritizing stakeholders should be done using various methods. The Interest-Power Matrix is one of the tools that categorizes stakeholders based on their influence (power) and interest (benefit) in the project.

In general, stakeholder analysis involves identifying stakeholders, evaluating their interests in the project, and identifying the methods by which these interests are affected by the project and its sustainability. Some researchers consider the stakeholder analysis process as a crucial element of stakeholder management, equivalent to how an organization performs (Altonen & Sivonen, 2009).

# (2) Problem Analysis:

Identifying Problem Clusters and Establishing Cause-Effect Relationships Using the "Problem Tree"

The problem tree is one of the problem-solving techniques. This technique, much like a toolbox, helps groups get closer to their goals. To perform this technique, we ask the stakeholder group to, through brainstorming and consultation with each other, note down the main problem or, better yet, the central issue that the group is facing, on the trunk of a hypothetical tree. Group members must write down the causes of the problem on the roots of this tree and the consequences of the problem on the branches. For this, they need to understand the concept of cause and effect. The roots are the causes of the problem, and the branches are the situations that become apparent after the problem occurs. Drawing the problem tree illustrates the current undesirable situation for the group (Compilation of integrated management plan in Hablehroud watershed, 2018). It's worth mentioning that depending on the group or the situation, both brainstorming and systematic approaches are available for developing the problem tree.

# (3) Objective Analysis: Transforming the "Problem Tree" into an "Objective Tree"

In the trunk of this tree, we write down the main goal, which is usually the reduction or elimination of the problem. For each cause of the problem on the roots of this tree, we need to write down at least one corrective activity or solution. It's important to note that what is written on the roots of the objective tree should be in the form of activities, meaning actions that will be taken and will have specific outputs or outcomes. Perform this process for each of the causes contributing to the problem, and in the branches, note down the achievements of problem-solving. Achievements are positive states that will emerge after solving the problem. Regarding the inclusion of the goal on the trunk of the objective tree, it should be specific, measurable, achievable, relevant to the vision you've outlined for the future, and time-bound. This means that you should consider a specific time frame for it so that after a while, you can evaluate whether you've achieved your goal or not. If the goal hasn't been achieved, determine the reasons, and if there has been success, write down the reasons so that you can plan better for the group's future activities (Compilation of integrated management plan in Hablehroud watershed, 2018).

## (4) Alternative Analysis:

This step involves evaluating various options for the project. The evaluation can be based on technical, financial, economic, institutional, social, and environmental feasibility.

#### (5) Identification of Key Project Elements:

These key elements include the ultimate goal (long-term overall objective), partial goals (operational objectives), outputs (results guaranteed by the project), activities, and inputs extracted from the objective tree.

#### (6) Assumptions:

Assumptions describe the conditions that must be in place for the project to succeed but are beyond the project's control.

#### (7) Identification of Indicators:

Indicators are performance standards that must be achieved to reach the overall goal, partial goals, and outputs.

It's important to note that elements from stages 5 to 7 are also integrated into the project planning matrix.

#### - The Logical Framework Matrix:

After creating the tree of objectives to address the identified problems, the main objectives, subobjectives, outputs, and activities are extracted from the tree of objectives and categorized in the Logical Framework Matrix. The Logical Framework Matrix presents the project in a standardized format for designers, policymakers, and managers. It also serves as a reference for managing the project cycle. This method uses a 4x4 matrix in which (Table 1):

The first column represents the hierarchy of objectives, including long-term objectives, short-term objectives, outputs, and activities.

The second column contains performance indicators.

The third column outlines the methods and tools for achieving success based on criteria.

The fourth column lists threatening factors or project assumptions based on logical reasoning.

In other words, by applying inputs and implementing activities, assumptions are validated, and outcomes are achieved. If outcomes are achieved and assumptions remain valid, short-term objectives are likely to be realized within the specified timeframe. Subsequently, if medium-term objectives are achieved, and assumptions remain unchanged, there's a high likelihood of achieving long-term objectives (Compilation of integrated management plan in Hablehroud watershed, 2018).

Project Summary	Measurable Metrics	Monitoring and Review Tools	Key Assumptions
Ultimate Goal: Long-term impact on national or developmental objectives	Direct or indirect tools to assess achievement of the ultimate goal	-	Outcomes and critical conditions or decisions needed for the long-term sustainability of specific objectives
Subsidiary Goal: Short-term measurable project-level impact	Direct or indirect tools to assess the extent of the intended impact	-	Outcomes and critical conditions or decisions beyond the project's control that were pre-existing for the achievement of developmental objectives
Outputs:Project results that the project manager can ensure will occur in the future	Direct or indirect actions to address the range of outputs	-	Outcomes and critical conditions or decisions beyond the project's control that were necessary for achieving the developmental objectives
Activities: Core operations carried out by the research team to produce outputs	Goods and services required to carry out activities	-	Outcomes and critical conditions or decisions beyond the project's control necessary for obtaining the required outputs

Table 1 - Logical Framework Matrix Structure

# 2.1.2. Advantages of Using LFA:

- Ensures that fundamental questions are answered and weaknesses are identified, providing decision-makers with better and relevant information.
- Connects key elements of the project in a systematic and logical analysis.
- Improves planning by identifying the linkages between project elements and external factors.
- Provides a better foundation for systematic monitoring and impact analysis of projects.
- Facilitates shared understanding and better communication among decision-makers, managers, and other stakeholders involved in the project.
- Enables project management and implementation to benefit from standardized methods of data collection and analysis.
- Using LFA and regular monitoring can provide confidence in the continuity of the approach even during staff turnover.
- Increased familiarity with the LFA concept among institutions will facilitate communication between governments and voluntary organizations.

 Widely adopting the LFA model makes conducting partial and comparative studies much easier.

# 2.1.3. Limitations of Using LFA:

- Overemphasis on specific objectives and predefined external factors may lead to rigidity in project implementation. Avoiding this issue can be achieved through regular project reviews that allow for reevaluation and adaptation of key project elements.
- LFA is a broad analytical tool with a general policy focus and may not provide detailed insights into specific aspects such as income distribution, job opportunities, resource access, local participation, cost-effectiveness of strategies, technology, or its environmental impacts.
- Therefore, LFA is just one of several tools used in project preparation, implementation, and evaluation and does not replace target group analysis, cost-benefit analysis, time planning, final impact analysis, and others.
- The full benefits of utilizing LFA can only be realized through systematic training for all involved parties and ongoing methodological development.

# 2.2. Participatory Rural Appraisal (PRA) in Development Planning

Development projects often show short-term successes during the project period but frequently struggle to maintain long-term sustainability. One of the significant shortcomings of development projects is the lack of genuine ownership and responsibility among local stakeholders, who do not feel accountable for maintaining the infrastructure or organization developed through the project (Asadi et al., 2015). Therefore, a vital aspect of development planning is identifying local priorities and encouraging stakeholder involvement. A tool developed to ensure stakeholder participation in planning, monitoring, and evaluation is the Participatory Rural Appraisal (PRA) method.

PRA, or participatory rural assessment, is a technical technique for gathering information based on community knowledge and their needs for use in community development programs and literacy. Its primary objective is to empower people to articulate and analyze realities and living conditions, design intended actions, and evaluate program results. In other words, PRA aims to enable local communities to play a key role in all aspects of development projects they participate in. Essentially, PRA is a method of thinking and behavior that requires a shift in roles. Instead of having an external expert come in to tell people how to solve problems and improve their living conditions, individuals from outside come to join local members in collectively analyzing, implementing, and acting on their own activities for improved living conditions. Chambers (1997) emphasizes that PRA's roots lie in participatory action, agro-ecological analysis, participatory observation, applied anthropology, agricultural systems research, and rapid rural appraisal.

Chambers further argues that rural participatory appraisal does much more than the conventional practices of investigation, introduction, presentation, analysis, planning, and publication. By accepting this definition, rural participatory appraisal is not limited to assessment and planning but is also applied in execution, monitoring, and evaluation (Narayanasamy, 2009). In this regard, Maulani et al. (2020) emphasize the equal status of the rural participatory assessment group and the local community, defining how the research group and the local community interact based on Figure 1.

It is worth noting that the method of rural participatory assessment can be seen as a growing family of approaches and methods used to enable people to analyze and share their own knowledge of life and local conditions effectively. While the term "rural" is used, the applicability of this method extends beyond rural areas.

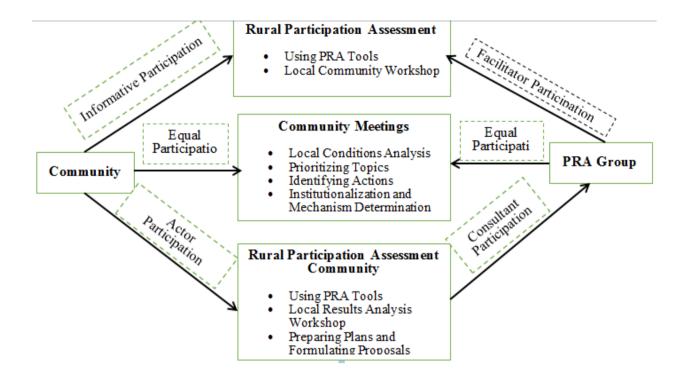


Figure 1 - The Interaction Process between Rural Participation Assessment Group and Local Community (Maulani et al., 2020)

#### 2.2.1. Principles of the Participatory Rural Appraisal (PRA) Method

The Participatory Rural Appraisal (PRA) method is guided by principles that set it apart from other approaches, giving it a unique advantage (Maulani et al., 2020). These principles include:

- Considering the community as a subject, not an object: PRA views the community as an active participant in the process, not merely as an object of study or intervention.
- Facilitators, not experts: Those involved in PRA are facilitators who assist the community, rather than external experts who dictate solutions.
- Researchers as part of the community: PRA researchers become integrated members of the community, rather than remaining outsiders.
- Focus on the primary issue: PRA concentrates on addressing the main issue or problem at hand.
- Empowerment perspective: PRA empowers the community to define social indicators, improve its capacity through processes of situation identification, decision-making, policy formulation, evaluation, and adaptation of activities.
- Inclusive participation: All community members are encouraged to participate, and respect for diversity of opinions and perspectives is essential.
- Triangulation and iterative learning: Information is expanded and deepened through triangulation and repeated testing and retesting.
- Optimization of results: PRA seeks to optimize the outcomes of its processes.
- Flexibility in the participation process: The process allows for flexibility and adaptation.

By adhering to these principles, PRA ensures a participatory and community-centered approach that can be highly effective in various development contexts.

# 2.2.2. Advantages of the Participatory Rural Appraisal (PRA) Method

The Participatory Rural Appraisal (PRA) method offers several advantages, making it a valuable approach in development contexts:

- Group interview methods: PRA uses group interview techniques to facilitate the exchange, control, and continuous review of information. This harnesses collective memory and knowledge.
- Attention to marginalized and minority groups: PRA pays heed to peripheral and minority groups, ensuring their voices and concerns are considered.
- Non-prejudicial researcher intervention: PRA researchers refrain from imposing preconceived notions at all stages of the research process.
- Empowerment of rural communities: PRA empowers rural communities to identify, analyze, articulate, and learn from their issues.
- Freedom for communities to choose formats: Communities have the freedom to choose the formats and methods of engagement that suit them best.
- Enhanced participation spirit: PRA fosters a spirit of participation, encouraging active involvement in decision-making.
- Short time gap between data collection and analysis: PRA minimizes the time lag between data gathering and data analysis.
- Close researcher-community relationship: PRA emphasizes a close, friendly relationship between researchers and the community under study.
- Cost-effective research: PRA can be a cost-effective research method.
- Collective agreement and commitment: PRA facilitates collective agreement and commitment to discussed topics.

Therefore, the participatory rural appraisal (PRA) method is an approach that enables the local community to collectively identify their issues and problems and engage in the development of plans and policies. This empowers them to actively participate in the planning, monitoring, and evaluation of policies that impact their lives (Kanyamuna & Zulu, 2022). In fact, by involving the local community and stakeholders, the intended actions align more closely with the community's needs, and the level of sensitivity and community engagement in the implementation of the program increases (Heidari & Shakiba, 2021). This community involvement leads to an increase in awareness and capacity among the community members in development activities (Heidari & Shakiba, 2021).

2.2.3. Participatory Rural Appraisal (PRA) methods

Participatory Rural Appraisal (PRA) encompasses the collective evaluation of participants and beneficiaries in a program or project. It is a people-centered process because it transforms project beneficiaries into key analysts and active contributors in the evaluation process. PRA is the process of gathering information about a village, which is then analyzed through the active involvement of the village residents themselves. In this method, instead of conducting individual interviews with multiple villagers, the focus is on examining and conducting interviews with specific groups. In this approach, it is crucial that all the methods and models mentioned are carried out by the villagers themselves, and guiding and facilitating their involvement in this process is an essential aspect of PRA (Chambers, 2003).

 Map: Perhaps the best approach to initiate the valuation process is to include social facilities, family structures, and personal assets and debts. The map can be drawn, for example, on the ground.

- Models: If we add materials such as stones and wood to the drawn map, it is called a model.
- Creating a Social Profile: One way to create it is through semi-open questions. In this method, a set of information is obtained from individuals. In the semi-open questionnaire method, questions are not predetermined, and each question and answer can lead to the next question.
- Group Discussion Sessions: Groups should consist of individuals who are willing to express their opinions, and for better efficiency, it is suitable for at least two experts to be present in these groups. One is to initiate the discussion and guide it, and the other is to write and record the content.
- Ranking Preferences: This factor can itself act as an icebreaker in starting the interview and encourage individuals to engage in discussion. Preferences include the village's problems, obstacles or desires, and the needs of the villagers. In fact, people prefer to talk about issues they are interested in.

Furthermore, there is currently a wide variety of tools and techniques in participatory rural appraisal, which can be categorized into audio-visual tools, quantitative tools, and tools derived from the tradition of "ethnography." Below are some of the tools and techniques used in participatory rural appraisal (Maghsoudi and Rahimi, 2017).

### A) Visual Analysis Methods:

- Participatory mapping and modeling
- Analysis of aerial images
- Walkthroughs and group walks
- Seasonal calendars
- Drawing Venn diagrams and network diagrams
- Matrix scoring and prioritization ranking
- Pie charts

#### B) Sampling Interview Methods:

- Semi-structured interviews
- Direct observation
- Key informants
- Oral histories
- Key informant maps

#### C) Group and Team Dynamics Methods:

- Team agreements
- Team review sessions
- Interviews with facilitators
- Rapid reporting

#### 2.2.4. Roles of Facilitators and Researchers in the PRA Method

The most important role of a researcher is facilitation. In general, the primary roles of a researcher

#### include:

- In the initial stage, the researcher should explain the objectives and concepts of the PRA method to the target community and clarify its benefits, limitations, potential outcomes, and their applications.
- During the preparation and scheduling of the program, the facilitator should reach an agreement with local groups regarding the time and location of the planned activities.
- When commencing the program, the facilitator should provide a brief introductory overview and guide the participating members into PRA.
- Throughout the implementation of the program, the facilitator should maintain a respectful attitude, preserve their interest in participation and learning, and avoid imposing personal opinions on the members.

In summary, the qualities of a good facilitator include flexibility, asking questions at the right time, active listening, encouraging participation, and appropriately emphasizing important issues.

#### 3. Conclusion

Evaluating and planning projects without considering an appropriate approach can lead to mistakes and deviations in the planning process. Therefore, the present research aimed to conduct a comparative description of two methods: LFA (Logical Framework Analysis) and PRA (Participatory Rural Appraisal) to identify the strengths and weaknesses of both methods, allowing planners to choose the best approach based on their needs. It is worth mentioning that this research is descriptive in nature, and after studying numerous articles, data collection was conducted. After reviewing the information, the following results were obtained.

The research results showed that, in general, both LFA (Logical Framework Analysis) and PRA (Participatory Rural Appraisal) approaches have their own strengths and weaknesses, and there isn't a significant difference in nature between the two methods. In fact, the examined methods empower the weakest groups to express their needs and decide on their priorities for the project. The outcome of this process often reveals differences in priorities among different groups, and decisions must be made regarding whose interests are of the utmost importance in the decision-making process. Regardless of which planning system is used, there will always be power struggles. However, what these methods aim to ensure is that the weakest groups are capable of expressing their needs. Additionally, these methods have the ability to work quickly and at relatively low costs while still providing significant accuracy in the relevant field. The findings of the present research are consistent with the findings of various researchers such as Maghsoudi and Rahimi (2017), Maulani et al. (2020), and Chakraborty et al. (2023).

However, with a closer look at the research findings, it can be concluded that although these two methods share similarities in terms of their nature, there are fundamental and noticeable differences between them (Table 2). The main distinction between LFA and PRA is that LFA predicts external factors that can influence the success or failure of projects in advance. Additionally, all stakeholders impacting the project play a key role in decision-making in LFA, while in PRA, only local stakeholders are involved. Therefore, by choosing a comprehensive decision-making tool over others, not only cost savings but also the prevention of resource and time wastage will be achieved.

Furthermore, based on the present research, the hypothesis that the performance of the two approaches, LFA and PRA, in project evaluation and planning is the same, is not supported. In other words, the LFA approach outperforms the PRA approach. Therefore, it can be stated that LFA addresses the shortcomings and limitations of PRA and is recommended as a suitable model for optimal decision-making for planners in evaluating the country's watershed areas in future research.

Furthermore, in order to improve project performance, some research proposals and effective planning suggestions are presented as follows:

- Using a combination of LFA and PRA methods in a comparative case study to determine efficiency.
- Organizing joint sessions among all stakeholders to reduce and resolve issues.
- Paying attention to the opinions and suggestions of all stakeholders.
- Implementing projects with the participation of all stakeholders.
- Providing a platform for capacity building and empowerment of stakeholders.
- Reviewing and strengthening the planning and decision-making system.

These recommendations aim to enhance project outcomes and ensure that all stakeholders are actively involved in the planning and implementation process.

Table 2 - Comparison of LFA and PRA Methods

LFA	PRA	
Participation of all stakeholders	Active participation of local people through observation	
Collective work and information sharing	Collective work and information sharing	
Consideration of all perspectives	Consideration of all perspectives	
Key decisions are made in an LFA workshop	Key decisions are made by local stakeholders	
Formal evaluation and informal evaluation	Informal evaluation	
Identification of local issues and strengthening decision-making by stakeholders and project staff	Identification of local issues and strengthening decision-making at the local level	
Tool for assisting the project in asking the right questions and structuring essential project elements	A crucial tool in enhancing participation and empowering local stakeholders	
Primarily used for project planning and utilizing various indicators	Flexibility and informality	
Used in the overall program planning process structure	Decisions made at the community level	

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**Conflict of Interest /Competing interests** (None)

**Availability of Data and Material** (Data are available when requested)

Consent to Publish (Author consent to publishing)

**Authors Contributions** (All co-authors contributed to the manuscript)

**Code availability** (Not applicable)

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