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**Addis Ababa University**

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**Towards Community Participation in Urban Road Infrastructure Development  
practices**

*A Thesis Submitted to the Graduate Programs Office of Ethiopia Institute of  
Architecture, Building Construction and City Development (EiABC) in Partial  
Fulfillment of the Requirement for the Award of Master's Degree in Urban  
Planning*

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**Addis Ababa**

**December, 2023**

## **DECLARATION**

I hereby declare that the thesis entitled “Towards Community Participation in Urban Road Infrastructure Development Practice: In the Case of Woreda6 of Nifas Silk Lafto Sub City, Addis Ababa” is my original work carried out by me with the guidance of my advisor Dr. Asfaw Mohamed, and has never been submitted to any other institution to award any degree or certificate.

**Researcher Name**

**Date**

**Signature**

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**Towards Community Participation in Urban Road Infrastructure Development  
practices**

**By: Girma Yibeltal**

**DECEMBER, 2023, ADDIS ABABA, ETHIOPIA**

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## **CERTIFICATE**

This is to certify that the thesis entitled "Towards Community Participation in Urban Road Infrastructure Development Practice: In the Case of Woreda 6 of Nifas-Silk-Lafto Sub-City, Addis Ababa," submitted to Ethiopian Institute of Architecture, Building Construction and City Development (EiABC) for the award of degree in Master of urban planning. Therefore I declare that no part of this thesis has been submitted to any other institution to award any degree or certificate.

Chair of urban and regional planning, Ethiopian Institute of Architecture, Building Construction and City Development (EiABC), Addis Ababa University

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## **ABSTRACT**

*Community participation is vital to any development. Community participation in urban road infrastructure development helps to mobilize resources and advance the ROW. However, community participation is affected by a lack of awareness, an absence of bottom-up decision-making, economic capacity, political will, etc. The objective of this study is to investigate community participation in urban road infrastructure development practice in woreda 6 of the N/S/L sub city, Addis Ababa. The study used 388 samples selected by purposive sampling techniques. The study used a mixed (qualitative and quantitative) research approach. In order to analyze and interpret the data; the study used descriptive and inferential statistics. Data were collected through questionnaire, key informant interviews, and desk review. A questionnaire and an interview were used to collect primary data, and a survey of the pertinent literature, including books, journals, reports, and other research-related papers, was employed to collect secondary data. Results showed that community participation in the development of roads is restricted and more than half of the community is unaware of what it is. Most of the participation is done to advance the implementation of ROW rather than use the community's ideas as input. The majority of the community was participating to secure the property rights affected by the development. Institutions that are organized to facilitate communities' participation have low achievement, and their activity is limited to volunteer services like security, small ditch building, and traffic control. The participation was not inclusive. Most decisions were made by the city administration. Their main contributions were financial, and it also insufficient. Absence of transparency, lack of awareness, lack of trust in institutions, lack of political will, insecure property rights of affected communities', the absence of strong community organizations, the economic capacity of the community, and the presence of top-down decision-making processes are challenges on the way to community participation in woreda 6 road developments. The researcher recommends woreda 6, N/S/L sub city and other stake holders including the city administration; increase institutional capacity, apply inclusiveness, empower communities, increase political commitment, create community awareness, apply a bottom-up decision-making process, will applied in order to enhance community engagement. Furthermore the study recommended proper compensation and relocation for affected community properties help the institution to build community trust and to confront the challenges of community participation in urban road infrastructure development.*

**Key Words:** *Community, Participation, Road Infrastructure, Development*

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## **LIST OF ACRONYMS & ABBREVIATIONS**

AACRA	Addis Ababa City Road Authority
CSA	Central Statistical Agency
CP	Community Participation
EF	Economical Factor
ERA	Ethiopia Road Authority
INF	Institutional Factor
N/S/L/S/C	Nifas Silk Lafto Sub City
PAS	Principal Arterial Street
PF	Personal Factor
PLF	Political Factor
SAS	Sub Arterial Street
SF	Social Factor
BRT	Bus Rapid Transit
UNCHS	United Nations Centre for Human Settlements (Habitat)
UN-HABITAT	United Nations Human Settlement Program

## **CHAPTER ONE: INTRODUCTION**

### **1.1. Background of the Study**

Community participation is very important for any successful development, including urban road infrastructure projects. Communities' participation can be held in planning, decision-making, and the implementation or evaluation stages. Communities have a right to contribute their thoughts and capacities. Since the early 1950s, community engagement has been acknowledged as a crucial element in urban development. Urban road infrastructure development is the most significant component in urban settings. It is a foundational element and a key determinant of city expansion. Good road infrastructure is essential for community socioeconomic development and the reduction of poverty because these factors all depend heavily on it (Africa Economic Commission, 2009). To get the intended urban road infrastructure development, community engagement is very important.

Communities have the power to improve the road system, transport accessibility, build culverts, gravel roads, and other infrastructure. Due to these realities, the government and policymakers are starting to understand the significance and potential contribution of communities, and attempts are being made to facilitate their involvement in the process of urban infrastructure development. Studies revealed community involvement in road infrastructure development is done informally and through campaigns. Community involvement was held to cover financing deficits. Most communities participated in the implementation phase of road development projects. Due to this, community engagement is low during the project identification, planning, monitoring, and assessment stages.

In Addis Ababa, in recent years, too much urban road infrastructure development has taken place. Residents were collaborative in neighborhood upgrading initiatives like the construction of cobblestone, local roads, open ditches, and culverts. Finance and materials were mobilized from residents. However, lack of transparency in decision-making, lack of tenure security, mismanagement of funds, unfair development of road infrastructure, weak institutional structures, a lack of resources, a lack of awareness and information, and poor coordination between local authorities and

communities are the main obstacles to community participation in the development of road infrastructure and create rifts between communities and local authorities, discontinue contributions, and reduce social trust.

In Nifa-Silk-Lafto Sub City, including the study area, major roads (PAS and SAS) and local roads like sub base, cobblestone road, culvert, drainage, and gravel road are constructed. In most urban road development projects, participation is required to clear out demolished properties along the roadside. Communities contribute finance, ideas, and labor force to the development of road projects, especially cobblestone and local developments. In woreda 6, major urban road infrastructure developments, community participation is held to convince people about the projected overall development process and the essentiality of community support to achieve the desired development goal. Apart from its importance, road infrastructure development practices in woreda 6 have displaced many communities from their original places, and they face problems related compensation and rehabilitation.

To effectively manage the links between the development of road infrastructure and community engagement, it is essential to design appropriate methods that result in purposeful actions. However, community participation was not reached at its expected level due to several reasons, like lack of stakeholder coordination, lack of political commitment, lack of finance to create awareness, low economic capacity, and the quality of the development activity.

Centered on the essentialities of community engagement and the existence of multi-road infrastructure development in woreda 6, the investigator became interested in conducting an investigation towards community participation in urban road infrastructure development practices in Woreda 6 of Nifas Silk Lafto Sub City, Addis Ababa.

## **1.2. Statement of the Problem**

The Addis Ababa city administration has made huge efforts to renew many roads and develop new ones in the city as well as its surrounding areas. As part of the city, in Nifas Silik Lafto sub city woreda 6, there are a number of urban road infrastructure development activities like gravel and cobble roads, culverts, drainage, sub-bases, local street lighting development, and major road construction. This urban road

infrastructure development requires consecutive community involvement in order to achieve the desired goal, and there are activities to involve the community in the development, especially on local roads, to mobilize resources.

Besides to its importance, urban road infrastructure developments affect community houses, fences, and their economic activities. This implies that, apart from its essentiality in woreda 6, road infrastructure development affects a number of woreda 6 communities, either directly or indirectly. To do this, implementing participatory urban road development is necessary. However, apart from the road infrastructure development, the affected community in woreda 6 suffers from governmental bureaucracy to secure their property rights. The participation is seasonal, and the participation is limited to major asphalt road developments. This is due to a lack of stakeholder coordination, a lack of political commitment, and a lack of finance to create awareness. Therefore, integrating urban road infrastructure development with community participation is very important.

Therefore, centered on the essentialities of community engagement and the existence of multi-road infrastructure development in woreda 6, the investigator became interested in conducting an investigation towards community participation in urban road infrastructure development practices in Woreda 6 of Nifas Silk Lafto Sub City, Addis Ababa.

### **1.3 Objectives of the Study**

#### ***1.3.1. General objective***

The general objective of the study is to investigate of community participation in urban road infrastructure development practice in Woreda 6 of Nifas Silk Lafto Sub City, Addis Ababa.

### ***1.3.2. Specific objective***

The specific objectives of the study are to:

1. Investigate the practice of community participation in urban road infrastructure development in woreda 6.
2. Examine the roles of community participation in urban road infrastructure development in woreda 6.
3. Examine the factors influencing community participation in urban road infrastructure development in woreda 6.
4. Identify possible strategies for enhance community participation in the urban road infrastructure development of woreda.

### **1.4. Research Questions**

The research attempted to present answers to the following queries in order to achieve the above objective:

1. What are the practices of community participation in urban road infrastructure development in woreda 6?
2. What are the roles of the community in the urban road infrastructure development in woreda 6?
3. What are the main factors influencing community participation in urban road infrastructure development in woreda 6?
4. What the possible strategies are for enhance community participation in the urban road infrastructure development of woreda 6?

### **1.5. Significance of the Study**

The study investigated community participation in the urban road infrastructure development practice of woreda 6, Nifas Silk Lafto Sub City. It describes the practice, role, factors affecting, and possible strategies of community participation in urban road infrastructure development practice. As a result, the study will help in the development of subsequent strategies for urban road infrastructure development. The study enables decision-makers to develop and improve operating strategies that basically aim at fostering community involvement in the development of urban road

infrastructure. Additionally, the research contributes to existing literature on the issues of community participation in the development of urban road infrastructure. Also, the study serves as a framework in terms of offering essential data to undertake additional research on community participation community participation in urban road infrastructure development practice.

### **1.6 Scopes of the Study**

The practice of community participation can be used in a variety of development programs, such as in road infrastructure, energy, and water management. It provides input for decisions and it is crucial to realizing objectives and enhancing the efficacy, proficiency, worth, and sustainability of projects. There is a geographical and thematic boundary for this study. As a result, the investigating of community participation in the development of urban road infrastructure practice was bounded in woreda 6 of Nifas Silik Lafto Sub-city. Regarding to the study's focus, the primary and secondary data collected from questionnaires distributed to communities, interviews with sub-city and woreda 6 team leaders and experts, road authority coordinators, and review of reports, books, journals, and articles. The study towards community participation in urban road infrastructure development was took place between January 2023 and December 2023.

### **1.7. Limitation of the Research**

Any study has limitations, and this one was not particularly unique. The researcher encountered a variety of difficulties like lack of willpower of the participants to fill out the questionnaire, absence of organized documents while collecting the data, which had an adverse impact on the research. However, the researcher tried to overcome these challenges by creating awareness among the respondents before giving them a questionnaire to fill out. Also, the researcher used existing report documents to solve problems related to lack of organized document.

## **1.8 Organization of the Document**

There are five chapters in the study. The first chapter comprises background of the research, statement of the problem, research objective, research questions, significance, scope, and limitations. Chapter two describes a review of related literature. The third chapter includes a description of the study area, research design and methodology, research method, data source, sample design and sample technique, instruments of data collection, methods of data analysis and presentation, and ethical consideration. Chapter four consist results and discussions and the last chapter contains conclusions and recommendations of the study.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1. Theoretical Literature Review

Arnstein(1969), states that participation has eight stages with unique characteristics. According to the theory, there were eight stages on the ladder, and each of them indicated the level of citizen participation and control over development. These include manipulation, therapy, informing, consultation, placation, partnership, partnership, delegated power and citizen control.

In manipulation, citizens participate by placing approval conditions on advisory committees, and power holders do not agree for the people to participate actively. Therapy is a non- participatory technique where authority owners try to educate or “cure” citizens of their ignorance on a particular issue. It is not providing actual opportunities. Informing is telling citizens of their rights, tasks, and opportunities. Consultation is engaging citizen’s opinions, like telling them to ensure their involvement. Placation indicates that citizens do not have enough power to make decisions beyond giving advice. In partnership power shared through compromising to share planning and decision-making responsibilities among the residents and power holders. In delegating power, citizens achieving principal executive expert over a specific strategy or package in the form of agents. In citizen control, members or occupants can fully manage a platform or an organization. Participatory techniques are adaptable, process-focused approaches. It is now well acknowledged that participation is a key element of effective development projects. However, this idea is given a lot of various interpretations (Arnstein, 1969).

The seven distinguished stages of participating in development initiatives, from "passive participation," in which people are only informed of what would happen to them, to "self-mobilization," in which local people act as active change agents without the assistance of outside groups(Pretty, 1995).

The participatory methods outlined below are meant to encourage greater levels of involvement in which local residents keep substantial influence on the development process. The adoption of such strategies has typically been driven by development practitioners and organizations that have grown concerned with the fact that a large portion of development dialogue and decision-making is crafted by and restricted to

specialists. Their goal is to make it easier for local residents to participate in these discussions and, in some situations, to increase community control over the processes for allocating resources and making plans.

Two elements have aided in the development of participatory methods in urban settings. First off, the requirement to quickly and accurately obtain information about the people participating in or impacted by a project was a major factor in their early development. One of these methods' many benefits is that it provides better, more complete information more quickly and inexpensively than traditional research methods. Second, it has been demonstrated that gathering information is one way for locals to fully understand the significance of their own expertise and to grow more confident in their ability to play a significant role in development. In order to enable low-income communities to participate more actively in their own development, methods have thus become a crucial component of development plans. We can infer from the aforementioned two theories that the organization should aim to employ more participatory methods and establish a more suitable institutional environment in order to raise their degree of involvement. The body ought to keep a high degree of participation in development projects until the project is finished.

### ***2.1.1. The concept of community, participation and road infrastructure***

A community is a group of people or families who live in the same area, share similar interests or social networks or relationships at the local level, have similar development aspirations, share a common managerial behavior and norms, have a common communication system, share some resources (such as water, schools, etc.) and are sociologically and psychologically connected (Botes & van, 2000). Community is the people with common interests living in a particular area or it is a group of people with a common characteristic or interest living together within a larger society (*Merriam-Webster.com*).

Participation entails taking part in the creation, execution, and evaluation of projects as well as sharing the rewards. The intended beneficiaries actively participate in the process, influencing program outcomes and advancing personally (Oakley, 1991). According to the United Nations (1991), community participation is the process of providing opportunities for all people of a community to actively

participate in, influence, and fairly share in the benefits of development. There isn't really a single blueprint for community engagement because it's a complicated process. As a result, the dynamics and demography of each area differ. This opinion is held while acknowledging that effective development cannot take place if the people who will benefit from it are not actively involved in the process's design and execution.

Participation is described as "a process through which stakeholders' influence and share control over development initiatives and the decisions and resources that affect them" ( World Bank, 1994). The World Bank's Learning Group on Participatory Development defined participation as a process by which stakeholders have an impact on and share power over development efforts, decisions, and resources that have an impact on them. In the context of development, participation is a procedure that allows all members of a community or organization to be involved in and have a say in decisions on development initiatives that will have an impact on them. This indicates that all phases of the development process will be marked by the active involvement of community or organization members and those development initiatives will answer the needs of the community or group on which members have decided to concentrate.

When the community undertakes a large portion of the responsibility, community engagement is more successful than when higher-level public agencies try to meter consumer preferences through surveys or meetings. Projects must contain unique elements to address community engagement if they are to be successful. Inhabitants can be recruited to help in all phases of designing, implementing, maintaining, supervising, and evaluating new developments. The creation of neighborhood committees and governance arrangements that may effectively regulate local participation needs special consideration.

Empowerment, capacity building for beneficiaries, enhancing project effectiveness, boosting project efficiency, and project cost sharing are the goals of community participation as an active process. The framework proposes four levels of participation intensity; exchanging information, consulting, making decisions, and taking initiative. Various strategies were created as a result of these experiences, and they have shown to be more effective and have received widespread support from

every important stakeholder in the development sector (Abbott, 1991). Community participation is giving people greater opportunity to participate successfully in their communities entails empowering them to use their own skills to manage resources, take charge of activities that have an impact on their lives, and act as social actors rather than passive participants (Sproule, 1996).

Infrastructure is the collection of facilities and systems that provides the services and facilities required for the operation of a country, city, or other areas of economy, and businesses. Infrastructure is made up of both public and private physical structures, including telecommunications, Internet connectivity, and broadband access as well as roads, railways, bridges, tunnels, water supply, sewage, and electrical grids. The term "road infrastructure" refers to all physical assets included inside the road reserve, including not only the actual road but also any accompanying furnishings, earthworks, drainage, and structures (such as culverts, bridges, and buildings). The management functions, typical system components, component selection, and general system implementation procedures can all be utilized to define the system used to manage road infrastructure (Roberts & Pretty, 2004).

### ***2.1.2 Types of Participation***

There is seven type of participation; passive participation, participation in information giving, participation through consultation, participation for material incentives, functional participation, interactive engagement, and self-mobilization (Pimbert & Pretty, 1994).

Passive participation is informed of upcoming events or recent events. Only outside professionals are the rightful owners of the provided information. Participation in information giving indicates respondents to surveys used by extractive researchers to submit queries. However, the research can be influenced by humans. In participation through consultation, people are consulted and external actors pay attention to their thoughts, typically on issues and solutions that are externally determined. The decision-making process is not truly one in which people participate. In participation for material incentives, people participate by providing resources, for example labor in return for food cash or other material incentive. In functional participation, after significant project decisions are made, groups are typically created to accomplish predetermined goals. They are initially reliant on outsiders but have the potential to

develop self-reliance, enabling engagement as an organization. Interactive engagement is joint analysis, joint action, and enabling and equipping individuals so they have a stake in preserving practices or structures. In self-mobilization, people are already in a position of power; they make decisions without the assistance of outside institutions. Engagement as empowering may or may not challenge current inequitable allocations of wealth and power (Pimbert & Prett, 1994).

### ***2.1.3 Value and principles of community participation***

People have the right to have a say in the decisions that affect their lives. The advantages of participation must be distributed fairly, and participation should foster trust through cooperative problem-solving and discussion methods.

The following guidelines help to create a successful community plan. Transparent, honest, and clear about the purpose; be clear about the boundaries of what can be changed and what cannot; be clear about who can participate and how; and be clear about what happens as a result. Lastly, be sure to allocate enough resources to the project in order to effectively manage it.

Participants who are appropriate, representative, or inclusive, with historically excluded groups receiving additional assistance and encouragement for their participation. Outreach must be sincere and accessible, preventing the exclusion of any participant due to physical access restrictions. Genuine and open outreach is required, as is accessible so that no participant is turned away due to physical access issues to meeting locations, timing, language, and suitable support (such as child care). CP needs to answer to everyone involved. This calls for thorough documentation and reporting of the procedures and results, as well as learning and development (World press, 2011).

Participatory methods ought to encourage learning and development among all parties engaged. Along with continual civic education for successful involvement by citizens and public servants, the CP must have enough power to accomplish the set goals. The current power-sharing arrangements may need to be altered in order to achieve this (World press, 2011).

#### ***2.1.4 Implications of community participation***

Participation in the community has two major implications; those who see it as a means and those who see it as an end in itself. The question of whether community engagement should be an end in itself or a means has troubled both development personnel and theorists (Kumar, 2002). Participation in the community is employed to accomplish the objectives of the program. Participation in this instance is a method for enhancing program outcomes (Oakley, 1991).

Endpoint of community participation is self-mobilization, in which the local population is in complete command (Kumar, 2002). There is little question that having power, or the ability to influence decisions that have an impact on one's life, is the goal of meaningful participation. More individuals can benefit, application is facilitated, and the result better meets the needs of the target groups if people contribute their creativity, skills, and other resources (Moser, 1989). The second approach frequently holds that development for the benefit of those who are poor cannot happen until the poor directly control the process through the praxis of participation. The active participation of residents of a specific community is the cornerstone of initiatives for community-based development.

#### ***2.1.5 Significance of community participation***

Since it is well acknowledged that community participation is one of the essential components of an empowered community. Community development projects collect more resources, produce more outcomes, and progress in a more comprehensive and ultimately advantageous manner. Therefore, participation in the community is essential for community success (Norman, 2000). Furthermore, participation may result in stronger neighborhood organizations, a sense of pride in oneself, and the start of new activities, according to some research (Oakley, 1991). As people get involved when they have a sense of ownership over the project and that it fits their requirements, it is considered that their participation insures success. In order to assure the sustainability of the facilities, they are able to oversee development (Tacconi & Tisdell, 1992).

El-Sanady (2002), emphasizes the significance of community participation. The strategy helps the project be sustainable as communities themselves learn how to integrate

and correct changes brought about by the project's creation. The Partnership or participation allows maintain the interests of the parties involved; it improves people's self-respect and self-reliance, allowing them to obtain and complete the project on their own; and communities grows into aware of the project's execution because they have a wealth of expertise and information. They are mindful of the nature of the new projects they finish to meet their local demands. They can quickly increase the growth of the new idea by spreading the new knowledge they learn to other communities.

Participation fosters an awareness of communal ownership of the tools used in the project and even of the project itself. For instance, they will use their own resources, such as dispensary facilities, water pumps, and school buildings, to safeguard and maintain the initiatives. Participating in community affairs entails involving people and groups in choices that have an impact on their lives. It is crucial for improves social cohesion because communities see the value in collaborating with one another and with government agencies; it increases effectiveness because communities bring awareness, knowledge, and experience crucial to the regeneration process; and it improves democracy and service accountability. It enables policy to be relevant to local communities; it adds economic value both through the mobilization of volunteer contributions to deliver regeneration and through skill development, which improves the opportunities for employment and an increase in community wealth; It encourages sustainability since communities have a sense of ownership over their neighborhoods and can gain the skills and confidence to continue developments when the "extra" resources have run out (Danny et al., 2004).

### ***2.1.6 Factors influencing community participation***

Since a process of participation cannot take place in an empty space, it is susceptible to a number of factors that can either hinder or enhance its efficacy (Oakley, 1991). Participation in the community is influenced by a wide range of determinants that can be categorized in various ways. The following are some factors that discourage communities from engaging in development. In local-level development projects, structural and political influence is a typical occurrence. Perhaps the community may have an urgent need for a dispensary, but politicians may chose to ignore those needs in favor of their own agendas and political ambitions and divert funding to other

initiatives like building schools and roads. A country's political climate plays a crucial role in the effectiveness of a participative process. Genuine participation is challenging in a society when the dominant ideology does not support freedom of expression and openness but rather controls how things are done. The other aspect is the ruling party's political meddling in local projects and programs in order to control the intervention course for its own political gain (Oakley, 1991).

It is necessary to keep in mind that decentralization of decision-making regarding development and finance is a key element in enabling true stakeholder participation. Decentralization must be supported by local government institutional frameworks that promote accountability, openness, and participation. Realizing meaningful local-level participation requires consideration of political concerns. The political commitment and will of public servants at all levels of government is the second most crucial structural aspect (Van Dijk, 2006). It is crucial to establish enabling regulatory frameworks at the national, regional, and local levels that encourage and reward participatory decision-making by urban stakeholders because the mere existence of legal frameworks does not ensure genuine participation (Pieterse, 2000).

The urban management approach states that the main goal of local governments is to encourage stakeholder participation in decision-making and general urban development (Van Dijk, 2008). It is crucial to remember that not all stakeholders have an equal voice; some have greater ability to be heard than others. The local government must be able to stop these groups from dominating the community. Only then can the silent majority's voices be heard (Jenkins et al., 2002).

Another important element that has a significant impact on participation at the local government level is the mindset of planners and officials regarding the contributions of other stakeholders. Planners, experts, and representatives of local governments frequently consider the suggestions made by communities and activists to be unimportant and unethical. Consequently, the level of engagement is yet another crucial factor (Jenkins et al., 2002). Another element that influences participation is the drive of governments or agencies to involve stakeholders in decision-making.

To avoid misinterpretation, incorrect communication, and misconceptions, local government officials and planners must ensure that their concerns and proposals are

made clear to all stakeholders and must also use language that is understandable by all stakeholders (Glicken, 2000). Almost all of the time, councilors are in charge of deciding which initiatives to launch under their purviews. Therefore, it appears that some locally elected leaders choose projects with the aim of achieving personal profits rather than based on community demand. To accomplish this, they appointed close partners to participate in the project execution process, keeping the initial beneficiaries in the loop. Projects are carried out to help the local population develop. Therefore, residents should be involved in the selection, planning, and implementation of projects. The right of project beneficiaries to be informed about project-related information is violated by the fact that local communities rarely receive information about development projects, which makes it difficult for them to participate in such projects (Oakley, 1995).

Making the selection of projects, execution, and evaluate processes visible is a good strategy to boost community involvement since it may alter the power dynamics between people and development organizations as well as among local concerns. Simply allocating funding to committees is insufficient to establish community control because communities must be safeguarded against the abuses of committees hurriedly put together to represent them. This indicates that when participation processes are carried out in a transparent manner, it fosters trust and raises the degree of community involvement in development projects.

The extent to which residents are dependent on the government is the key factor influencing the quality of involvement at the community stage. Citizens are used the decisions and initiatives of their leaders in many third-world nations. Effective leadership that gets support by the community and is committed to the organization's mission is essential. One of the things that prevent communities from actively participating in a participatory process is the lack of these leadership and community organization skills (Oakley, 1991). The availability of information and the level of education in the community also contribute to the public's continued reliance on decision-making. Numerous studies have demonstrated that planning systems inherently favor the educated and knowledgeable (Jenkins et al., 2002). It is crucial to remember that these emotions are a result of the perception that the public's

opinions were not taken into account throughout the planning process (Oakley, 1991).

The majority of metropolitan regions are made up of diverse populations in terms of language, occupation, income, gender, age, politics, and several other characteristics. Due to this diversity, many interests and growth visions will emerge, some of which may compete with one another and some of which may be pursued at the detriment of others. The selective engagement of the wealthy, strong, or articulate individuals against the weaker segment of the community will make this situation worse. Most of the time, governments and development organizations work with local officials or representatives, who frequently don't accurately represent the needs of the most vulnerable and marginalized groups of the population, such as women, the poor, racial and ethnic minorities, etc. (Botes & van, 2000). This will have an impact on how well the various groups are represented, which will ultimately decrease how well the process takes into account the demands of all parties concerned. Consequently, in order to accomplish genuine development, organizations that can organize the community and responsible stakeholders are required.

#### ***2.1.7. Strategies used to enhance community participation***

Equal partnership, social justice and self-reliance are the goals in community participation requiring that the following preconditions have been met for different forms of community participation to be sustainable (Chitambo et al., 2002). Political commitment and involvement from the government, development of self-management capabilities of local communities and the socio-economic situation in the country must be conducive to development (the development of self-management capabilities of local communities should be taken as essential), and finally the socioeconomic situations in the country should be conducive to development.

Policies and programs designed to establish forums for participation of local associations and organizations in decision-making processes provide new avenues for civil society to influence public policy and expose public policy to greater scrutiny. This makes the relationship between participatory development and openness in decision-making, local group empowerment, and governmental accountability very apparent (Mitlin & Thompson, 1995).

They consist of a variety of activities intended to:

- Improve understanding and awareness of the important players and organizations operating locally.
- Boost the amount and quality of information available on regional circumstances.
- Determine workable ideas for local development
- Collect resources, both internal and external, for these choices.
- Empower locals to identify difficulties, establish priorities, and take initiative.
- Boost local groups' capacities and confidence.
- Provide and encourage conflict resolution procedures in your community.

Through enhancing the local decision-making process, these techniques have led to the following outcomes for the local population. They create a greater sense of respect for themselves and an understanding of their own skills and knowledge, having the ability to create and implement plans to better their circumstances, responding to and resolving internal problems, and negotiating on an equal footing with the government and other agencies.

Participatory strategy must consider the role of many stakeholders at the community level (households, community-based organization leaders, and in particular women), at the intermediary level (non-governmental organizations and special purpose government agencies), in the private sector (formal and informal enterprises), and in government (technical agencies and local government authorities). In between various forms of involvement and collaboration, four main strategic approaches are identified to foster partnership and participation (World Bank, 1996).

1. Community based support strategies
2. Area based involvement strategy
3. Functionally based collaboration strategies
4. Process based decentralization strategies

At the level of implementation, the relatively small projects which were started in response to the community's needs, show higher levels of participation and more consent modes of decision making. However, the large projects with extensive service

delivery systems which lack client-centered planning, have little to do with community participation. In the latter, there is little expectation of participation by anyone. Many believe that in today's changing economic and political scenario, the responsibilities of organizing development programs may shift from the governments to the communities, however much one may view this shift as an abdication of responsibility on the part of the state.

Hence many projects which are planned according to western attitudes, fail when they are implemented in developing countries. Unlike the European or North American states, in developing countries one has to include a strategic plan to enhance the community's 'participation', during the project planning stage. Like any other strategic plan, enhancement of community participation also requires a clear understanding of the baseline and the expected target of achievement after a certain period of time. Because of the lack of clarity in the concepts of participation, most people find it difficult to define the levels of achievement as they progress with the project. Development programs are more likely to succeed if a well-planned strategy to enhance participation is also incorporated into the programmed planning (Thomas et al., 2023).

### ***2.1.8 Community participation in development***

Development without Participating is not feasible, and vice versa. This is the fundamental reason why a single-community ghetto society participates but does not develop, while occasionally the reverse may happen. A proper strategy that includes both participation and development should be demonstrated for the improvement of those societies that make up the key efforts of any city (Caharles, 1995). The self-help, democratic, and local leadership components of the community development method are highlighted in the process of community rehabilitation. The communities or participants involved in the work are typically active in community development efforts (Smith, 1998). In fact, community development has been characterized as a social process that results from citizen engagement. One of the main goals of community development is to foster community participation across all levels.

### ***2.1.9 Participatory methods for urban development***

Every urban development project has an impact on a broader community that lives and works nearby, frequently travels through or visits the area, as well as people who invest in or occupy buildings in the city. So it is everyone's right to be involved in creating projects so that everyone benefits equally and there are no negative effects on anyone, including local companies and citizens. Although disadvantaged groups are the ones most negatively impacted by unplanned cities, much less focus has been placed on include them in urban development in order to guarantee fair results. In this context, governments urgently need to implement and uphold procedures that enable individuals, notably exposed communities, to take part in development planning and policymaking (Devindi et al., 2021).

Current community engagement practices are primarily in the pre-design and briefing stages of the urban development processes. Local communities should participate as major stakeholders because they have access to an extensive amount of understanding and assets from various sectors that are necessary to manage complex urban concerns and adapt to uncertainties in urban development. Communities are reluctant to take part in government-led initiatives because the general public is cynical and mistrusts local authority procedures (Devindi et al., 2021). This is made worse by a number of additional factors, including the low infrastructure and planning costs needed for community engagement workouts the rigidly enforced top-down procedures, the absence of a participatory culture among users, and their inadequate familiarity with and comprehension of participatory processes.

Urban planners should grasp the available participation methodologies and the genuine goal of including the public along the lifecycle of an urban development project in order to achieve inclusiveness in urban planning. In order to effectively involve local communities in all stages of urban development, from pre-design analysis (conceptual design) to post-development, practitioners must strategically choose participatory methods (Devindi et al., 2021).

### ***2.1.10 Links of community participation with the urban development process***

To increase the public and private sectors' understanding of public participation, academic scholars from a variety of fields have created many models for community

involvement. To increase the public and private sectors' understanding of public participation, academic scholars from a variety of fields have created many models for engagement with the community. Eight steps make up the ladder, which is divided into three levels of public participation (Arnstein, 1969). The first two steps, manipulation and therapy, stand in for non-participation or having no power. The next three steps, information, consultation, and placation, represent tokenism. The final three steps; partnership, delegated power, and citizen control, stand in for having power as a citizen.

Later, Glass established five stages of public participation as goals to be met in effective community engagement initiatives. These are information sharing, education, bolstering of support, and supplementary decision-making, and representational input. Over time, academics have changed it, but it is still the most current and reliable model for public participation. Five degrees of citizen participation are outlined in this framework of inform, consult, involve, collaborate and empower, or citizen-led decision-making. There is a reason for each of these involvement levels. It is never advised to execute all of these levels of participation in a single development project since each one plays a specific function in community engagement that must be carefully selected based on the demands of the project and the setting. Different participatory models can be identified depending on the community groups and representatives participating in the stages of planning. As a result, provides a hierarchy of participation levels, especially for urban mobility planning, spanning from information dissemination to engagement and actual decision-making is provided (Sturm, 2013).

### ***2.1.11 Understanding of urban infrastructure development***

Infrastructure projects are crucial for maintaining national security and integrating into the global economy because they provide externalities, boost economic growth, make it easier for economic variables to change, improve quality of life, and are non-rival in terms of consumption. In order to deliver public services, it refers to the hard component of all urban physical structure systems that are mostly built underground (such as water mains), on the ground (such as highways), or above the ground (such as telephone and electric lines) (Arnstein, 1969).

The hierarchy of infrastructure that is delivered or managed at each level—macro level and micro/ local level—is indicated by the infrastructure level. Integrated infrastructure refers to a situation in which various infrastructure interventions are planned and put into action in a way that is balanced both with respect to one another and with respect to the urban functions they are intended to serve. Additionally, urban infrastructure development offers a nation's socioeconomic development the essential skeleton support it needs (Baird, 2007-2008).

## **2.2 Empirical Literature Review**

### ***2.2.1 Community participation in urban road infrastructure development***

Community participation is vital for urban road infrastructure development. When community members actively engage in decision-making processes improve the planning and execution of road projects, and it leads to more inclusive and sustainable development outcomes. Reliable transportation systems are crucial to a nation's prosperity, but it is frequently inevitable that putting these projects into action will have immediate adverse effects on some members of the community or organizations. Road projects in particular travel a distance and may go through defined communities; urban road redevelopment projects may result in acquiring land where there are already well-known residential or commercial districts or even urban open public areas. Such urban road projects may change the character of living localities, impair ways of life, and have a negative impact on the environment. Public protests against the improvement of urban highways are frequent as a result of these uncertainties (Vanita & Shalin,2017).

Public input and participation by the community support is taking off these uncertainties, while also assisting the project supporters in a number of ways, including: acquiring community knowledge to enhance the quality of project route planning and design; knowing local features in the design of the project route and boosting social support for it; fostering cooperation and trust between the project's proponents and the affected communities; and identifying potential contention points (Vanita & Shalin, 2017). This acknowledges that local values and needs will be given priority and that the public has real understanding of its own area. Given that highways are linearly aligned, several community organizations and individuals—

including private houses and business establishments—are impacted when urban roads are redeveloped.

Roadside merchants and disadvantaged and underprivileged urban populations may also be specifically affected in the Indian context. NGOs, labor unions, community leaders, local government, and political leadership are some of the parties that could affect these groups' decisions. It has been noted that in India, the opposition of locals to leave the proposed project site, unequal compensation and land acquisition agreements, culturally insensitive operational practices, and disputes between and within communities over the distribution of the project's benefits and impacts all impede project progress (Vanita & Shalin, 2017).

Infrastructure development is crucial to achieving the goals of development policies in developing countries, such as viable development, reasonable income distribution, and environmental protection. Thus, from this definition, it is clear that infrastructure development includes many activities and has several benefits for society. But to get the intended benefit from infrastructure, we should use it effectively and efficiently. The willingness of the community and the government to embrace specific duties and tasks is referred to as community participation (Byoungki, 2006). Additionally, it implies that the importance of each group's contribution is recognized, valued, and utilized. Participation cannot be meaningfully achieved through only symbolic action or promotion (Schübeler, 1996). Participating in projects for development is definitely not a novel idea.

Since the early 1950s, community engagement has been acknowledged as a crucial element in urban development. Users of urban projects have traditionally been viewed largely as service consumers, and as a result, their contribution to the creation of supply networks has received less attention. Benefits include improved project targeting to people's real needs through their participation in the planning phase, in addition to cost reduction and resource mobilization. Additionally, engagement increases the sense of ownership that the user community has over the facilities, resulting in greater upkeep and more stable operation (Moser, 1989).

Experts have recommended the following methodology for public consultations conducted with the goal of fair and participatory projects. The characteristics and

information about the road projects should be presented to the local authorities and participants in order to create a climate of trust, the information gained from the project and the advantages that it brings should be presented in a didactic manner, so that any listener can understand it, the preliminary design proposals of the programs for anticipation and alleviation of socio-environmental damage should be presented and accordingly participation of the community is endorsed in the implementation and evaluation of the plan, as well in their revision. Alternative project designs and alignments should be investigated, where possible, based on the information from public discussions in order to reduce the need to relocate people the suggestions, contributions, and decisions made by the communities during discussions should also be documented and properly legalized (Vanita & Shalin, 2017).

The historical strategies for involving local residents in the construction of road infrastructure on the African continent can be divided into "means" and "ends" strategies. Development in South Africa has historically been built on a 'means' approach to community engagement, whereby community participation was seen as a means of accomplishing a specific, usually project-related purpose. Various public engagement meetings addressing the roads programs that were held in various towns serve as typical examples (Stiglitz & Joseph, 2002).

Mandala (2018), investigated the effects of stakeholder participation in project identification on the efficiency of roads in Kenya, focusing on Bondo Sub County and Siaya County. The study states that stakeholders' participation in the project identification had major consequences that contributed to the success of road construction projects.

Case studies of Indian road redevelopment projects in Bengaluru, the state capital of Karnataka, concentrated mostly in urbanized and congested areas. Furthermore, road widening and improvement projects were not planned progressively with growing urbanization and population needs. When the city began to experience traffic issues, extensive road widening and improvement initiatives were launched. As a result, various community groups were impacted, and at the same time many trees were being cut down or were due to be cut down. Because the public consultation process was not at necessary scale, protests broke out, and social organizations and NGOs persuaded and assisted the local community organizations with their efforts to

collectively oppose these initiatives. In this case community participation can be categorized as 'Bottom Up' and supported by 'Third Party' (Vanita & Shalin,2017).

Moreover, case studies the Indian Sardar Patel Ring Road project was located in a peri-urban area, and it required purchasing agricultural land from locals and farmers. Land acquisition is a significant problem and a major cause of opposition to development projects in India. The compensation practices are generally unpopular and there are also problems related to clarity about ownership rights. As a result, the government identified these problems early on and engaged the public in developing a plan for acquiring land and gaining support for the project. This can be categorized as 'Top Down' community participation (Vanita & Shalin, 2017).

### ***2.2.2 Community participation and urban road infrastructure development in Ethiopia***

Infrastructure is a key factor in a nation's growth and development. Road infrastructure in particular is essential for regional integration and collaboration. A study on community involvement in road infrastructure development that was carried out in Ethiopia showed many findings on the practice, significance and issues that affect community participation in urban road infrastructure development.

Roads are typically the most significant component of the transportation infrastructure system in urban settings. It is a foundational element and a key determinant of city expansion, closely linked to the daily movement of people and goods. Similar to this, suggested that good road infrastructure is essential for socioeconomic development and the reduction of poverty because these factors all depend heavily on it (Africa Economic Commission, 2009).

The Government of Ethiopia is aware that the road network's patchy coverage and poor quality have made it difficult to combat poverty and foster economic development in the nation. In order to improve the road network's condition and enhance the country's road density, the government introduced the Road Sector Development Program (RSDP) in 1997. Since then, RSDP has gone through four implementation phases between 1997 and 2015, and RSDP fifth phase has been in place since July 2015. The RSDP is still being implemented and will do so until 2020. The Ethiopian Roads Authority (ERA), the Regional Roads Authorities

(RRAs), the Woreda Road offices (WRO), and the community and municipalities have all worked together over the past 22 years of the RSDP to complete physical works that include the rehabilitation and improving of the trunk and link roads, building new link roads, rural roads, and district roads, as well as sustaining federal and regional roads (Ethiopian Roads Authority, 2018).

The entire length of the road system is 126,773 kilometers, of which the federal government owns 31.88 percent and the regional road authorities 24.28 percent. The remaining roads are Woreda/URRAP ones, or low traffic volume ones. In terms of the kind of pavement, asphalt roads make up roughly 14% of the entire road network. 72% of the road network is in good order, 21% is in fair condition, and the other 7 % are in poor condition. This suggests that 93% of the road networks are fair and good; nonetheless, since good roads tend to encourage excessive speeding, stringent speed enforcement may be necessary (Ethiopian Roads Authority, 2018).

Study conducted on community involvement in urban road infrastructure development projects the case of Wolkite town, Ethiopia; revealed that the number of community participation in road development projects was low, especially on cobblestone and gravel roads. The study's findings also indicate that institutional structures designed to involve communities in local development initiatives, particularly roads, are highly disjointed and inconsistent (Zeliku, 2022).

Community involvement in projects to develop road infrastructure is done informally and in campaigns. Furthermore, they participated in the implementation phase of road development projects. Community involvement has therefore been minimal during the project identification, planning, monitoring, and assessment stages. The survey also found that most community members were not aware of what they had to do during the town's road construction processes. The study also showed those weak institutional structures, a lack of resources, a lack of awareness and information, and poor coordination and communication between local authorities and communities are the main obstacles for community participation in the development of the road infrastructure in Wolkite town (Zeliku, 2022).

A study conducted on community engagement in road infrastructure development projects in Bishoftu Town, Ethiopia, indicates community involvement is used in the

town to cover financing deficits. In addition, the study states there were poor communication and connections between the community and local officials, and the community did not participate during every phase of the project cycle ( Bekele, 2019).

A study carried out to investigate the manner in which community participation impacts on the development of urban roads, in Bahir Dar, Ethiopia, demonstrated that the construction of urban roads in Bahir Dar revealed community participation has had a positive impact on urban road development. Community members have been involved in various components of road development projects, such as planning, design, and implementation. As a result, there has been an improvement in the road system, greater accessibility to transportation options, and shorter travel distances for locals. The study also highlighted a number of elements that support successful community engagement, such as efficient communication between project stakeholders, the provision of technical guidance to community groups, and the accessibility of resource financing. The survey also identified a number of barriers to community participation in the development of roads. These are inability of community groups to successfully participate in development projects, a lack of understanding among community members about what is expected from them, and a lack of funding for community-led initiatives (Getachew, 2009).

Studies in Jimma town, Ethiopia, conducted to examine the role of community involvement in road development projects showed that the road sector was found to be resource-dependent on external sources and lacking in resource mobilization because of the poor quality and accessibility of urban road infrastructure development. Additionally, the town's citizens were not participate in the entirely road development project, which negatively impacted their perceptions of ownership. The local community helps to build culverts, schools, hospitals, gravel roads, and other infrastructure. Due to these realities, the government and policy makers are starting to understand the significance and potential contribution of communities, and attempts are being made to facilitate their involvement in the process of urban infrastructure development (Seboka, 2020).

### ***2.2.3 Community participation and urban road infrastructure development in Addis Ababa***

Urban road infrastructure can be designed as either a boulevard or an expressway that is connected to other roadways with varying hierarchy. When the city of Addis Ababa was founded in November 1886 by Emperor Menilik II and Etegie Taitu, the first roadways were built there. The early roads were used as a means of non-motorized travel to connect Sefers (villages) throughout larger residents. At the commencement of Emperor Haile Selassie's reign, road development increased. Large-scale development of roads started after the establishment of the Addis Ababa City Road Authority (AACRA) in 1998. From 1992 to 2012, the city's overall road length nearly doubled (to 3,731km), and the quantity of road increased to 12.9% (Lia, 2017).

Services were inadequate due to the inadequate standard of road infrastructure and unplanned settlements in the city. The city's and its surrounding areas' transportation challenges have not yet been solved, despite recent improvements to the quantity and quality of roads and public transportation vehicles. There are a variety of causes for this; however, the most significant are the owners' institutions, executive bureaucracies, poor decision-making processes, the separation of land use and transportation planning, the lack of emphasis on pedestrian transportation, and the lack of progress in mass transit implementation (Lia, 2017).

The current road density is less than the 25% acceptable standard. About thirteen percent of the total built-up area is roads. The overall urban area, however, is only roughly 54,000ha. As a result, the total gross densities are less than 10%, and the road's coverage area is roughly 5199 ha. Last but not least, it is important to realize that Addis Ababa continues to be a city of primates that confronts significant challenges as a result of its explosive population growth (Lia, 2017).

In recent years, urban development activities have been extensively done in the city to facilitate urban development with the collaboration of the community. The city established the Public Participation Development Agency. The Public Participation Development Agency (PPDA) was established in 2011 under the Addis Ababa City Government's Construction and Housing Development Bureau to facilitate

collaboration between the city government and residents in neighborhood upgrading. In addition to physical infrastructure and communal facility maintenance and construction, the PPDA is also responsible for coordinating, supporting, and monitoring public participation in the maintenance of houses for “the poorest of the poor.” (Woldetsadik, 2022).

A study conducted on the state of trust and cooperation; local government-residents’ joint neighborhood upgrading initiatives in Addis Ababa's different zones indicates residents were collaborative in neighborhood upgrading initiatives like the construction of cobblestone, local roads, open ditches, and culverts. Finance and materials were mobilized from residents. Clearing right-of-way for the local roads had affected residential houses and fences. Committee members claim that while almost all had willingly agreed to either take down their walls or fences without any kind of compensation, less than half a dozen had initially refused in one Mender. A draft research report conducted in 91 woredas of Addis Ababa in 2017 for the PPDA by Addis Ababa University indicates that 71% of respondents were willing to continue their contribution and participation in the local government-residents’ joint upgrading initiative (Woldetsadik, 2022).

However, lack of transparency in decision-making and in the selection of projects and project sites, insecurities related to lack of tenure security, mismanagement of funds by previous committees, and sanctions for those who did not contribute make it difficult to develop initiatives fully. Also, not all localities in the zone benefited from the infrastructure projects, even though cash contributions had been collected from residents in all neighborhoods of the zone. This created a rift between zone committees and households. As a result, these households discontinued their contribution to the joint initiative. Social trust is nonetheless low, as most interviewed respondents responded in the negative when asked if people can generally be trusted. Lack of confidence in the semi-informal committees or local government actors varies and is directly related to confidence in the respective local governments. There are also reluctant neighborhoods to contribute their share (Woldetsadik, 2022).

#### ***2.2.4 Community participation and urban road infrastructure development in Nifas Silk Lafto Sub City***

Nifa-Silk-Lafto Sub City is the second level of administration among the 11 sub cities in Addis Ababa city administration and is located around the south-west of the city. The sub city is on the outskirts of the city and is characterized by different urban development activities like housing development, major road (PAS and SAS) construction, fruit and vegetable market development, and manufacturing development (Office report, 2015). Communities participate in infrastructure construction like sub base, cobblestone road, culvert, drainage, police community, and gravel road construction with the collaboration of the government in the form of finance, knowledge, and labor force (Office report, 2015).

In the development of major roads and other urban development activities, the community participates to secure their tenure rights that are affected by the development (Office report, 2015). Urban development actions in Nifas Silk Lafto sub city are supported by the community through the sub city land development administration, the communities' participation, and the volunteer service office. However, community participation in the sub-city is affected by a lack of stakeholder coordination, community capacity, quality of the development activity, lack of finance for awareness creation, and lack of officials' commitment (Woreda 6 report, 2015).

#### ***2.2.5 Research gap***

The researcher conducted an extensive literature review that helped as an input for the study, and the researcher identified research gaps related to community participation and urban road infrastructure developments. The gap identified from the review and analysis of the research was a lack of detailed analysis of personal, social, economic, institutional, and political factors that affect the practices of community participation in the application of urban road infrastructure developments. Researchers have mostly focused on the directly affected communities, and they have an analysis gap related to the effect of urban road infrastructure development on the indirectly affected communities. There was a research gap related to a lack of community participation and its effect on urban road development projects. In addition to the above, most research focuses on assessments of community participation in local road and other

development projects, which means there is a lack of detailed analysis about community participation on major road project development (PAS and SAS), which affects a large amount of land and community in urban areas. Another gap was the lack of data regarding the contribution of the community on major road construction development in Nifas Silk Lafto sub city.

Hence, the research aimed to provide solutions to some of the identified research gaps related to community participation and urban road infrastructure development by analyzing collected data from the study area and proving recommendations based on the results obtained.

### **2.3. Conceptual Framework**

In urban road infrastructure development, community involvement is preferred. There are several factors that prevent the community from taking part in development in a true way. Considering the literature and using real-world experiences, the researcher created a conceptual framework that is crucial in investigating community participation in urban road infrastructure development practices in the study area.

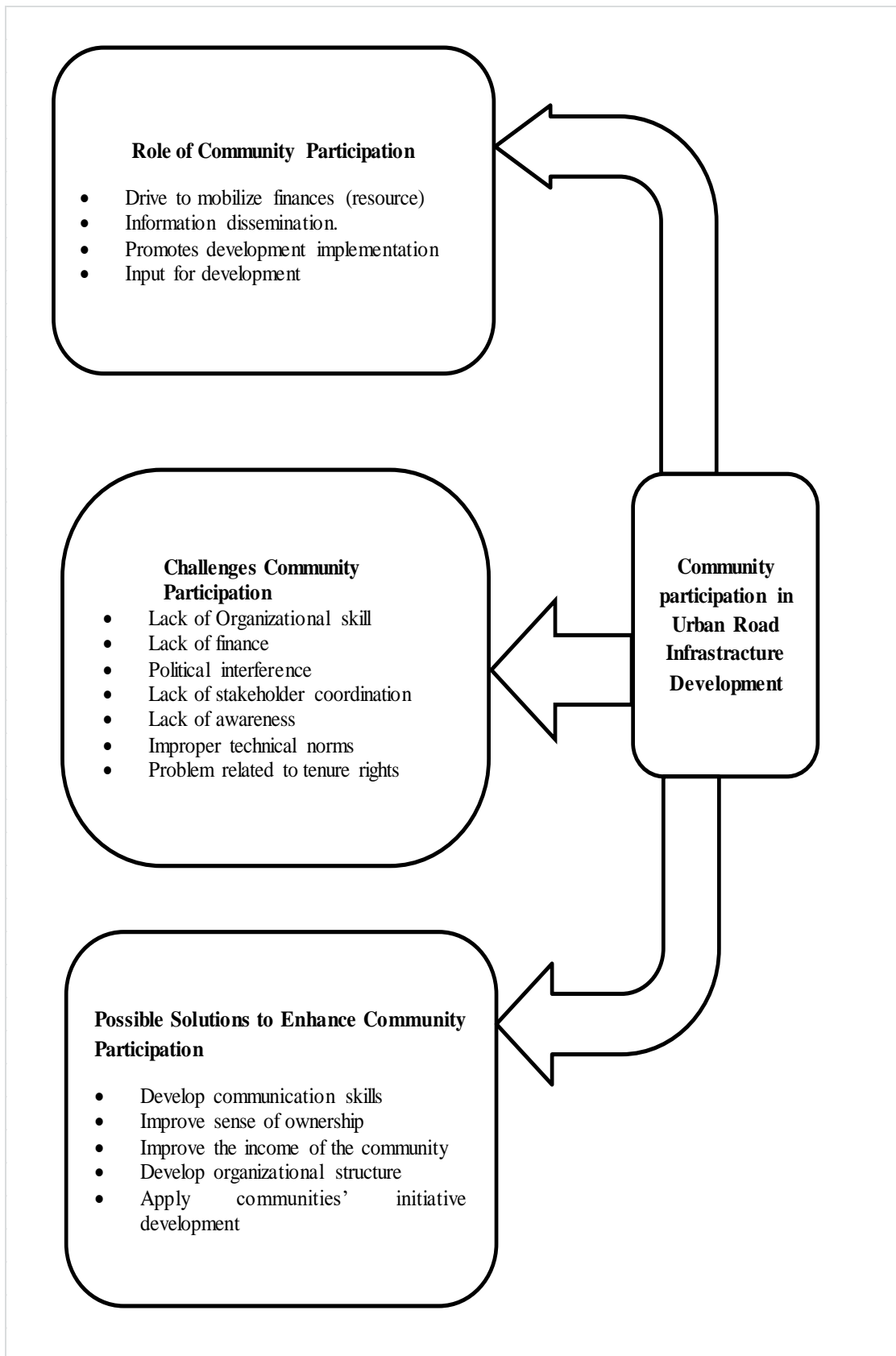


Figure 2. 1 Conceptual framework of the study

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Description of the Study Area

#### 3.1.1 Location of the study area

Woreda 6 is among the 13 woreda administrations in Nifas Silk Lafto Sub City, Addis Ababa. Its relative location is east of woreda 5 and 2, west of woreda 7 and 10, north of woreda 2 and 12 of Nifas-Silik-Lafto Sub-City, and south of woreda 4 of Kirkos Sub-City, or an absolute location of  $8^{\circ}58'41''$  latitude and  $38^{\circ}45'6''$  longitude. It covers 311.68 hectares of the total area of 4,233.79 hectares of the sub city (Plan and Development Commission, 2022).

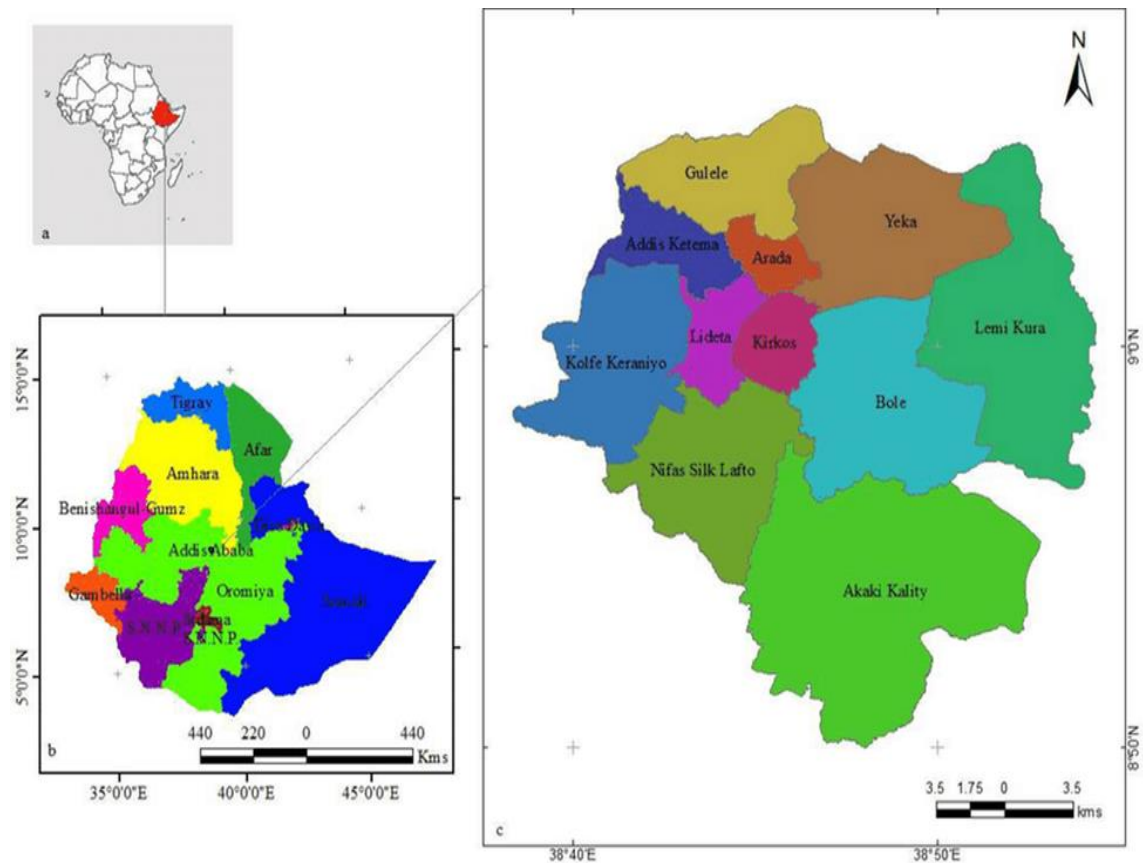


Figure3. 1 Location map of Addis Ababa with sub city

(Source: Ethiopia GIS, 2022)

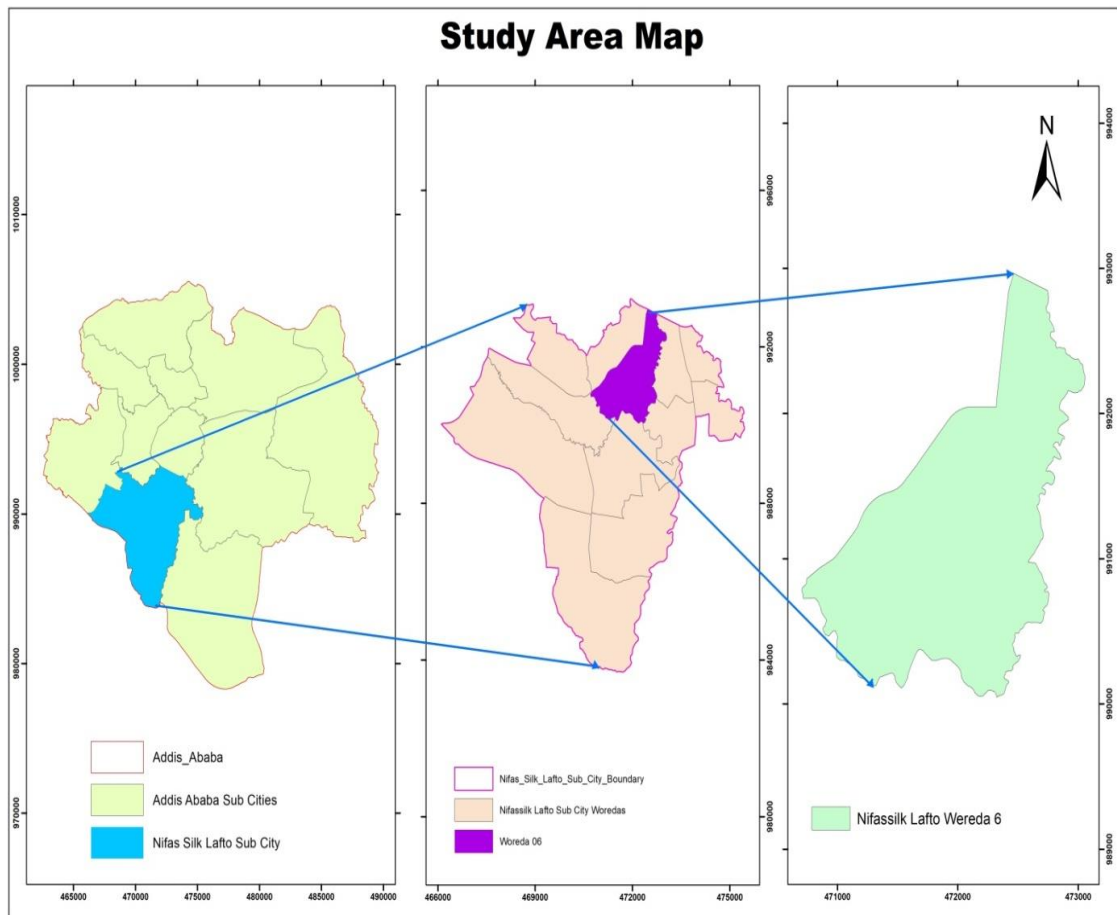


Figure3. 2 Location map of the study area

(Source: Addis Ababa Plan Development Commission, 2022)

### 3.1.2. Biophysical background of the study area

The topography feature of Woreda 6 is characterized by a gently sloping type, and its altitude ranges from 2211 to 2302 meters above sea level (Integrated Land Information Center, 2006). The study area is found in Addis Ababa, and its climate conditions are similar to those of the city. Based on this conclusion, the climate of Addis Ababa is a sub-tropical highland climate with precipitations varying considerably by the month. Addis Ababa has a complex mix of alpine climate zones, with temperature differences up to 10 °C (18 °F), depending on elevation and prevailing wind patterns( *In Wikipedia, 2023*).

### ***3.1.3 Socioeconomic background of population***

Based on the 2007 census, conducted by the Central Statistics Agency of Ethiopia (CSA), woreda 6 has a total population of 28,714, of whom 13,444 are men and 15,270 are women, with a population density ranging from 83.66 to 109.0 people per hectare (Integrated Land Information Center, 2006). Addis Ababa is a melting pot of different communities throughout the country's regions. Also, all Ethiopian ethnic groups are represented in Addis Ababa because it is the capital of the country. People in the city are engaged in trade and commerce (*In Wikipedia, 2023*). The study area is found in Addis Ababa, the economic activity of the study area is more or less trade and commerce. The socio-cultural situation is heterogeneous, which means different cultural groups live together in the area. Therefore, the economic activity and socio-cultural situation of the study area are similar to those of the capital, Addis Ababa. Also, woreda 6, like other woredas in the sub-city, it is the 3rd administration level in Addis Ababa city administration, and it is administered by the chief executive.

## **3.2. Research Methods**

### ***3.2.1 Research approach and design***

In order to investigate community participation in urban road infrastructure development practice, the researcher uses both quantitative and qualitative research approaches. The qualitative research methodology enables the study of a phenomenon in its natural environment (Creswell, 2009). Quantitative research methodology enables the researcher to identify elements that influence the dependent variable (community participation). The researcher also used a descriptive research approach and this helps the researcher accurately and systematically describe community participation in urban road infrastructure development practice in the study area.

### ***3.2.2 Type of data***

Both qualitative and quantitative data were employed in this study. Qualitative data refers to attributes and descriptions that are observed but cannot be quantified. Quantitative data are data that are measured, numerically represented, and calculated.

### ***3.2.3 Source of data***

To achieve the objective of the study primary and secondary sources of data were employed in the study.

**Primary data:** the study uses primary data obtained directly from survey questions and interviews. It allows the researcher to get valuable information from respondents' actual experiences, feelings, and opinions. The primary data for the study were obtained from sub-city and woreda 6 community participation and volunteer service office, sub city land development and administration office experts and team leaders, the road authority coordinator, and communities of the study area.

**Secondary data:** Secondary data for the study were obtained from reviewing pertinent literature from different books, reports, journal reports, and other related research documents focused on community participation and road infrastructure development.

### ***3.2.4 Sampling design***

Due to the large extent of the population in the research area, to save time, energy, and money, the researchers used sampling techniques. Therefore, the researcher arrived at valid conclusions based on selected samples from the target population. The target population of the study area was the population of woreda 6. According to the Ethiopian Statistics Agency, the total population of the study area in the 2007 census was 28,714 people.

The study used purposive sampling techniques. It allowed for the identification of target individuals who were thought to be representative of the study population and to have met the study's objectives. The degree of confidence and the accuracy or sampling error all served as the basis for estimating the sample size. A simplified formula is used because of the large population. The sample size was determined by using a confidence level of 95% and a margin of error of  $\pm 5\%$  to carry out the study.

$$n = \frac{N}{1+N(e)^2} \dots\dots\dots \text{eq. 1}$$

Where,

n= is the sample size,

N = is total sample frame,

e= is level of precision (error)

$$n = \frac{28,714}{1+28,714(0.05)^2}$$

Using the above formula as a base, n = 394.504. As a result, the study area's sample size was 395. Moreover, chosen woreda 6, sub-city and road authority coordinator and employees were included in the study.

### ***3.2.5 Data collection instrument***

To achieve the objective of the study, primary data was obtained from respondents via questionnaires and key informant interviews. Additionally, secondary data was collected by reviewing pertinent literature in a variety of formats and sources, such as books, journals, reports, and other relevant research papers.

**Questionnaire:** In order to get a variety of data from the respondents, the researcher designed and distributed both closed-ended and open-ended questionnaires. The questionnaires were prepared and administered by me. The questions were organized in English, and they were transformed to Amharic to make them easier to recognize. It helps to minimize misunderstandings of questions.

**Interview:** Both structured and semi-structured interviews were conducted. This helped me get the detailed data that is necessary for the research. The interview participants included selected sub-city, woreda 6 team leader, experts, and road authority coordinator.

**Desk reviews:** The researcher examines the existing documents and data that are necessary for the study. This includes sub city and woreda 6 office reports.

### 3.2.6 Data analysis and interpretation

Based on selected research approaches, the researcher employed both descriptive and inferential methods of data analysis, and the data obtained from each tool was analyzed separately and conglomerated carefully. The researcher employed descriptive statistics (percentage, frequency table, mean score, and standard deviation).The researcher used inferential statistical analysis (correlation analysis and multiple regressions) to analyze and evaluate the impact of each predictor on the relationship as well as the strength of the relationship between an outcome (the dependent variable) and multiple predictor (the independent variable).

In this study, the dependent variable is community participation, whereas the independent variables are personal, economic, social, political, and institutional factors that affect the dependent variable. Therefore, the relationship between the dependent variable and independent variables is analyzed through a five-point Linkert scale (1 = strongly disagree, 2 = disagree, 3 =moderate, 4 = agree, and 5 = strongly agree).

Table3. 1 Likert scale criterion

Number	Mean range	Level of effect
1	1.00 - 2.32	Low
2	2.33 -3.65	Medium
3	3.66 -5.00	High

(Source: Bhandari& Nikolopoulou,2023)

Whenever there are two or more independent variables, multiple correlations is important to identify their relations. Also the degree of connection between two variables was determined using Pearson Correlation analysis. In this case, the causal relationship between the independent and dependent variables was computed using Pearson correlation.

Table 3.2 Rule of thumb for correlation analysis

<b>Range of coefficient</b>	<b>Descriptive of Strength</b>
± 0.8 to ± 1.0	Very Strong
± 0.61 to ± 0.8	Strong
± 0.41 to ± 0.6	Moderate
± 0.21 to ± 0.4	Weak
± 0.00 to ± 0.20	No Relation

Source: (Bhattacharjee, 2012)

The possible strategies for factors that affect community participation were analyzed by connecting the perceptions of participants and related research findings from the reviewed literature. The participant perception was analyzed and interpreted through a descriptive statistics. A qualitative data matrix was employed for the analysis of result obtained from the various participant categories. For the analysis of the quantitative data, basic statistical techniques such as percent, mean scores, standard deviations, correlation, and multiple regressions are used to facilitate significant analysis and interpretations of the collected data. Collected data are analyzed at a 95% confidence level by using IBM SPSS version 22. Without primary data, secondary data loses its statistical significance, and vice versa. To get an integrated effect out of them, both the primary and secondary data were examined simultaneously.

### ***3.2.7 Data presentation techniques***

Both collected and analyzed data from primary and secondary data were presented through text, tabular, and graph. Texts were used to present data collected from interviews, secondary data, and the findings of the study. Tabular and graphs were used to present the data collected from questionnaire participants in the study. These were tables, pie charts, and bar graphs.

### ***3.2.8 Ethical consideration***

Ethical issues were considered when the study was conducted. In terms of ethical concerns, this study was carried out in a trustworthy and genuine manner. There are four main guiding concepts for implementing ethical considerations: privacy, accuracy, property, and accessibility (Kivunja & Kuyin, 2017). When conducting

this research, all of the aforementioned principles were taken into account. In accordance with their consent, respondents were also fully informed about their engagement in the research. When presenting, analyzing, and interpreting the data, the researcher assured the respondent that he would not personally identify any of the responses they provided. Moreover, due credit was given to all utilized materials.

## CHAPTER FOUR: DATA PRESENTATION AND DISCUSSION

### 4.1. Response Rate of Respondents

To judge the reliability and acceptability of the response, identifying the distribution and response rate of the questioner is important. The analysis and interpretation of the data were done based on the correctly filled-out and returned rate of the questionnaire. This helps to know the collected data about its reliability and acceptability. Table 4.1 below shows the distribution and return rate of the questionnaire.

Table 4. 1 The distribution and return rate of the questionnaire

Number	Respondents Type		
	Distributed	Return	Return rate
	395	388	98.2%

(Source: Sample survey, 2023)

### 4.2 Demographic and Socio-economic Characteristics of Respondents

The demographic and socioeconomic characteristics of the respondents represent their sex, age structure, educational status, marital status, occupation status, and income status in the study area.

#### 4.2.1 Sex and age structure of participants

As presented in figure 4.1, of the total 388 participants, 198 (51%) were male respondents, while the rest, 190 (49%) were female. This suggests that the randomly chosen respondents are generally represented with an equal ratio for both sexes, enabling effective integration of gender-sensitive themes.

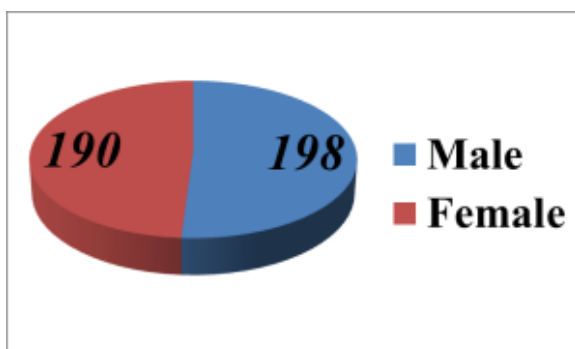


Figure 4. 1 Sex characteristics of participants

(Source: Sample survey, 2023)

Table 4.2 below shows the age characteristics of the participants. Based on the respondents' age distribution, the majorities were found in the age group ranging from 36 to 45, and they were expected to have better information about the study area and the overall situation of community engagement in different developments, including urban road infrastructure development. This helps the researcher get better information to achieve research objectives.

Table4. 2 Age characteristics of participants

Age	Number of participants	Percent
18-25	39	10.1
26-35	76	19.6
36-45	184	47.4
46 and above	89	22.9
Total	388	100

(Source: Sample survey, 2023)

#### 4.2.2 Marital characteristics of respondents

Figure 4.2 below presents marital characteristics of respondents. Among the total 388 participants 223 (57.5%) were married, 116 (29.9%) were single, 22 (5.7%) were widowed, and 27 (7%) were divorced.

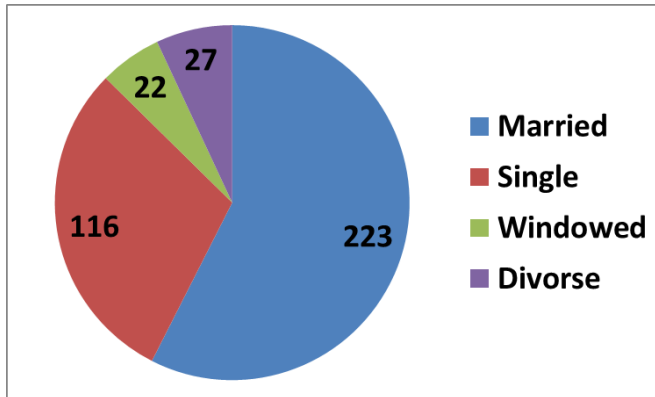


Figure 4. 2 Marital statuses of respondents

(Source Sample survey, 2023)

#### 4.2.3 Educational status of respondents

As indicated in Figure 4.3 below, most of the respondents were at a primary or above educational level, and they are likely to have better information about community participation and how urban road infrastructure was developed in the study area. This also helped them fill out the questionnaire without guidance.

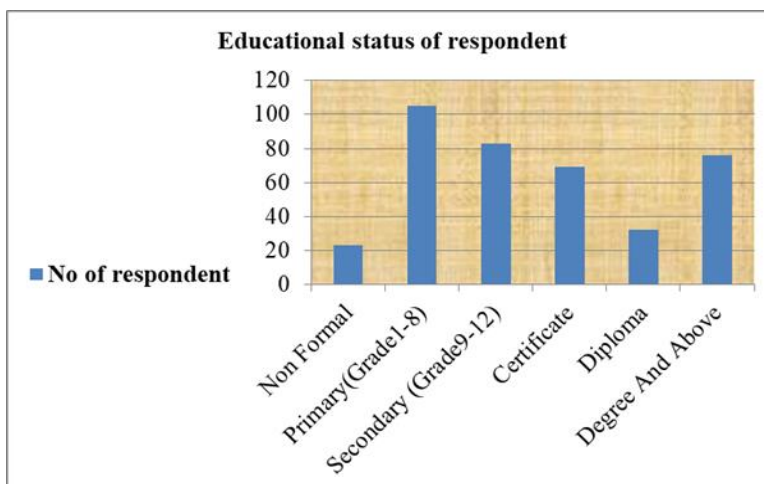


Figure 4. 3 Educational status of respondent

(Source Sample survey, 2023)

#### 4.2.4 Occupational and income characteristics

As the figure 4.4 revealed, more than 90% of the community were employed. Communities that have work are more able to participate in development projects than communities without work. Therefore, the respondents were expected to know about their role in developments, including road infrastructure development. This helped me get reliable information that helped me to achieve the study objectives.

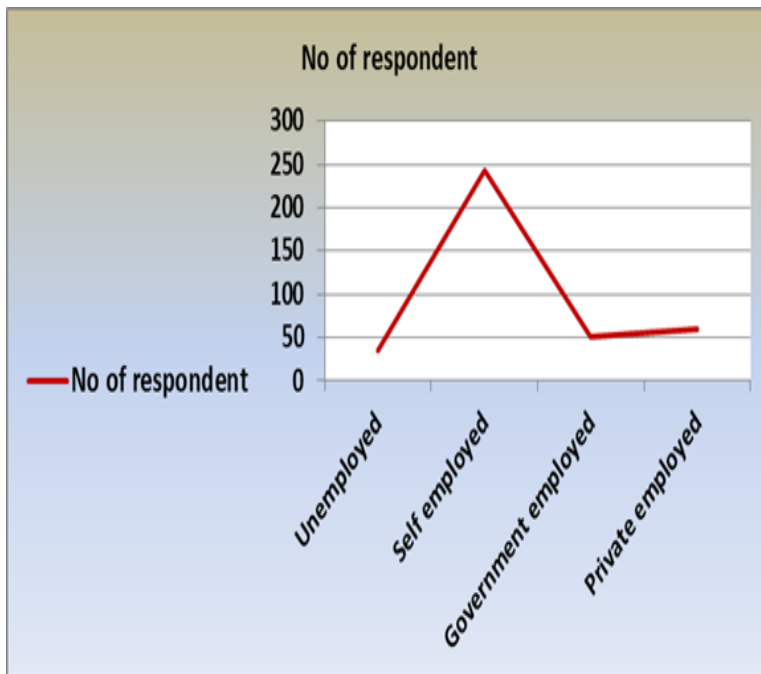


Figure 4. 4 Occupational status of respondent

(Source: Sample survey, 2023)

As far as the income status of the respondents' figure 4.5 below, indicates the income status of the participants per month. Based on the sample survey, out of the total 388 respondents, 57 (14.7%) had earned below 5,000 birr per month, 181 (46.6%) earned between 5001 and 10,000 birr per month, and the remaining 150 (38.7%) obtained above 10,000 birr. Understanding the income status of the respondent is very important because income helps communities contribute to urban road infrastructure development.

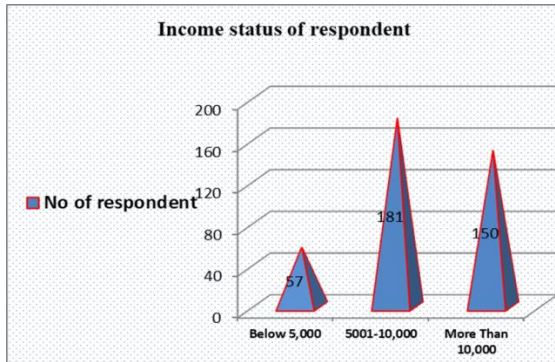


Figure 4. 5 Income statuses of respondents

(Source Sample survey, 2023)

### 4.3. Practice of Community Participation in Urban Road Infrastructure Development

Table 4.3 shows the respondents' reactions in relation to their understanding of the existence of urban road infrastructure development in the study area.

Table 4. 3 Community awareness about the existence of urban road infrastructure development in the study area

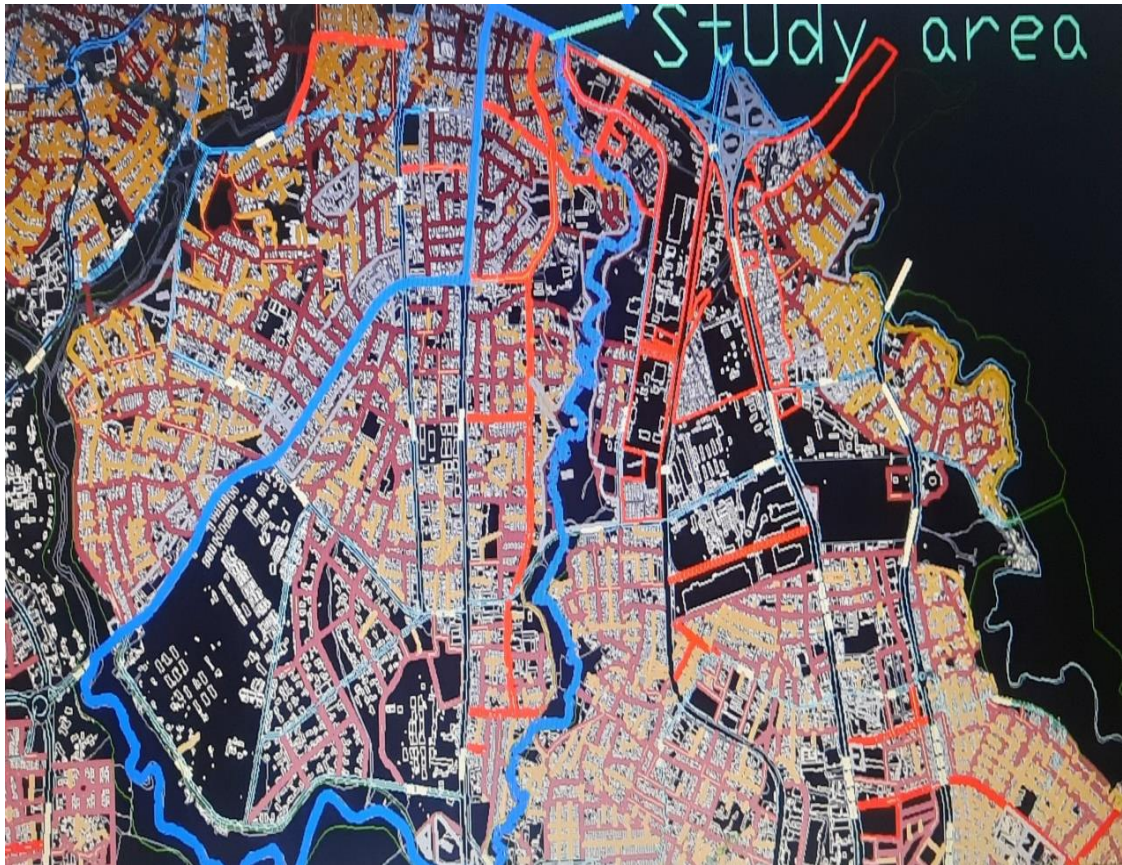
Item	Response	Frequency	Percent	Cumulative present
Presence of urban road infrastructure development	Yes	372	95.9	95.9
	No	16	4.1	100
	<b>Total</b>	<b>388</b>	<b>100</b>	
Type of road	Asphalt road	246	66.1	66.1
	Coble Stone road	113	30.4	30.4
	Gravel road	8	2.2	2.2
	Culvert and bridge	5	1.3	100
	<b>Total</b>	<b>372</b>	<b>100</b>	
If no, urban road Infrastructure development, what is the reason behind it?	There is enough existing road	5	31.3	31.3
	Due to a lack of finance	2	12.5	12.5
	Due to a lack of coordinators	2	12.5	12.5
	Have no information.	7	43.8	100
	<b>Total</b>	<b>16</b>	<b>100</b>	

(Source Sample survey, 2023)

As illustrated in Table 4.3 above, the majority of the participants assured the existence of road infrastructure development in the study area, and most of the development is asphalt roads, whereas very few respondents responded that there is no road development in the study area. However, among communities that have known the existence of development, more than half of the respondents revealed no community involvement in road infrastructure development. Also, among participants who say there is participation, the majority of them do not participate due to a lack of awareness, low economic capacity, a lack of participatory development, and a lack of representation.

Reports from the sub-city land development administration office in 2015 and key informants from the city road authority coordinator in the sub-city revealed there is extensive road development in woreda 6, especially asphalt road development, and they emphasized that the majority of communities are not willing to participate, even though they have awareness, because the participation did not include the community's ideas and was only done to advance the implementation to clear the ROW. Also, the absence of transparency in its implementation limited their participation.

According to research by Wang et al. (2019), community involvement enhanced the quality of urban road infrastructure project implementations in a variety of areas, from planning to identifying local requirements and priorities up to the design and execution stages. The existence of urban road development fosters the economic growth of a community. When the economies of the community are developed, they become capable of participating in road infrastructure developments. Therefore, in the study area, there is the development of road infrastructure that helps to increase community development.



**Figure 4. 6 Road network of the study area**

(Source: N/S/L/Sub City Land development and administration office, 2023)

The figure above shows the existing and proposed road network of the study area. The existing roads, especially local and collector roads, are cobblestones, which are more or less constructed in collaboration with the government and study area communities. The road network implies the necessity of community participation for proper utilization of existing roads and for future development of proposed roads in the study area.

Table 4.4 the presence of community engagement in urban road infrastructure development.

<b>Item</b>	<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Presence of community participation	Yes	153	39.4	38.5
	No	235	60.6	100
	<b>Total</b>	<b>388</b>	<b>100</b>	
Presence of your participation	Yes	64	41.8	41.8
	No	89	58.2	100
	<b>Total</b>	<b>153</b>	<b>100</b>	
Factors to not you participate	lack of representative	9	10.1	10.1
	lack of awareness	36	40.4	50.6
	Low economic capacity	24	27	77.5
	Lack participatory development	20	22.5	100
	<b>Total</b>	<b>89</b>	<b>100</b>	
Level of community participation	Very high	15	3.9	3.9
	High	24	6.2	10.1
	Moderate	38	9.8	19.8
	Low	270	69.6	89.4
	Very low	41	10.6	100
	<b>Total</b>	<b>388</b>	<b>100</b>	

(Source Sample survey, 2023)

Table 4.4 presents participants reactions in relation to the presence of community involvement in urban road infrastructure development at the study area. Based on participant reactions, community participation is not fully applied in road infrastructure development in the study area. Also, the level of community engagement is low in the study area. Lack of awareness and economic capacity of the community are the most contributing factors to the reduction of community participation.

The interviewee emphasized that the majority of communities are not willing to participate, even if they have awareness, because the participation did not include the community's idea and was only done to advance the implementation to clear the ROW, and a lack of compensation for affected communities hinders their participation. Also, the absence of transparency in its implementation limited their participation. Also, 2015 reports of the sub city and woreda 6 community participation revealed communities are participating in different infrastructure development, including road infrastructure development. However, a lack of official commitment and a lack of budget for awareness creation limit community participation.

Table4. 4 The presence of institutional structure for community participation

<b>Item</b>	<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Presence of institutional structure	Yes	301	77.6	77.6
	No	87	22.4	100
	<b>Total</b>	<b>388</b>	<b>100</b>	
Effectiveness to engaging the community	Yes	89	29.6	29.6
	No	212	70.4	100
	<b>Total</b>	<b>303</b>	<b>100</b>	

(Source: Sample survey, 2023)

Table 4.5 presents respondents reactions towards the presence of institutional structures that facilitate community participation and their effectiveness. Most participants revealed the presence of institutional structure in the study area. However, the institutions success is low in their engagement of the community in urban road infrastructure development.

The key informant also revealed that there is community participation and a volunteer service office in the sub city as well as in woreda 6. However, the institution is limited in coordinating public participation in the all-over process of road infrastructure development. Reports of the woreda 6 community participation and volunteer service office in 2015 also show that the institution gives more

attention to volunteer services like security, small ditch building, cobblestone road maintenance, and traffic control.

According to Nurkomala et al.(2023) analysis of the role of community empowerment institutions, the institutions play the roles of mediator, vibrant, and facilitator in a village's development. Based on this analysis, apart from its institutional existence, the institution's achievement is not adequate, especially in the urban road development of the study area.

Table 4. 5 The inclusiveness of community participation in urban road infrastructure development

<b>Item</b>	<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Inclusiveness of community participation	Yes	87	22.4	22.4
	No	301	77.6	100
	<b>Total</b>	<b>388</b>	<b>100</b>	
More participant community group	Affected communities	161	53.5	53.5
	Community representative	71	23.6	77.1
	Public figure	10	3.3	80.4
	Civic association	59	19.6	100
	<b>Total</b>	<b>301</b>	<b>100</b>	
key decision makers in urban road infrastructure development	City administration	302	77.8	77.8
	Sub city administration	43	11.1	88.9
	Woreda administration	14	3.6	92.5
	Community	29	7.5	100
	<b>Total</b>	<b>388</b>	<b>100</b>	

(Source: Sample survey, 2023)

As illustrated in Table 4.5 above, community participation in urban road infrastructure development that is being placed in the study area is not inclusive, and most of the participation is held with affected communities. Also, respondents revealed that most decisions regarding road infrastructure development are made by the city administration, and community participation in decision-making is very low. The key informant also revealed participation in road development was held with those whose properties were demolished or communities existed on the ROW.

Without inclusivity, infrastructure cannot be sustainable, and inclusivity by itself does not imply sustainability. In order to achieve inclusive infrastructure, plans, policies, and projects pertaining to infrastructure should incorporate a gender sustainability perspective, with a particular emphasis on vulnerable populations such as minorities, indigenous peoples, and people with disabilities (Aizawa, 2020). However, the majority of participants in the study area revealed that community participation is not inclusive, which means the majority of participants are from the directly affected community. Also, most decisions in road infrastructure development are made by the city administration, which means decisions in the study area are not participatory.

#### **4.4 The Role of Community Participation in Urban Road Infrastructure Development**

The responses from participants about the roles played by communities in the development of urban road infrastructure in the study area are shown in the table below.

Table 4. 6 Ways and reason for community participation in urban road infrastructure development

Item	Response	Frequency	Percent	Cumulative percent
Presence of community participation	Yes	174	44.8	44.8
	No	214	55.2	100
	<b>Total</b>	<b>388</b>	<b>100</b>	
Types of participation	Via active participation	64	36.8	36.8
	By means of a representative	110	63.2	100
	<b>Total</b>	<b>174</b>	<b>100</b>	
Reason to participate	To get road infrastructure services	53	30.5	30.5
	To secure property rights affected by the development	81	46.6	77
	To take part in the development	16	9.2	86.2
	To respect my legal duty	24	13.8	100
	<b>Total</b>	<b>174</b>	<b>100</b>	
Reason for no participation	Lack of awareness	70	32.7	32.7
	Lack of participatory development	64	29.9	62.6
	Lack of interest	12	5.6	68.2
	Time shortage	15	7	75.2
	Economic limitation	53	24.8	100
	<b>Total</b>	<b>214</b>	<b>100</b>	
Type of contribution	Contribute labor	12	6.9	6.9
	Contribute finance	95	54.6	61.5
	Contribute material	2	1.1	62.6
	Ideas	65	37.4	100
	<b>Total</b>	<b>174</b>	<b>100</b>	
Sufficiency of the contribution	Yes	27	15.5	15.5
	No	147	84.5	100
	<b>Total</b>	<b>174</b>	<b>100</b>	
Possible solution for insufficient contribution	Increase Awareness	40	23	23
	Community empowerment	32	18.4	18.4
	Make the decision decentralized	52	29.9	29.9
	Create a sense of ownership	50	28.7	100
	<b>Total</b>	<b>174</b>	<b>100</b>	

(Source: Sample survey, 2023)

As illustrated in the above table, participant responses revealed that more than half of the communities do not participate in urban road infrastructure development, and even among the communities that are participating in urban road infrastructure development, they do so to secure their property rights affected by the development, to get road infrastructure services, to respect their legal duty, and to take part in the process of development, respectively, and more than half of the participants revealed their participation is through representation. In the study area, the absence of awareness, the absence of participatory development, and the economic capacity of the community had a huge negative impact on their participation when compared to interest and time shortages. Also, the majority of communities' contributions are financial and ideas. Community contribution is insufficient, and participants reacted proportionally, increasing awareness, empowerment, making the decision decentralized, and creating a sense of ownership as possible solutions to make it sufficient.

In addition to this, some participants identified that they participated because they were represented by a community block committee. Also, participants' reactions to the absence of coordination and compensation for demolished property, especially in cobblestone road development, limit their participation. Key informants revealed that a top-down decision-making method, a lack of strong civic organizations that work on community empowerment, prolonged compensation and relocation processes, especially in asphalt road construction, and a lack of inclusiveness hamper the effectiveness of their participation.

According to Seboka (2020), for the purpose of facilitating the development of road infrastructure and bringing about sustainable and successful road infrastructure development in the municipality, the community shares ideas and provides resources in the form of money and labor. This study also reveals apart from its limitations, the community in the study area participated in the form of finance, ideas, labor, and materials, respectively in descending order.

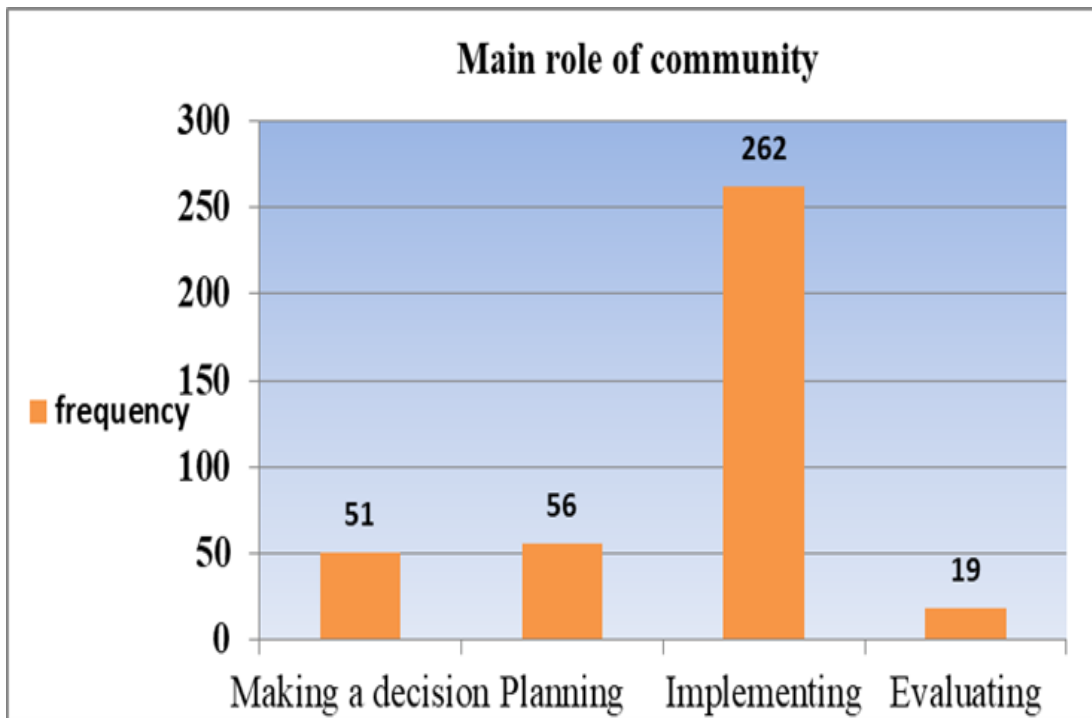


Figure 4. 7 Major Role of Community for Urban Road Infrastructure Development

(Source: Sample survey, 2023)

Moreover, figure 4.6 illustrates the main role of communities in the study area of urban road infrastructure development. Based on participants' reactions, most of the community's role is bounded in implementation, and their roles in decision-making, planning, and evaluating are limited. Increased community empowerment can result from involvement in the form of reinforced community organizations, heightened self-esteem, and the pursuit of novel endeavors (Oakley, 1991). It is thought that involvement guarantees success because people become involved when they feel that the project fulfills their needs and gives them a sense of ownership over it. This enables them to easily supervise development and then maintain the facilities to guarantee their long-term viability.

Secondary sources from sub-city and woreda 6 reports showed a lack of official commitment and a lack of budget to create awareness are hindrance to community participation. Also, informants revealed that communities are basically engaged in the implementing stage to contribute money or secure ROW other than participating in planning and decision-making.

## 4.5 Factors Affecting Community Participation in Urban Road Infrastructure Development

### 4.5.1 Descriptive analysis on factors

#### 4.5.1.1 Personal factors

The result illustrated in Table 4.8 below is the mean score for personal factors that affect the efficiency of community involvement in urban road infrastructure development in the study area. Based on the Likert scale criterion, lack of willingness to participate and education has a medium level of effect. However, the effects of time shortages and the age of the community are low in the case area.

Table 4. 7 Personal factors that affect community participation

Item	Mean score	Std. Deviation
Low educational status of community	2.44	1.009
Time shortage	1.89	0.99
Age of communities	1.77	0.94
Lack of willingness to participate	2.58	1.064

(Source: Sample survey, 2023)

#### 4.5.1.2 Institutional factors

As presented in Table 4.8 below, the result implies institutional factors: insecure property rights and a lack of institutions that coordinate communities have the highest effect, while a lack of transparency has a medium effect on participation. However, the unfair distribution of road development within the study area has the lowest effect.

Table4. 8 Institutional factors that affect community participation

Item	Mean	Std. Deviation
Lack of institutions that coordinate communities	3.63	1.32
Lack of Transparency	3.5	1.113
Unfair distribution of road development	1.66	1.001
Unsecured property right of affected communities	3.78	0.991

(Source: Sample survey, 2023)

#### 4.5.1.3 Social factors

As presented in Table 4.9 from the social factor, the absence of strong community organizations has a high effect, and the absence of trust in institutions and lack of awareness about road development have a medium-level effect. Whereas, the social class of communities within the study area has the lowest effect on it.

Table 4. 9 Social factors that affect community participation

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Lack of awareness about the road development	3.44	0.718
Absence of trust in institution	2.79	0.79
Social class	1.22	0.605
Absence of strong community organizations	3.99	1.055

(Source: Sample survey, 2023)

#### 4.4.1.4 Economic factors

As presented in Table 4.10 for the economic factor, the result implies that the economic capacity of the communities has a high effect on community participation. The effects of economic instability and poor resource mobilization and utilization are medium, and unemployment has a low level of impact on community participation in the study area.

Table 4. 10 Economic factors that affect community participation

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Economic capacity of the community	3.84	0.974
Unemployment	1.7	1.271
Economic instability	3.29	0.934
Poor resource mobilization and utilization	3.26	0.965

(Source: Sample survey, 2023)

#### ***4.5.1.5 Political factors***

As presented in Table 4.11, among political factors, the results indicate that the presence of a top-down decision-making process has a high effect, while community participation as a political benefit, lack of political will, and lack of representation have a medium effect.

Table 4. 11 Political factors that affect community participation

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
The presence of top-down decision making process	4.15	0.955
Use communities participation as political benefit	2.95	1.196
Lack of political will	3.28	0.816
Lack of representation	2.74	0.811

(Source: Sample survey, 2023)

#### ***4.5.1.6 Overall mean of the five independent variables***

In the study area, time shortages, age of communities', social class, unfair distribution of road developments, and unemployment have insignificant influence on community involvement. Educational status of communities, lack of willingness to participate, lack of transparency, lack of awareness about road development, absence of trust in institutions, economic instability, poor resource mobilization and utilization, use of community participation as a political benefit, lack of political will, lack of institutions that coordinate communities, and lack of representation have a moderate level of influence on community participation. Whereas the insecure property rights of affected communities', the absence of strong community organizations, the economic capacity of the community, and the presence of top-down decision-making processes have an abundant level of influence on community involvement.

As stated in Table 4.12 below, from the overall mean of five explanatory independent variables, the personal factor has a low level of influence, whereas the institutional, social, economic, and political factors play a moderate level of

influence on community participation in urban road infrastructure development in the study area.

Table 4. 12 Overall mean score of five independent variables

<b>Variables</b>	<b>No of participant</b>	<b>Mean Score</b>	<b>Std. Deviation</b>
Personal factor	388	2.17	1.00075
Institutional factor	388	3.1425	1.10625
Social factor	388	2.86	0.792
Economical factor	388	3.0225	1.036
Political factor	388	2.79875	0.9445

(Source: Sample survey, 2023)

Since a process of participation cannot take place in an empty space, it is susceptible to a number of factors that can either hinder or enhance its efficacy. The political intervention, lack of leadership and community organization skills, education, and discrimination affects community participation (Oakley, 1991). According to Zeliku (2022), Community participation in road infrastructure development are influenced by weak institutional structures, a lack of resources, a lack of awareness and information, and poor coordination and communication between local authorities and communities.

As like as Oakley and Zeliku conclusion, key informants from sub-city and woreda team leaders, experts, and Addis Ababa road authority sub-city coordinators revealed in their interview that participation is held only with the affected community to notice and play their role in the advance of right of way (ROW) when the plan is approved and the implementation is started. The rest of the community is not engaged to play their role in decision-making, planning, implementation, and evaluation. Moreover, their property affected by the development was not secured as soon as it was demolished. This is due to the multi-bureaucratic systems of governmental offices.

This reduced their trust in the institution, and they felt the development was ignorance. Secondary sources also show that compensation and resettlement

activities for those affected by the road development take more than two years, and this process creates dissatisfaction in communities. Also, the delay in compensation and resettlement leads the government to make additional expenditures to compensate them. In general, lack of periodic awareness and unsecured property rights and lack of official commitment to infrastructure development have their own influence on community participation in urban road infrastructure development in the study area.

#### ***4.5.2 Inferential statistics***

##### ***4.5.2.1. Correlation analysis***

The result in table 4.15 below indicates Pearson correlation on the relationship between dependent variable (community participation), and independent variables (institutional factors, political factors, social factors, and economic factors). The economic factor has the highest correlation coefficient ( $r=-0.434$ ,  $p< 0.01$ ). The second-ranked correlation is institutional factors and community participation, with  $r$  values of  $-0.398$ , followed by the correlation coefficient between social factors and community participation, with values of ( $r=-0.121$ ,  $p< 0.05$ ). The insignificant relationship reported is among personal factors and community participation, as the  $P$  value in the table is higher than the alpha value of  $0.05$ . It implies that personal factors have no significant relationship with community participation at a 95% confidence level in the case area.

The Pearson correlation coefficient among every couple of independent variables should not exceed  $0.9$ , according to Hair et al. (2006), cited in Mengistu 2016). This is because if the correlation value exceeds  $0.90$ , the data may be suspected of having a major collinearity problem. The highest correlation coefficient in the table above is  $26.2$  percent, which is between institutional factors and economic factors, and it, is still less than  $0.90$ . It is therefore anticipated that multicollinearity problems won't arise in this investigation.

Table 4. 13 Pearson correlation analysis on the relationship between dependent and independent variables

**Correlations**

	CP	PF	INF	SF	EF	PLF	
CP	Pearson Correlation	1	0.06	-.398**	-.121*	-.434**	-0.042
	Sig. (2-tailed)		0.24	0	0.017	0	0.407
	N	388	388	388	388	388	388
PF	Pearson Correlation	0.06	1	.233**	.215**	0.095	0.086
	Sig. (2-tailed)	0.24		0	0	0.062	0.09
	N	388	388	388	388	388	388
INF	Pearson Correlation	-.398**	.233**	1	0.048	.262**	-0.097
	Sig. (2-tailed)	0	0		0.344	0	0.057
	N	388	388	388	388	388	388
SF	Pearson Correlation	-.121*	.215**	0.048	1	-0.007	-0.095
	Sig. (2-tailed)	0.017	0	0.344		0.891	0.06
	N	388	388	388	388	388	388
EF	Pearson Correlation	-.434**	0.095	.262**	-0.007	1	.232**
	Sig. (2-tailed)	0	0.062	0	0.891		0
	N	388	388	388	388	388	388
PLF	Pearson Correlation	-0.042	0.086	-0.097	-0.095	.232**	1
	Sig. (2-tailed)	0.407	0.09	0.057	0.06	0	
	N	388	388	388	388	388	388

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

(Source: Sample survey, 2023)

#### 4.5.2.2. Multiple linear regression analysis

Multiple linear regressions are the most common type of linear regression analysis. On the way to explain the link among the determinant factors and community participation, multiple linear regressions is used as a predictive analysis in this study. Because it allows the researcher to account for all of these potentially significant factors in a single model, multiple linear regression is used. This strategy has several advantages, including a more specific awareness of the association among every distinct factor and the result.

##### A. Assumption test

**1. Normality assumption:-**The researcher used both analytical and graphical methods to check the normality assumption of the study.

**Using the graphic method to check normality:** The researcher ought to plot the standard residuals across the expected values while evaluating the data, to determine the data points is uniformly distributed over all independent variable values, The data in this research was displayed on a scatter plot and histogram in order to test the hypothesis that the data are from a normal population.

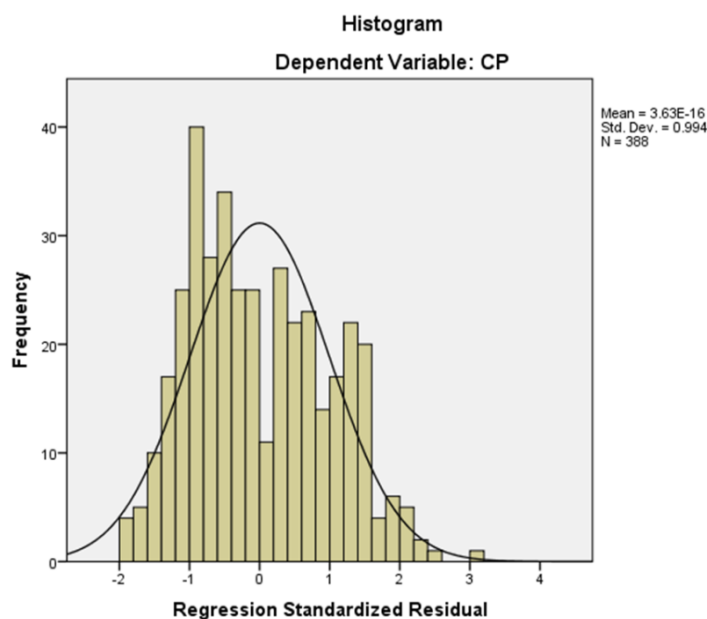


Figure 4. 8. Histogram regression standardizes residual

(Source: Sample survey, 2023)

As it is shown in Figure 4.8 above, the histogram looks like a bell-shaped. It implies that it approximates a bell-shaped and normal distribution. Moreover, the standard deviation in the histogram measures the width of the bell curve. Still, the SD value of.994 is less than two, which indicates that the data is normal.

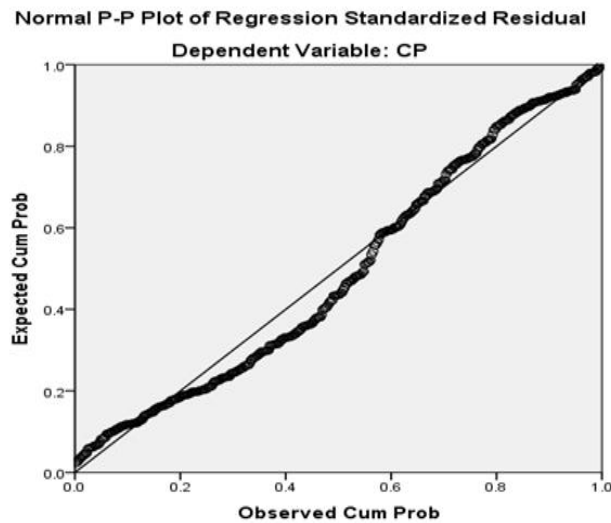


Figure 4. 9 Normal PP-plot

(Source: sample survey, 2023)

As shown in figure 4. 9 above normal probability plot as it is clearly seen the observed are plotted diagonally and very close with the expected normal line. It shows that the normality criterion is met and data set is approximately normally distributed.

## 2. Checking the absence of multicollinearity using VIF values

The data shouldn't show multicollinearity, which happens if the independent variables (explanatory variables) are strongly correlated. It becomes challenging to pinpoint the exact variable that adds to the variance in the dependent variable when independent variables show multicollinearity. The most effective method to verify the hypotheses is to use the variance inflation factor methodology. Every explanatory variable has a VIF value of less than 10, and most of the VIF is less than 5. Every explanatory variable has a VIF value of less than 10, as can be seen in the tables below. It demonstrates that the presumption is upheld.

Table 4. 14 VIF values to check absence of multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
PF	0.888	1.127
INF	0.857	1.167
SF	0.94	1.063
EF	0.865	1.156
PLF	0.897	1.114

(Source: Sample survey, 2023)

### ***B. Model Fit***

The researcher examined the link between the causes and effects of community participation and independent factors using adjusted R squared in this study.

Table4. 15 Model summary

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.571 <sup>a</sup>	.327	.318	1.31034	2.081

a. Predictors: (Constant), PLF, PF, EF, SF, INF

b. Dependent Variable: CP

(Source: Sample survey, 2023)

R-squared has an alternative called adjusted R-squared, which accounts for the amount of predictors in the model. The reason it's used in this study is that it

increases when a new word enhances the model beyond what would be expected by chance. A predictor drops if it adds less value to the model than anticipated. The adjusted R-squared is usually greater than zero. It is consistently less than the R-square. The adjusted R2 value of .328 indicates that 31.8 percent of the change in the dependent variable due to all independent variables accounts for the entire variation in the dependent variable (community participation). That is, these five independent variables cannot account for 68.2 (1-0.318) percent of the variation in cumulative community engagement. Therefore, additional variables that are not included in the study must account for community participation.

**C. ANOVA**

ANOVA was used to examine the significance of the entire model. The table below displays the findings.

Table 4. 16. ANOVA

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	318.040	5	63.608	37.046	.000 <sup>b</sup>
	Residual	655.890	382	1.717		
	Total	973.930	387			

a. Dependent Variable: CP

b. Predictors: (Constant), PLF, PF, EF, SF, INF

(Source: Sample survey, 2023)

A considerable correlation between the study's dependent and independent variables can be seen in the above ANOVA table, which also indicates that the F-value is highly significant ( $p = .000 < .01$ ), with an overall analysis F-statistic or F-ratio of 37.046.

Also, key informants from woreda 6, sub-city, and Addis Ababa road authority experts revealed that most communities' engagement is done when the road development implementation is started, and the engagement mostly involves the community that they are found in the ROW (affected community) to clear the properties that existed under the ROW. This creates ignorance and a lack of sense of ownership in the rest of the community.

The interviewee revealed prolonged problems related to compensation and relocation problems in the Asphalt road development and the absence of secured property rights in the Coble Stone road development for affected communities, which reduced their trust in the developments. Secondary data sources (attached in the appendix) obtained from the N/S/L sub-city land development and administration office and the woreda 6 community participation and volunteer office show communities affected by the road developments in woreda 6 suffered from bureaucracy and prolonged compensation and relocation problems for their demolished property. Aside from the advantages of road development, problems related to compensation create a negative attitude toward road development.

#### **4.6 Possible Strategies for Enhancing Community Participation in Urban Road Infrastructure Development**

In the study, the analysis illustrates and forwards possible strategies used to enhance community participation in urban road infrastructure development in the study area. To do this, a researcher used different reviews of published and unpublished literature and the perceptions of sample participants.

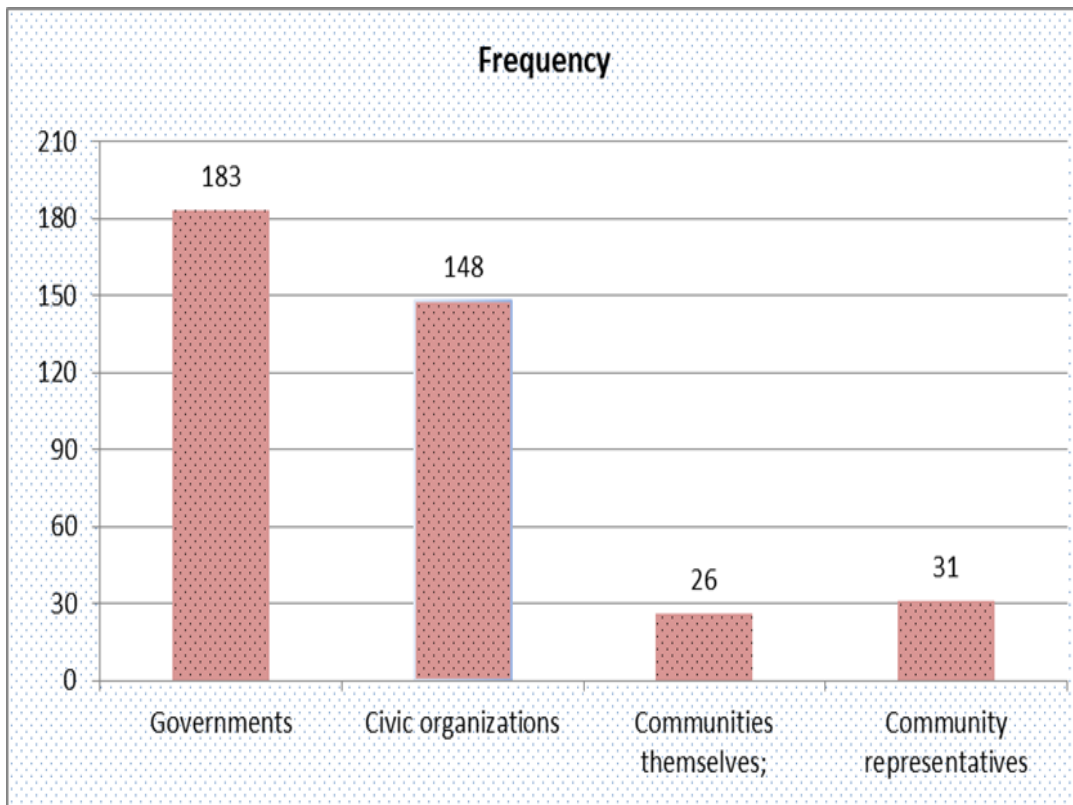


Figure 4. 10 Participants’ reactions towards the possible responsible bodies

(Source Sample survey, 2023)

Figure 4.9 above shows participants’ reactions towards the possible responsible bodies to enhance community participation in the study area. Based on participants’ reactions, government and civic organizations are more responsible for improving community participation in the study area. Also, the study indicates that the community itself and its representatives have an insignificant responsibility to enhance community participation.

Also, the researcher used nine explanatory independent variables in survey questions to know communities’ perceptions about possible strategies used to promote community participation in urban road infrastructure development in the study area.

Table4. 17 Possible responsible bodies to enhance community participation

No	Responses	Mean	Std.	Deviation
1	Apply bottom-up decision-making	3.90	1.078	
2	Create a sense of ownership in development decisions as well as programs and plans	4.16	.985	
3	Strengthen both internal and external institutions by working with communities	3.42	.775	
4	Involve community leaders, local politicians, religious leaders, and business owners in the community	2.64	.985	
5	Increase community empowerment	3.93	1.095	
6	Hold a periodic community awareness program	3.89	1.035	
7	Give recognition for the community's contribution	2.80	.904	
8	Make transparency all over the process of development	3.00	.864	
9	Secure property rights for the affected community	3.96	.754	

(Source: Sample survey, 2023)

As illustrated in Table 4.17 above, the listed explanatory variables scored a mean range of 2.64 to 4.16. Based on participants reactions, which involve community leaders, local politicians, religious leaders, and business owners in the community,

give recognition for the community's contribution, make transparency all over the process of development, and strengthen both internal and external institutions working with communities, the variables score between 2.33 and 3.65, which means the variable has a medium-level contribution to enhance community participation in urban road infrastructure development in the study area.

Similar studies conducted on community participation in urban road and other infrastructure developments revealed their findings and pointed out the possible methods used to combat the challenges of community participation. Government and non-governmental organizations presence at the grassroots, close to the poorest of the poor, is important in promoting participation (Chifamba, 2013). Applying bottom-up decision-making, increasing community empowerment, and alleviating economic problems by coordinating government and non-government organizations is very important to increasing community participation in other areas and developments.

Also holding a periodic community awareness program, applying a bottom-up decision-making process, increasing community empowerment, securing property rights for the affected community, and creating a sense of ownership in development decisions, as well as programs and plans scoring above 3.66, which means these variables have a high level of contribution to enhance community participation in urban road infrastructure development in the study area. Also, on the way to increase community participation and reduce the challenges that affect their involvement, participants from sub-city land development and management and Addis Ababa road authority N/S/L sub-city coordinator states applied community consultation, created a sense of ownership, and ensured timely delivery of compensation and relocation, which are very important for the affected community.

Generally, based on participant reactions and reviewed literature, the following methods and strategies are presented as possible strategies to enhance community participation in urban road infrastructure development in the study area.

Hold public consultation, which means consulted the public from the beginning to seek input from the community for the development and problems affecting them through an open meeting or written form. People not only need to have access to

information, but they also need to properly understand it. Apply the bottom-up decision-making process, which means corporate decisions at all levels, starting from the bottom level, and this helps to know community priorities. Create awareness, which means conveying to the community about the positive impact of urban road development. Also, making the political actors committed to giving their time, energy, and funds to achieve the desired development helps to gain public engagement and trust.

Also, secure the property rights of the community when urban road and other infrastructure development affect the properties of the community directly or indirectly. Therefore, properly compensating, relocating, and rehabilitating affected community properties is critical to achieving the desired development, unless the development is not supported by the community and appears as ignorance.

Empowering the economic capacity of the community also facilitates development through different mechanisms, like finance. To enhance community participation in urban road infrastructure development in the study area, working with the community and governmental and non-governmental organizations plays a crucial role. In common-place use, technology also helps to enhance community participation. Additionally, building institutional trust to implement the development, creating access to the development's plan, and understanding what it entails to participate fosters community participation in urban road infrastructure development in the study area.

## CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Conclusion

The main objective of the study was to investigate community participation in urban road infrastructure development practices in Woreda 6 of N/S/L sub city, Addis Ababa. To achieve the objective of the study, an attempt was made to collect pertinent data. Based on the collected data and analysis, the following conclusions are drawn in the study area:

The study concluded that apart from the essentiality of community engagement for urban road infrastructure development, in the study area more than half of the community has no understanding of participation in urban road infrastructure development. More than half of the community's participation was done through representation. Most communities are not willing to participate, even though they have awareness, because the participation did not include the community's ideas and was only done to advance the implementation of ROW. The institutions established to facilitate community participation have low achievement, and their activities are inadequate towards coordinating the community's involvement in urban road infrastructure development. They give more attention to volunteer services like security, small ditch building, cobblestone road maintenance, and traffic control. Community participation in urban road development is not inclusive, and most of the participation was held with affected communities. Also, they participated to secure property rights affected by the development. In addition, in the study area, most decisions regarding urban road infrastructure development are made by the city administration, and the community is mostly engaged in implementation.

Community roles in decision-making, planning, and evaluating were insignificant. Communities' engagement was mostly bounded by implementation in order to clear the right of way (ROW) when the plan is approved and the implementation is started. The study revealed that the main roles of the community were contributing finance and ideas, and also that their contribution was insufficient.

The study concluded that time shortages, the age of communities' social class, unfair distribution of road development, and unemployment have insignificant influence on communities' participation in the study area. Educational status of communities, lack of willingness to participate, lack of transparency, lack of awareness about road development, absence of trust in institutions, economic instability, poor resource mobilization and utilization, use of community participation as a political benefit, lack of political will, lack of institutions that coordinate communities, and lack of representation have a moderate level of influence on community participation. Whereas, insecure property rights of affected communities', the absence of strong community organizations, the economic capacity of the community, and the presence of top-down decision-making processes have a significant impact on the involvement of the community in the study area. Also, the study concluded that the absence and prolonged process of compensation and relocation for demolished property, a lack of strong civic organizations that work on community empowerment, and a lack of inclusiveness hinder the effectiveness of community participation in the study area.

The study concluded that government bodies are the main responsive bodies to enhance community participation in the study area. The study revealed that involving community leaders and local politicians, promoting transparency in development, and empowering internal and external institutions working on communities slightly enhanced community participation in urban road infrastructure development. Also the study concluded that holding a periodic community awareness program, applying a bottom-up decision-making process, increasing community empowerment, securing property rights for the affected community, and creating a sense of ownership in development decisions as well as programs and plans have a high level of capacity to increase community participation in urban road infrastructure development in the study area. Furthermore, the study concluded that improving the bureaucracy system, appropriate compensation and relocation for affected communities, and inclusive community engagement enhance community participation in urban road infrastructure development.

## 5.2 Recommendation

Depending on research findings, the following recommendations are drawn for stakeholders in order to maximize community involvement in the development of urban road infrastructure:

- ❖ Involve government and non-governmental groups to establish transparent community engagement.
- ❖ Implement participatory decision-making, planning, and implementation in urban road infrastructure development.
- ❖ Increasing capacity building for institutions that are working on community
- ❖ Hold inclusive community engagement.
- ❖ Empower and implement community awareness programs.
- ❖ Increase political commitment, build community trust in institutions, apply a bottom-up decision-making process, create a sense of ownership, and improve the bureaucracy system in road developments.
- ❖ Finally, the study recommended that local government bodies work with stakeholders, especially Addis Ababa road authority, woreda 6, and sub city land development and administration, to solve the prolonged compensation and relocation process for affected communities so as to build community trust and to implement participatory development.

## 5.3 Recommendations for Future Research

The research data collection and analysis are done in woreda 6. Due to the small size of the study area and the large coverage and connectivity of roads outside of the study area, the investigator suggests that more research is needed on the implications of identified factors that influence communities' participation in road infrastructure development at the sub city or city administration level.

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# **APPENDIXES**

## **APPENDIX-I Publishable Manuscript**

### **Factors Affecting Community Participation in Urban Road Infrastructure Development Practice: The Case in Woreda 6 of Nifas Silik Lafto Sub City, Addis Ababa**

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#### **Abstract**

*Community participation is vital to any development. Community participation in urban road infrastructure development helps to mobilize resources and advance the Right Of Way. However, besides to their contribution community participation is influenced by different factors. This article focuses on factors that affect community participation in urban road infrastructure development practice. The study used 388 samples selected by purposive sampling techniques. The study used a mixed (qualitative and quantitative) research approach. The study used descriptive and inferential statistics to analyze and interpret the collected data. The study used both primary and secondary data source. Data were collected through questionnaire, key informant interviews, and desk review. Results showed that community participation in the urban road development practice in the study area was affected by absence of transparency, lack of awareness, lack of trust in institutions, lack of political will, insecure property rights of affected communities', the absence of strong community organizations, the economic capacity of the community, and the presence of top-down decision-making processes. Based on the findings the researcher recommends stake holders in urban road development increase institutional capacity, apply inclusiveness, increase political commitment, hold a periodic community awareness program, apply a bottom-up decision-making process, create a sense of ownership will applied in order to enhance community engagement. Also properly compensate and relocate for affected community properties help the institution to build community trust and to confront the challenges of community participation.*

**Key Words:** *Community, Participation, Road Infrastructure, Development, factor*

## **1. Introduction**

Community participation is very important for any development, including urban road infrastructure projects. Good road infrastructure is essential for community socioeconomic development and the reduction of poverty because these factors all depend heavily on it (Africa Economic Commission, 2009). To get the intended urban road infrastructure development, community engagement is very important. Community involvement in road infrastructure development is done informally and through campaigns. Community involvement was held to cover financing deficits. Most communities participated in the implementation phase of road development projects (Zeliku, 2022). Due to this, community engagement is low during the project identification, planning, monitoring, and assessment stages. In Addis Ababa, residents were collaborative in neighborhood upgrading initiatives like the construction of cobblestone, local roads, open ditches, and culverts (Woldetsadik, 2022). However, Lack of transparency in decision-making, lack of tenure security, mismanagement of funds, unfair distribution of road infrastructure development, weak institutional structures, a lack of resources, a lack of awareness and information, and poor coordination between local authorities and communities are the main obstacles to community participation in the development of urban road infrastructure. Apart from its importance, road infrastructure development practices displaced many communities from their original places, and they face problems related compensation and rehabilitation. To effectively manage the links between the development of road infrastructure and community engagement, it is essential to design and implementing participatory urban road infrastructure development. Therefore, centered on the essentialities of community engagement for urban road infrastructure development this article focused on factors that affect community participation in urban road infrastructure development practice in Woreda 6 of Nifas Silik Lafto Sub City, Addis Ababa.

## **2. Literature Review**

### **2.1. The Concept of Community, Participation and Road Infrastructure**

Different scholars put their definition about community. A community is a group of people or families who live in the same area, share similar interests or social networks or relationships at the local level, have similar development aspirations,

share a common managerial behavior and norms, have a common communication system, share some resources (such as water, schools, etc.) and are sociologically and psychologically connected (Botes & van, 2000). Community is the people with common interests living in a particular area or it is a group of people with a common characteristic or interest living together within a larger society (*Merriam-Webster.com*).

Participation is described as "a process through which stakeholders' influence and share control over development initiatives and the decisions and resources that affect them" (World Bank, 1994). The term "road infrastructure" refers to all physical assets included inside the road reserve, including not only the actual road but also any accompanying furnishings, earthworks, drainage, and structures (such as culverts, bridges, and buildings). The management functions, typical system components, component selection, and general system implementation procedures can all be utilized to define the system used to manage road infrastructure (Roberts, 2004).

## **2.2. Factors Affecting Community Participation**

Since a process of participation cannot take place in an empty space, it is susceptible to a number of factors that can either hinder or enhance its efficacy (Oakley, 1991). Participation in the community is influenced by a wide range of determinants that can be categorized in various ways. The following are some factors that discourage communities from engaging in development. In local-level development projects, structural and political influence is a typical occurrence. Perhaps the community may have an urgent need for a dispensary, but politicians may choose to ignore those needs in favor of their own agendas and political ambitions and divert funding to other initiatives like building schools and roads. A country's political climate plays a crucial role in the effectiveness of a participative process (Oakley, 1991).

Decentralization of decision-making regarding development and finance is a key element in enabling true stakeholder participation. The political commitment and will of public servants at all levels of government is crucial structural aspect (van Dijk, 2006). Another important element that has a significant impact on participation at the local government level is the mindset of planners and officials regarding the

contributions of other stakeholders. Planners, experts, and representatives of local governments frequently consider the suggestions made by communities and activists to be unimportant and unethical. Consequently, the level of engagement is yet another crucial factor (Jenkins et al., 2002).

Allocating funding to committees is insufficient to establish community control because communities must be safeguarded against the abuses of committees hurriedly put together to represent them. This indicates that when participation processes are carried out in a transparent manner, it fosters trust and raises the degree of community involvement in development projects. The extent to which residents are dependent on the government is the key factor influencing the quality of involvement at the community stage. Citizens are used the decisions and initiatives of their leaders in many third-world nations (Oakley, 1991). The availability of information and the level of education in the community also contribute to the public's continued reliance on decision-making. Numerous studies have demonstrated that planning systems inherently favor the educated and knowledgeable (Jenkins et al., 2002).

Most of the time, governments and development organizations work with local officials or representatives, who frequently don't accurately represent the needs of the most vulnerable and marginalized groups of the population, such as women, the poor, racial and ethnic minorities, etc. (Botes & van, 2000). This will have an impact on how well the various groups are represented, which will ultimately decrease how well the process takes into account the demands of all parties concerned.

### **3. Research Methodology**

#### **3.1 Study Area**

Woreda 6 is among the 13 woreda administrations in Nifas Silk Lafto Sub City, Addis Ababa. It is the third administration level in Addis Ababa city administration it is located in the absolute location of 8<sup>0</sup>58'41"latitude and 38<sup>0</sup>45'6 "longitude. It covers 311.68 hectares of the total area of 4,233.79 hectares of the sub city (Plan and Development Commission, 2022).

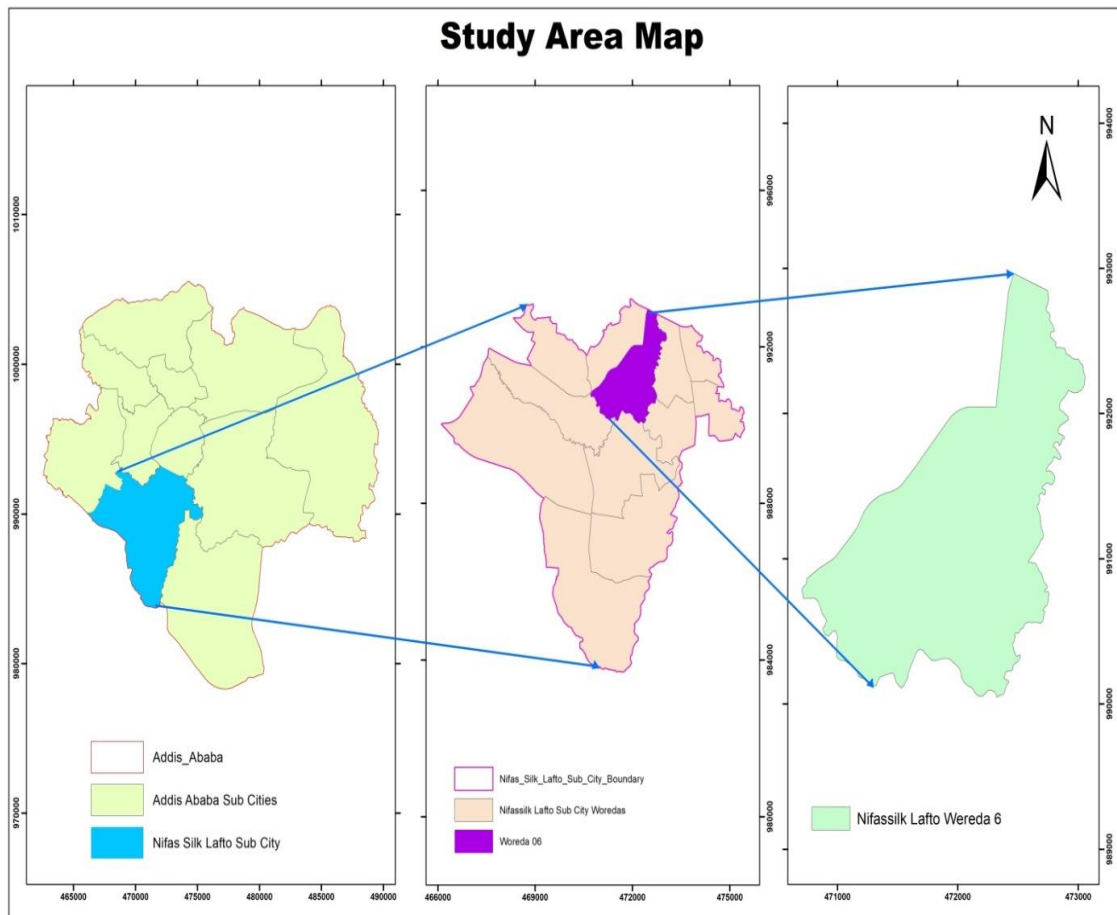


Figure3. 1 Location map of the study area

(Source: Addis Ababa Plan Development Commission, 2022)

### 3.2. Research Methods

#### 3.2.1 Research approach and design

In order to investigate factors that affecting community participation in urban road infrastructure development, the researcher uses both quantitative and qualitative research approaches. The qualitative research methodology enables the study of a phenomenon in its natural environment (Creswell, 2009). Quantitative research methodology enables the researcher to identify elements that influence the dependent variable (community participation). The researcher also used a descriptive research approach. Descriptive research helps the researcher to accurately and systematically describe the practice of community participation in urban road infrastructure development in the study area.

### ***3.2.2 Type of data***

Both qualitative and quantitative data were employed in this study. Qualitative data refers to attributes and descriptions that are observed but cannot be quantified. Quantitative data are data that are measured, numerically represented, and calculated.

### ***3.2.3 Source of data***

To achieve the objective of the study primary and secondary sources of data were employed in the study.

**Primary data:** the study uses primary data obtained directly from survey questions and interviews. It allows the researcher to get valuable information from respondents' actual experiences, feelings, and opinions. The primary data for the study were obtained from sub-city and woreda 6 community participation and volunteer service office, sub city land development and administration office experts and team leaders, the road authority coordinator, and communities of the study area.

**Secondary data:** Secondary data for the study were obtained from reviewing pertinent literature from different books, reports, journal reports, and other related research documents focused on community participation and road infrastructure development.

### ***3.2.4 Sampling design***

Due to the large extent of the population in the research area, to save time, energy, and money, the researchers used sampling techniques. Therefore, the researcher arrived at valid conclusions based on selected samples from the target population. The target population of the study area was the population of woreda 6. According to the Ethiopian Statistics Agency, the total population of the study area in the 2007 census was 28,714 people.

The study used purposive sampling techniques. It allowed for the identification of target individuals who were thought to be representative of the study population and to have met the study's objectives. The degree of confidence and the accuracy or sampling error all served as the basis for estimating the sample size. A simplified

formula is used because of the large population. The sample size was determined by using a confidence level of 95% and a margin of error of ±5% to carry out the study.

$$n = \frac{N}{1+N(e)^2} \dots\dots\dots \text{eq. 1}$$

Where,

n= is the sample size,

N = is total sample frame,

e= is level of precision (error)

$$n = \frac{28,714}{1+28,714(0.05)^2}$$

Using the above formula as a base, n = 394.504. As a result, the study area's sample size was 395. Moreover, chosen woreda 6, sub-city and road authority coordinator and employees were included in the study.

### ***3.2.5 Data collection instrument***

To achieve the objective of the study, primary data was obtained from respondents via questionnaires and key informant interviews. Additionally, secondary data was collected by reviewing pertinent literature in a variety of formats and sources, such as books, journals, reports, and other relevant research papers.

**Questionnaire:** In order to get a variety of data from the respondents, the researcher designed and distributed both closed-ended and open-ended questionnaires. The questionnaires were prepared and administered by me. The questions were organized in English, and they were transformed to Amharic to make them easier to recognize. It helps to minimize misunderstandings of questions.

**Interview:** Both structured and semi-structured interviews were conducted. This helped me get the detailed data that is necessary for my research. The interview participants included selected sub-city, woreda 6 team leader, experts, and road authority coordinator.

**Desk reviews:** The researcher examines the existing documents and data that are necessary for the study. This includes sub city and woreda 6 office reports.

### ***3.2.6 Data analysis and interpretation***

Based on selected research approaches, the researcher employed both descriptive and inferential methods of data analysis, and the data obtained from each tool was analyzed separately and conglomerated carefully. The researcher employed descriptive statistics (percentage, frequency table, mean score, and standard deviation) to analyze and interpret the practice and role of community participation in urban road infrastructure development.

The researcher used inferential statistical analysis (correlation analysis and multiple regressions) to analyze and evaluate the impact of each predictor on the relationship as well as the strength of the relationship between an outcome (the dependent variable) and multiple predictor variables (the independent variable).

In this study, the dependent variable is community participation, whereas the independent variables are personal, economic, social, political, and institutional factors that affect the dependent variable. Therefore, the relationship between the dependent variable and independent variables is analyzed through a five-point Linkert scale 1 = strongly disagree, 2 = disagree, 3 = moderate, 4 = agree, and 5 = strongly agree (Bhandari & Nikolopoulou,2023)

Whenever there are two or more independent variables, multiple correlations and the important. The degree of connection between two variables was determined using Pearson Correlation analysis. In this case, the causal relationship between the independent and dependent variables was computed using Pearson correlation.

The possible strategies for factors that affect community participation were analyzed by connecting the perceptions of participants and related research findings from the reviewed literature. The participant perception was analyzed and interpreted through a descriptive statistics. A qualitative data matrix was employed for the analysis of result obtained from the various participant categories. For the analysis of the quantitative data, basic statistical techniques such as percent, mean scores, standard deviations, correlation, and multiple regressions are used to facilitate significant analysis and interpretations of the collected data. Collected data are analyzed at a 95% confidence level by using IBM SPSS version 22. Without primary data, secondary data loses its

statistical significance, and vice versa. To get an integrated effect out of them, both the primary and secondary data were examined simultaneously.

### ***3.2.7 Data presentation techniques***

Both collected and analyzed data from both primary and secondary data were presented through text, tabular, and graph. Texts were used to present data collected from interviews, secondary data, and the findings of the study. Tabular and graphs were used to present the data collected from questionnaire participants in the study. These were tables, pie charts, and bar graphs.

## **4. Result and Discussion**

### **4.1. Demographic and Socio-economic Characteristics of Respondents**

The demographic and socioeconomic characteristics of the respondents represent their sex, age structure, educational status, marital status, occupation status, and income status in the study area.

As presented in table 4.1 below of the total 388 participants, 198 (51%) were male respondents, while the rest, 190 (49%) were female. The majority of respondents' age distribution was found in the age group ranging from 36 to 45, and they were expected to have better information about the study area and the overall situation of community engagement in urban road infrastructure development. Majority of the respondent were married. Most of the respondents has primary or above educational level, and they are likely to have better information about community participation and how urban road infrastructure was developed in the study area. Also more than 90% of the communities have work and more than 85 percent participants earned 5,000 Ethiopian birr and above per month.

Table 4.1 Demographic and socio-economic characteristics of respondents

<b>Variables</b>	<b>Item</b>	<b>No of Participant</b>	<b>Percent</b>
Sex	Male	198	51
	Female	190	49
	<b>Total</b>	<b>388</b>	<b>100</b>
Age	18-25	39	10.1
	26-35	76	19.6
	36-45	184	47.4
	46 And Above	89	22.9
	<b>Total</b>	<b>388</b>	<b>100</b>
Marital Status	Married,	223	57.5
	Single	116	29.9
	Widowed	22	5.7
	Divorced	27	7
	<b>Total</b>	<b>388</b>	<b>100</b>
Education Status	Non Formal Education	23	5.9
	Primary Education(Grade 1-8)	105	27.1
	Secondary Education (Grade 9-12)	83	21.4
	Certificate Graduates	69	17.8
	Diploma Graduates	32	8.2
	Degree And Above	76	19.6
	<b>Total</b>	<b>388</b>	<b>100</b>
Occupational status	Unemployed	35	9
	Self Employed	243	62.6
	Government Employed	50	12.9
	Private Employed	60	15.5
	<b>Total</b>	<b>388</b>	<b>100</b>
Income Status	Below 5,000	57	14.7
	5001-10,000	181	46.6
	More Than 10,000	150	38.7
	<b>Total</b>	<b>388</b>	<b>100</b>

(Source: sample survey, 2023)

## 4.2 Factors Affecting Community Participation in Urban Road Infrastructure Development in the Study Area

### 4.2.1 Descriptive analysis on factors

Table 4.2 Five explanatory independent variables that affect community participation

Variables	Mean score	Std. Deviation
<b>Personal Factor</b>		
Low educational status of community	2.44	1.009
Time shortage	1.89	0.99
Age of communities	1.77	0.94
Lack of willingness to participate	2.58	1.064
<b>Institutional Factor</b>		
Lack of institutions that coordinate communities	3.63	1.32
Lack of Transparency	3.5	1.113
Unfair distribution of road development within the woreda	1.66	1.001
Unsecured property right of affected communities	3.78	0.991
<b>Social Factor</b>		
Lack of awareness about the road development	3.44	0.718
Absence of trust in institution	2.79	0.79
Social class	1.22	0.605
Absence of strong community organizations	3.99	1.055
<b>Economic Factor</b>		
Economic capacity of the community	3.84	0.974
Unemployment	1.7	1.271
Economic instability	3.29	0.934
Poor resource mobilization and utilization	3.26	0.965
<b>Political Factor</b>		
The presence of top-down decision making process	4.15	0.955
Use communities participation as political benefit	2.95	1.196
Lack of political will	3.28	0.816
Lack of representation	2.74	0.811

(Source: sample survey, 2023)

As presented in the table 4.2 above, based on Bhandari and Nikolopoulou (2023) Likert scale criterion, among personal factors lack of willingness to participate and education has a medium level of effect. However, the effects of time shortages and the age of the community are insignificant in the case area. Among institutional factors;

insecure property rights and a lack of institutions that coordinate communities have the highest effect, while a lack of transparency has a medium effect on participation. However, the unfair distribution of road development within the study area has the insignificant effect.

Also from social factor, the absence of strong community organizations has a high effect, and the absence of trust in institutions and lack of awareness about road development have a medium-level effect. Whereas, the social class of communities within the study area has the lowest effect on it. Among the economic factor; economic capacity of the communities has a high effect on community participation. The effects of economic instability and poor resource mobilization and utilization are medium, whereas unemployment has a low level impact on community participation in the study area. From political factors, the presence of a top-down decision-making process has a high effect, while community participation as a political benefit, lack of political will, and lack of representation have a medium effect on community participation.

Based on descriptive statistical analysis, time shortages, age of communities', social class, unfair distribution of road developments, and unemployment have insignificant influence on community involvement. Educational status of communities, lack of willingness to participate, lack of transparency, lack of awareness about road development, absence of trust in institutions, economic instability, poor resource mobilization and utilization, use of community participation as a political benefit, lack of political will, lack of institutions that coordinate communities, and lack of representation have a moderate level of influence on community participation. Whereas the insecure property rights of affected communities', the absence of strong community organizations, the economic capacity of the community, and the presence of top-down decision-making processes have a high level of influence on community involvement.

As stated in Table 4.3 below, from the overall mean of five explanatory independent variables, the personal factor has a low level of influence, whereas the institutional, social, economic, and political factors play a moderate level of influence on community participation in urban road infrastructure development in the study area.

Table 4.3 overall mean of five explanatory independent variables

<b>Variables</b>	<b>No of participant</b>	<b>Mean Score</b>	<b>Std. Deviation</b>
Personal factor	388	2.17	1.00075
Institutional factor	388	3.1425	1.10625
Social factor	388	2.86	0.792
Economical factor	388	3.0225	1.036
Political factor	388	2.79875	0.9445

(Source: sample survey, 2023)

## **4.2. Inferential statistics**

### **i. Correlation analysis**

The result in table 4.4 below indicates that Pearson correlation on the relationship between dependent (community participation) and independent variables (institutional factors, political factors, social factors, and economic factors). The economic factor has the highest correlation coefficient ( $r=-0.434$ ,  $p< 0.01$ ). The second-ranked correlation is institutional factors and community participation, with  $r$  values of  $-0.398$ , followed by the correlation coefficient between social factors and community participation, with values of ( $r=-0.121$ ,  $p< 0.05$ ). The insignificant relationship reported is among personal factors and community participation, as the  $P$  value in the table is higher than the alpha value of  $0.05$ . It implies that personal factors have no significant relationship with community participation at a 95% confidence level in the case area.

The Pearson correlation coefficient among every couple of independent variables should not exceed  $0.9$ , according to Hair et al. (2006), cited in Mengistu 2016). This is because if the correlation value exceeds  $0.90$ , the data may be suspected of having a major collinearity problem. The highest correlation coefficient in the table above is  $26.2$  percent, which is between institutional factors and economic factors, and it is still less than  $0.90$ . It is therefore anticipated that multicollinearity problems won't arise in this investigation.

Table 4.4. Pearson correlation on the relationship between dependent and independent variables

**Correlations**

	CP	PF	INF	SF	EF	PLF	
CP	Pearson Correlation	1	0.06	-.398**	-.121*	-.434**	-0.042
	Sig. (2-tailed)		0.24	0	0.017	0	0.407
	N	388	388	388	388	388	388
PF	Pearson Correlation	0.06	1	.233**	.215**	0.095	0.086
	Sig. (2-tailed)	0.24		0	0	0.062	0.09
	N	388	388	388	388	388	388
INF	Pearson Correlation	-.398**	.233**	1	0.048	.262**	-0.097
	Sig. (2-tailed)	0	0		0.344	0	0.057
	N	388	388	388	388	388	388
SF	Pearson Correlation	-.121*	.215**	0.048	1	-0.007	-0.095
	Sig. (2-tailed)	0.017	0	0.344		0.891	0.06
	N	388	388	388	388	388	388
EF	Pearson Correlation	-.434**	0.095	.262**	-0.007	1	.232**
	Sig. (2-tailed)	0	0.062	0	0.891		0
	N	388	388	388	388	388	388
PLF	Pearson Correlation	-0.042	0.086	-0.097	-0.095	.232**	1
	Sig. (2-tailed)	0.407	0.09	0.057	0.06	0	
	N	388	388	388	388	388	388

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

(Source: sample survey, 2023)

**ii. Multiple linear regression analysis**

**A. Assumption test**

**1. Normality assumption:-**The researcher used graphical methods to check the normality assumption of the study.

The researcher ought to plot the standard residuals across the expected values while evaluating the data, to determine the data points is uniformly distributed over all independent variable values, The data in this research was displayed on a scatterplot and histogram in order to test the hypothesis that the data are from a normal population.

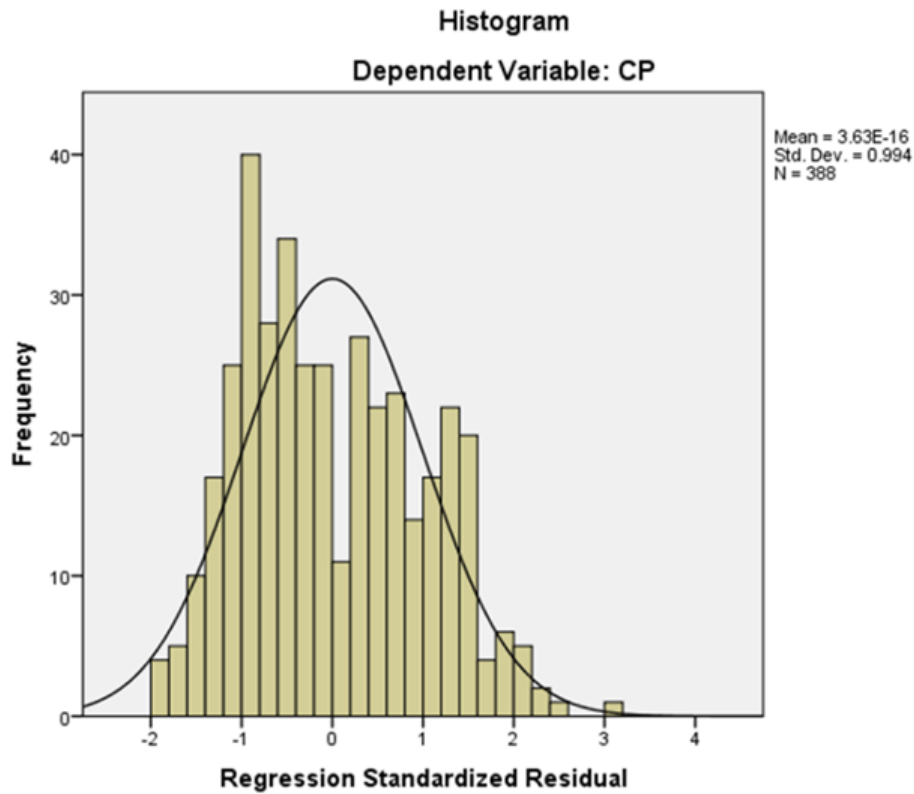


Figure 4.1. Histogram regression standardizes residual

(Source: sample survey, 2023)

As it is shown in Figure 1 above, the histogram looks like a bell-shaped. It implies that it approximates a bell-shaped and normal distribution. Moreover, the standard deviation in the histogram measures the width of the bell curve. Still, the SD value of .994 is less than two, which indicates that the data is normal.

## 2. Checking the absence of multicollinearity using VIF values

The data shouldn't show multicollinearity, which happens if the independent variables (explanatory variables) are strongly correlated. It becomes challenging to pinpoint the exact variable that adds to the variance in the dependent variable when independent variables show multicollinearity. The most effective CP method to verify the hypotheses is to use the variance inflation factor methodology. Every explanatory variable has a VIF value of less than 10, and most of the VIF is less than 5. Every explanatory variable has a VIF value of less than 10, as can be seen in the tables below. It demonstrates that the presumption is upheld.

Table 4.5. VIF values to check absence of multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
PF	0.888	1.127
INF	0.857	1.167
SF	0.94	1.063
EF	0.865	1.156
PLF	0.897	1.114

(Source: sample survey, 2023)

### B. Model Fit

The researcher examined the link between the causes and effects of community participation and independent factors using adjusted R squared in this study.

Table 4.6. Model summary

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.571 <sup>a</sup>	.327	.318	1.31034	2.081

a. Predictors: (Constant), PLF, PF, EF, SF, INF

b. Dependent Variable: CP

(Source: sample survey, 2023)

R-squared has an alternative called adjusted R-squared, which accounts for the amount of predictors in the model. The reason it's used in this study is that it increases when a new word enhances the model beyond what would be expected by chance. A predictor drops if it adds less value to the model than anticipated. The adjusted R-squared is usually greater than zero. It is consistently less than the R-square. The adjusted R2 value of .328 indicates that 31.8 percent of the change in the dependent

variable due to all independent variables accounts for the entire variation in the dependent variable (community participation). That is, these five independent variables cannot account for 68.2 (1-0.318) percent of the variation in cumulative community engagement. Therefore, additional variables that are not included in the study must account for community participation.

Since a process of participation cannot take place in an empty space, it is susceptible to a number of factors that can either hinder or enhance its efficacy. The political intervention, lack of leadership and community organization skills, education, and discrimination affects community participation (Oakley, 1991). Zeliku (2022) Community participation in road infrastructure development are influenced by weak institutional structures, a lack of resources, a lack of awareness and information, and poor coordination and communication between local authorities and communities.

As like as Oakley and Zeliku conclusion, the descriptive and inferential analysis, and revealed community participation in urban road infrastructure is affected by the above mentioned explanatory factors in different ranges. Also key informants from sub-city and woreda team leaders, experts, and Addis Ababa road authority sub-city coordinators states in their interview that participation is held only with the affected community to notice and play their role in the advance of right of way (ROW) when the plan is approved and the implementation is started. The rest of the community is not engaged to play their role in decision-making, planning, implementation, and evaluation. Moreover, their property affected by the development was not secured as soon as it was demolished. This is due to the multi-bureaucratic systems of governmental offices.

This reduced their trust in the institution, and they felt the development was ignorance. Secondary sources also show that compensation and resettlement activities for those affected by the road development take more than two years, and this process creates dissatisfaction in communities. Also, the delay in compensation and resettlement leads the government to make additional expenditures to compensate them. In general, lack of periodic awareness and unsecured property rights and lack of official commitment to infrastructure development have their own influence on community participation in urban road infrastructure development in the study area.

## 5. Conclusions

- The study concluded that time shortages, the age of communities' social class, unfair distribution of road development, and unemployment have insignificant influence on communities' participation in the study area.
- Educational status of communities, lack of willingness to participate, lack of transparency, lack of awareness about road development, absence of trust in institutions, economic instability, poor resource mobilization and utilization, use of community participation as a political benefit, lack of political will, lack of institutions that coordinate communities, and lack of representation have a moderate level of influence on community participation.
- The research concluded that the insecure property rights of affected communities', the absence of strong community organizations, the economic capacity of the community, and the presence of top-down decision-making processes have a significant impact on the involvement of the community in the study area.
- Also, the study concluded that the absence and prolonged process of compensation and relocation for demolished property, a lack of strong civic organizations that work on community empowerment, and a lack of inclusiveness hinder the effectiveness of community participation in the study area.

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## **Appendix 2- Questionnaire**

Addis Ababa University

Ethiopian Institute of Architecture, Building Construction, and City Development

(EiABC) Chair of Urban and Regional Planning

Program in Urban Planning

Questionnaire filled out by Woreda communities

Dear participants!

I am a post-graduate student of urban planning in the department of urban and regional planning at the Ethiopia Institute of Architecture, Building Construction, and City Development, Addis Ababa University. With this understanding, therefore, I am conducting a research entitled "Towards Community Participation in Urban Road Infrastructure Development" in the case of Woreda 6 of Nifas Silk Lafto Sub City, Addis Ababa. The purpose of the study is to investigate community participation in urban road infrastructure development in Woreda 6 of Nifas Silk Lafto Sub City. The study will have paramount significance in terms of identifying the practice, role, extent, factors affecting it, and main methods and schemes to confront the challenge of community participation in urban road infrastructure development in the study area.

You are engaged in this study purposefully. In this section, you are offered the opportunity to complete your perception about community participation in urban road infrastructure development. Hence, your responses are vital for the study and determine its success, and your honest response will help a researcher to achieve the research objective. Therefore, the researcher requests that you read all of the questions, fill out the questionnaire with genuine information, and return it to the researcher. The researcher acknowledges your cooperation to a great extent. Thank you in advance for your cooperation!

### **General Direction**

1. There is no need to write your name on the questionnaire.
2. Please do not leave the questions unanswered

3. Any information obtained from you will be used for research purposes only, and
4. Fill your opinion briefly for the short answer questions in the space provided, or circle the letter for your answer among the given alternatives.

**Part I: General Background of Respondents.**

1. **Sex:** A. Male, B. Female
2. **Age:** A. 18-25 B. 26-35 C. 36-45 D. Over 46
3. **Educational Status:** A. Non-formal education; B. Primary education (1–8)  
C. Secondary education (9–12) D. Certificate E. Diploma F. Degree and above
4. **Marital Status:** A. Married B. Single C. Widowed D. Divorced
5. **Occupation:** A. Unemployed B. Self-employed C. Government-employed D. Private employee
6. **Income:** A. Below 5000 birr B. 5001–10,000 birr; C. More than 10,000 birr

**Part II. The Practice of Community Participation in Urban Road Infrastructure Development**

1. Presence of urban road infrastructure development? A. Yes, B. No
2. What type of urban road development is taking place? A. Asphalt B. Coble Stone C. Gravel D. Culvert and Bridge (You can choose more than one.)
3. If your answer to question number 1 is no, what is the reason behind it?  
A. There are enough existing roads. B. Due to a lack of finance; C. Due to a lack of coordinators; D. Have no information. E. Is how if any other.....
4. Presence of community participation in urban road infrastructure development? A. Yes; B. No
5. Presence of your participation in urban road infrastructure development? A. Yes; B. No
6. Factors if you are not participate? A. Lack of representative. B. Lack of awareness C. Low economic capacity D. Lack of participatory development E. If other.....
7. Level of community participation? A. Very high B. High C. Moderate D. Low E. Very low

8. Presence of institutional structure? A. Yes B. No.
9. Effectiveness to engaging the community in urban road infrastructure development? A. Yes B. No
10. Inclusiveness of community participation in road infrastructure developments?  
A. Yes B. No
11. More participant community group in the development? A. Affected communities B. community representatives C. public figures D. civic societies  
E. if other....
12. Key decision makers in urban road infrastructure development?  
A. City administration B. Sub-city administration C. Woreda administration  
D. Community E. if other specifies it.....

### **Part III: The Role of Community in Urban Road Infrastructure Development**

1. Presence of community participation? A. Yes, B. No
2. Types of participation? A. Via active participation; B. By means of a representative
3. Reason to participate? A. To get road infrastructure services B. To secure property rights affected by the development; C. To take part in the development process; D. To respect my legal duty E. if other specifies it
4. Reason for, if you not are participation? A. Lack of awareness; B. Lack of participatory development C. Lack of interest; D. Time shortage E. Economic limitation
5. Type of community contribution in urban road infrastructure development? A. Contribute labor B. Contribute finance C. Contribute material D. Ideas
6. Sufficiency of community contribution? A. Yes, B. No
7. Possible solution for insufficient contribution? A. Increase Awareness B. Community empowerment C. Make the decision decentralized D. Create a sense of ownership E. if other specifies it.....
8. Main role of communities in urban road infrastructure development? A. Making a decision, B. Planning, C. Implementing, and D. Evaluating

## Part IV: What Are the Factors That Affect Community Participation in Urban Road Infrastructure Development?

Many factors influence the community's participation in urban road infrastructure development activities. However, those factors that influence community participation are different from development to development, palace to palace, and time to time. By considering those factors, the following question is prepared to identify the main factors that affect community participation in woreda 6 of Nifas Silk Lafto Sub City urban road infrastructure development based on the understanding of respondents. **Please insert (√) marks for your response.**

**Hence=1. Strongly Disagree 2= Disagree 3= Undecided 4= Agree and 5= Strongly Agree.**

Independent variables		Linkert scale				
No	Personal factor	1	2	3	4	5
1	Educational status of communities					
2	Time shortage					
3	Age of communities					
4	Lack of willingness to participate					
<b>Institutional Factor</b>						
1	Lack of institutions that coordinate communities					
2	Lack of Transparency					
3	Unfair distribution of road development within the					
4	Insecure property right of affected communities					
<b>Social Factors</b>						
1	Lack of awareness about the road development					
2	Absence of trust in institution					
3	Social class					
4	Absence of strong community organizations					
<b>Economical Factor</b>						
1	Economic capacity of the community					

2	Unemployment					
3	Economic instability					
4	Poor resource mobilization and utilization					
<b>Political Factor</b>						
1	The presence of top-down decision making process					
2	Use communities participation as political benefit					
3	Lack of political will					
4	Lack of representation					

### **Part V. Strategies for enhancing Community Participation in Urban Road Infrastructure Development**

1. Responsible bodies for promoting community participation in urban road infrastructure development? A. Government officials; B. Civic organizations; C. Communities themselves; D. Community representatives

Please use the following likert scale to show your perceptions about methods and schemes to confront the challenge of community participation in urban road infrastructure development. Choose your appropriate answer by putting a (√) mark on the following scales.

**Key: Strongly Disagree = 1, Disagree = 2, Undecided = 3, Agree =4, and Strongly Agree =5**

No	Methods and Schemes to Confront the Challenge of Community Participation in Urban Road Infrastructure Development.	Linkert scale				
		1	2	3	4	5
1	Apply bottom-up decision-making					
2	Create a sense of ownership in development decisions as well as programs and plans.					
3	Strengthen both internal and external institutions by working with communities.					
4	Involve community leaders, local politicians, religious leaders, and business owners in the community.					
5	Increase community empowerment.					
6	Hold a periodic community awareness program.					
7	Give recognition for the community's contribution					
8	Make transparency all over the process of development.					
9	Secure property rights for the affected community.					

**VI. More information**

If you have additional information about Woreda 6 community participation in urban road infrastructure development, please describe it. -----

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## **Appendix 3 -Interview Questions**

Addis Ababa University

Ethiopian Institute of Architecture, Building Construction, and City Development  
(EiABC)

Interview Questions for Selected Woreda, sub city and road authority participants

Dear participants!

I am a post-graduate student in urban planning program at Ababa University; Ethiopia institute of architecture, building construction and city development (EiABC), department of urban and regional planning. With this understanding therefore, I am conducting a research which is entitled as, Towards community participation in urban road infrastructure development in woreda 6 of Nifas Silk Lafto sub city, Addis Ababa. The purpose of the study is to do investigation on community participation in urban road infrastructure development.

You are selected to take part in this study purposely. In this section you are offered to give your perception and practical experience towards community participation in urban road infrastructure development. Hence, your responses are vital and determine the success of my study, and your honest response will help me to achieve the research objective. The study involves open ended interview guided questions.

**Thank you**

Yours faithfully, Girma Yibeltal

1. Urban road infrastructure development participatory or not?
2. Did the developmental activities embrace all segments of the community? If so, how? If not, why?
3. What is the role of communities in urban road infrastructure development?
4. Is there any formal organization designed by the government that enables all segments of the community to participate in urban road development activities?
5. What are done for communities affected by urban road development

6. What are the factors that affect effective community participation in urban road infrastructure development?
7. Which mechanisms are essential to make community participation effective?

### Appendix 4

#### Sample of secondary documents and sample of data analysis in IBM SPSS version 22

The following documents shows infrastructure development reports of woreda 6, N/S/L sub city community participation and volunteer service offices, prolonged system of compensation and relocation and communities complaints, and additional payment for compensation due to lack of relocation.



በ2015 በጀት ዓመት የተጠናቀቁ የልማት ስራዎች

ተ.ቁ	ወረዳ	የተሰጠ የልማት ዓይነቶች	መሰብሰያ	መጠን	ከልተሮ ብሎክ ልዩ ስፍራ	የስራው ማህበር ስም	የጥርጣጣቱ ዋጋ	ስራውን ያስተናግድ የሰርቲፎኬት ካውንስል አመራሮች	ገለል ቁጥር
1	ወ/ወ	ከብልህቶን ጥገና	550 ካ.ሜ	430,419.41	ሃዋርያ ጳጥሮስ ት/ቤት ፈት ላፈት	ናምሮድ መንገድና ሀገሃ ስራተቋራጭ	20,000	አልሰባ ገሳ	0923276128
2		ከብልህቶን ጥገና	35 ካ.ሜ	130,127.44	ተጠና 53 ሰላም ሽማግሌ አጠገብ	ቢዝ ጠ/ስራ ተቋራጭ	99,147.67	ሰላሙ ሊደሊ	0910191255
3		አዲስ ቱቦ ተባራ	40ሜ	216,000	ተጠና 4 ብሎክ 6 እና ተጠና 52	ናምሮድ መንገድና ሀገሃተቋራጭ	አቴቱ መንግስት	አሮጃሽ ዳቢ አበራሽ ለሁኔ	0912975173
4		አዲስ ቱቦ ተባራ	126ሜ	216,000	ተጠና 43/አልማዝዩ ሜዳ	ክ.አ መንገዶች ባለስልጣን	ግህደር መሳፍን ከሆሎ ስራድ		0911885787
5			85ሜ		ተጠና 52፣53	በግል			
6		ቱቦ ጥገና	156ሜ	259,500.00	ተጠና 46/53/52	በግል ሰላይነት/በቀሳቀስ የተደረገ ግብዓት በግልሰብ/በባለሀብት የተሰራ		ታደሰ ለበበ መላኩ ወልድ ወንድሙ ሀ/ማሪያም	0911610024 0911561251 0911929106
7		እስተኛድልድይ	24ሜ	40,000	ገብርኤል ቢክርኩቲያን አጠገብ	በሀብረተሰብ ትብብር			
8		ሰብሊክ ስራ	ካ/ሜ						
9		ካልሸርት							



ጸ/ቤት ገ/ቤት  
0911561251



በአዲስ አበባ ከተማ አስተዳደር  
 በንጉሥ ስልክ ላይኛ ክፍለ ከተማ የህብረተሰብ ተሳትፎ  
 እና በጎ ፈቃድ ማስተባበሪያ ጽ/ቤት  
 ADDIS ABABA CITY GOVERNMENT  
 NIJAS SILK LAFTO SUB CITY Public participation AND  
 VOLUNTARY coordination OFFICE



ተገ 49110/2015 ዓ.ም

ቁጥር በ/ሰ/ህ/ከ/ተ/ዘ/ጎ/ግ/ጽ/ቤት/ 11/10/2015 ዓ.ም

በአዲስ አበባ ከተማ አስተዳደር  
 ህብረተሰብ ተሳትፎና በጎ ፍቃድ ማስተባበሪያ ኮሚሽን  
 ለአካባቢ መሰረተ ልማት ዳይሬክቶሬት  
 አዲስ አበባ

11/10/2015  
 - የሥራ ሰዓት  
 - የገንዘብ ሰዓት  
 - የሥራ ሰዓት  
 - የሥራ ሰዓት  
 - የሥራ ሰዓት

**ጉዳይ:- የ አጠቃላይ የ2015 የበጀት ዓመቱ ሪፖርት መላክን ይመለከታል**

ከላይ በርዕሱ ለመግለጽ እንደተሞከረው በንጉሥ ስልክ ላይኛ ክፍለ ከተማ የህብረተሰብ ተሳትፎ እና በጎ ፍቃድ ማስተባበሪያ ዕ/ቤት በ-ድን የ2015 የበጀት ዓመቱ እና የሰነድ ወር ሪፖርት -- ገጽ አባሪ አድርገን መላክችንን እንገልጻለን።



ከሰላምታ ጋር

**ግልጻፍ**  
 በን/ሰ/ህ/ከ/ተ/ማ ዋና ስራ አስፈጻሚ

መሥሪያ ቤቱ ደርሶ የሚገኘውን ሰነድ ተሳትፎና በጎ ፍቃድ ማስተባበሪያ ኮሚሽን ጋር

11/10/2015  
 ደ/ሥ/ሥ/ግ/ጽ/ቤት

ለሰብአዊነት እና ምክንያቱ ስብረተሰብ ...  
 FOR HUMANITY AND REASONABLE SOCIETY ...  
 "ወወደ ልዩ ልዩ የሆነ ቁጥር ደግሞ" የዘጠነዎ ስም ይጻፉ  
 In replying please quote our Ref. No. and Full name of the employee involved  
 ☎ 0118-83-80-08

**ክፍል አራት**

**ያጋጠሙ ችግሮችና የተወሰዱ የመፍትሄ እርምጃዎች**

**3.1 ያጋጠሙ ችግሮችና**

- > የባለሙያ እጥረት
- > የተሽከርካሪ እጥረት
- > በወረዳ ደረጃ ከፍተኛ የሆነ የበጀት እጥረት መኖሩ በሚፈለገው ደረጃ የግንባቤ ማስጨበጫ ስራዎች መሰራት አለመቻላቸው
- > የወረዳ አመራሩ በገንዘብ ለሚሰሩ ተግባራት በሚሰጠው ትኩረት ልክ ለመሰረተ ልማት የሚሰጠው ትኩረት እናሳ መሆኑ

**3.2 የተወሰዱ የመፍትሄ እርምጃዎች**

- > በባለሙያ እጥረት ምክንያት ስራው እንዳይቋረጥ ከስራ ሰዓት ውጭ ባለው 1 ቡድን መሪ ስራዎች እንዲሰሩ መደረጉ እና ከሌሎች ቡድኖች ጋር ካሉ ባለሙያዎች ጋ በመሳጋገር ስራው ለምስራት ጥረት ተደርጎልኑ።
- > የተሽከርካሪ ችግር ለመቅረፍ በአግር ወደ ወረዳ እና የልማት ስራዎች የተከናወኑበት ቦታ እየወረዱ ለመደገፍ ጥረት ተደርጎልኑ።
- > በበጀት እጥረት ምክንያት የግንባቤ ማስጨበጫ ስራዎች ችግር ለመቅረፍ ያለ የትራንስፖርት አጠቃላይ ስልጠናዎች ለመስጠት ጥረት መደረጉ
- > አመራሩ የስራ ባህሪ ተረድቶ በፍጥነት ወደ ተግባር እንዲገባ ተደጋጋሚ ግምገማዎች ውይይቶች ተደርጎልኑ። በዚህም የነበረበትን የግንባቤ ችግር ለመተንሰ ጥረት ተደርጎልኑ።
- > አመራሩ በገንዘብ ለሚሰሩ ተግባራት ብቻ ሳይሆን ተቆጣጣሪ የወረዳ ለትን ተግባራት አስተሳሰብ መተግበር እንዳለበት በተለይም የህዝቡን መሰረታዊ ችግሮች ሊቀርፍ የሚችለውን የልማት ጥያቄ ትኩረት ሰጥቶ መስራት እንዳለበት መግባባት ተደርጎልኑ።
- > የወረዳ ባለሙያው ካሰጠው ተደርጎ በወረዳ ለትኩረት እንዲሰጥ በአግባቡ ተገንዝቦና ተረድቶ ስራው በልዩ ትኩረትና ተገንዝቦ ማከናወን እንዳለበት ተደጋጋሚ መድረኮችን በመፍጠር መግባባት ተደርጎልኑ።

**> ተጨማሪ በየወረዳው የተከናወኑ ስራዎች**

- በየወረዳው የትቦ ጠረጋ 8.3 ኪ.ሜ ተከናውኗል በወረዳ 0118 012 ሜ ብር
- ለታራሚዎች 3 ተጨማሪ ክፍሎች ተሰርተዋል ብረዳ 05 ና 14 በ1.2 ሜ ብር
- የትቤት 65ሜ እጥር ተሰርተዋል በወረዳ 01 ለቡ 631000 ብር
- የወረዳዎች 4 የቢሮ ማስፋፊያ ክፍሎች ተሰርተዋል በወረዳ 081 01 ለቡ 1.35 ሜ ብር





**ሽብርት ስጦት ከተማ ስስተጻጻር የመሬት ልማትና ስስተጻጻር ቢሮ**  
**City Government of Addis Ababa Land Development and Administration Bureau**

ቀን: 03/2015

Date

በላንጎስ ስልክ ከተማ መሬት ልማት ስስተጻጻር

ለመሬት ልማትና ስስተጻጻር ጽ/ቤት

ስጳስ ስጦት

11- 663  
08/03/15

ቁጥር: ስ/ሰ/ሰ/ሰ/ /2015  
No

23/8646

ጉዳይ :- የልማት ተሽከርካሪ ምትክ ቤትን መላክን ይመለከታል ::

በቁጥር ስ/ሰ/ሰ/ሰ/395/14 በተን 11/06/14 ዓ.ም በቁጥር ስ/ሰ/ሰ/ሰ/3072/15 በተን 9/9/14 ዓ.ም እና በቁጥር ስ/ሰ/ሰ/ሰ/4059/14 በተን 3/8/14 ዓ.ም ፣ በቁጥር ስ/ሰ/ሰ/ሰ/1004/14 በተን 3/8/14 ዓ.ም ፣ በቁጥር ስ/ሰ/ሰ/ሰ/849/14 በተን 14/11/14 ዓ.ም ፣ በቁጥር ስ/ሰ/ሰ/ሰ/589/14 በተን 17/10/14 ዓ.ም ፣ በቁጥር ስ/ሰ/ሰ/ሰ/505/15 በተን 04/01/15 ዓ.ም በተጻፈ ደብዳቤ በጎፋስ ስልክ ላይኛ ክፍል ከተማ ወረዳ 06 በቲራ መንገድና ፈጣን ባስ ፕሮጀክት ተሽከርካሪ የሆኑ የልማት ተሽከርካሪዎች በጎፋስ ስልክ ላይኛ ክፍል ከተማ ለመሬት ባንክና ጥቅም ቡድን ለተለያዩ ጊዜያት ለምትክ ቤት ፍላጎት የተላኩ ሲሆን ምትክ ቤት የልወሰዱ የ20 የልማት ተሽከርካሪዎች ዝርዝር እና የተደጉ የይዘት ማረጋገጫ የልማት ተሽከርካሪዎች መስጠት ካደረጉ ለምትክ ቤት ዝርዝር የተላኩት የወረዳ 6 የመንገድ ልማት ተሽከርካሪ 18 ግለሰቦች ደብዳቤ ኮፍ መታወቂያ ኮፍ እንዲሁም ከላይ እንደተገለጹ በተለያዩ ተንና ቁጥር ምትክ ቤት ለልማት ተሽከርካሪዎች ለዘጋጅታቸው መላካቸው ይታወቃል ::

ነገር ግን 20 የተሸፈነ ትተር ፣ ፈጣን ባስ እና የቲራ የመንገድ ተሽከርካሪ ምትክ ቤት ለዘጋጅታቸው የላካቸው ቢሆንም ካላ የተከፈለበት ማስረጃ እና ስርተፍኬት እያያዘቸው ባለመላካቸው የተጎሳ ለማስተናገድ የተቸገርን ሲሆን የልማት ተሽከርካሪዎች እንግልት ደረሰባቸው በማለት በተደጋጋሚ ትራታቸውን ለቢሮ እያቀረቡ መሆናቸው ከላይ የተጠቀሱት 20 የልማት ተሽከርካሪዎች ከቢሮ መልሶ ማልማት ጠላን ማስከበር ጻይሬሲቱን ከክፍለ ከተማው በቁጥር 589/14 በተን 17/19/14 ዓ.ም የተጻፈ ደብዳቤ የተላከው መረጃ እንዲስተካከል ተደርጎ የመጣው መረጃ የተጣራ መሆኑን በማረጋገጥ 2 የልማት ተሽከርካሪዎች መረጃቸው ሲሆን እንዲስተናገዱ እና 17 የልማት ተሽከርካሪዎች መረጃቸው የተሞላ ስለሆነ በሽንጃ መሰረት እንደተናገሩ በተን 18/11/14 አሳውቀውናል::

ስለዚህም ከላይ የተጠቀሱት 20 የልማት ተሽከርካሪዎች ውስጥ ቦታ 16 ቦታዎች ከመመሪያ ጋር ተያያዞ ቢሮ በኩል ውሳኔ የሚጠብቁ ሲሆኑ 3 የልማት ተሽከርካሪዎች የመመሪያ ክፍተት ስለሌላው እን ትርጉሙ ቸርነት ፣ ወ/ር ይጋለች መላት እና እን ዘርቲቲ ውብ ግንባታ ቀል የቦታ ስፋታቸው ፣ ባለ 300 ፓሎት (1) ፣ ባለ 90 ፓሎት (2) በመግቢያው ፕላን መሰረት አነስተኛ ትይዩ መኖሪያ (Low Density Mixed Residence) የተመዘኑ ቦታዎች የተዘጋጁ ሲሆን ቦታዎቹን ለልማት ተሽከርካሪዎች ከማስገባት ባደረጉ ካላ የተፈለገው ማስረጃ ፣ 2 የካላ የተቀበሉበት ስራተኛነት እንዲሁም ከቢሮ በፊት በክፍለ ከተማው ስሜቸው ቦታ መውሰድ አለመውሰዳቸው በማረጋገጥ ለልማት ተሽከርካሪዎች እንደተሰጠባቸው እያሳሰቡ ለአፈጻጸም ያረፉት ዘንድ የተዘጋጀው ፕላን ፎርማትና ዘርፍ እና ላይኛ እንዲሁም ከጻፉት ቢታዩት በሌላው ጊዜ የተሰጡት ደብዳቤዎች ኮፍ -- ገጽ እያደዘን የላክን መሆኑን እንገልጻለን::



ገልጻል፤  
 በላንጎስ ከተማ ስስተጻጻር  
 - ለመሬት ልማትና ስስተጻጻር ቢሮ  
 በመሬት ልማትና ስስተጻጻር ቢሮ  
 - ለመሬት ስጦትና ማስተላለፍ ዘርፍ ም/ቢሮ ጋራ  
 - ለመሬት ስጦትና ማስተላለፍ ጊዜያት ጻይሬሲታ  
 - ለመሬት ስጦትና ማስተላለፍ ልማት አንጻር ቡድን  
 - ስራው፣  
 ስጳስ ስጦት

ገዢው ፊርማ



በንፋስ ስልክ ላፍቶ ከ/ከተማ  
የመሬት ልማትና ከተማ ማደስ ጽ/ቤት

Nifas Silk Lafto Sub-City  
Land Development and Urban Renewal Office

ቁጥር:-ንስላ/ከ/ከ/መ/ል/ከ/ማ/ፅ-ዕ/፲፱/13

ቀን:- 14/1/13 ዓ.ም

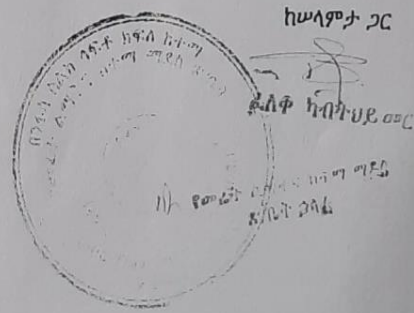
ለአዲስ አበባ ከተማ አስተዳደር መንገዶች ባለስልጣን  
አዲስ አበባ፤

**ጉዳዩ:- ተጨማሪ ካሳ ክፍያን ይመለከታል፤**

በንፋስ ስልክ ላፍቶ ከ/ከተማ በወረዳ 06 አስተዳደር ክልል ከፕላን አደባባይ እስከ ጎተራ አደባባይ በሚሰራው መንገድ ምክንያት ለተነሱ ነዋሪዎች ይዘታቸው በሙሉ የሚነካባቸው የአዲስ አበባ ከተማ አስተዳደር የመሬት ልማትና ከተማ ማደስ ኤጀንሲ በቁጥር መ/ል/ከ/ማ/ኤ-10/1708/12 በቀን 30/07/2012 ዓ.ም የ2012 ዓ.ም የገጠላ ዋጋ መሰረት ተጨማሪ የመፈናቀያ ካሳ በካሳ ምትክ አሰጣጥ መመሪያ ቁጥር 19/2006 መሰረት የቤት የመፈናቀያ/የ24 ወር የቤት ኪራይ ልዩነት በካሳ ባለሙያ ተተንትኖ ሂሳብ ተሰርቶና በካሳ ግምትና ምትክ አረጋጋጭ አገልግሎት በተደረገውና በካሳ ክፍል ኃላፊ በተረጋገጠው መሰረት:-

ተ.ቁ	ሙሉ ስም	ጠቅላላ ድምር
ተከስተ በቀለ ወልደገዳቅ (ወራሾች)		400,845.67
1	ንግስት ሀይሌ ወ/ኪዳን	
2	ሙሉአቤት በቀለ ወ/ገዳቅ	
3	ሸዋዬ በቀለ ወልደገዳቅ	
4	ጌቱ በቀለ ወልደገዳቅ	
5	መላኩ በቀለ ወልደገዳቅ	400,845.67
6	ዘመናይ በቀለ ወልደገዳቅ	
7	ኤልያስ በቀለ ወልደገዳቅ	
8	መንግስቱ በቀለ ወልደገዳቅ	
2	አስያ ሙሳ ዑስማን	400,845.67
<b>ድምር</b>		<b>801,691.34</b>

በአጠቃላይ 801,691.34 ብር (ስምንት መቶ አንድ ሺህ ስድስት መቶ ዘጠና አንድ ብር ከ34/100) ብር ብቻ እንዲከፈላቸው የካሳ ዝርዝር የሚገልፅ ..... ገፅ አባሪ በማድረግ የላከን መሆኑን እየገለፅን የካሳ ክፍያው እንዲፈፀም እንጠይቃለን።

ከሠላምታ ጋር  
  
 ጸሐፊ ካብትህይ መር

- ግልባጭ:-**  
**በንፋስ ስልክ ላፍቶ ክፍለ ከተማ አስተዳደር**
- ለመሬት ልማትና ከተማ ማደስ ፅ/ቤት
  - ለወሰን ማስከበር ዋና የሥራ ሂደት
  - ለካሳ ግምትና ምትክ አረጋጋጭ አፈሰር
  - ለካሳ ግምትና ምትክ አፈሰር
  - ለፋይል
- አዲስ አበባ፤

በልክ ላፍቶ ክፍለ ከተማ የወረዳ 06  
መሠረተ ልማት ቅንጅት  
ግንባታ ፈቃድና ቁጥጥር  
ጽ/ቤት



Nfas silk lapto sub city worda 06  
INFRASTRUCTURE COORDINATION,  
BUILDING PERMIT AND CONTROL  
AUTHORITY

ቁጥር ን/ስ/ላ/ክ/ከ/ወ/ፊ/ሥ/ጽ 161 /2012 ዓ.ም.

ቀን 16/03/2012

Ref.No \_\_\_\_\_

Date \_\_\_\_\_

በንፋስ ስልክ ላፍቶ ክፍለ ከተማ  
ለመሠረተ ልማትና ከተማ ማደስ ጽ/ቤት  
አዲስ አበባ

**ጉዳዩ:- መረጃ ሰለመስጠት**

ከላይ በርዕሱ ለመግለፅ እንደተሞከረው የክፍለ ከተማችን የመሠረተ ልማትና ከተማ ማደስ ጽ/ቤት በቁጥር ን/ስ/ላ/ክ/ከ/ወ/ፊ/ሥ/ጽ 9089/12 በቀን 03/03/2012 ዓ.ም እና በቁጥር ን/ስ/ላ/ክ/ከ/ወ/ፊ/ሥ/ጽ 10196/12 በቀን 16/03/2012 ዓ.ም በተፃፈ ደብዳቤ አልማዘዩ ሜዳ አካባቢ በሚሰራው መንገድ ፕሮጀክት ይዞታቸው መንገድ የሚነካ ግለሰቦች ፋይላቸው የተላኩትን ሲሆን ለሚፈረሰባቸው ንብረት ካሳ ለመክፈል በእኛ በኩል የግንባታውን ህጋዊነት የሚያረጋግጥ የግንባታ ፍቃድ ሰነድ ካለ አረጋግጠን እንድንልክላቸው በጠየቃችሁን መሰረት ::

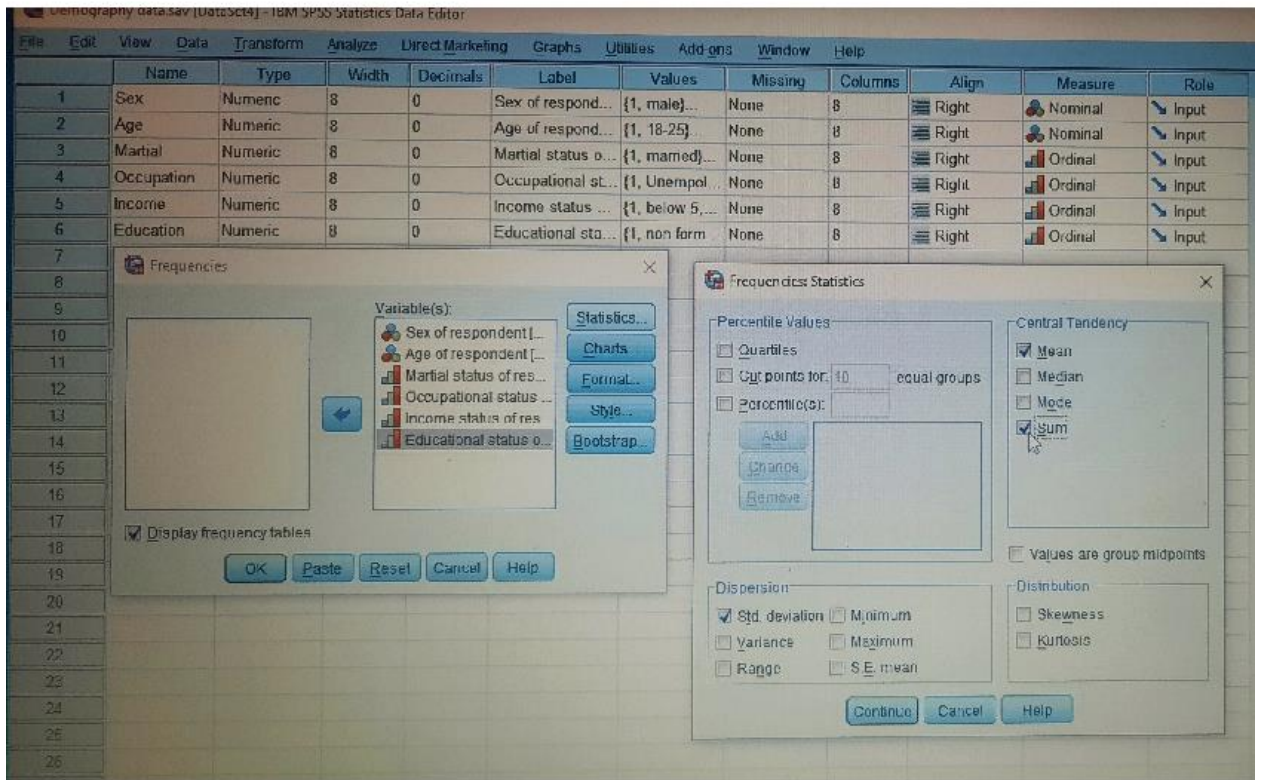
እኛም ባደረግነው ማጣራት መሰረት የግንባታ ፍቃድ ሰነድ ያላቸውን በጀርባ ማህተም በሚረጋገጥ የይዘታ ካርታ ማረጋገጫ ኑሯቸው የግንባታ ፈቃድ ያላያዙ ነገር ግን በጂ.አይ.ኤስ ቤታቸው የሚታይ እና ምንም አይነት የይዘታ ማረጋገጫ ሰነድ ያልተያዙ ብለን በመለየት ከዚህ ደብዳቤ ጋር ገፅ ያረጋገጥንበትን አያይዘን የላክን መሆኑን እንገልጻለን::



ከሰላምታ ጋር  
  
የን/ስ/ላ/ክ/ከ/ወ/ፊ/ሥ/ጽ የግንባታ  
ፈቃድና ቁጥጥር ጽ/ቤት ኃላፊ

በከተማችን በመካከሪያ ያለው ግንባታ ሥርዓት ባለው እና ደረጃውን በጠበቀ መንገድ እንዲመራ በማድረግ የሕዝብን ጤንነትና ደህንነት እናረጋግጣለን !!

ስልክ ☎ 011-416-31-03 መልስ ሲጻፉልን የእኛን ቁጥር ይጥቀሱ In replying Please Quote Our Ref.No



File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Add-ons Window Help

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	FACPQ	Numeric	8	0	What is your p...	{1, Absence...	None	8	Right	Nominal	Input
2	PF1	Numeric	8	0	Low educationa...	{1, Strongly ...	None	8	Right	Ordinal	Input
3	PF2	Numeric	8	0	Time shortage	{1, Strongly ...	None	8	Right	Ordinal	Input
4	PF3	Numeric	8	0	Age of commun...	{1, Strongly ...	None	8	Right	Ordinal	Input
5	PF4	Numeric	8	0	Lack of willingne...	{1, Strongly ...	None	8	Right	Ordinal	Input
6	INSF1	Numeric	8	0	Lack of institut...	{1, Strongly ...	None	8	Right	Ordinal	Input
7	INSF2	Numeric	8	0	Lack of Transp...	{1, Strongly ...	None	8	Right	Ordinal	Input
8	INSF3	Numeric	8	0	Unfair distributi...	{1, Strongly ...	None	8	Right	Ordinal	Input
9	INSF4	Numeric	8	0	Unsecured prop...	{1, Strongly ...	None	8	Right	Ordinal	Input
10	SF1	Numeric	8	0	Lack of awaren...	{1, Strongly ...	None	8	Right	Ordinal	Input
11	SF2	Numeric	8	0	Absence of trus...	{1, Strongly ...	None	8	Right	Ordinal	Input
12	SF3	Numeric	8	0	Social class	{1, Strongly ...	None	8	Right	Ordinal	Input
13	SF4	Numeric	8	0	Absence of stro...	{1, Strongly ...	None	8	Right	Ordinal	Input
14	ECF1	Numeric	8	0	Economic capa...	{1, Strongly ...	None	8	Right	Ordinal	Input
15	ECF2	Numeric	8	0	Unemployment	{1, Strongly ...	None	8	Right	Ordinal	Input
16	ECF3	Numeric	8	0	Economic insta...	{1, Strongly ...	None	8	Right	Ordinal	Input
17	ECF4	Numeric	8	0	Poor resource...	{1, Strongly ...	None	8	Right	Ordinal	Input
18	PLF1	Numeric	8	0	The presence o...	{1, Strongly ...	None	8	Right	Ordinal	Input
19	PLF2	Numeric	8	0	Use communiti...	{1, Strongly ...	None	8	Right	Ordinal	Input
20	PLF3	Numeric	8	0	Lack of political...	{1, Strongly ...	None	8	Right	Ordinal	Input
21	PLF4	Numeric	8	0	Lack of represe...	{1, Strongly ...	None	8	Right	Ordinal	Input
22	CP1	Numeric	8	0	Is the communi...	{1, Strongly ...	None	8	Right	Ordinal	Input
23	CP2	Numeric	8	0	Is the participat...	{1, Strongly ...	None	8	Right	Ordinal	Input
24	CP3	Numeric	8	0	Are you commil...	{1, Strongly ...	None	8	Right	Ordinal	Input
25	CP4	Numeric	8	0	You know your ...	{1, Strongly ...	None	8	Right	Ordinal	Input
26	PF	Numeric	8	2			None	10	Right	Scale	Input
27	INF	Numeric	8	2			None	10	Right	Scale	Input
28	SF	Numeric	8	2			None	10	Right	Scale	Input
29	EF	Numeric	8	2			None	10	Right	Scale	Input
30	PLF	Numeric	8	2			None	10	Right	Scale	Input
31	CP	Numeric	8	2			None	10	Right	Scale	Input

Linear Regression

Dependent: CP

Block 1 of 1

Independent(s): PF, INF, SF

Method: Enter

Selection Variable: Rule

Case Labels:

WLS Weight:

OK Paste Reset Cancel Help

Output 7 (Document) 2 - IBM SPSS Statistics viewer

File Edit View Data Transform Insert Format Analyze Direct Marketing Graphs Utilities Add-ons Window Help

Output

- Log
- Descriptives
  - Title
  - Notes
  - Descriptive Statistics
- Regression
  - Title
  - Notes
  - Descriptive Statistics
  - Correlations
  - Variables Entered
  - Model Summary
  - ANOVA
  - Coefficients
  - Collinearity Correl.
  - Collinearity Diagn.
  - Casewise Diagn.
  - Residuals Status
  - Charts
    - Title
    - Field Histogram
    - Field Name
    - Field of 70
- Correlations
  - Title
  - Notes
  - Log

```

CORRELATIONS
/VARIABLES=CP PF INE SP EF PLF
/PRINT=TWOTAIL NUSIG
/MRESIN=FAIKRTE.
  
```

### Correlations

		CP	PF	INE	SP	EF	PLF
CP	Pearson Correlation	1	.090	-.384	-.121	.434**	-.642**
	Sig. (2-tailed)		.746	.003	.017	.000	.437
	N	388	388	388	388	388	388
PF	Pearson Correlation	.090	1	-.237	-.215**	.065	.066
	Sig. (2-tailed)	.746		.030	.003	.662	.090
	N	388	388	388	388	388	388
INE	Pearson Correlation	-.384	-.237	1	.048	.207	-.267
	Sig. (2-tailed)	.003	.030		.344	.030	.067
	N	388	388	388	388	388	388
SP	Pearson Correlation	-.121	-.215**	.048	1	-.007	-.095
	Sig. (2-tailed)	.017	.003	.344		.881	.090
	N	388	388	388	388	388	388
EF	Pearson Correlation	.434**	.065	.207	-.007	1	.232
	Sig. (2-tailed)	.000	.662	.030	.691		.000
	N	388	388	388	388	388	388
PLF	Pearson Correlation	-.642**	.066	-.267	-.095	.232	1
	Sig. (2-tailed)	.437	.090	.067	.090	.000	
	N	388	388	388	388	388	388

\*\* Correlation is significant at the 0.01 level (2-tailed).  
\* Correlation is significant at the 0.05 level (2-tailed).