

## **Identifying the Causes of Dissatisfaction of Construction Labour: A Case Study of Building Construction of Jajarkot District Hospital, Nepal**

**Bikash Bista<sup>1</sup>, Uttam Neupane<sup>1\*</sup>, Subash Kumar Bhattarai<sup>1,2</sup>**

<sup>1</sup> Graduate School of Engineering, Central Department of Civil Engineering Mid-West University (MU), Surkhet, Nepal

<sup>2</sup> HERD International, Lalitpur, Nepal

\* Author to whom correspondence should be addressed; E-Mail: [uttam.neupane@mu.edu.np](mailto:uttam.neupane@mu.edu.np)

*Received : 12 October 2023; Received in revised form : 6 December 2023; Accepted : 14 December 2023; Published: 25 January, 2024*

### **Abstract**

The construction industry in Nepal is a significant contributor to the country's economy, but it faces challenges related to construction labor's dissatisfaction. This study focuses on identifying the causes of dissatisfaction of construction labour during the building construction in Jajarkot. The primary objective of this study is to pinpoint and dissect the critical challenges that confront construction workers and, more importantly, to propose strategies aimed at enhancing their job satisfaction. The ultimate goal is to catalyse improvements in overall productivity and the successful completion of construction projects in the region. The study uses a mixed-method approach, including questionnaire, reports and research papers to gather data. The research identifies several key factors contributing to labour dissatisfaction, including delayed payment, inadequate compensation, inadequate wages, unsafe working conditions, excessive working hours and insufficient safety measures. These issues have a direct impact on construction labour motivation, affects their morale and well-being, leading to unhappiness, reduced productivity and reduced work excellence. The key recommendations include timely payments, improving compensation, enhancing working conditions, offering career growth prospects, promoting open communication, and recognizing workers' contributions. By adopting these measures, the construction industry can foster a positive work environment, leading to increased productivity and timely project completion.

**Keywords:** Construction, Labour, Dissatisfaction, Building Construction

### **1. INTRODUCTION**

In Nepal, the construction industry plays a vital role in the economic development of nations, contributing to infrastructure projects that shape cities and communities. However, the industry is often characterized by demanding work conditions, physical labour, tight deadlines, and high-pressure environments. As a result, labour dissatisfaction can be a prevalent issue among construction workers, negatively impacting their job satisfaction, motivation, and overall well-being. Understanding the causes of labour's dissatisfaction in construction is essential for both employers and policymakers to create a more productive and harmonious work environment. The construction industry is closely

connected to a country's economy, playing a significant role in its growth. Since these two aspects, construction industry and country's economy are so interrelated, it makes sense to manage the workforce in the construction sector effectively [1]. Construction workers are exposed to risks that differ from general industry relative to occupational health and safety (OHS). In view of this, it is important for construction firms to provide the necessary work provision requirement for their workers to work and be satisfied with the job. Job satisfaction is important in everyday life to both employers and their workers. Labour's dissatisfaction refers to the discontentment and unhappiness experienced by workers in their jobs. In the context of Nepal's construction sector, this dissatisfaction can arise due to factors such as low wages, poor working conditions, inadequate safety measures, limited career growth opportunities, and lack of recognition. Below figure shows the construction workers working in different weather conditions in the study area.



Figure 3: Construction workers working in both sunny and foggy weather

Construction industry is one of the nation's largest and challenging industries. Construction accounted for 10-11 % nation's gross domestic product (GDP) of Nepal. Besides it uses around 35% of Government Budget. Similarly, about 60% of the nation's development budget is spent through the use of contractors [2]. Hence, construction is one of the major sectors of country and has positive impact on overall improvement of the nation's economy and provides employment to large number of people. Typically, labour costs make up a substantial portion of the total project expenses, ranging from 33% to 50% [3]. Boosting labour productivity is a key factor in cutting down labour costs and improving the overall efficiency of construction projects. Contractors commonly prioritize labour productivity rates as a critical factor determining the overall success or failure of a project [4].

The Nepalese construction industry faces a range of challenges, including poor infrastructure, inadequate resources, and a shortage of skilled workers. One of the key factors contributing to these challenges is construction labor's dissatisfaction, which can lead to low productivity and poor-quality services. The impact of labor's dissatisfaction in the construction industry in Nepal is multi-fold. It affects not only the workers themselves but also the efficiency and quality of construction projects. It hinders the smooth progress of construction projects, lead to delays, cost overruns, and may even compromise the structural integrity or safety of buildings. It is crucial for construction companies, project managers, and stakeholders to address construction labor's dissatisfaction proactively to ensure the successful completion of projects and the well-being of the workers. By recognizing and addressing the causes of construction labor's dissatisfaction, implementing measures to improve working conditions, providing fair compensation, offering opportunities for skill development, promoting

worker engagement, and fostering a positive work environment, the construction industry in Nepal can mitigate the negative impacts and promote productivity, quality, and worker satisfaction.



Figure 2: Lack of Safety equipment (Helmet, Harness, Glasses, and Gloves) during construction work

It is important to understand the causes and effects of construction labour dissatisfaction for employers, policymakers, and stakeholders to create a more productive and harmonious work environment. This research aims to identify the major factors contributing to construction labor's dissatisfaction on the construction of 50 bed Jajarkot District Hospital, a healthcare facility in Nepal and to propose effective measures to enhance construction labor's satisfaction in the construction industry in the country. Below figure illustrates the overtime working by the labor at nighttime.



Figure 3: Late night work done by construction labours

In essence, this research project is not only a response to a pressing issue within the construction industry but also a proactive step towards fostering a positive and constructive atmosphere for labourers, which, in turn, can contribute significantly to the continued growth and success of the construction sector in Nepal. To achieve the aim of this research, the overall objective of this research is to identify the key factors contributing to dissatisfaction and to propose effective measures to enhance

satisfaction of construction labour in the construction industry in Nepal, particularly in the context of construction of 50 Bed Jajarkot District Hospital. The Cambridge Dictionary describes labour as the workers, particularly those engaged in practical manual tasks, are referred to as labour, encompassing both skilled and unskilled individuals. According to the findings of Frederick Herzberg, factors for dissatisfaction are security, status, salary, supervision, organizational policies and working environment. In the construction industry, professionals have to do various tasks throughout the entire construction project. How well they do their job is often linked to how satisfied they are with their work [5]. When workers are not happy with their jobs, it can cause several problems, including lower productivity, higher labour turnover, higher safety risks, lower quality of work, and a negative atmosphere at work. Employee turnover happens when employees leave the organization, and their decision to leave is often connected to how satisfied they are with their jobs [6]. To retain the employees, a manager needs to deal with each person, perhaps by asking questions and maintaining good communication [7]. Employee satisfaction is a crucial factor influencing whether someone decides to stay with or leave an organization [8]. Satisfaction factors such as such as monetary and non-monetary rewards, the work environment, the nature of the job, a sense of achievement, recognition, responsibility, and opportunities for personal growth contribute to employees feeling valued by their organizations [9].

This study aims to improve the working environment for construction labours in Jajarkot, Nepal, by identifying their concerns and challenges. The goal is to create a safer and more satisfying working environment for these labours. Satisfied and energetic workers tend to work better and faster. So, this research can help construction projects finish on time. This study can suggest better rules and laws to protect labors' rights, making their lives better. Labors' opinions and problems are heard through this study, which can lead to better treatment and conditions. This research can also help other people learn about work issues, especially in construction in Nepal.

## **2. METHODOLOGY**

### **2.1 Selection of Study Area**

In this study, we have chosen the "Construction of 50 Bed Jajarkot District Hospital" as the study area due to its significance and potential impact on the construction industry. This construction project has a substantial budget of 48 crore and a workforce comprising 148 workers, including civil, sanitary, electrical, aluminum, metal workers, and painters.

Jajarkot is situated in Karnali Province and is a district in middle hill of Nepal with coordinate extent of 28°36'40" to 29°7'39" latitude and 81°49'18" to 82°34'56" longitude. It covers an area of 2,230 sq.km and has a population of 1,89,360 according to the CBS 2021 [10]. The district consists of 3 municipalities and 4 rural municipalities with Khalanga as a district headquarters. Below figure shows the study area in detail.

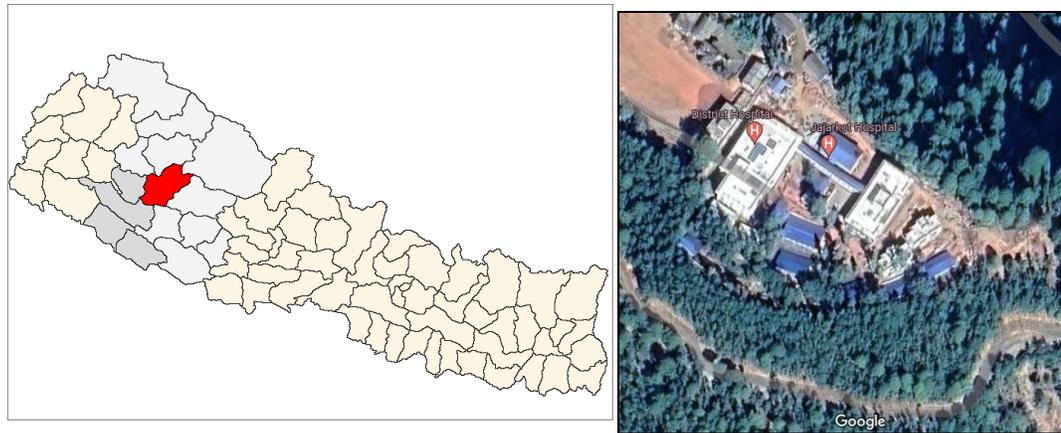


Figure 4: Location map of Jajarkot District (Source:Wikimedia) and Google Earth Image of Study Site (Source: Google Map)

By selecting this specific study area, we seek to identify the root causes of any discontent among the construction workers, which could include issues related to work conditions, safety, communication, compensation, or opportunities for growth. Addressing these concerns can not only enhance worker satisfaction but also contribute to the successful completion of the 50 Bed Jajarkot District Hospital. Additionally, the findings of this study may serve as a valuable reference for future construction projects, guiding policymakers, project managers, and stakeholders to implement measures that foster a positive and harmonious work atmosphere. The methodology involved an in-depth review of relevant literature to establish a comprehensive understanding of the context. To address research objectives systematically, we followed a structured approach, starting with problem identification, formulating research objectives, and proceeding to data collection. Primary and secondary data were gathered through a questionnaire. The survey responses were carefully analysed to gain meaningful insights, aiding in achieving the research goals. This step-by-step process, from identifying the problem to formulating objectives, and finally, collecting and analysing data, served as the methodological framework to navigate the complexities of understanding and addressing construction labour dissatisfaction in Nepal's construction industry.

## 2.2 Data Collection

Journal articles, textbooks, websites, etc. were used for the collection of secondary data. Reports and dissertation regarding the study were studied to gather ideas about the research problem, issues, and other ideas related to the research works. From these sources, 12 statements of key factors that causes dissatisfaction and 14 statements of effective measures that enhance satisfaction among construction labour are drawn out. Primary data provides more actual figures and is more precise. A set of different questionnaires were prepared for the construction workers, working in the project of building construction of Jajarkot district hospital. The questionnaires were related to identifying the causes of dissatisfaction of construction labour and possible effective measures to enhance construction labour's satisfaction in the construction industry in context of construction of Jajarkot district hospital. The respondents were asked to rate above mentioned statements with their satisfaction of the five (5) dimensions on a five-point Likert scale, based on the importance. The scale ranged from: Very low important / strongly Disagree (1), low important / Disagree (2), medium important / Neutral (3), highly

important / agree (4) and Very highly important / strongly agree (5). The questionnaire was pre-tested using a sample of 12 construction workers to identify any ambiguous items for refinement. Finally it was administered to the respondents through personal contact with the assistance of trained research assistants.

### 2.3 Data Analysis

After the process of collection of data, they were analysed by the descriptive method. For the easier interpretation of data, they are expressed in percentages. For easy understanding, these findings are expressed in the form of charts and tables. Before we started looking at the information, we did a few important things: we fixed mistakes in the data, filled in missing answers, organized the data into groups, and did some mathematical calculations. These steps helped us make sure the information was clear and made sense when we looked at it later. The data collected from the questionnaire was analysed using the Microsoft Excel application and for ranking the factors using the RII. The Relative Importance Index (RII) is a way to figure out which things are most important based on people's opinions. We ask people to rate different things, and then we calculate a number for each thing. The higher the number, the more important that thing is according to the people's ratings. This helps us know what matters most to them.

The relative importance index (RII) has been calculated as follows:

$$\text{Relative Importance Index (RII)} = \frac{\sum W}{A \cdot N} \quad (0 \leq \text{RII} \leq 1)$$

Here, W – is the weight given to each factor by the respondents and ranges from 1 to 5, (where “1” is “Very Low Important / Strongly Disagree” and “5” is “Very High Important / Strongly Agree”); A – is the highest weight (i.e., 5 in 5-point Likert’s scale) and N – is the total number of respondents.

In this study, the decision was made to use the RII method due to its ability to analyze the causes, understand their consequences, and identify potential solutions. Particularly, when dealing with issues like dissatisfaction, RII is a good way to see what matters most when different factors are involved. Hence, the RII method was selected for this investigation.

### 2.4 Study Population

The study population consists of 148 construction workers actively engaged in the building construction of 50 bed Jajarkot District Hospital. These workers represent a diverse range of roles and skills within the project. The research focuses on understanding the factors contributing to their dissatisfaction. By examining their experiences and concerns, the study aims to propose effective strategies to enhance their job satisfaction and overall well-being during their involvement in the construction of the hospital.

### 2.5 Sample Size

Sample is a selection of a case which represents the entire population; it is less costly and saves time when there is a tight deadline than using the entire population. Error tolerance is taken as 10% because it's commonly seen in similar studies and fits within acceptable ranges for our measurements. We couldn't aim for more accuracy due to practical reasons like limited tools. Importantly, this margin of error doesn't really change our main findings, so our results are still reliable within the usual range

allowed in our field. An article published by [11] conducted a sample size determination for their research using Slovin's formula.

Sample size is chosen as per the Slovin's formula  $n = \frac{N}{1 + Ne^2}$

Where, n = Number of samples,

N = Total population and

e = Error tolerance

Here, Total population is 148. e = Error tolerance (10%)

And we determined sample size as 60.

Out of 60 questionnaires distributed, 57 questionnaires were returned which were equivalent to 95%.

### 3. RESULTS AND DISCUSSION

#### 3.1 Demographic Data

The age of respondents was investigated. The following Table 1 indicates findings.

Table 1: Age of respondents

Age (in years)	Frequency	Percent
Less than 25	18	31.58
26-35	31	54.38
36-45	6	10.53
45-55	2	3.51
Above 56	0	0
Total	57	100

The findings reveal that among the respondents, 31.58% were under the age of 25. The majority of participants, comprising 54.38%, fell in the age range of 26 to 35. A smaller portion, accounting for 10.53%, was aged between 36 and 45. Just 3.51% fell in the age range of 45 to 55. Interestingly, no participants were above the age of 56. The gender of respondents was investigated. The following Table 2 indicates findings.

Table 2: Gender of respondents

Gender	Frequency	Percent
Male	50	87.72
Female	7	12.28
Other	0	0
Total	57	100

Out of the total respondents (57 people), most were male, making up 87.72% (50 individuals). Females comprised a smaller portion, at 12.28% (7 individuals). The study's data, collected in 2080, showed that respondents from all gender were represented to capture unbiased information on labour dissatisfaction among workers in the construction industry.

The work experience was investigated. The following Table 3 indicates findings.

Table 3: Work experience in construction of Respondents

Experience (in years)	Frequency	Percent
Less than 2	11	19.3
5-Feb	31	54.38
9-Jun	13	22.81
10 and above	2	3.51
Total	57	100

The majority of workers (54.38%) reported having work experience in the construction industry between 2 to 5 years. This suggests a significant presence of mid-level experienced workers in the project. Workers with less than 2 years of experience accounted for 19.3%, indicating a portion of relatively newer workforce. Interestingly, a smaller proportion (22.81%) had work experience ranging from 6 to 9 years, possibly representing workers with a more developed skill set and knowledge. It's worth noting that only a very small percentage (3.51%) had a decade or more of experience. This might be due to the specific nature of the project or the availability of experienced workers in the area. This distribution points to a varied and relatively experienced workforce contributing to the construction of Jajarkot District Hospital. The source of skill acquisition of respondents was investigated. The following Table 4 indicates findings.

Table 4: Source of Skill Acquisition of Respondents

Source of Skill Acquisition	Frequency	Percent
On-the-Job Learning	23	40.35
Apprenticeships	18	31.58
Community Workshops	10	17.54
Non-Formal Education Centers	6	10.53
Total	57	100

The data highlights the sources through which respondents obtained their skills. On-the-job learning stands out as the most significant source, representing 40.35% of respondents. This hands-on experience is a crucial component of skill development in this industry. Another substantial portion (31.58%) gained their expertise through apprenticeships, benefiting from structured training programs under experienced mentors. Additionally, 17.54% gained skills through community workshops, emphasizing the value of organized local training initiatives. A smaller percentage (10.53%) obtained skills from non-formal education centers. This suggests that a portion of workers sought skill development through educational programs that might not follow traditional formal structures. These insights collectively depict a diverse landscape of skill acquisition pathways, emphasizing both practical experience and structured training programs within the construction industry.

### 3.2 Causes of construction labor’s dissatisfaction

The study's first goal was to discover why construction workers in Nepal are dissatisfied with their jobs and what they think about it. Questionnaires were used to understand what the workers feel. 57 respondents were asked to fill out the questionnaires.

Each of the causes were assessed through a questionnaire survey with various affecting factors, the frequency of the scores received by each variable based on the Likert scale were recorded. The relative importance factors have been assessed and ranked as per their value. The RII value and its corresponding rank given by the respondents have been presented in the table below. The construction labor’s view towards the causes of their dissatisfaction has been tabulated in table 5 and depicted in figure 5.

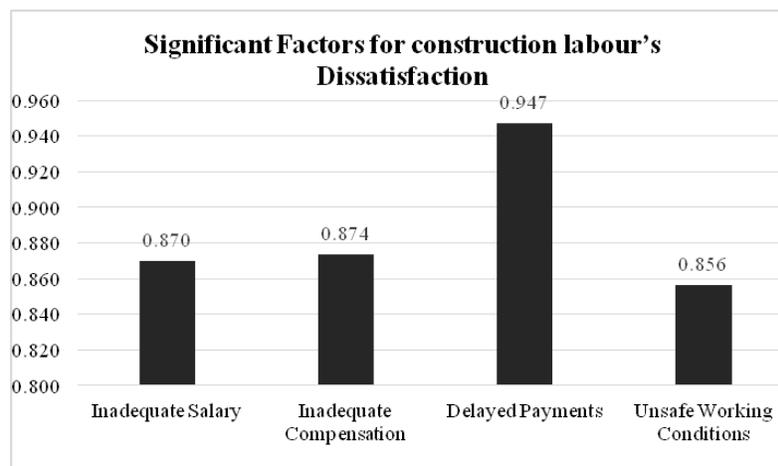


Figure 5: Significant factors for dissatisfaction of construction labours

Table 5: Individual RII values and their corresponding rank given by the respondents for causes of dissatisfaction

SN	Statements (factors)	RII	Rank
1	Inadequate Salary	0.87	3
2	Inadequate Compensation	0.874	2
3	Delayed Payments	0.947	1
4	Unsafe Working Conditions	0.856	4
5	Lack of Proper Accommodation	0.793	6
6	Inadequate Safety Measures	0.761	8
7	Poor Management and Communication	0.772	7
8	Lack of Access to Basic Amenities (Water, Sanitation, etc.)	0.716	10
9	Excessive Working Hours	0.839	5
10	Unfair Treatment and behaviour by Supervisors or Managers	0.716	10
11	Lack of Employee Benefits (Healthcare, Insurance, etc.)	0.716	10
12	Lack of Recognition for Hard Work	0.754	9

### 3.3 Discussions on RII values for Causes of dissatisfaction

Table 4.5 above shows the 12 causes of construction labour’s dissatisfaction. The RII values represent the factors' importance according to respondents. Higher RII values indicate higher importance. For construction labour most significant factors for their dissatisfaction are:

#### *Delayed Payments*

This is the top cause of dissatisfaction. When workers don't receive their pay on time, it affects their morale and well-being, leading to unhappiness. If workers are consistently unsure about when they will receive their wages, it creates anxiety and frustration. This uncertainty can extend to their personal lives, affecting their ability to manage expenses, plan, and meet financial obligations. The stress and worry associated with delayed payments can lead to decreased morale and motivation, which in turn affects their dedication and performance on the job.

#### *Inadequate Compensation and Inadequate Salary*

These two factors are closely related and hold a significant place in the reasons for dissatisfaction. If workers feel they are not being paid fairly or sufficiently, it affects their overall job satisfaction. Inadequate compensation, whether in terms of overall package or specific salary, can lead to feelings of undervaluation and dissatisfaction. When workers feel that their compensation does not align with the effort and expertise required, their overall job satisfaction diminishes. This dissatisfaction can also lead to turnover as workers seek opportunities where their efforts are more adequately rewarded.

#### *Unsafe Working Conditions*

Safety is crucial in any work environment. Working in hazardous environments can result in not only physical injuries but also mental stress. The fear of accidents or injuries can lead to decreased morale and job satisfaction. Workers might feel that their well-being is not a priority for the organization, which impacts their commitment and loyalty. Furthermore, unsafe working conditions can hinder productivity as workers might be preoccupied with concerns about their safety rather than focusing on their tasks. Similarly, least Significant Factors are as follows:

#### *Unfair Treatment and behaviour by Supervisors or Managers*

This factor is still important appears to be less significant compared to others. This suggests that while some workers might face unfair treatment, it might not be as widespread or influential in causing dissatisfaction.

#### *Lack of Employee Benefits (Healthcare, Insurance, etc.)*

While benefits are important, they seem to have a lower impact on overall dissatisfaction. This could imply that while desirable, they might not be the main contributors to worker unhappiness.

#### *Lack of Access to Basic Amenities (Water, Sanitation, etc.)*

Like benefits, access to basic amenities is still a concern, but it might not have as strong an effect on job satisfaction as other factors.

#### *Lack of Recognition for Hard Work*

Recognition is valued, but its impact on dissatisfaction is less pronounced. This could suggest that while workers appreciate acknowledgment, it might not be a primary source of unhappiness.

### 3.4 Effective measures to enhance construction labor's satisfaction

The second objective of the study was to propose effective measures to enhance construction labour's satisfaction in the construction industry in Nepal and view of the respondents on it. Fourteen different

effective measures to enhance construction labour’s satisfaction have been assessed through a questionnaire survey. The RII value and its corresponding rank given by the respondents have been presented in the table below. The construction labour’s view towards the possible effective measures to enhance their satisfaction in construction industry has been tabulated in table 6.

Table 6: Individual RII values and their corresponding rank given by the respondents for Effective measures to enhance satisfaction

SN	Statements (Effective Measures)	RII	Rank
1	Fair and Competitive Compensation	0.93	2
2	Timely and Reliable Payment	0.972	1
3	Improved Health and Safety Standards	0.888	3
4	Provision of Proper Accommodation	0.828	6
5	Enhanced Safety Training and Measures	0.818	8
6	Effective Communication and Management	0.86	4
7	Access to Basic Amenities (Water, Sanitation, etc.)	0.782	11
8	Reasonable Working Hours and Breaks	0.835	5
9	Clear Job Roles and Responsibilities	0.825	7
10	Respectful Treatment by Supervisors or Managers	0.765	12
11	Opportunities for Skill Development and Training	0.793	9
12	Recognition of Hard Work and Contributions	0.786	10
13	Promotion of Career Growth Opportunities	0.688	13
14	Comprehensive Employee Benefits (Healthcare, Insurance, etc.)	0.646	14

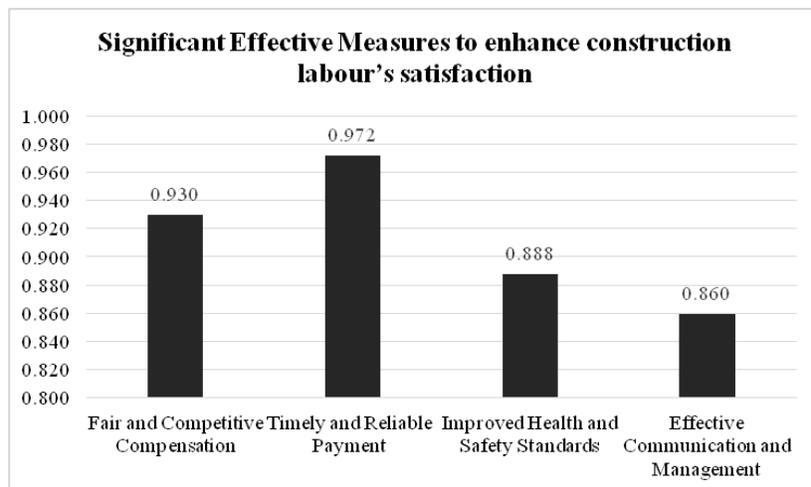


Figure 6: Significant Effective Measures to enhance satisfaction of construction labours

The Fig. 6 depicted the significant effective measures that can enhance the satisfaction of construction labors.

### 3.5 Discussions on RII values for Objective II

Table 12 above shows the 14 possible effective solutions to enhance construction labour's satisfaction. The RII values show how important the factors are according to the people who answered. When RII values are higher, it means those factors are seen as more important by the respondents. For construction labour most significant effective measures are:

#### *Timely and Reliable Payment*

This measure holds the highest importance. When workers receive their pay on time and consistently, it greatly impacts their satisfaction and morale. They can confidently manage their expenses, plan for the future, and meet their obligations. Timely payment reduces stress and anxiety associated with financial uncertainty, allowing workers to focus on their tasks without distractions. This reliability creates a positive relationship between the workers and the organization, fostering trust and loyalty.

#### *Fair and Competitive Compensation*

Paying workers fairly and competitively is important. It shows them that they're valued in the organization. When workers feel their pay is in line with what others get and appreciates their efforts, they feel good and want to do their best. Fair pay doesn't just make workers happier; it also makes them less likely to leave for other jobs.

#### *Improved Health and Safety Standards*

Making the workplace safer is crucial. When we make things safer and better for health, workers feel protected and cared for, which makes them happier. When they know their well-being matters, it boosts how satisfied they are with their job. A safe environment also helps them focus on their tasks without worrying, which lead to better work and a more positive work atmosphere

#### *Effective Communication and Management*

Good communication and efficient management enhance the work experience. When workers are well-informed and their concerns are addressed, it positively influences job satisfaction. When management communicates clearly and consistently, workers feel valued and informed about their roles, tasks, and organization updates. This clarity reduces misunderstandings and conflicts, creating a harmonious work environment. Similarly, least significant effective measures are as follows:

#### *Comprehensive Employee Benefits (Healthcare, Insurance, etc.):*

Although comprehensive benefits like healthcare and insurance are significant, they might not have as big of an impact on improving overall job satisfaction as some other factors.

#### *Promotion of Career Growth Opportunities*

Although it's great to have opportunities for career growth, they might not make workers feel immediately happier with their job as much as some other things do.

#### *Respectful Treatment by Supervisors or Managers:*

Even though being treated well by supervisors is important, it might not make workers feel as much happier compared to some other things that have a bigger impact. Their organization is already taking care about these basic amenities.

*Access to Basic Amenities (Water, Sanitation, etc.)*

Even though having things like water and sanitation is important, they might not make workers feel as happy with their job right away compared to some other factors. Their organization is already taking care about these basic amenities.

#### **4. CONCLUSIONS**

For the causes of dissatisfaction, based on the study and questionnaire survey, it can be concluded that: The data highlights delayed payments, inadequate compensation, inadequate salary, and unsafe working conditions as the top factors contributing to dissatisfaction among construction labour. Factors such as unfair treatment by supervisors, lack of employee benefits, absence of basic amenities, and insufficient recognition for hard work are viewed as less influential in causing worker dissatisfaction. These findings offer direction for addressing crucial issues and enhancing labour satisfaction within the construction industry.

For the effective measures to enhance satisfaction, it can be concluded that: The analysis identifies timely payment, fair compensation, improved health and safety standards, and effective communication and management as the key effective measures for enhancing construction labour satisfaction. Measures like comprehensive employee benefits, career growth opportunities, respectful treatment by supervisors, and access to basic amenities, while still important, have a slightly lower immediate impact on workers satisfaction. Prioritizing the most influential measures has the potential to significantly enhance worker contentment in the construction industry. These findings provide valuable guidance for directing initiatives aimed at improving satisfaction among construction workers.

Immediately address critical issues such as delayed payments, low wages, and unsafe conditions promptly to boost worker morale and team motivation. Develop long-term plans that resolve current problems while also preventing future issues, ensuring sustained worker satisfaction. Implement a monitoring system to watch if the solutions are working well and change them if needed, so things keep getting better. Establish a structured feedback system and implement monitoring to continuously assess and adapt solutions for ongoing improvement. In terms of further study recommendations, it is suggested to compare worker's satisfaction across diverse construction projects in Nepal, considering factors like project scale, location, and duration. Conduct a longitudinal study to evaluate the sustained effectiveness of implemented solutions addressing issues such as delayed payments, low salaries, and unsafe working conditions. Explore the impact of career growth programs on labor satisfaction in construction, examining specific initiatives contributing to workers' career advancement. Investigate how technology integration like digital tools and smart construction practices can enhance working conditions and overall satisfaction among construction laborers.

#### **CONFLICTS OF INTEREST STATEMENT**

The authors would like to declare that there are no conflicts of interest in this study.

#### **DATA AVAILABILITY STATEMENT**

The questionnaire data and other relevant data can be available upon request to the authors.

## REFERENCES

1. P. M. James, L. Kingma, and A. A. Braam Rust, "The well-being of workers in the South African construction industry: A model for employment assistance," *African Journal of Business Management*, vol. 6, pp. 1553-1558, 2012.
2. FCAN, "Federation of Contractors' Associations of Nepal (FCAN)," Available: <https://fcan.org.np>.
3. Jergeas, George. "Improving construction productivity on Alberta oil and gas capital projects, a report submitted to Alberta Finance and Enterprise," *Alberta, Canada, May*, 2009.
4. H. Missbauer and W. Hauber, "Bid calculation for construction projects, regulations and incentive effects of unit price contracts," *European Journal of Operational Research*, pp. 1005-1019, 2006.
5. U. N. Md Ali, N. Nasution, and I. Pratam, "Determinants of Job Satisfaction: Qualitative Case Survey," *Qualitative and Quantitative Research Review*, vol. 1, no. 1, pp. 73-98, 2016.
6. A. R. A. Arokiasamy, "A Qualitative Study on Causes and Effects of Employee Turnover in the Private Sector in Malaysia," *Middle East Journal of Scientific Research*, vol. 16, no. 11, pp. 1532-1541, 2013.
7. S. H. Khahro, T. H. Ali, F. Siddiqui, and A. R. Khoso, "Critical Success Factors Affecting Job Satisfaction in Construction Projects: A Case of Pakistani Workers," *International Journal of Civil Engineering and Technology*, vol. 7, no. 6, pp. 507-513, 2016.
8. P. Bowen, K. Cattell, K. Michell, and P. Edwards, "Job satisfaction of South Africa quantity Surveyors, Are employers happier than employees? " *Journal of Engineering, Design and Technology*, pp. 124-144, 2008.
9. A. Raziq and R. Maulabakhsh, "Impact of Working Environment on Job Satisfaction," in 2<sup>nd</sup> Global Conference on Business, Economics, Management and Tourism Prague, Czech Republic, 2015.
10. National Population and Housing Census 2021, Nepal. Available : <https://censusnepal.cbs.gov.np/results/population?province=6&district=65>
11. A. Widyani, N. Landra, N. Sudja, M. Ximenes, and I. Sarmawa, "The role of ethical behavior and entrepreneurial leadership to improve organizational performance," *Cogent Business & Management*, vol. 7, no. 1, 2020.

**SUPPLEMENTARY FILES**

**RII Calculation**

**Construction Labour Response for Causes of Dissatisfaction**

SN	Statements (Factors)	Frequency of the score (x)					Total No. of Respondents (N)	ΣW	RII	Rank
		1	2	3	4	5				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree				
1	Inadequate Salary	0	0	2	33	22	57	248	0.870	3
2	Inadequate Compensation	0	0	3	30	24	57	249	0.874	2
3	Delayed Payments	0	0	1	13	43	57	270	0.947	1
4	Unsafe Working Conditions	0	0	5	31	21	57	244	0.856	4
5	Lack of Proper Accommodation	0	1	8	40	8	57	226	0.793	6
6	Inadequate Safety Measures	0	3	14	31	9	57	217	0.761	8
7	Poor Management and Communication	1	3	10	32	11	57	220	0.772	7
8	Lack of Access to Basic Amenities (Water, Sanitation, etc.)	2	4	15	31	5	57	204	0.716	10
9	Excessive Working Hours	0	0	12	22	23	57	239	0.839	5
10	Unfair Treatment and behaviour by Supervisors or Managers	0	4	22	25	6	57	204	0.716	10
11	Lack of Employee Benefits (Healthcare, Insurance, etc.)	0	8	17	23	9	57	204	0.716	10
12	Lack of Recognition for Hard Work	0	5	14	27	11	57	215	0.754	9

**RII Calculation**  
**Construction Labour Response for Effective measures to enhance satisfaction**

SN	Statements (Effective Measures)	Frequency of the score (x)					Total No. of Respondents (N)	Σ	RII	Rank
		1	2	3	4	5				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree				
1	Fair and Competitive Compensation	0	0	2	16	39	57	65	.930	2
2	Timely and Reliable Payment	0	0	0	8	49	57	77	.972	1
3	Improved Health and Safety Standards	0	1	4	21	31	57	53	.888	3
4	Provision of Proper Accommodation	0	2	4	35	16	57	36	.828	6
5	Enhanced Safety Training and Measures	0	1	6	37	13	57	33	.818	8
6	Effective Communication and Management	0	3	10	11	33	57	45	.860	4
7	Access to Basic Amenities (Water, Sanitation, etc.)	0	3	10	33	11	57	23	.782	11
8	Reasonable Working Hours and Breaks	0	2	6	29	20	57	38	.835	5
9	Clear Job Roles and Responsibilities	0	2	17	10	28	57	35	.825	7
10	Respectful Treatment by Supervisors or Managers	0	1	15	34	7	57	18	.765	12
11	Opportunities for Skill Development and Training	0	1	13	30	13	57	26	.793	9
12	Recognition of Hard Work and Contributions	2	0	14	25	16	57	24	.786	10
13	Promotion of Career Growth Opportunities	7	1	15	28	6	57	96	.688	13
14	Comprehensive Employee Benefits (Healthcare, Insurance, etc.)	6	4	22	21	4	57	84	.646	14