

# Job Satisfaction among Vector-Borne Disease Control (VBDC) Workers and Its Impact on Rural Development in Uttar Dinajpur District, West Bengal

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## Abstract:

Job satisfaction of the VBDC workers naturally depends on the economically, social and cultural conditions. The aim of the study is to assess the level of job satisfaction among VBDC workers in Uttar Dinajpur District of West Bengal and to find association between levels of job satisfaction with selected demographic variables. A quantitative survey approach with non-experimental research design was used. A total of 200 VBDC workers were selected through Non-Probability Purposive Sampling method. Data was collected by using job satisfaction scale and categorized under High, Moderate and Low Satisfaction level. Data was analysed by using descriptive & inferential statistics. In that frequency, mean, SD, & Chi square test were included. The majority 60.25% of them had low level of satisfaction in areas like: wage and social security and the majority 42% of them moderate level of satisfaction on working condition and also 51.5% of them high level of satisfaction on human relation. Looking at the results, majority of them were dissatisfied in terms of their working environment, difficult working condition, respect, standard of living, social security and minimum remuneration. Financial compensation or wage of the workers has a great impact on the overall job satisfaction of the workers. Hence, there is need to Government to give focus on VBDC workers working condition, social security and their wage along with the kind of services they provide to common people.

**Keyword-** VBDC worker, Job Satisfaction, Demographic variable, Chi-square test, Uttar Dinajpur District.

## I. Introduction

Rural development refers to the process of improving the economic, social and living conditions of people living in rural areas. It includes efforts to increase employment, develop infrastructure, develop agriculture, and provide better access to education, healthcare, and basic services in villages (World Bank 2000). So, health is very important for rural development. A Vector-Borne Disease (VBD) worker in West Bengal is a field-level public health worker who is engaged in prevention and control programs for diseases spread by vectors such as mosquitoes. These workers are part of state initiatives and national programs such as the National Vector-Borne Disease Control Program ([prd.wb.gov.in](http://prd.wb.gov.in)). VBDC (Vector Borne Disease Control) workers are engaged in controlling spread of mosquito through the vanquishing mosquito larva. They are recruited by the Government of West Bengal. VBDC workers are supervised by Gram Panchayat Nodal Officer, Block Nodal Officer

and also District Nodal Officer. 15 VBDC workers are engaged in each Gram Panchayat and amongst them 6 workers spray medicines and 9 workers surveillance mosquito borne disease and find out mosquito larva by visiting door to door (Block Development office report). VBDC workers play a vital role in strengthening rural healthcare systems, spreading health awareness, and connecting villagers with government services. By preventing diseases and improving health conditions, vector-borne disease workers help increase productivity, reduce medical expenses, and improve the overall quality of life in rural communities.

VBDC workers are engaged in Rural area of West Bengal to control vector borne disease. Each worker has to visit 60 house every day. They have been leaving no stone unturned to control spread of mosquito and mosquito borne diseases like Dengue, malaria, Zika, Chikungunya etc. Mosquito borne diseases are that which is spread by the bite of an infected mosquito.

VBDC workers make awareness among the household to clean their homes, teach waste management and clean stock water. They aware people about how to keep themselves safe from mosquito borne diseases. But the working atmosphere, wage, and incentives are important factor to keep them motivated and satisfied. Many of them say that they are facing many challenges from hard working conditions to lack of support, respect and low wages. Job satisfaction refers to the happiness, motivation, and positive attitude that workers have towards their work,

## II. Review Literature

Freeman (1977) observed that job satisfaction to be a major determinant of labour market mobility and has turned up puzzling relations between certain economic variables, notably unionism and satisfaction that appear attributable to the subjective nature of the variable.

Macdonald & Macintyre (1997) described that the generic job satisfaction scale is related to variables external to the workplace. It is likely that job and life satisfaction influence each other and nature of that influence may change from time to time. A crisis at work may cause disruption at home and later a crisis at home might cause disruption at work. Judge & Watanabe (1993) also explained that job satisfaction and life satisfaction are positively and reciprocally related. Life satisfaction significantly influenced job satisfaction and job satisfaction significantly influenced life satisfaction.

Judge et al., (2008) suggest that the relationship between personality and job satisfaction depends on neuroticism, extroversion and core self-evaluation. These three typologies are uniquely related to job satisfaction.

Mishra (2013) explained that job satisfaction is one of the most crucial but controversial issues in industrial psychology and behavioural management in organization. Job satisfaction is a narrow sense means attitudes related to the job. In is concerned with such specific factors has wages, supervision, steadiness of employment conditions of work, social relation of the job, prompt settlement of grievances, fair treatment of employer and other similar items. Job satisfaction is related to different socio-economic and personal factors, such as, age, sex, incentives,

responsibilities, and work environment. Among workers infected with vector-borne diseases in West Bengal. So, job satisfaction depends on factors such as incentives, workload, training, supervision, and community recognition (Sarkar & Lahiri 2021). So, Job satisfaction has a positive effect on quality of services and work outcomes. High satisfaction keeps them motivated and give better quality services and outcomes and low satisfaction give low quality services and outcomes respectively.

working environment, education, duration, duration of work.

Barbara & Sypniewska (2014) explained that satisfaction is seen as a multidimensional, attitude. The factors like the communication between the employees and another groups, good relationships with colleagues, working atmosphere and the independence in decision making has a big impact on job satisfaction.

Raziq & Maulabakhsh (2015) described that good working environments where employees are made a part of the overall decision-making process, being given flexible working hours, less work load, a team work approach and a supportive top management have positive impact on the performance of employees. This leads to high level of employee job satisfaction. Thus, making the employees more committed towards their business, more motivated to work hard and more willing to get high productivity for their firms benefiting their respective business in the long run.

## III. Objectives of the Study

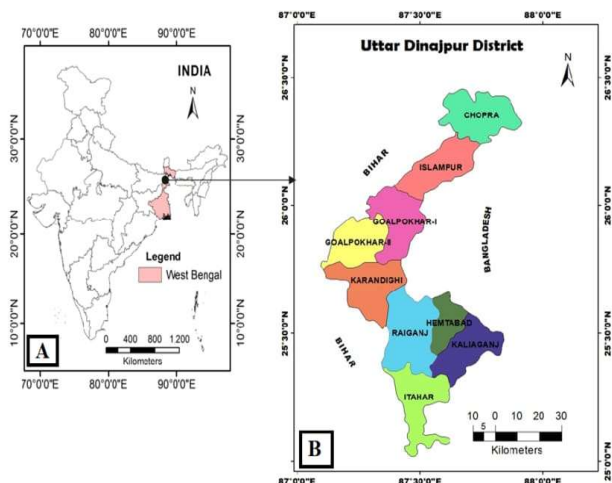
The study aims to identify the job satisfaction of VBDS workers and for this identification I use many dimensions that's are given below-

1. To study the level of satisfaction of respondents towards demographic variables like age, gender, marital status, education and experiences.
2. To study the level of satisfaction of respondents towards amount of wage.
3. To study the level of satisfaction of respondents towards working condition.
4. To study the level of satisfaction of respondents towards human relation of each other.

5. To study the level of satisfaction of respondents towards social security.
6. To find out over all level of satisfaction of VBDS worker among these variables.

7. To give suggestions to improve the level of job satisfaction, if required.

#### IV. Study Area and Methodology



Uttar Dinajpur is the study area which is one of the districts of West Bengal, India. Uttar Dinajpur district is located between 25<sup>0</sup>11' north latitude and 26<sup>0</sup>49' north latitude and 87<sup>0</sup>49' east longitude and 90<sup>0</sup>00' east longitude. The area of the district is 3,140 square kilometres. It is bordered by Bangladesh to the east, Bihar state to the west, Darjeeling district and Jalpaiguri district

to the north, and Malda district and Dakshin Dinajpur district to the south.

The present study is descriptive in nature and it is based on primary data. The study attempts to adopt a dependent-independent and associational research design to fulfil the objectives of the research. A total of 200 samples were collected from the Uttar Dinajpur district of West Bengal. The samples were selected using a non-probability purposive sampling technique.

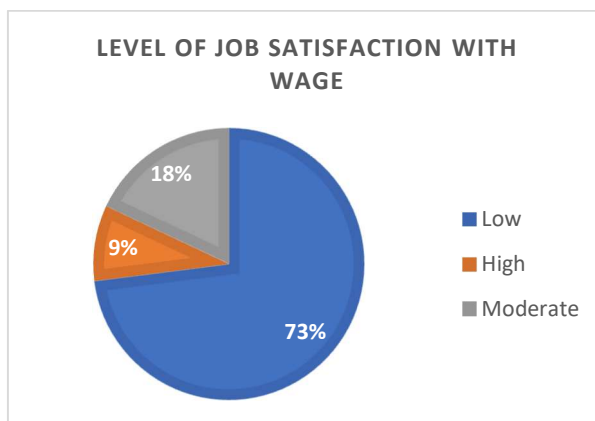
A Job Satisfaction Scale was used to assess the level of job satisfaction among the participants. The content validity of the tool was established, and its reliability was tested using the test-retest method. Data were collected from the respondents after obtaining their written informed consent. For data analysis, descriptive statistics (frequency and percentage) were used to assess the level of job satisfaction among VBDC workers, while inferential statistics (Chi-square test) were applied to examine the association between job satisfaction levels and selected demographic variables. The level of job satisfaction was categorized into high, moderate, and low levels of satisfaction.

#### V. Result and Discussion

Frequency tables based on the scores of total Job Satisfaction and scores for sub-scales of the VBDC workers scale have given below;

➤ **Table-1** Level of Job Satisfaction with Wage

Job Satisfaction Level	Frequency	Percentage
Low	146	73%
High	18	9%
Moderate	36	18%
Total	200	100%



Source- Authors calculation- 2026

The table 1 shows that the level of Job Satisfaction of the respondents for wage. A majority (73%) portion of the respondents have

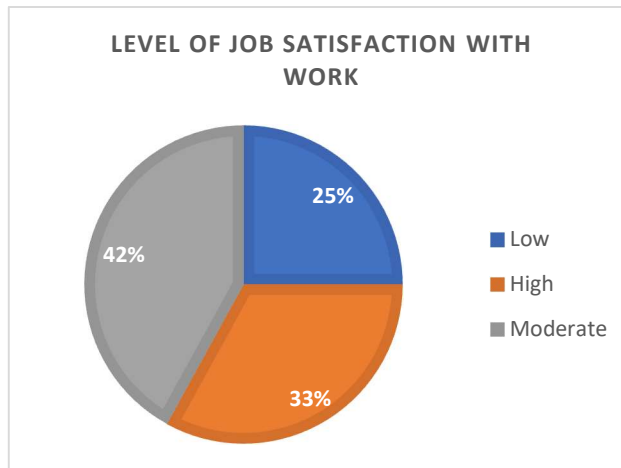
low level of Job Satisfaction about their wage. Only 9% respondents have high level Job Satisfaction about their wage and 18%

respondents have moderate level of Job Satisfaction about their wage. It is clear from the

above table that majority of the respondents have low level of Job Satisfaction for their wage.

➤ **Table-2** Level of Job Satisfaction with Work condition.

Job Satisfaction Level	Frequency	Percentage
Low	50	25%
High	66	33%
Moderate	84	42%
Total	200	100%

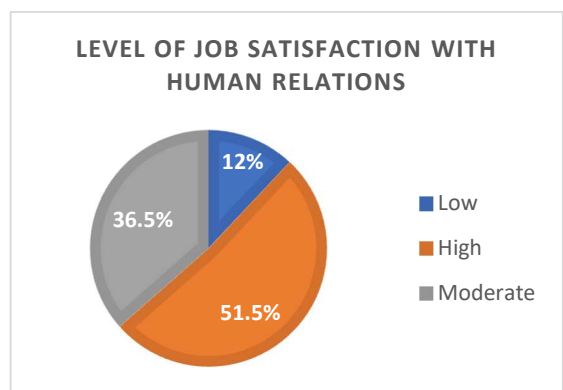


The table 2 shows that the level of Job Satisfaction of the respondents for Work condition. A majority (42%) portion of the respondents have moderate level of Job Satisfaction about their work. 33% respondents have high level Job Satisfaction about their work Satisfaction for their work.

and 25% respondents have low level of Job Satisfaction about their work. It is clear from the above table that majority of the respondents have moderate or average level of Job

➤ **Table-3** Level of Job Satisfaction with Human Relations

Job Satisfaction Level	Frequency	Percentage
Low	24	12%
High	103	51.5%
Moderate	73	36.5%
Total	200	100%



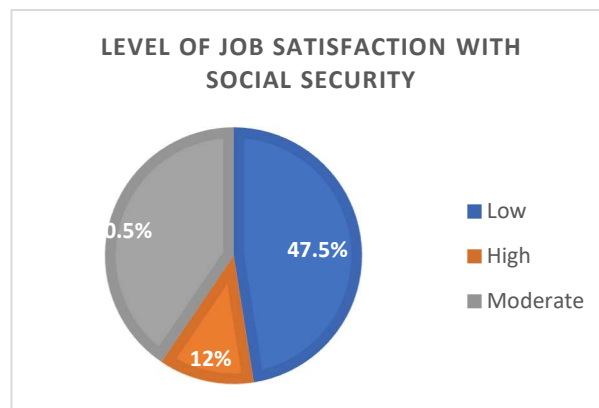
The table 3 shows that the level of Job Satisfaction of the respondents for Human Relations. A majority (51.5%) portion of the respondents have high level of Job Satisfaction for their human relations. Only 36.5% respondents have moderate level Job Satisfaction

for their human relations and 12% respondents have low level of Job Satisfaction about their human relations. It is clear from the above table that majority of the respondents have high level of Job Satisfaction for their human relation

➤ **Table-4** Level of Job Satisfaction with Social Security

Source-  
 Authors calculation- 2026

Job Satisfaction Level	Frequency	Percentage
Low	95	47.5%
High	24	12%
Moderate	81	40.5%
Total	200	100%



Source- Authors calculation- 2026

The table 4 shows that the level of Job Satisfaction of the respondents for social security. A majority (47.5%) portion of the respondents have low level of Job Satisfaction about their social security. Only 12% respondents have high level Job Satisfaction about their social security

and 40.5% respondents have moderate level of Job Satisfaction about their social security. It is clear from the above table that majority of the respondents have low level of Job Satisfaction for their social security.

➤ **Table-5 Association of the level of Job Satisfaction with Age**

Demographic Variable	Satisfaction Category				Frequency	Chi-Square Value	DF	p-Value	Chi-Square Table Value	Result
	Low	High	Moderate							
1. Age	24-26	31	18	29	78	4.25	4	0.93	9.49	Not Associated
	27-29	39	25	24	88					
	30-32	10	9	15	34					
Total		80	52	68	200					
Percentage		40%	26%	34%	100%					

Source- Authors calculation- 2026

The table 5 shows that the level of Job Satisfaction of the respondents on the basis of their Age. A majority (40%) portion of the respondents have low level of Job Satisfaction about their age. 26% respondents have high level Job Satisfaction on the basis of their age and 34% respondents have moderate level of Job Satisfaction on the basis of their age. It is clear

from the above table that majority of the respondents have low level of Job Satisfaction on the basis of their age. This section shows that there is a no significant association between Age and level of Job Satisfaction as calculated p-value is more than 0.05 among VBDC workers. H0 is accepted and H1 is rejected for this association.

➤ **Table-6 Association of the level of Job Satisfaction with Gender**

Demographic Variable	Satisfaction Category			Frequency	Chi-Square Value	DF	p-Value	Chi-Square Table Value	Result	
	Low	High	Moderate							
2.Gender	Male	63	39	56	158	1.42	2	0.84	5.99	Not Associated
	Female	16	14	12	42					
Total		79	53	68	200					
Percentage		39.5%	26.5%	34%						

Source- Authors calculation- 2026

The table 6 shows that the level of Job Satisfaction of the respondents on the basis of their Gender. A majority (39.5%) portion of the respondents have low level of Job Satisfaction about their gender. 26.5% respondents have high level Job Satisfaction on the basis of their gender and 34% respondents have moderate level of Job Satisfaction on the basis of their gender. It is clear

from the above table that majority of the respondents have low level of Job Satisfaction on the basis of their gender. This section shows that there is a no significant association between Gender and level of Job Satisfaction as calculated p- value is more than 0.05 among VBDC workers. H0 is accepted and H1 is rejected for this association.

➤ **Table-7 Association of the level of Job Satisfaction with Marital status**

Demographic Variable	Satisfaction Category			Frequency	Chi-Square Value	DF	p-Value	Chi-Square Table Value	Result	
	Low	High	Moderate							
Marital status	Married	43	28	33	104	0.74	2	0.69	5.99	Not Associated
	Unmarried	36	24	36	96					
Total		79	52	69	200					
Percentage		39.5%	26%	34.5%						

Source- Authors calculation- 2026

The table 7 shows that the level of Job Satisfaction of the respondents on the basis of their Marital Status. A majority (39.5%) portion of the respondents have low level of Job Satisfaction about their marital status. 26% respondents have high level Job Satisfaction on the basis of their marital status and 34.5% respondents have moderate level of Job Satisfaction on the basis of their marital status. It

is clear from the above table that majority of the respondents have low level of Job Satisfaction on the basis of their marital status. This section shows that there is a no significant association between marital status and level of Job Satisfaction as calculated p- value is more than 0.05 among VBDC workers. H0 is accepted and H1 is rejected for this association.

➤ **Table-8 Association of the level of Job Satisfaction with Education**

Demographic Variable	Satisfaction Category			Frequency	Chi-Square Value	DF	p-Value	Chi-Square Table Value	Result
	Low	High	Moderate						
	H.S	20	6	16	42				
	U.G	30	27	29	86				

1. Education						5.57	4	0.47	9.49	Not Associated
	P.G	32	20	20	72					
Total		82	53	65	200					
Percentage		41	26.5	32.5						

Source- Authors calculation- 2026

The table 8 shows that the level of Job Satisfaction of the respondents about their Education. A majority (41%) portion of the respondents have low level of Job Satisfaction about their education. 26.5% respondents have high level Job Satisfaction about their education and 32.5% respondents have moderate level of Job Satisfaction on the basis of their education. It

is clear from the above table that majority of the respondents have low level of Job Satisfaction on the basis of their education. This section shows that there is a no significant association between Education and level of Job Satisfaction as calculated p- value is more than 0.05 among VBDC workers. H0 is accepted and H1 is rejected for this association.

➤ **Table-9 Association of the level of Job satisfaction with Experience**

Demographic Variable	Satisfaction Category			Frequency	Chi-Square Value	DF	p-Value	Chi-Square Table Value	Result
	Low	High	Moderate						
2. Experience	1-3 Year	11	5	22	25.24	4	0.014	9.49	Associated
	3-5 Year	52	21	23					
	5-7 Year	17	25	24					
Total		80	51	69					
Percentage		40	25.5	34.5					

Source- Authors calculation- 2026

The table 9 shows that the level of Job Satisfaction of the respondents about their Experience. A majority (40%) portion of the respondents have low level of Job Satisfaction about their experience. 25.5% respondents have high level Job Satisfaction on the basis of their experience and 34.5% respondents have moderate level of Job Satisfaction on the basis of their experience. It is clear from the above table that majority of the respondents have low level of Job Satisfaction on the basis of their experience. This section shows that there is a significant association between Experience and level of Job Satisfaction as calculated p- value is less than 0.05 among VBDC workers and it is state that H0 is rejected and H1 is accepted for this association. According to field survey, VBDC workers are mainly focusing on working condition, wage, job satisfaction, incentives related issues. They get

200 rupees per day which is too low for supporting their families. the study area is Uttar Dinajpur district where VBDC workers lament that they are not getting any compensation and incentives. Overload of work, extensive working hours, working most of the time in the field in scorching weather condition are the main challenges. They are bound to submit their work report in every afternoon to their supervisor. Walking field visit is very stressful and tedious. Few of them have told extensive workload affects their commitment and work output.

## VI. Conclusion

A Vector-Borne Disease (VBD) worker in West Bengal is a field-level public health worker who is engaged in prevention and control programs for diseases spread by vectors such as mosquitoes. By preventing diseases and improving health

conditions, vector-borne disease workers help increase productivity, reduce medical expenses, and improve the overall quality of life in rural communities. Job satisfaction refers to the happiness, motivation, and positive attitude that workers have towards their work, responsibilities, and work environment. Among workers infected with vector-borne diseases in West Bengal. So, job satisfaction depends on factors such as incentives, workload, training, supervision, and community recognition.

Study was conducted among 200 VBDC workers in Uttar Dinajpur District of West Bengal. Job Satisfaction scale was administered after fulfilling all the ethical considerations. Results of the study reported that the majority 60.25% of them had low level of satisfaction in areas like: wage and social security and the majority 42% of them moderate level of satisfaction on working condition and also 51.5% of them high level of satisfaction on human relation. The socio-demographic study variables i.e. respondent's age, sex and qualification are not associated the respondent's job satisfaction level because p-value is more than 0.05 among VBDC workers. H<sub>0</sub> is accepted and H<sub>1</sub> is rejected for this association and years of experience are associated the respondent's job satisfaction level because p-value is less than 0.05 among VBDC workers and it is state that H<sub>0</sub> is rejected and H<sub>1</sub> is accepted for this association. Looking at the results, majority of them were dissatisfied in terms of their working environment, difficult working condition, respect, standard of living, social security and minimum remuneration.

Many studies have demonstrated an unusually large impact on the job satisfaction on the motivation of the workers, while the level of motivation like: the nature of work and the level of overall job satisfaction have an impact on their working performance. Financial compensation or wage of the workers has a great impact on the overall job satisfaction of the workers. However, improving financial incentives, workload management, and training opportunities can further enhance their satisfaction and effectiveness in controlling vector-borne diseases. Hence, there is need to Government to give focus on VBDC workers working condition, social security and their wage along with the kind of services they provide to common people.

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