



# A TCV+ STUDY ON UNION LEVEL ANIMAL HEALTH SERVICE EXTENSION FACILITY

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Access to Information (a2i) Programme  
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## II. ACCRONYMS

<b>a2i</b>	Access to Information
<b>BBS</b>	Bangladesh Bureau of Statistics
<b>SIF</b>	Service Innovation Fund
<b>SPSS</b>	Statistical Package for the Social Sciences
<b>TCV</b>	Time, cost and visit
<b>UNDP</b>	United Nations Development Program
<b>UVHC</b>	Upazilla veterinary health complex
<b>DLO</b>	District livestock officer
<b>ULO</b>	Upazilla livestock officer

### **III. EXECUTIVE SUMMARY**

Main concern of this study is to find out the TCV (Time, Visit and Cost) through project implementation. Agriculture industry is highly dependent on livestock animal. Without it, the development of the country may be hampered. Previously, people have to go to Upazilla Veterinary Health Complex to take service for their animals. These processes need a certain amount of money and strength. As a result, people lose their interest for follow-ups and further treatments of their animals. Modification of existing services and facilitation of new services of the government, The Access to Information Program has played a catalytic role in digitalizing different services. According to the program's vision, this initiative facilitates many important plans to reach the services at citizens' doorstep in terms of reducing time, cost and visit while taking services. Now the Union Animal Health Center makes the process much easier. It turns the expenditure of time, cost and visit of beneficiaries into the least. We used random sampling method for data collection and interviewed 150 beneficiaries for this purpose.

Broad objective of this study is to find out the monetary and non-monetary benefits of animal health service extension facilities. It will disclose the TCV of this extension facilities and respondents' perception on this issue. According to the study vision, this study includes the monetary and non- monetary benefits. The monetary benefits will be discussed in light of Time, Cost and Visit analysis of extension services. Besides, the non- monetary benefits will cover up the correlation between peoples' satisfaction level and provided extension service. It will reflect the non- monetary benefits of these provided facilities. Here this study will disclose about service oriented satisfaction, beneficiaries' opinions regarding provided facilities and how they are experiencing) this extension facilities.

According to the project officials, the extension facilities of this project satisfy the needs of the people as well as put an impact in the social and economic context of Bangladesh. However, in terms of better service qualities, these extension facilities need to be strengthened further with more work forces. There must be adequate involvement of skilled physicians.

# 1 INTRODUCTION AND BECKGROUND

It has been stated that Livestock production is subject to the risk of disease, accident and death often causing decline in farm production ultimately leading to a threat to the country's food security system (Sen, 2012). The veterinary sector of Bangladesh has a huge potential in Bangladesh. Most of the rural people are associated with veterinary. Bangladesh is predominantly an agricultural country where the agricultural sector plays a pivotal role in accelerating the economic growth. Livestock animals are the subsector of agriculture industry (Sen, 2012). In Bangladesh, the industry generally combines with various animals like chicken, duck, cattle, buffalo, goat and sheep and others. Livestock constitutes an integral part of the net economy of our country as well. As a prominent sector for the economic growth of Bangladesh, this sector is needed to be more flexible, but veterinary sector of Bangladesh is adjunct with the rural belongings.

The extension service of veterinary health service is one of the prominent sub-sectors of each Upazilla. Each and every farmer who has animal husbandry has to visit the Upazilla Veterinary Health Complex. Veterinary resource office of Upazilla is approximately 10-25 km far from a different union. So, visiting Upazilla veterinary resource office seems to be difficult for rural people. It causes high requirement of time, cost and visit to complete any task regarding animal health services. Besides, lack of places in union level and lack of volunteers to provide this service are the main problem to broaden the animal husbandry facilities among rural people. As a result, accessing the facilities in root level seems to be difficult for the health officers.

Considering these situations in mind, the veterinary resource officer came up with an innovation pilot to make a flexible access of veterinary services and organized an animal health service extension. In the previous process, the farmers have to visit Upazilla veterinary resource office to get services for their cattle. They have to travel more than 20-25 km to access the facility and at the same time they have to spend their time, energy and money. Drainage of the labor, money and energy causes a loss in the entire socio-economic condition. The extension facility here will facilitate the Upazilla level veterinary services in union level. Two-trained person will provide primary check-

up, enlisting history of disease and prescription. If needed, they will communicate with Upazilla veterinary officers over phone and receive concerned prescription for critical cases. Besides, they will refer the most critical cases to the Upazilla veterinary office for better treatment.

## **2 OBJECTIVES OF THE STUDY**

Broad objective of this study is to find out the monetary and non-monetary benefits of veterinary health service extension facility. The specific objectives of this study are:

- To determine the amount of time saved on average of the beneficiaries of the veterinary health service extension facility.
- To determine the amount of cost saved on average of the beneficiaries of the veterinary health service extension facility.
- To determine the number of visits saved on average of the beneficiaries of the veterinary health service extension facility.
- To assess the non-monetary benefits of the veterinary health service extension facility.

## **3 METHODOLOGY OF THE STUDY**

The assignment adopted several steps to collect quantitative and qualitative information in order to fulfill the objectives of the study. Data were collected through phone interviews, face-to-face interviews, and in-depth interviews from different groups of respondents. Detail indication of the methods and process that were followed conducting the study, however, could be summarized as follows:

### **3.1 Study Approach and Design**

This study was both qualitative and quantitative in nature. This research defines quantitative research as a formal, objective, systematic process to describe and test relationships and examine cause and effect interactions among variables. A descriptive survey design was used. It provides an accurate portrayal or account of the characteristics, for example, behavior, opinions, abilities, beliefs and knowledge of a particular individual, situation or group, etc. The proposed study was based upon Primary data. However, the secondary data was reviewed to - (1) conceptualize the

problem, understand the situation and define the problem statement for the project and (2) Assess relevancy, efficiency and effectiveness of the intervention.

### 3.2 Population and Area of the Study

This study has been conducted among those, who received veterinary health service extension services. This study was conducted in Kurigram district. The population of this district is 2,069,273 (national population census, 2011).

Several rivers are flowing through the heart of this district. The major rivers are Brahmaputra, Dharla, and Tista and the minors are Dudhkumar, Phulkumar, Gangadhar, Jinjiram etc. Three northern sub districts (namely thana or upazila) of this district (Nageshwari, Bhurungamari, and Phulbari) are recently connected by a beautiful bridge over the Dharla river with the main land of the district. The economy of Kurigram district, being a flood prone area, is significantly depends on livestock.



Figure 1: Map of the Study Area

## **Data Collection**

Data were collected through interviews by structured questionnaires. In total 174 interviews were conducted. In 174, 93 interviews were conducted via telephones and 82 of them were done by face to face interviews.

## **Data Analysis**

Data entry or importation was done concurrently with data collection. Data was analyzed using SPSS software (IBM, v22). The researchers reviewed, edited and cleaned the data by performing a series of frequency and data range checks. Any inconsistencies were checked visually by comparing the electronic entry to the entry on the original questionnaire.

### **3.3 Limitations of data collection**

Although the research has reached its aims, there were some limitations. The researchers faced several challenges while collecting data such as;

- Getting contact numbers from service providers
- Getting wiliness responses to take a survey over phone
- Getting proper cooperation during face to face interviews

## 4 FINDINGS OF THE STUDY

This study has been conducted among people who receive health services for their animals. Previously, people went to the District veterinary health complex for receiving animal health services. As a result, people needed to spend a long time for availing animal health services. They also needed to travel a long distance, ultimately had to spend huge amount of money.

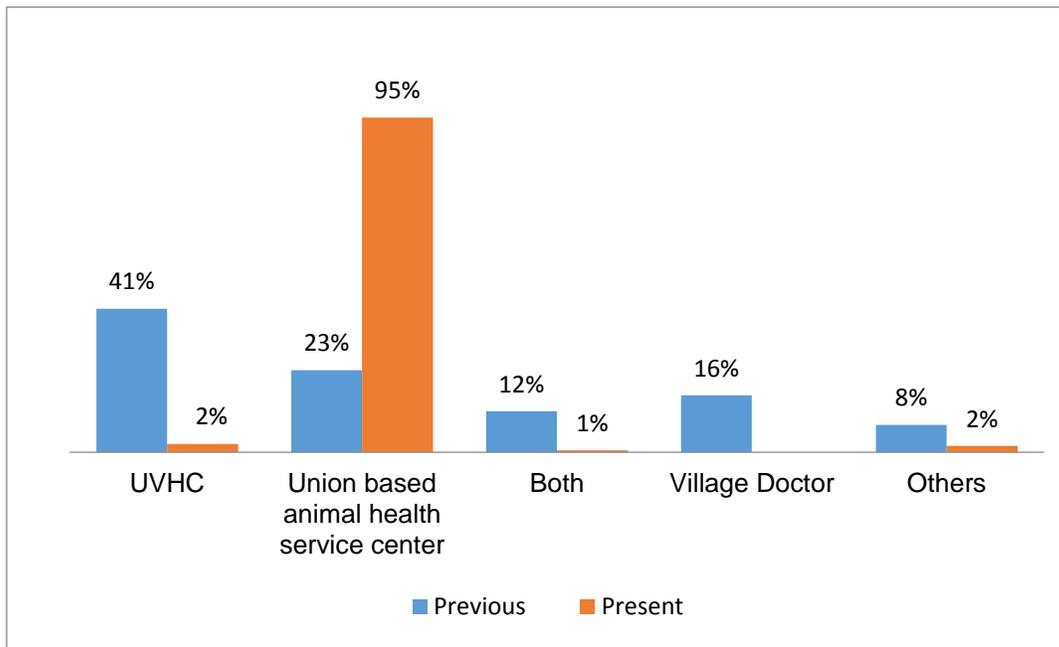


Figure 2: Previous & existing way of receiving the animal health service

Union Level Animal Health Service center has been introduced to make easy solution for them. If we fragment the service intake process into two parts, previous and present: it will give us a brief understanding on this issue. Study findings showed that (See figure 1) 41% people went to Upazilla veterinary health complex in the past. 95% informants have provided information that after the establishment of the Union based animal health service center, it is helpful for them to go to the Union based animal health service center. It was also found that only 16% people visited village doctors in the past.

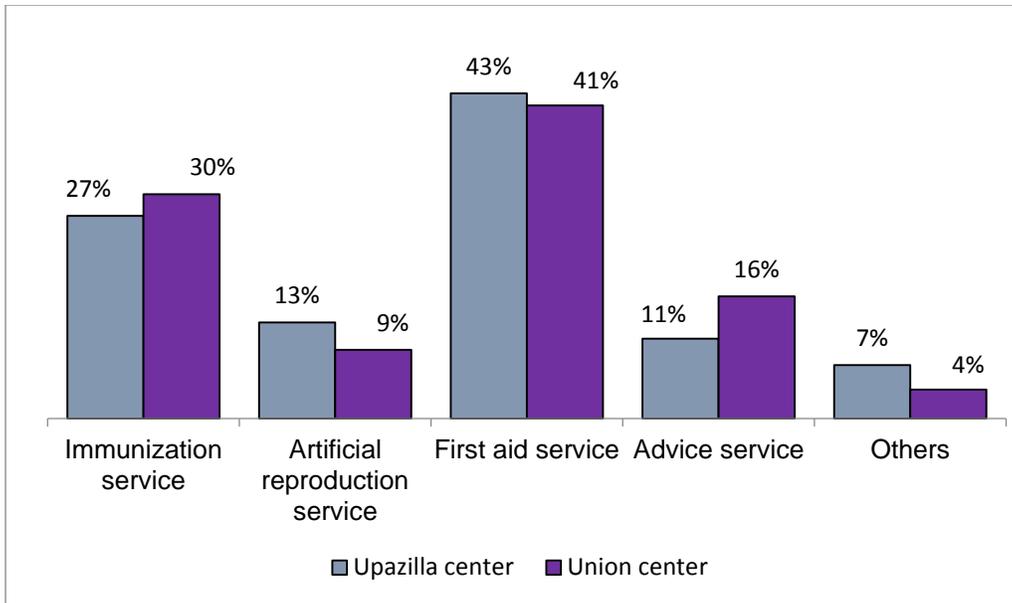


Figure 3: services available in Upazilla and union levels veterinary hospital

After implementation of the extension services, people who receive health services for their animals; (See figure 3) 41% stated that they got first aid service from the Union center that was closely near about Upazilla center and 30% mentioned that they received immunization service from the Union Level Animal Health Service center.

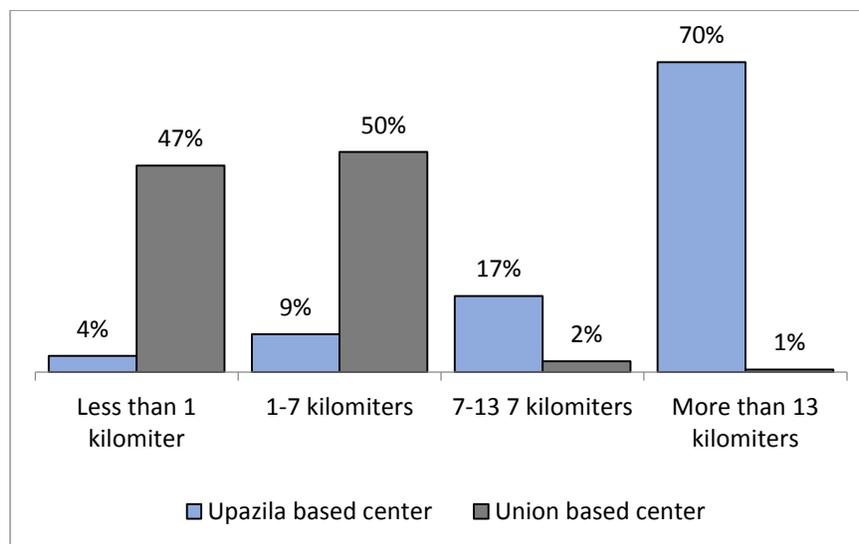


Figure 4: Distance required in both animal health center

According to the figure 4, it is presented that 47% respondents stated that it took less than 1km to go to the Union Animal Health Center. On contrast, 70% respondents claimed that they had to go more than 13km to reach UVHC. This indicates that the establishment of Animal Health Center in union level is very helpful for poor people. It takes less time, cost and distance to travel.

#### 4.1 TCV analysis

Specific objective of this study is to determine the amount of Time, Cost and Visit saved on average on those respondents who receive union level health services. According to the project officer, new service centers are reducing hassles of people. From the analysis of collected data, we can measure the TCV part as following-

##### Time required for getting animal health service

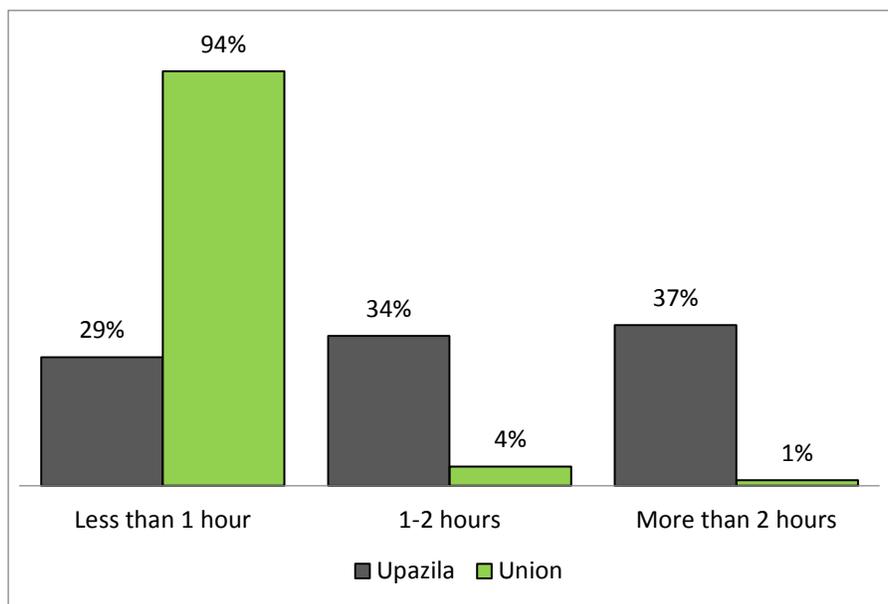


Figure 5: Time required in both veterinary hospital

Figure 5 shows, about 94% of respondents opined that union health center required less than one hour for providing services. On other hand, about 71% of respondents who received health services from UVHC mentioned that it required more than 1 hour even more than 2 hours getting the facility.

## Cost required for getting animal health services

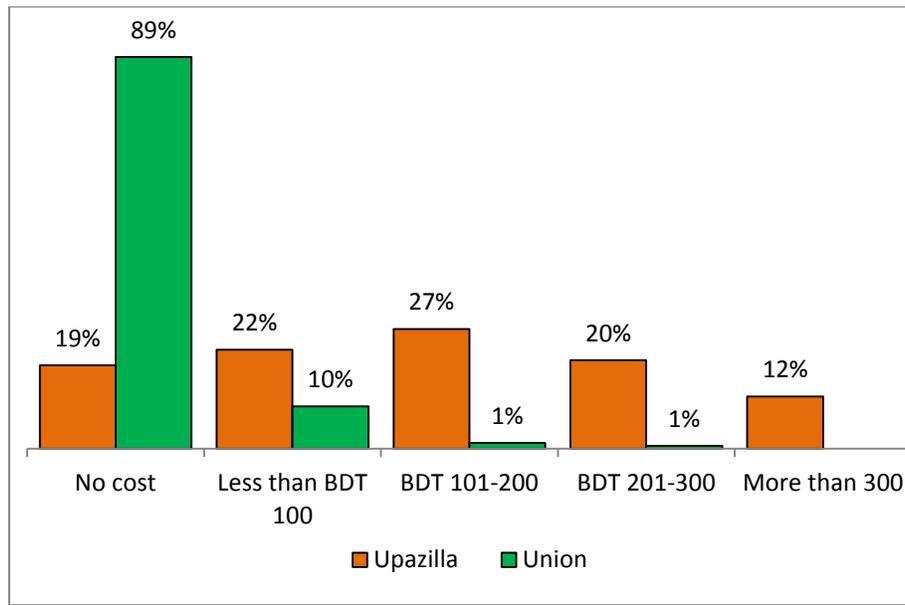


Figure 6: Cost required in both veterinary hospital

The following graph (See figure 6) shows a comparative analysis on the average cost needed for getting animal health services in Upazilla and Union. About 89% of the respondents stated that they got the animal treatment facility from Union Animal Health Center without spending money. In a contrary situation- among the people who received services from UVHC, 22% provided that they have to spend around one to one hundred taka to get the facility. At the same time 12% of them mentioned that they had to pay more than three hundred taka to take facility from UVHC; while the number of people who have to pay an amount of money more than two hundred taka in Union Animal Health Center is only 1%.

## Visits required for getting animal health services

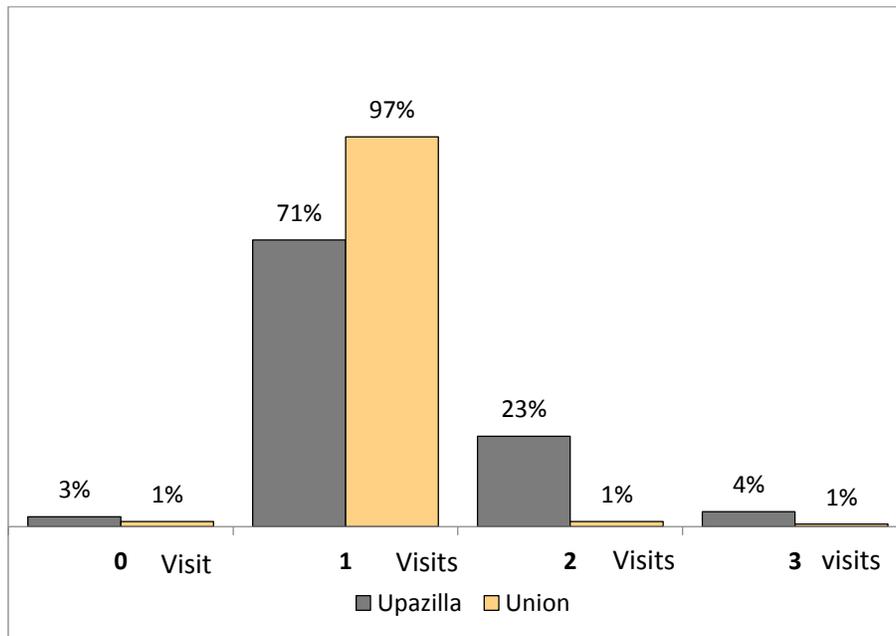


Figure 7: Visits required in both veterinary hospital

This graph (figure 7) has explained the required frequency of visits to get services from Upazilla and Union. Study reveals, beneficiaries have visited the Union Animal Health Center for one time; 97% of the people mentioned about this who receive services from the union. On the other hand, 23% respondents mentioned that they had visited the UVHC more than two times. As a result, the analysis put a scenario that the establishment of Union Animal Health Center increased the number of visits which shows a positive attitude towards facility and an increase in their awareness about animal health.

## Comparative analysis of TCV (time, cost and visit)

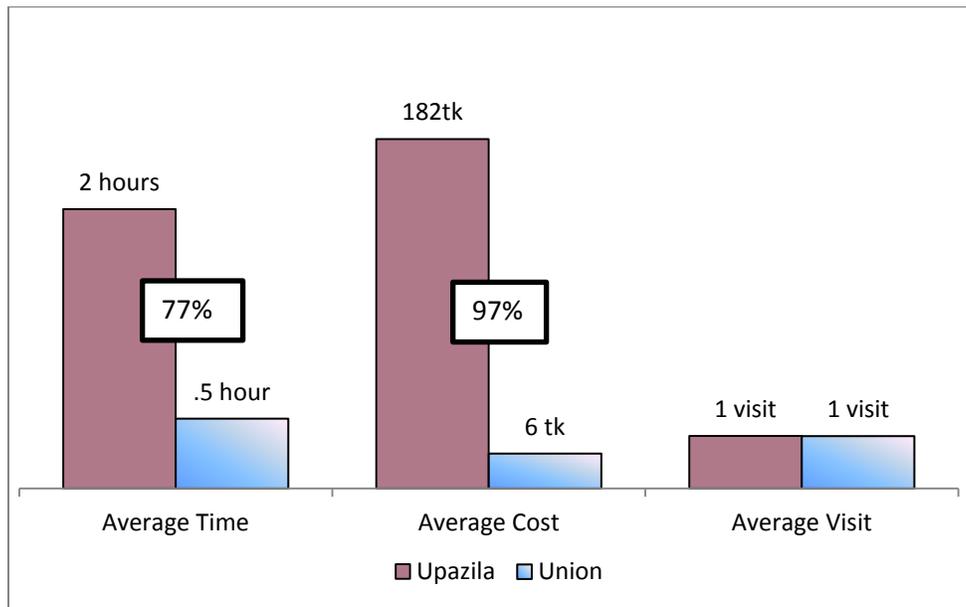


Figure 8: Average Time, Cost and Visit

According to the figure, it has been stated that (see figure 8) the time has been reduced. An interesting thing that on average respondents spend a little money for getting this service from Union level animal health center, but the average visit remained same.

As, this study was a concern of the Access to Information Program, a questionnaire was set to know the familiarity of this program. Covering this vision, the outcome has come as following- 33% of the informants know about Access to Information and their activities. On the other hand, 67% of the respondents do not know about this program and they are informed about the program vision while conducting interview.

## 4.2 TCV+ Analysis

### Suitable option

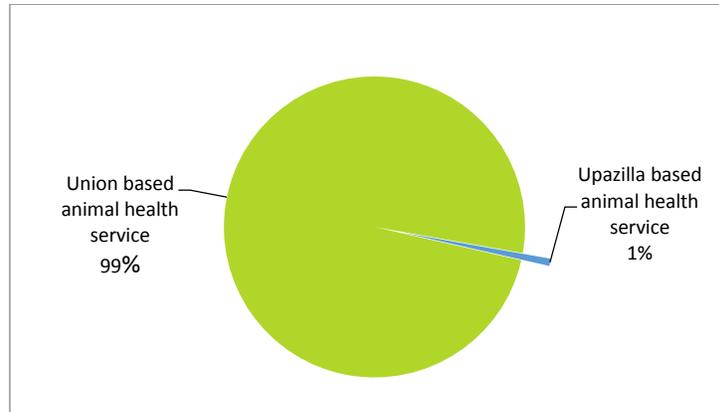


Figure 9: Better option for animal health service

As, this study provides a TCV+ study on the services, this study will also focus on other non-monetary benefits, like service providers' behavior, beneficiaries' satisfactory level and other aspects regarding this. In this sector, this analysis will show the non-monetary benefits of this study. Almost 99% respondents (See figure 9) mentioned that Union based health service is more appropriate than Upazilla.

### Advantages of Union based animal health service

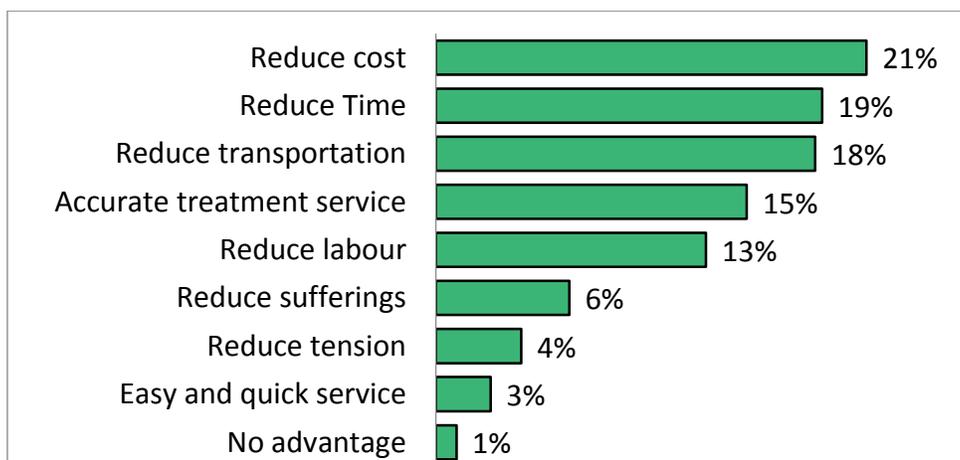


Figure 10: Advantages of union based animal health service

In figure 9, among those who receive the services- 21% population mentioned that this service reduced cost for them. 15% informants stated that they got accurate treatment. This special extension service has reduced the labor of these patient oriented people as well as the trouble of the patients. Around 13% informants have mentioned that it reduced labor and 19% mentioned that these services are reducing their time as well. On the other hand, an important feedback of this provided service is- there is a lack of accurate treatment service (4%); at the same time they feel that there is a lack of necessary equipment.

### Disadvantages of Upazilla based animal health service

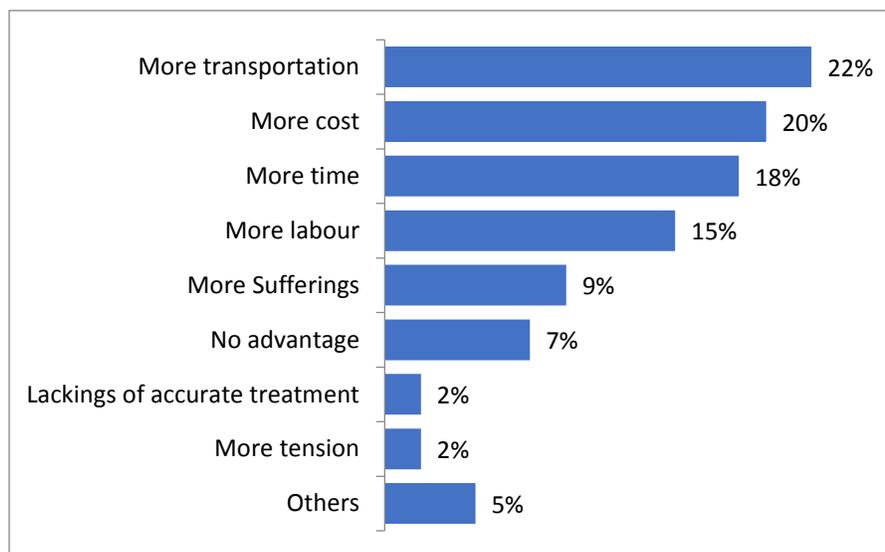


Figure 11: Disadvantages of Upazila based animal health service

From the visualization of the graph (Figure 10), it is presented that it needed more time and cost (20% and 18% respectively) to receive service from UVHC. More transportation is also needed for receiving UVHC service. Around 7% informants have mentioned that they have not got any advantage from UVHC.

## Satisfaction and Reasons of satisfaction:

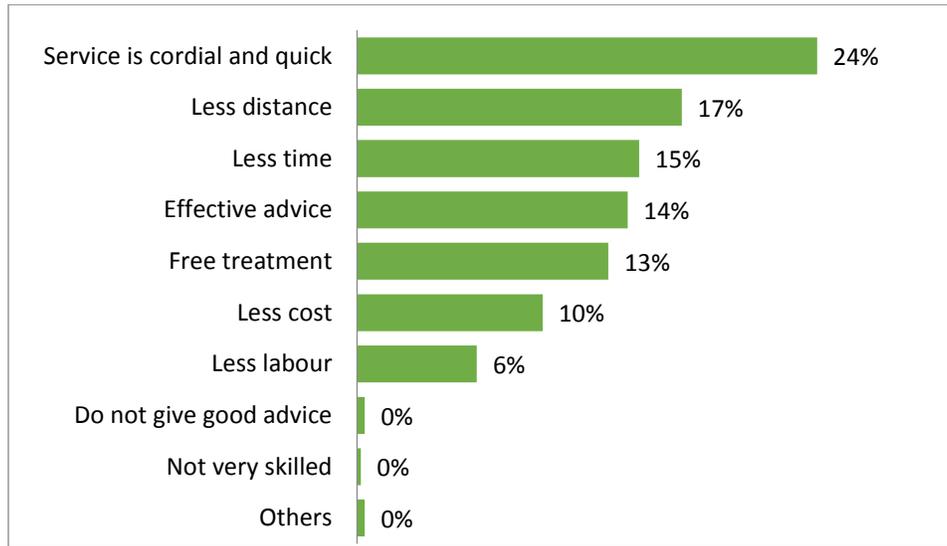


Figure 12: Reasons behind respondent's opinion

In this regard, respondents who are satisfied with this service mentioned the reasons as following. According to them, this facility is taking less time, less cost and providing effective solutions. The given graphical (Figure 11) presentation is providing the statistical data of the percentage of respondents' reasons of their satisfaction. On the other hand, 28% have agreed that they have known the service from meetings and seminars.

## **5 RECOMMENDATIONS**

Though this animal health service proved successful from TCV aspects, however, there is still scope of improvements. The following recommendations may contribute in this regard

- Increase the number of doctors for Union Animal Health Center.
- Increase the announcement of the activities of union level.
- For better facilities, beneficiaries recommended to provide monthly field visit by animal doctor.
- Necessary equipment and medicine are strong recommendations, because these are the essential elements to improve the animal health service facilities.

## **6 CONCLUSION**

UVHC has been providing treatment among people for the wellbeing of their animal health. Recently the extension facilities have been introduced in several unions at Kurigram. This study reveals the extension facilities of UVHC in brief and deals with details of the facilities. Besides, it explores the population's perspective and their understandings about the provided facilities. Though the main vision of this study is to find the monetary benefits in terms of Time, Cost and Visit (TCV), it also discovered other non-monetary benefits in terms of beneficiaries' satisfaction, service delivery timing and service providers' behavior towards them.

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