

(二) 論文要旨

論 文 要 旨	
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主論文題目 POSTHARVEST LOSSES OF VEGETABLES IN NEPAL	
In recent years arable land has been declining rapidly in infrastructure development,	
and it is challenging to provide food for the world's growing population. At the	
same time, the growing population and decreasing arable land are the biggest problems	
for food sustainability. The postharvest loss rate in developing countries is about	
20 to 50 percent of the total production. Resolving postharvest losses can help the	
economy and living standards of the farmers as well as aid in food sustainability.	
This study is based on all those factors that help find the proper solution to Nepal's	
postharvest loss of vegetables.	
Postharvest losses of vegetables occur at all points in the market chain area, from	
production to food on plates for consumption. Postharvest activities include harvesting,	
handling, storage, processing, packaging, transportation, and marketing. The loss of	
horticultural produce is a significant problem in the postharvest chain. It can be	
caused by various factors, ranging from growing conditions to handling at the retail	
level. The losses are not only a waste of food but also a waste of human effort,	
agricultural inputs, livelihoods, investments, and scarce resources such as water.	
This study aims to find out the actual causes of postharvest losses and provide	
appropriate solutions for them.	

<p>This thesis consists of six chapters, each having its respective contents.</p>
<p>In 1st chapter, "Introduction," all the study background and material from other branches have been described.</p>
<p>Chapter 2nd contains the "postharvest practice and losses of the vegetables." This chapter considered the causes of postharvest losses of vegetables from production to consumer level and the harvesting technology of Nepalese farmers. Apart from this, government policies and agricultural implementations are also included. The study was conducted in Nepal (Kathmandu, Bhaktapur, and Lalitpur).</p>
<p>The 3rd chapter is "Postharvest practice and food losses in Japan." The study covers the current state of food loss in Japan and its potential for mitigation and postharvest practices, and their role in food losses are carried out in this chapter. This chapter covers the stages of agricultural development in Japan, the stages of development of agricultural technology, government investment in the farming sector, modern agricultural technology, vegetable distribution medium and modern agricultural materials used in it, etc.</p>
<p>The study was conducted with secondary and primary data collection methods. Preliminary data were collected from farmers, suppliers (wholesalers), and retailers by questionnaire. Secondary data were collected from published and unpublished books and other Internet sources. Three central regions of Japan, Saitama, Kanagawa, and Tokyo, have been selected for the survey.</p>
<p>The 4th chapter is about the "postharvest losses of tomatoes in Nepal." The reason for choosing Tomato among the different vegetables for the study, many farmers in Nepal cultivate only tomatoes throughout the year. And Tomato is known as a highly perishable vegetable, so that it can be represented all kinds of vegetables on postharvest losses. The study was carried out in the different municipalities of the Kavrepalanchowk district. Kavrepalanchok district is 21 kilometers east of the country's capital.</p>
<p>The 5th chapter is "Climate change and its effects on postharvest losses." The study is</p>

conducted with only a secondary data collection method. This chapter focuses on how climate change affects agriculture and what can be done to sustain vegetable farming in the face of climate change. Agricultural production is highly climate-dependent since crop growth is influenced by solar radiation, temperature, and rainfall also sensitive to climate variability and weather extremes (droughts, floods, and severe storms). Climate change will affect the productivity of crops and harm their quality, so climate change cannot ignore during the analysis of the postharvest losses.

The 6th chapter is "Conclusion and summary," This chapter focuses on the research's concrete results and the entire study's findings.

Although most Nepali are engaged in agriculture, the import of agricultural products in Nepal is increasing yearly. As a result, Nepalese farmers cannot meet the Nepalese market's demands.

The general economic situation in Nepal can be significantly improved by improving Nepal's agricultural sector. Therefore, this study will play a significant role in reducing postharvest losses of vegetables in Nepal.

This study begins by discovering the causes of postharvest losses and finding the appropriate solution. Regarding the positive effects of technology on agriculture, we believe that farming methods in Nepal are the same as those in Japan 80 years ago and that Nepal can develop agriculture in the same way Japan experienced. Nepal could emulate modern Japanese tools and techniques. Also, this study can contribute to the agricultural development of Nepal by adding various analytical tools learned in Japan to advanced farm technology and agricultural knowledge.