

A THESIS REPORT

On

Determination of Key Factors That Contribute to Farmers Not Receiving Fair Value for Their Products in The Supply Chain System in Bangladesh: A Case Study in Gopalganj district, Using Machine Learning Techniques

Submitted By
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17CSE014

A thesis in the Department of Computer Science and Engineering presented in partial fulfillment of the requirements for the Degree of Bachelor of Science in Computer Science and Engineering



Bangabandhu Sheikh Mujibur Rahman Science and Technology University

Gopalganj, 8100

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Products in The Supply Chain System in Bangladesh: A Case Study in Gopalganj district, Using
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I the undersigned, I recommend that the thesis completed by the student mentioned above, in partial fulfillment of B.Sc. Engineering degree requirements, be accepted by the department of Computer Science and Engineering, Bangabandhu Sheikh Mujibur Rahman Science & Technology University for deposit.

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Abstract

This paper makes an attempt to describe the key factors of supply chain system in Gopalganj, which includes the number of markets in Gopalganj, number of middlemen, and number of financing institutions. Then it shows various constraints in the existing supply chain where the problems of the vegetable supply chain are discussed thoroughly. Then, the impacts of lack of effective supply chain linkages are discussed.

The farmer product supply chain system is a complex network of activities and actors that are involved in the production, processing, distribution and delivery of agricultural products to consumers. Key factors that play a critical role in the efficient functioning of this system include: (1) High-Cost Product; (2) Market Structure; (3) Power imbalance; (4) Lack of information; (5) Limited access to finance; (6) Inadequate logistic; (7) Lack of policy support; (8) Dependence on middlemen; (9) Climate Change; (10) Inadequate govt support; (11) Quality and Grading; (12) Market power of intermediaries. Effective management of these key factors is crucial in ensuring that farmer products reach consumers in a timely and cost-effective manner, while also ensuring the livelihoods of farmers and other actors in the supply chain.

Acknowledgment

In this very special moment, first and foremost I would like to express my heartiest gratitude to the almighty God for allowing me to accomplish this thesis successfully. It is my first thesis using Machine Learning. I am really thankful for the enormous blessings that the Almighty has bestowed upon me not only my student life but also throughout my whole life. Then I like to give many thanks to my thesis supervisor Dr. Saleh Ahmed, Chairman & Associate Professor, Department of Computer Science and Engineering, who encouraged, supervised and supplied necessary requirements and guideline in performing this work. In achieving the gigantic goal, I have gone through the interactions with and help from internet and would like to extend my deepest appreciation to those who have contributed to this dissertation itself in an essential way.

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