

"A man is
great by
deeds, not by
birth"

-Chanakya

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INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE



Case Study

IIMK/CS/172/QMOM/2023/02

January 2023

Farmer's Dilemma – A Bayesian Perspective

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Farmer's Dilemma – A Bayesian Perspective

Abstract:

Ajay Desai, a farmer from the Nashik district of Maharashtra and owner of ten acres vineyard has been producing wine grapes since the last eleven years. He is the supplier of wine grapes to a few local wineries. The climate of Nashik has been quite favourable for the cultivation of grapes. In the recent past, the climatic variability especially the untimely drought and rains have caused harm to the quality of the fruit resulting in the periodic drop in the outputs and financial loss to the farmers. Ajay makes profit of ~INR 25 lakh in the ideal climate condition while incurs a loss of INR 10 lakh when the weather doesn't favour the cultivation. He has the option of leasing out his vineyard at INR 14 lakh per year to avoid any risk associated with the climate. However, being a passionate farmer, Ajay is averse to leasing out the vineyard to any wine making firm, and even though he is aware of the risk involved, he is inclined to cultivate and manage the vineyards by himself. So, how can Ajay overcome this output dilemma? He can buy reliable information from a climate tech start-up on the possibility of unseasonal drought or rain to choose between the two options – to lease the vineyard or to continue with farming by himself.

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