The Effects of Dry Spell on Eggplant Production in Batangas City, Philippines

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Abstract
According to the Food and Agriculture Organisation of the United Nations, there is an unclear understanding as to the extent to which natural disasters cause significant impacts to the agriculture sector, especially on its subsectors. Most studies holistically focus on the agriculture sector as a whole and fail to address sector-specific industries. This research was conducted to identify the nature and extent of effects of dry spell on a specific sector, eggplant production, in Batangas City in the Philippines. To determine the effects of the dry spell, 71 eggplant farmers situated in the barangays (villages) of Tabangao Dao, Pinamucan East, and Sto. Niño in Batangas City were interviewed. The data was analyzed using frequency and mean analysis as well as cost and return analysis. The respondents reported that the dry spell delayed their transplanting activity, which led to delays in fertilizer application. The dry spell also decreased the quality of the eggplants, as well as increased the number of twisted-shaped eggplants, fruits with brown streaks and lesions on the skin, and fruits which were stunted and thin. Consequently, there was a decrease of good-graded eggplants and the increase in semi-good and rejected eggplants. Lastly, on the average, there was a 105 kg per harvest per hectare decrease in eggplant production in Batangas City, which resulted to a PhP14,880.85 reduction in the expected income of the farmers. It is recommended that the government provide a communal water source, subsidize the costs of some production inputs, and link the farmers to technology developers and agriculture experts who can help develop appropriate coping mechanisms against dry spells. Further, the eggplant farmers must be encouraged to practice mulching, contour farming, and crop rotation to minimize possible production losses from dry spells.

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