

Improving Livelihood of Farmer through Climate Field School by Utilizing Climate Information

An abstract on Climate and Agriculture

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Background

Biodiversity plays important role for human live. It fulfils human basic needs such as food supplies by providing different kind of food with different genetic inheritance and its different benefits, and also shelter deliver by varieties of ecosystem which gives services; include service of water and fresh air. Climate somehow affects sustainability of biodiversity. Production of apple tree (*Malus Sylvestris Mill.*), for example, is affected by the amount of rain day, temperature, and wind speed during certain period. The case showed by apple production in Batu-Malang, East Java which is slightly decreasing along with the changing of climate element.

Show case: Planting Apple to Kailan

Data of Agriculture Service of Batu shows total area of apple production in Batu in 1980 was 2.015 hectare, with annual production of 72 thousand ton from 5,64 million of apple trees. Apple was an icon of the area in 1980 to 1996. That the reason why apple was selected as an icon of Batu. According to Head of Agriculture Service of Batu Himpun, the District of Bumiaji was become the central of apple production compare to the two other districts; Junrejo and Batu. Ninety five percent of apple was in Bumiaji. Unfortunately because of the changing element of climate, the total area of apple production is slightly decreasing from time to time. Data of Agriculture Service showed that total area of apple production was remain only 600 hectares on March 2011, with total number of apple tree of 2.506.546. From that amount, apple production was only 24.625 ton per year which may cause the decreasing income of government of Batu.

Importance of Climate Information

Climate information was remain unused by most of farmers in deciding variety of crops to grow. Anticipating from greater loss, most of farmers kept on shifting their crops to other commodities such as Orange and Kailan (*Brassica oleraceae var. acephala*) without using climate information. Whilst, certainly every crops needs a particular condition to grow and climate information will help farmer in deciding which crops will be best for certain period with possibility of re-planting valuable crops by knowing the condition of the influencing climate element. Learning from the past, few success stories of climate field school has showed how knowledge on climate information could really influence farmers in choosing the right varieties of crop.