

## INDONESIA HOME COUNTRY INDEGENIOUS KNOWLEDGE AND TRADISIONAL WISHDOM FOR GROWING SEASON OF LAND PADDY

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### ABSTRACT

The aim of this research is to determine growing season land paddy with use tradisional climate prediction base on indegenious knowledge and tradisional wishdom from society where they live on remote area. The data of growth and yield of land paddy was collected at Powelua Village, Donggala regency, Central Sulawesi Province, Indonesia. The method of this research use survey and interview in depth to farmer who planted land paddy. The result show that their knowledge to predict climate for growing season land paddy has to used both the climate data.

**Key Words :** Climate prediction, indegenious knowledge, land paddy.

### INTRODUCTION

Climate change and global warming not only issue but happen. As the result it is difficult to predict the weather and climate for growing season wet paddy although with use the high information technology like to predict dry and rain season. Planting wet and land paddy we need to know when rain season come. To know that we can account how much water we add for paddy plantation base on rain and irrigation. Water available determine growth and yield land paddy so that we need to adapted growing season. The growing season land paddy base on rain pattern can be used remaining the relationship between water and growth and yield of land paddy.

Land paddy is plant where the high altitude. In that area the water only come from the rain. Paddy is one of food source in Indonesia. The yield of paddy in Indonesia has some problem is environment factors like rain and precipitation. The plant need water for growth and yield, especially on critical stadium. Effect of fertilize is not significance if water available condition (Nasir and Effendy, 1999).

Land paddy growing at the dry land where water come from the rain. Different with the wet paddy, water for land paddy only come from the rain. In Central Sulawesi, Indonesia production of land paddy usually come from remote area like the high altitude place or mountain. The farmer planted the land paddy just once of the year. The yield and production of land paddy usually not for sale, but for consumption by the farmer or for saving food.

Study and research about land paddy in Indonesia just less, different with wet paddy. Include climate prediction for growing season. Base on the reality, it is important to know the farmer technology as well as their indegenious knowledge and their tradisional wishdom for land paddy growing season.

There is less research about growing time for land paddy in Indonesia. This is just initial research to explore those so that we have complete information about those.

### MATERIAL AND METHOD

This research was done in September 2013 until March 2014 at Powelua Village,

Central Banawa, Donggala Regency, Province Central Sulawesi, Indonesia. This research running use the survey and interview method. The primer (main) data collected with to interview all the farmer at Powelua Village, Donggala regency, Central Sulawesi, Indonesia who plant land paddy. The deep interview with the farmer and lead of tradisional people with making a structure question like how to determine growing season of land paddy, include the growth and yield production. Focus group discussion also to do for to confirm the data collected from individual farmer which we interviewed.

## RESULT AND DISCUSSION

The result show that the farmer use astronomy condition to determine growing season of land paddy. The astronomy condition depend on star and moon in the sky. They use their indegenious knowledge and tradisional wisdrom to determine growing season of land paddy and how to drive their land paddy plantation. For example they make collaboration planted land paddy together since land paddy is seed until production. Determining land paddy growing season they make focus group discussion between the farmers, head of village government (kepala desa), village custom (pemangku adat), and so on. If they are seven stars around the moon it means growing season is come. This is called "*Malunu*" (in Kaili language). Therefore they devide seed "woman and man" when the farmer plant the seed of land paddy.

The growth of land paddy does not use fertilizer. No disease and pest to land paddy growth since seed time until production or growing season. This is comparative quality of land paddy in Powelua. Every farmer at Powelua plant land paddy 2 ha. They plant land paddy with collaboration. The average land paddy production is 2 ton/ha.

There are two tradisional climate prediction popular in Indonesia, namely "Pranatamangsa" in Java and Bali island and "Palontar" in South Sulawesi (Hasan, 2003). The farmer use this tradisional method for paddy plantation. In Central Sulawesi we can see the tradisional climate prediction at Powelua Village. This technology has to used for the last time until now.

If we use the rainfall data, there is relationship between tradisional climate prediction (quality data) and the rainfall data which source BMKG (quantity). The yield of land paddy is not for sale, but is used for self consumption. They save the yield of land paddy in barms ("lambung padi").

The farmers at Powelua village to do tradisional farming when they determine growing season of land paddy, include their agricultural technic and determination of harvest time. Therefore they make decision for farming depending on custom. The farmer plant land paddy in October or they called "*Malunu*" month which its mean seven stars. There is seven stars furrow and one star the brightntest light. They called "Pantaolo" which it is mean there are three stars furrow/row and the same size large. Wiriadi wangsah (2005) said that our parent determine the growing season depend on the astronomy.

## CONCLUSION

This is the inisial research how to determine growing season for land paddy in Powelua. For the next time we need combine between the tradisional climate prediction (quality data) and the rainfalls data base (quantity data). There are many places land paddy plantation in Central Sulawesi, Indonesia. It is better to explore how the farmer determine growing season their land paddy plantation, their indegenious knowledge and their tradisional wisdrom.

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