

## **Adaptation of Farmers Wetlands on Water Purification Technology the Mandastana District, South Kalimantan**

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**Abstract:** Mandastana district is consist wetlands village a have small river throughout home residents. Daily activities farmers used to river water mentioned for need wash, bath, cook and drink. Subsequently in progress farmers receive assistance water purification technology for needs cook and drink. Research method used a qualitative approach with a variant of phenomenology. Data collection techniques used a thick description while data analysis a used interactive model with four grooves that is data collection, data reduction, data presentation and conclusion continuously until saturated. Conclusion adaftation of farmers wetlands toward water purification technology to used results water no operating and maintenance tool water purification technology. If program operating water purification technology finished accordingly farmers back are doing original habit used to river water for needs cook and drink.

**Key words:** Aadaftation farmer, wetland, water purification technology, cook and drink, purification

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### **INTRODUCTION**

Mandastana district consist from wetlands village a tend have small river throughout home residents. Home resident throughout small river each other between home with home other contiguous follow small river. Small river become something urgent and a part in life farmers there. A day activities farmers used to river water for need household such as need wash, bath, cook and drink. Need for cook and drink farmers used kind ingredients chemistry soluble which kind chemistry placed in drum contains river water, process are need time 1 night so that river water become limpid.

Subsequently in progress farmers receive assistance water purification technology for needs cook and drink which this technology can become river water limpid so that used for cook and drink. Water purification technology can replace old habits community in river water limpid with kind ingredients chemistry soluble.

### **Leterature review**

**Adaftation farmer:** Hardesty (1977), propose adaftation tend on process occurrence relationship reciprocal among living things with environment. Process farmer in adaptation with environment around. Then, Alland (1975) explain adaptation a strategy used by human in lifetime for anticipating change physical environment and social. Strategy are doing human farmer in create new life appropriate with condition environment.

Subsequently, Dolan *et al.* (2001) mention plan adaptation which adaptation in development involve institution and policy, target enforcement capacity adaptive farmers with trough utilization new technology and infrastructure in maximal.

### **MATERIALS AND METHODS**

Research method used a qualitative approach with a variant of phenomenology. Qualitative research phenomenology is research which aim understanding the meaning individual farmers wetland toward water purification technology with digging farmers interpretation in daily. Technique data collection used three activities is field observation in depth interview with farmers wetland and documentation secondary data which support research. Research informant used purposive sampling and snowball sampling in select farmers wetland. Data analysis in research used data analysis qualitative with interactive model (Miles and Huberman, 1984). This interactive model consist activities data collection, data reduction, data display and conclusion. Analysis conducted continuously until saturated with validity data used triangulation method.

### **RESULTS AND DISUSSION**

**Data analysis:** Mandastana district have wide 136 km<sup>2</sup> with amount population 13.029. Division gender

population Mandastana district consist female 6.590 and male 6.439. Population have work sector farmer amount 5.435, a sector merchant amount 20, a sector fishery amount 15, a sector labour amount 384, a sector industry amount 341. Informan research is seven person farmers, all of them male. This seven person farmers relevance with goal research which who result selection from farmers used water purification technology.

Mandastana district denote a part in region Barito Kuala regency but this location district no far with border Banjarmasin city. Mandastana district including area border which easy perfectly used land transportation such as car and motorcycle. Propensity Barito Kuala regency denote area wetland consist peat land and paddy field which. Mandastana district include area wetland, surrounded small river each other connected with more great river. Small river located in the middle village, cleve village become two that opposite each other. Small river flow between home residents that consecutive along flow small river mentioned. This Mandastana village denote village agriculturum which population dominant livelihood at sector agriculture. Existence small river very used for farmers in continuance paddy field them, small river become irrigate for paddy field.

Afterwards small river used farmers for needs daily others such as bath, wash, cook and drink. This habit farmers used small river done since a long time, hereditary from one generation on generation other, continuously until now. Therefore in habit farmers very difficult to change, especially used water small river in needs cook and drink which process cleaning water used ingredients chemistry purifier such as alum. This ingredients purifier are easy can, many on shop and cheap price so affordable by ability farmers. There are doing program aid in framework to change habit farmers in consume river water through provision water purification technology and experts operational technology. This program denote trials in to change habit farmers so selected Mandastana village that have small river.

This program doing in framework increase public health with consume clean water and hygienic for prevent spread disease through water such as cholera and diarrhea. This disease many happen on Barito Kuala regency which area wetland and habit society consume water in river. Perhaps water purification technology can increase farmers health and change habit farmers in consume water from small river. This technology make water river become worthy for cook and drink. Initially this technology when introduced farmers there, responses enthusiastic because technology building edge small river for ease operational machine. This technology become core attention farmers because located technology easy visits farmers and technology case new at district

mentioned. Operational machine used power electricity originated machine electricity which can bring and save. Operational technology doing on morning follow tide small river, case easy technology water purification siphon water river so that machine electricity used on daylight while night save at home people. If operational technology doing on morning which water siphon save in gallon big on afternoon farmers take water in gallon which water clear yet. Farmers bring container water such as ember, farmers take turns to bring water. Every day farmers take water clear at gallon for need cook and drink while every day operational technology water purification. Farmer very assistance with existence water purification technology. They in continue are used water purification technology for need a day them.

Although, there by still is farmer no used water purification technology, farmers this located house a far from located water purification technology. They reasoned other busy day farmers at paddy field so that no had take water clear in gallon. Operational water purification technology doing officer every day come to district mentioned. Officer fill gallon is empty water because every afternoon take by farmers which gallon fill to full, after gallon full officer shut down machine electricity so forth every day officer doing to. Officer no stay di Mandastana district who stay capital city Barito Kuala regent, officer every morning depart to Mandastana ditrict. Employment contract officer during one month without extension contract.

Farmer is involved in program water purification technology through storage machine electricity at home farmer which it is storage become known farmer about machine electricity from treat until operational. Officer in operational machine electricity and water purification technology assisted one person farmer who farmer at home storage machine electricity. Every morning farmer is assisted officer in operational machine. Cooperation officer and farmer continue until one month, during one month farmers used water clear from water purification technology no complaint from farmers toward water clear result water purification technology mentioned. One month pass task officer finished at district mentioned, habit operational machine doing officer devolve denizen there. Involvement denizen during one month in operational machine considered enough. Nevertheless assumption involvement denizen not appropriate reality, denizen there don't activity a like when together officer, denizen doing habit a long take water at river for needs cook and drink. Not activity operational machine electricity and machine water purification technology, them come back habit a long purify with method water river accomodated in drum during one night mixed solution purifier a like alum.

The use of machine electricity and water purification technology considered impracticable which denizen if needs water client must be are doing trough operational machine electricity and water purification technology. Subsequently denizen must be to vacate time for operational machine electricity and water purification technology and queuing take water client result from water furification technology.

### **CONCLUSION**

Adaftation of farmers wetlands toward water purification technology to used results water no operating and maintenance tool water purification technology. If program operating water purification technology finished accordingly farmers back are doing original habit used to river water for needs cook and drink. Old habit farmers in

river water with ingredients chemistry soluble for limpid river water which this water limpid result ingredients chemistry soluble mention used farmer for need cook and drink.

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