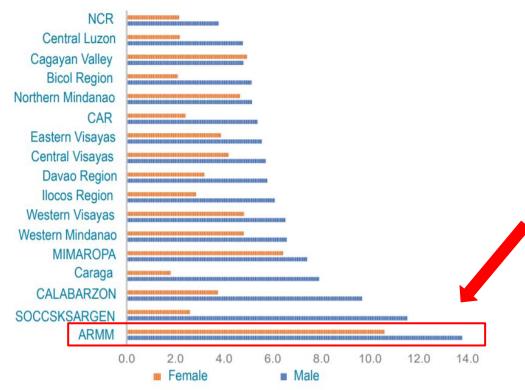
## 

Barriers to Education:

Identifying key indicators to improve student attendance in BARMM

Figure 1. Incidence (%) of out-of-school children aged 5–15 years, by region and sex: Philippines, 2017





ARMM and its neighbor provinces reported a **higher than average dropout rate** in the country.

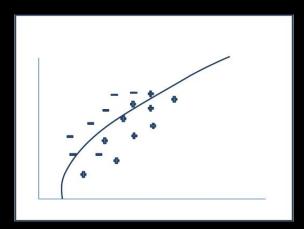
- Albert, David, Vizmanos, 2018



Disruptions to schooling caused by lack of interest, cost of education, access to basic needs, displacement, and conflict may result in declines in student attendance, and eventually student performance as well.

### **OBJECTIVES**

#### MACHINE LEARNING MODEL



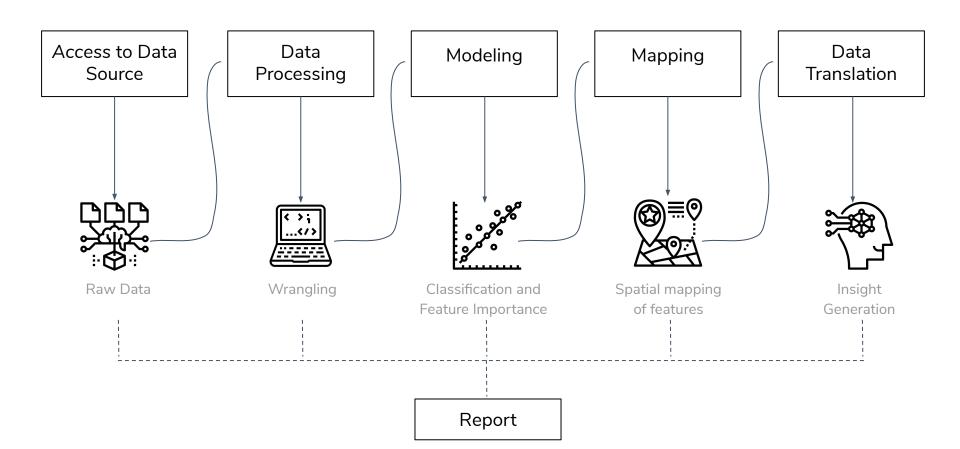
Which will identify the key factors causing the dropout.

#### **INTERACTIVE MAP**



That will provide as a storytelling guide for data communication and policy translation.

#### **METHODOLOGY**



### **DATA SOURCES**



**Open Bangsamoro** 

Barangay Geographical Boundaries

Number of Schools

Working Population

**FLEMMS 2015** 

Household data

**Department of Health** 

Count of Health facilities

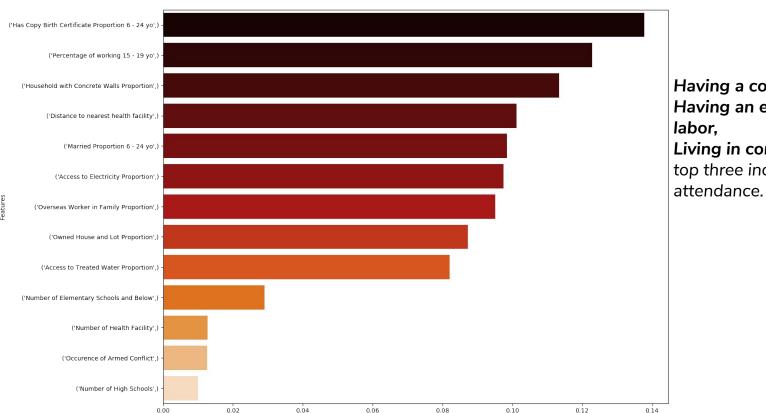
**ACLED** 

Locations of armed conflicts



## RESULTS

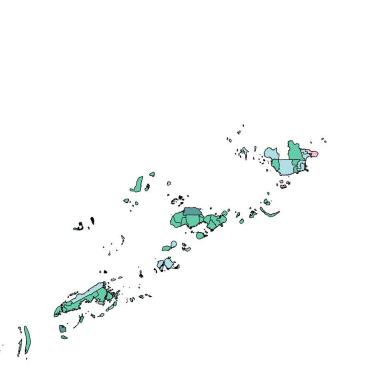


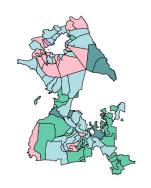


Feature importance score

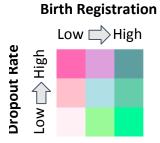
Having a copy of Birth Certificate, Having an environment for youth labor, Living in concrete homes, are the top three indicators of school

#### Birth Registration in BARMM

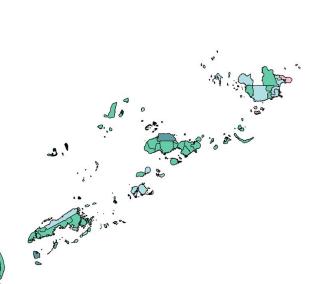


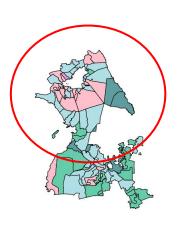




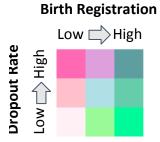


#### Birth Registration in BARMM

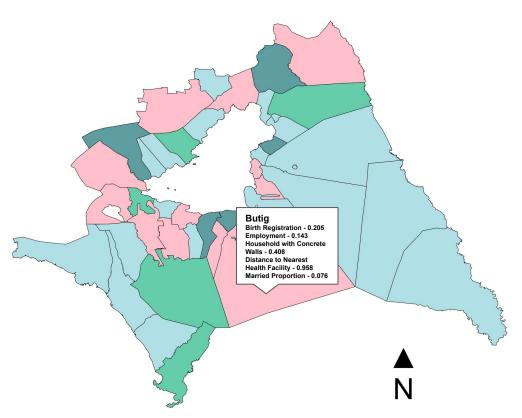








#### Birth Registration in Lanao del Sur

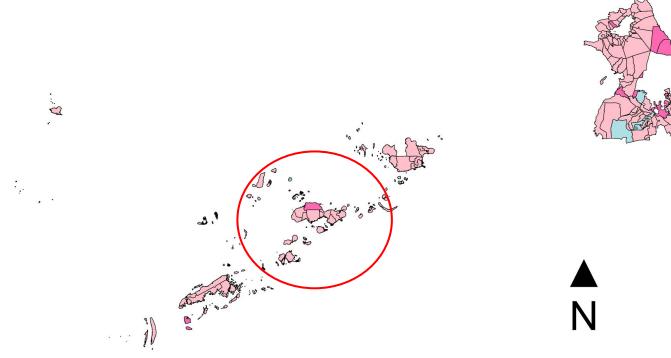


# Propout Rate Low High High High

#### Employment Percentage (15-19 yrs. old) in BARMM



#### Employment Percentage (15-19 yrs. old) in BARMM

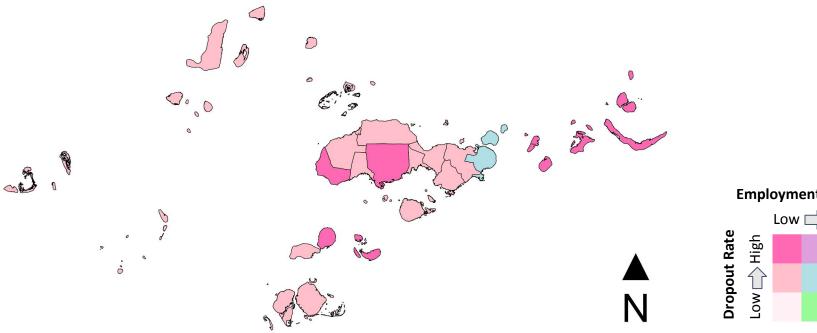






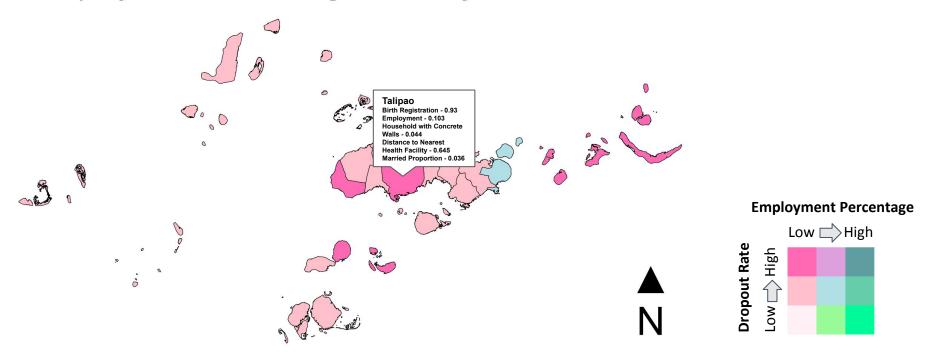


#### Employment Percentage (15-19 yrs. old) in Sulu





#### Employment Percentage (15-19 yrs. old) in Sulu

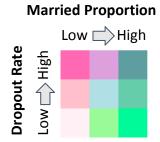


#### Married Proportion (6-24 yrs. old) in BARMM



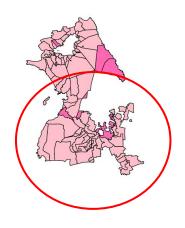




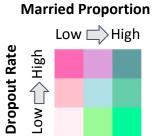


#### Married Proportion (6-24 yrs. old) in BARMM

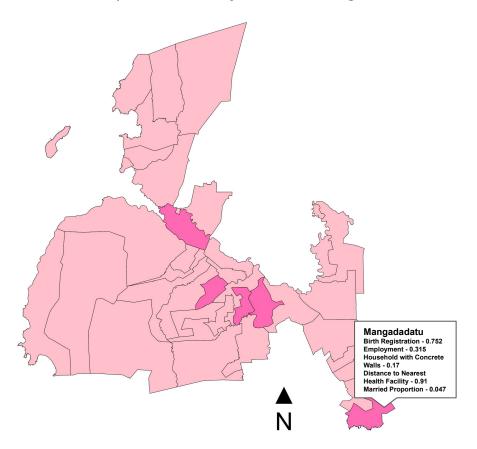








#### Married Proportion (6-24 yrs. old) in Maguindanao



# Dropout Rate Low High Tow High

#### **CONCLUSION**

Education is not recognized as a priority by the people of BARMM due to having more urgent things to address so they can survive their everyday life and fulfill their basic needs.

#### RECOMMENDATIONS

 Methodology - Add Environment Data and Armed Conflict Information

**2. Education** - requirements for school admissions like birth certificates and the like must be more accessible to the people.

#### RECOMMENDATIONS

- **3. Policies** Further studies on social, economic, and cultural context should be conducted to come up with a more appropriate education system for BARMM.
- **4. Geographic Dashboard** Policymakers and stakeholders can utilize this dashboard to know where, when, and how they would set their priorities in improving student retention rates in the region.