

UTILIZING A WEBSITE TO INCREASE EDUCATION QUALITY AWARENESS IN WEST KALIMANTAN RURAL VILLAGES

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Abstract – Education already become a basic human right since they were born. But geographical condition differentiates the level of education quality they get. Especially in most development countries with low implementation of ICT (Information, Communication, and Technology). In this digital era, it is hard to achieve an effective and efficient learning environment in rural areas. Infrastructures and teaching tools in those areas are very humble. Few books can be read. With limited educational background, social-economy issues will always keep remain. Love Borneo is an organic community that want to make a change for children in rural villages in West Kalimantan. They build a facility called Rumah Baca that provide good quality books suitable for children. They collect donated books and some money to buy books and educational games for children. Since 2015, they already build 10 Rumah Baca. But there are still so many villages that need this kind of facility. To build awareness about education for children in rural villages, this article discusses the development of a dedicated website called www.loveborneo.org that provides up to date information about this community and their activities. People around the world can access this website and can officially support this community. www.loveborneo.org is only one example of ICT implementation to help rural citizens.

Keywords: *education, ICT, love borneo, rural villages, rural development, social activity*

Introduction

As a basic right, education is an intrinsic good in itself, leading to broadened individual capacities and freedoms. It is also associated with a host of positive development outcomes. Not surprisingly, healthcare and education services are in general of lower quality in rural areas of developing countries than in the rest of the world. Ideally, education should not be not only free but also compulsory, but making it compulsory before it is truly cost-free would unfairly penalize poor parents (De Janvry, 2003).

Rural education has not yet adequately addressed the impact of globalization forces (e.g. demographic changes, the effects of networks and communication technologies) in the local space; tending instead to operate within the framework of what might be called traditional rural imaginaries (Robert & Cuervo, 2015)

Rural families often count on the labor of their children for tasks such as farm work; finding food, water, and fuel supplies; childcare; food preparation; and wage labor. School should, therefore, offer flexible timetables built around labor demands (De Janvry, 2003).

Background

There is not much attention given for rural areas condition since their locations are hard to reach. But it is not a reason for neglecting them. Thinking of the rural as outside these technologies risks falling back into romantic or deficient notations of the rural, while overlooking the real issues, including what knowledge is best situated to respond the need of its people and communities (Robert & Cuervo, 2015).

Since internet already become an effective facility to spread information effectively and efficiently, a website can cover the needs of connecting people around the world and give information about what happened there. An organic community called Love Borneo is focusing on helping children in rural

villages in West Kalimantan to get a better education materials. To get more supports, they need to announced their activities wider. The partnership between local, national, and international organizations must be forged in order to improve the quality, accessibility, and relevance of schools in rural areas (De Janvry, 2003).

West Kalimantan Geographic Condition

Based on a release from ‘Central Bureau of Statistics’ (Pitono, 2017), astronomically, West Kalimantan Province is located in the western part of the island of Borneo, or between lines 2008' and 3002 LU' LS and between 108030' and 114 010 BT' BT on a map of the earth. West Kalimantan region is one of the provinces in Indonesia which is directly adjacent to a foreign country, the State of Sarawak, East Malaysia.

West Kalimantan has 146,807 km² area wide. It lies along 600 kilometers from north to south and more than 850 kilometers from west to east. Currently, West Kalimantan is the fourth largest province area in Indonesia. The land area surrounded by Kalingkang Mountain/Kapuas Hulu in the north and Schwaner Mountain in the south along the border with Central Kalimantan Province. West Kalimantan has a great number of small and big rivers. Most of the rivers are safe for sailing even for large ships. In the past and now on, the rivers are considered as the main access to reach remote location or community primarily in hinterland area. Influenced by very wide of plateau land, the heights of the mountain in West Kalimantan is moderate/low and inactive or non-vulcanic. A part of West Kalimantan area contains with the marine area which has several islands where mostly scatter over Natuna Sea and Karimata Strait up to border with Riau Islands Province. Some of those islands, primarily located in Ketapang has been considered as National Park, reserves area, and conservation of various animals and plants.

Most lands in West Kalimantan are a forest (62,58%) divided in thicket forest (24,49%), thick forest (41,22%) and similar forest (1%). From 14.68 million ha area of West Kalimantan, area for the settlement only about 0,31%. The widest area for settlement was located in Sintang district then followed by Sambas and Ketapang district.

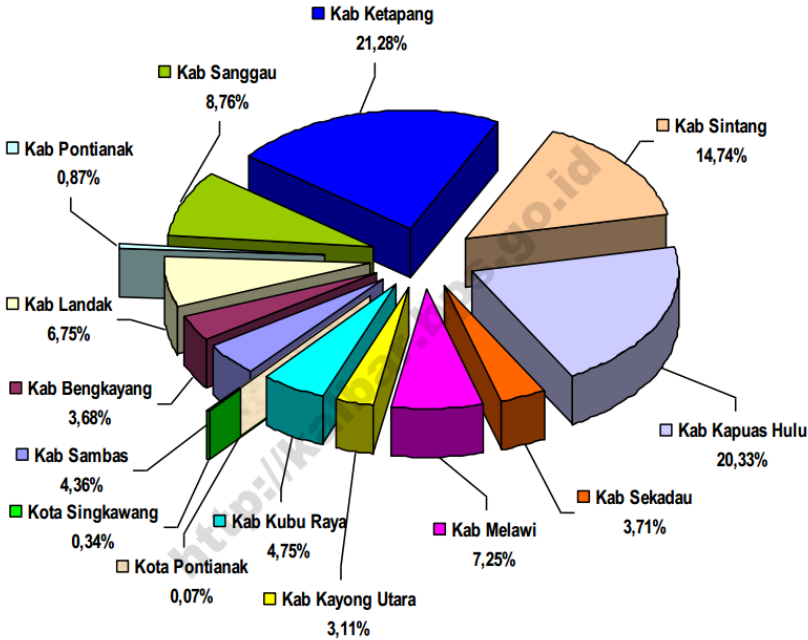


Figure 1: Area Distribution Percentage by District/City in West Kalimantan

Table 1: Area Wide and Number of Villages in West Kalimantan.

District / City	Area Wide (in km2)	Village Area (in km2)	Number of Villages
Sambas District	6.394,70	80,68	193
Bengkayang District	5.397,30	0,04	124
Landak District	9.909,10	0,05	156
Pontianak District	1.276,90	-	67
Sanggau District	12.857,70	76,19	169
Ketapang District	31.240,74	41,28	262
Sintang District	21.635,00	78,23	406
Kapuas Hulu District	29.842,00	16,66	282
Sekadau District	5.444,30	49,12	87
Melawi District	10.644,00	28,17	169
Kayong Utara District	4.568,26	27,00	43
Kubu Raya District	6.985,20	109,15	117
Pontianak City	107,80	-	29
Singkawang City	504,00	-	26
Grand Total	146.807,00	506,57	2.130

Human Development Index for West Kalimantan was at 65.88 and the rank was 29 of 34 provinces in Indonesia. It is sad to know that West Kalimantan as the fourth largest province in Indonesia only ranked 29 for Human Development Index. Rural areas tend to have a low Human Development Index (HDI), and as it is often argued, development in education and health sectors are important for improving HDI. Rural areas are poorly endowed with infrastructures like roads, sanitation, and clean water, thus the development of physical infrastructures is strongly needed (Keshav & Maharjan, 2017).

Table 2: Electricity Sources Percentage

District/City	PLN Electricity	Non-PLN Electricity	Non-Electricity	Grand Total
Sambas District	96,78%	3,04%	0,18%	100%
Bengkayang District	75,37%	10,34%	14,29%	100%
Landak District	66,50%	7,05%	26,45%	100%
Pontianak District	96,79%	0,18%	3,03%	100%
Sanggau District	68,85%	16,42%	14,73%	100%
Ketapang District	81%	7,55%	11,45%	100%
Sintang District	56,08%	13,52%	30,40%	100%
Kapuas Hulu District	71,59%	18,87%	9,54%	100%
Sekadau District	59,25%	18,53%	22,22%	100%
Melawi District	60,84%	11,29%	27,87%	100%
Kayong Utara District	89,33%	6,66%	4,01%	100%
Kubu Raya District	97,57%	1,75%	0,68%	100%
Pontianak City	99,51%	0,49%	0%	100%
Singkawang City	98,24%	1,34%	0,42%	100%
Average	79,84%	8,36%	11,80%	100%

Love Borneo Community

Love Borneo is an organic community that concerns about education in rural villages in West Kalimantan. It was initiated in 2015 by four young man that saw the lack of educational materials for children in remote villages. After two years, this community already has 72 volunteers that communicate through a chat group. Since this is an organic community, there is no organization structure made and

runs using individual expenditures. Its Mission is to build intelligent generation, though, and have the right value of life. Its Vision is a community that shares and inspires for the Borneo society.

Research Methodology

Data Collection

Primary data was taken from Indonesia Bureau Statistic and direct interview with the activists. Supporting data was taken from the research literature that has a similar condition with education in rural area. Field trips were made by volunteers and based on their journey stories, information was collected to complete the needs of this article preparation.

Data Analysis

After having a good understanding of what was on going and compiling literature reviews, this article tries to give solution from ICT perspective that can help the community to support their efforts effectively and efficiently.

Result and Discussion

Children in this rural villages mostly not finished their education level because driven by the family economic condition that pushed them to work in such young age. Their parent's neglection about the importance of educational background is another causal factor. Textbooks are used from generation to generation and no longer up to date with the current condition.

Children of young ages mostly work in palm plantations. Without realizing the fact that after approximately 3 years, those plantations already fully grown and don't need their service anymore. Dropout and unemployed become new causes for social issues such as drugs, gambling, even become music entertainers.

Based on data from Indonesia Bureau Statistic (Pitono, 2017), the number of school in West Kalimantan as per 2016 are as follow:

Table 3: Amount of School in West Kalimantan.

District / City	Primary School	Junior High School	Senior High School	Vocational High School
Sambas District	409	121	33	23
Bengkayang District	269	81	31	9
Landak District	454	101	44	8
Pontianak District	187	45	12	9
Sanggau District	474	117	25	15
Ketapang District	526	135	35	20
Sintang District	421	118	34	13
Kapuas Hulu District	407	98	28	4
Sekadau District	235	63	20	4
Melawi District	254	106	21	12
Kayong Utara District	104	38	13	5
Kubu Raya District	369	141	51	31
Pontianak City	163	79	45	31
Singkawang City	95	35	18	11
Grand Total	4.367	1.278	410	195

While the school participation percentage grouped by age are as follow:

Table 4: Percentage of Resident over 5 Years Old in West Kalimantan Based on Age Group and School Participation.

Age Group	Not/Never Go to School	Still Go to School	Not Go to School Anymore
05-09	28,23%	71,58%	0,20%
10-14	0,22%	97,56%	2,22%
15-19	1,05%	68,67%	30,28%
20-24	1,77%	18,26%	79,97%
25-29	2,47%	1,95%	95,58%
30-34	3,46%	0,26%	96,28%
35-39	3,52%	0,34%	96,13%
40-44	6,54%	0,14%	93,32%
45+	22,39%	0,04%	77,57%

From tables above, the government already provide more than four thousand primary schools spread over the districts and cities, but the school participation for age targeted is 71.58%. Poor governments often do not extend social services to the most rural, hard-to-access areas, so schools are often rudimentary and far apart, and children are required to walk long distances to school (De Janvry, 2003).

Challenge to Achieve Knowledge

To know better about the condition of children that live in these rural villages, some activists were having some field trips. After got through some field trips to survey the location for Rumah Baca, they agreed with similar challenges to achieve knowledge for those rural children.

The first challenge is access to the chosen locations. In normal weather condition, a village can be reached approximately in 7 hours. It was a different story if bad weather comes which needed approximately 11 hours.

The second challenge is the electricity and communication infrastructures. Based on data shown in the table 2, the chosen locations are lack of electricity support from the government. Since no transmitter tower built in this rural area, modern communication is useless.

The third challenge is the human resources who responsible to maintain and operate Rumah Baca units. They must make sure all the books and education games donated are well maintained and look after the existence. Also, they must make sure the children will come when Rumah Baca is opened in scheduled time (time will differ for every location).

Creating Learning Environment

As the first step to achieve their goals, Love Borneo opens an educational facility called Rumah Baca. This facility is equipped with majorly educational books and educational games that gathered from donations. Every unit has approximately 100 books available for reading.

Rumah Baca location selection based on preliminary information from villagers about the needs of education for their children. Activists then go to the candidate location to make sure there are enough children to visit Rumah Baca and person in charge for every Rumah Baca. Activists will re-visit this unit every 1 or 2 months to monitor the effectiveness. Rumah Baca operates 3 times a week. Children can freely access any kind of books available in Rumah Baca. They also can play educational games if available.

For the past 2 years, Love Borneo already open 10 units of Rumah Baca located in 10 rural villages (see figure 2). Their locations are (1) Pongok, Mandor; (2) Kuningan, Landak; (3) Batu Ajung, Bengkayang; (4) Tayan, Sanggau; (5) Betung Gerantung, Mempawah; (6) Liantong, Mandor; (7) Dusun Sei Daun, Sintang; (8) Dusun Jelayan, Landak; (9) Dusun Bangkup, Landak; (10) Entikong, Sanggau.

Since Kuningan Village already equipped with water turbine as a hydroelectric power plant for a single Rumah Baca unit, this village is chosen as a pilot project for ideal Rumah Baca activities.

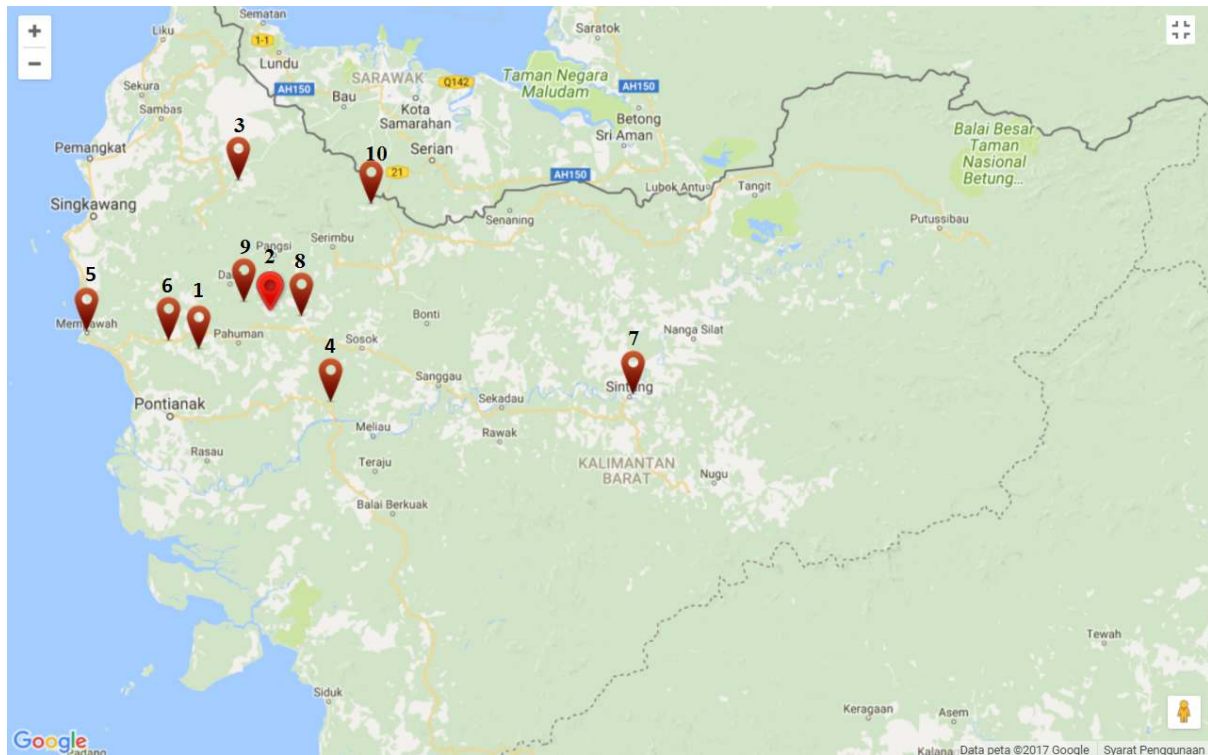


Figure 2. Geotag of “Rumah Baca” - (“Our Location Services – Love Borneo,” 2017)

Other Supporting Activities

Outside educational activities, children also learn about environmental sustainability. They were taught to plant tree seeds and nurture it. The activists give explanation about the importance of taking care of their environment and what positive advantages can be taken from it.

Connecting People

Based on challenges faced, it is impossible applying ICT directly in those locations now. But it is possible apply it indirectly using a dedicated website.

Since the community works voluntarily, resources limitation already become a big issue. From the ICT perspective, we already developed a dedicated website to help this community works effectively. This website is developed using Wordpress platform to make easier for an administrator to manage this website and also for the user can explore this website easily. The domain name for this website is loveborneo.org (<http://www.loveborneo.org>) according to the Love Borneo Community. This website has a variety contains information such as the activities performed by the Love Borneo Community, photos that integrate with their Instagram account and videos that integrate with their YouTube account. In addition to photos and videos, there are also blogs that contain details information about the community activities.

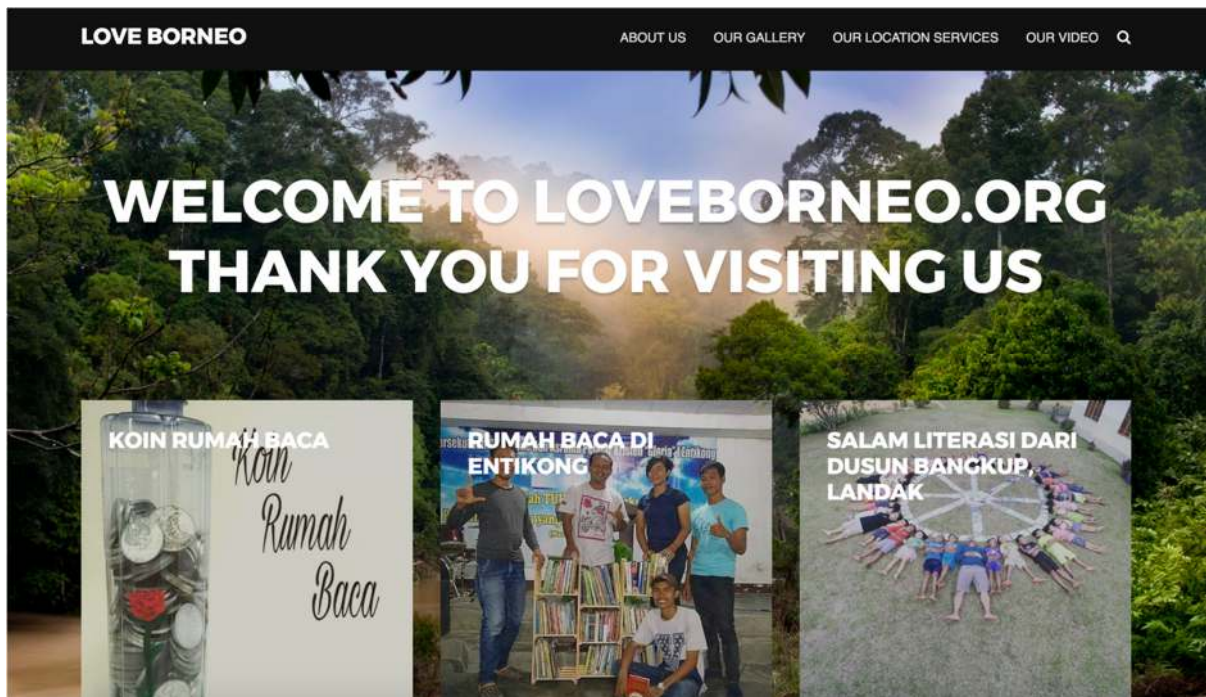


Figure 3. Love Borneo Community Website (“Love Borneo – Borneo in Your Heart,” 2017)

The purposes of this website work both ways, for and from the education program in those rural villages. Through this website, external parties can see all activities have done recently. Also, they can give any kind of donations (funding, books, educational games, etc). In the other way, the people in the villages, coordinated by the Rumah Baca coordinators with the activists, can inform their activities plan and mention or request education materials needed for their villages.

Conclusion

This article is discussing a community activity called Love Borneo that wants to take some actions to improve the access of education especially children of young ages in rural villages in West Kalimantan.

This article is limited only from the educational perspective that becomes the basic human rights and doesn't raise gender discrimination, social, cultural, or economic backgrounds that in some conventional area related to human rights for education. Also, it doesn't raise about family planning that related with the number of children that a family has.

The ideal concept of the social protection program, especially in the education and health sectors, is to cover all Indonesian people or at least all poor people. However, as long as the government lacks the budgets for universal social protection, and has no capacity to manage the database of poor people accurately, it can improve the targeting accuracy by directly involving the communities in selecting eligible households. This mechanism will result in a more accurate list of eligible recipients that does not only refer to the government criteria but also accommodates local flexibility. There also should be free information dissemination and an open decision making process through the publication of the recipient list as well as the clear complaint filling mechanism for people not receiving the program (Keshav & Maharjan, 2017).

If managed well, social protection can play a key role in the poverty alleviation effort. It will ensure the poor have access to basic necessities including staple food, education, and health services. Especially for Scholarship for the Poor, this program actually has the potential to be a means of cutting the poverty chain by giving the poor children access to education (Keshav & Maharjan, 2017).

Rural development did not only intend to improve income and productivity, but also the quality of life, specifically health, education, physical infrastructure, environment and gender (Keshav & Maharjan, 2017).

Future Research

Dedicated website developed for this community (“Love Borneo – Borneo in Your Heart,” 2017) is still in development progress and has a big chance to be enhanced with ICT infrastructures and tools. When it already touch those rural villages, human quality can be increased from their better education because the children will have access to good knowledge sources. They can learn to use blogs to share their experience and knowledge from the place they live. Also, they can learn how to build their villages in the right way so in the future they can create income for their villages.

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