

*Community Empowerment to Enhance Demographic Awareness:  
An Educational Approach from Indonesia*

Rr Sri Kartikowati, University of Riau, Indonesia  
Nur Laila Meilani, University of Riau, Indonesia  
Agrina, University of Riau, Indonesia

The European Conference on the Social Sciences 2015  
Official Conference Proceedings

**Abstract**

The study implemented 'operation research' aimed to enhance demographic awareness through educational approach that emphasized community empowerment. The study was conducted in two phases – Mapping and Intervention. Firstly, the mapping phase data was collected using an observation and a survey technique upon people living at Village Sungaitohor, Meranti Island, Riau Province, Indonesia. We identified five aspects related to demographic awareness: Knowledge on demography, Availability of data about demography, Family empowerment, Health behavior, and Social aspects. Accordingly, this mapping phase has resulted the new model to community empowerment constructed on the basis of educational approach. Secondly, at the Intervention phase we conducted the new model by implementing programs associated with education, training, and counseling. We concluded that demographic awareness of people involved in this study have enhanced.

Keywords: Indonesia, education, community, empowerment, demographic awareness

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## **Introduction**

This paper is about using ‘operation research’. As its name implies, operations research involves ‘research on operations’ that is applied to problems concerned on how to conduct the operations. Operation research attempts to search for a best solution for the model that represents the problem under consideration. (Hillier, F.S. and Lieberman, G.J, 2010). Additionally, two other characteristics of operation research are: implement the scientific method and requires a group of individuals having diverse backgrounds and skills using a team approach.

In this study, the idea of ‘operation research’ initially proposed by the The National Population and Family Planning Board (BKKBN) that stands for Badan Kependudukan dan Keluarga Berencana Nasional. The BKKBN is a government body committed to the five missions, two of them are: to mainstreaming population-based development, and to facilitate the family development. The BKKBN implements its programmes through partnerships regionally and globally with any potential reputable organization, including higher education institution.

In Riau Province, representative BKKBN has long been maintained active partnerships with University of Riau (UR). This current ‘operation research’ was one of several collaboration between the two institutions. The intention of the ‘operation research’ was to build the community that could become a best practice in term of demographic awareness. To build is meant to enhance demographic awareness of targeted community using educational approach that emphasized community empowerment. To meet this intention we, the BKKBN Riau Province and the Center for Women's Studies at University of Riau, ought to determine an eligible community that represent Riau condition geographically and socially.

The term of demographic awareness came up as an undeniable topic discussion lined with the issue of population growth. Commonly, demographics can be interpreted as text or picture of the population. Moreover, demographic can be discussed from both point of views – in numbers quantitatively and descriptive qualitatively.

Malthus (1766-1834) argues that population growth will outstrip the food supply. As a result, at some point there will be a large difference between the population and the necessities of life. Additionally, there are number of events that could inhibit the rate of population growth. He distinguishes between events that are beyond human power (positive checks) such as natural disasters and infectious disease; and things that can be cultivated by man himself (preventive checks) such as delaying marriage and birth control. However, Malthus was not sure about the results of preventive checks because only effective in countries that have not developed.

Along the population growth, there are two sides opinion from Malthus theory. The first critics, Malthus did not take in to account the advancement in technology, especially in Agriculture sector. New technologies allow massive increase in food productions. This critics was in line with Tiffen and Mortimore (1994) in Malthus controverted: The Role of Capital and Technology in Growth and Environment Recovery in Kenya.

On the other hand, John S. Mill, an English academics and economist, excepted Malthus argument. He agreed that when numbers of population were not handled seriously, it would more beyond the meals availability. He added with the axiom that on an certain situation, population (in group or individually) might influenced their demographic behavior. For example, people with high productivity tended to receive idea of small family, therefore lower fertility. High or low of fertility level was determined by people them self. In conclusion, it was an urgent to increase social economic status to poor people by education.

Mill's argument was the base for us to manage the program set for rural community in Riau Province. Our concern was not the quantity of the population rather to the social aspect, to encourage healthy lifestyles, nutrition and social interaction

Currently, Indonesia has been attention to 'demographic bonus' or 'demographic dividend'. It describes to the case where the age structure is characterized by a high proportion of people in the working ages compared to the non-working ages. Hayes, Adrian and Setyonaluri (2015) quoted from Mason (2005) who argued that "Countries with heavy concentrations of populations in the working ages have an inherent advantage to produce high levels of per capita income". On the contrary, worse situation might occur if the said population are unmanageable by an unavailability of jobs or inadequate educational institution. This scenario become our main concern.

The above dilemma was the basis of our research and to find out the best practical guideline for this 'operation research' on demographic awareness. In term of demographic awareness, first we defined a population as the total number of persons inhabiting a country, city, or any district or area. Moreover, referring to Legislation on Population Growth and Family Development issued by Indonesian government, NO: 52/2009, the term of demographic awareness refers to, level of knowledge and behavior of certain people on demographic information and issues, including structure, growth, deployment, mobility, welfare, concerning politics, economic, social, cultural, environmental as well as locals. Accordingly, to attain the main purpose of the 'operation research', we suggested two guidelines, educational approach and community empowerment. We explain the above guideline:

The first guideline was educational approach. When the focus is directed to adult, this is known as Andragogi. Acording to Pannen (1997), Andragogi is a process to encourage people's curiosity and lifelong learning (Suprijanto, 2009). Education process for adult can only work when there is a motivation, ability to make a decision and mature psychologically (Pannen, Paulina, dan Ida, 1997).

The second guideline was community empowerment. As defined by Rappaport (1984), empowerment is a 'process by which individual, communities and organization gain mastery over their lives (Castro-Palaganas, 2014). Castro quoted Lather (1986) and Grace (1991, to mention that empowerment is a process that occurs on many levels. Of utmost importance is the concept that empowerment is not simply an individual act, rather, it is fundamentally a process of collective reflection and action, in which previously isolated of individuals become protagonists in shaping society according to their shared interest. Empowerment involved analyzing ideas about the causes of powerlessness, recognizing systematic oppressive forces, and acting both individually and collectively to change the condition of life.

This outline highlighted us to determine the indicator of community empowerment for this current 'operation research' as a process of activities to attain community enhancement on demographic awareness on the basis of educational approach. Our next subject was how to deal with the challenges to achieve the main objectives of this current study. The following is our explanation.

## **Research Method**

The research was taken at the Village of Sungaitohor, Riau Province, Indonesia. Where and Why Village Sungaitohor?. Indonesia is a developing country located in south east Asia and close to Singapore and Malaysia. As a typical archipelago country, Indonesia has five big islands. One of them is Sumatera. Sumatra also known as the sixth largest island in the world. Sumatera itself has 10 provinces; and one of them is Riau Province. To be detailed, Riau Province has 12 regions, and one of them is the Region of Kepulauan Meranti where Village Sungaitohor is located. The village is a typically island surrounding by archipelago area with a unique community in term of demographic awareness. It is the youngest island in Riau formed in December 2008 right after forming the extended Region of Kepulauan Meranti or Meranti archipelago.

Sungaitohor geographically is a remote coastal area, however, its reputation was not parallel to its isolated location. Many good things have been achieved and been performed well at last five years. Women here are very active involved and contributed to the family income. Almost every house has a hand wash basin in front of the house. This is a physical evidences reflected health behavior as well as reflected certain level of demographic awareness in Village Sungaitohor. This is the reason why Village Sungaitohor was selected.

This study took a form of Operation Research (OR) that applied the method Participatory Rural Appraisal (PRA). The OR approach emphasized the answer to the problem based on the new model-constructed prior to the intervene. Practically, this study was conducted in more than a year, started from October 2013 until February 2015, with (2) major phases – Mapping phase and Intervention phase.

In mapping phase, data was collected using observation as well as survey techniques obtained from people living at Village Sungaitohor, conducted at the first 5-month. Research population was all residents of Village Sungaitohor. We applied total sampling technique. The survey stuff designed based on five aspects related to identify the existing demographic awareness: (1) Knowledge on demography, (2) Availability data about demography, (3) Family empowerment, (4) Health behavior, and (5) Social aspects.

Data gathered earlier from survey technique then was reviewed through observation technique, and finally was discussed in many FGDs (Focus Group Discussion) stage. Last stage in this mapping phase has resulted a new Model to Community Empowerment that intended became a guidance to the next phase – the phase of Intervene.

The FGDs were conducted by involving several parties, including the National Population and Family Planning Board (BKKBN) Riau Province, experts from Center for Women Studies UR, Local government in various sector, Leaders of Village Sungaitohor, local community cadres, and other potential persons. The second phase is the intervene action based on the model designed. Intervention phase was conducted by implementing programs associated with education, training, and counseling. This point where an education approach was took important part.

## Result and Discussion

Community living in Village Sungaithor was represent people of coastal communities, living with highly dependence on natural (land, forest, and river/sea); therefore their social structure was supported by the local culture, namely Malay culture, and physically live in waters with a fairly difficult accessibility.

The following is Table.1 that presented existing condition data over 5 aspects of demographic awareness.

**Table 1 Indicators and Level of Demographic Awareness**

Aspects	Indicators	Level of Demographic Awareness
Knowledge on demography	(1) Knowledge on issues and information of population	Moderate
	(2) Productive age	Moderate
	(3) Attitude on awareness in protecting green environment	Good
Availability of data about demography	(1) Availability data and mapping of Life-being family	(Not available)
	(2) Monogafi Program of Family Planning	(Available but not updated)
	(3) Availability data and family of Micro Family	
Family empowerment	(1) Participation on the Family with Toddlers Counseling Program	Moderate
	(2) Participation on the Family with Teenagers Counseling Program	Moderate
	(3) Participation on the Family with Elderly Counseling Program	Moderate
	(4) Toddler participation within the Health Centre activities	Moderate
	(5) Participation within UPPKS - activities to increase income to gain life-being family	Good
Health behaviour	(1) Implementing health behavior dally	Excellent
	(2) Monitoring pregnancy regularly	Excellent
	(3) Health insurance for poverty family	Excellent

	(4) Health monitoring and services for toddler organizing by health centre	Good
	(5) Health monitoring and services for elderly organizing by health centre	Excellent

Social aspects	(1) Adequate health house	Excellent
	(2) Neighborhood-watch security system	Excellent
	(3) Social charity activities	Excellent

Note for planned action

Excellent : Keep on/continue with guidance

Good : Intervention with guidance

Moderate : Intervention with guidance, counseling, & training in a certain period

From Table 1 we could highlight three potential variables. First is Knowledge which resulted at moderate level. Second is Availability data which resulted at moderate for data not available or available but not updated speedily. Third is Family empowerment which resulted mostly on moderate level. In the meantime, the level of excellent mostly marked by aspects of Health behavior and Social aspect. Therefore, an early conclusion could be drawn that three aspects indicated level of demographic awareness of people in Village Sungaitohor ought to be followed by necessarily actions and two others would be handled by remedial action, such as consultation. Following is some notes for planned action. An 'excellent' category meant that the level of demographic awareness has indicated with self-governance, most people identify fit with indicators, and values has embedded within their daily life. Such particular level might just need to be kept on and continue with open communication among community and local government. A 'good' category meant that the level of demographic awareness has conducted partly satisfactorily, therefore this level should be intervened by action plan such as counseling and guiding. The 'moderate' one explained that level of demographic awareness lead to low satisfactorily which was recommended by action plan including training, visiting, and counseling.

In addition, the Availability data on demographic was expected being processing periodically at any time. This unfavorable data were not supported by well information system. Information systems in Village supposedly function electronically at all levels of sub-district, district, provincial and national.

Starting from those existing data displayed on Table 1, we then carried out some FGDs to produce a New Model of Community Empowerment on the basis on educational approach and community empowerment. Look at Figure 1.

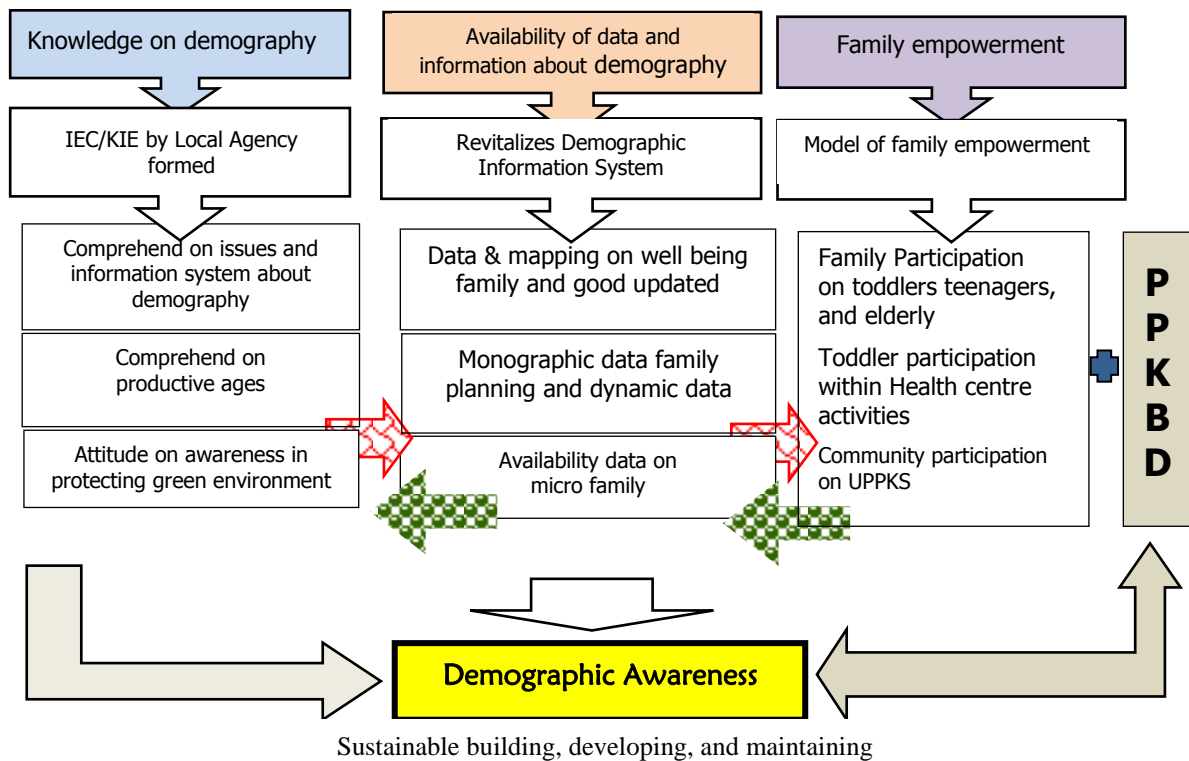


Figure 1 Model to Community Empowerment on Demographic Awareness at Village Sungaitohor, Riau Province Indonesia

The Fig.1 is a grand thought to conduct programs of enhancing demographic awareness to people in Village Sungaitohor. The essence of this strategy was initiated a process of community empowerment that require based on continuous self-reliance. The model of intervention we designed or re-construct in this study was the model based on family empowerment emphasized on education, training, and counseling. In short, empowering community with educational approach should be simultaneously and integrated approach. Later, action would be conducted by implementing programs highlighted to certain targeted community.

The thought started by given a focus on three aspects at the first layer – Knowledge, Data availability, and Family empowerment. The second layer is the ideas of solution that later would present at Figure 2. The next layers reflected ideas of detailed operational programs based on educational approach and community empowerment. This layer should be understood and be done in a circle orientation. At any program constructed should be carried out side by side likely a cycle and not any program justify better or more significant than other. By considering and implementing all parts within the grand design we then forward to the main propose of ‘demographic awareness’.

Following is the Figure 2 that present how the second layer at Fig. 1 was conducted.

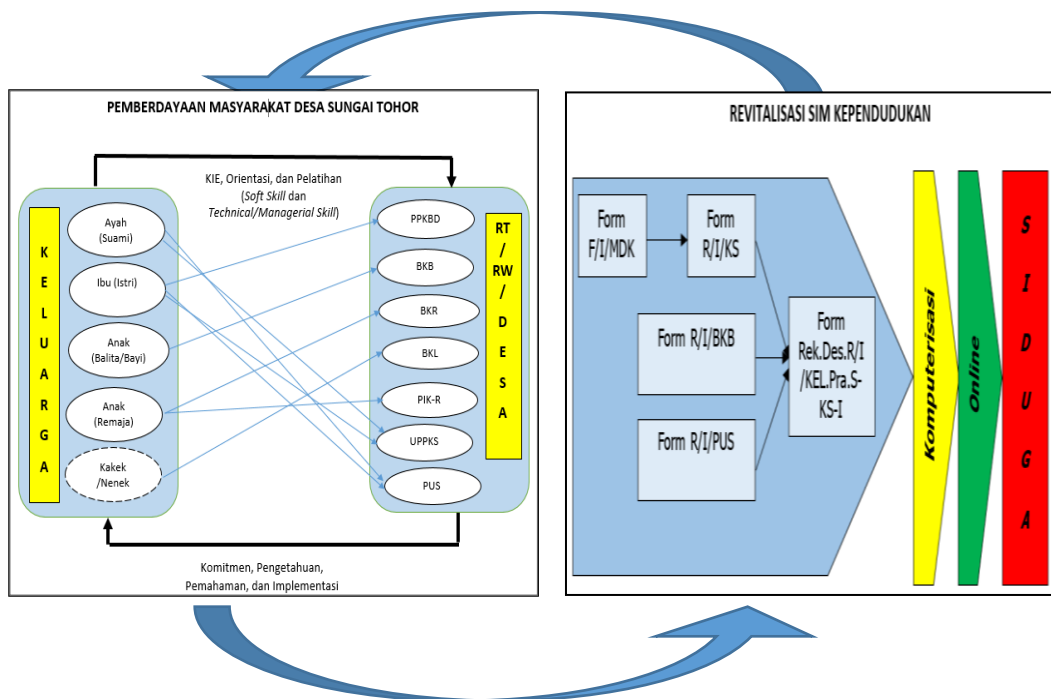


Figure 2 Community Empowerment on Aspect of Availability of Demographic Data for Community at Village Sungaitohor, Riau Province Indonesia

Referring to Fig. 2, there are two boxes – left and right. The left box focused on human development which consisted two components: a KELUARGA means a family and a RT/RW/DESA means a society organization. These is a typical Indonesian situation. The Family component encompasses individual members, while the Society organization encompasses units that support community activities such as PUS for potential/productive couple, PIK-R for information and counseling centers for youth, BKB for Support program for family with toddlers, and BKL for Support program for family with elderly. To create program with educational approach, these elements of two components within a left box should be integrated each other that eventually would build community empowerment.

The right box called Information revitalization. The aim is improving the availability of data and information on population in the Village Sungaitohor. Taking into consideration for long usefulness is to build a system of SIDUGA, stands for an Information System for Population and Family. The availability of data and information should be in computerized form to be able provide data for the regional, national, and internationally. It was clear that information system on demographic practically was carried out by special person, on the other side, community empowerment efforts must be done essentially by empowering all components of villagers at Village Sungaitohor, starting from the smallest unit, the family, both nuclear and extended families. They all were expected to participate provide any information such as movement of their members' family.



Accordingly, how to make them 'powerful', was done by the term of Information, Education and Communication (IEC), orientation and training in order to equip them with the knowledge and expertise related to the development of rural communities pertaining to the population.

The IEC, orientation and training was one of the main forms of capacity building which aimed to enable each individual in accordance with the position and function of each in the family level. For example, the mother who also has role as the wife has morale responsibility to engage in social activities. Those multiple role of the mother reflect her existing as well as at the organization at the concept of a support program for family. The concept of support program for family, moreover, mother with toddler(s) was required to engage as health volunteer for the community as an unpaid assistant. On the other side, in her capacity as a wife, then she was required to comprehend as well as choosing and precise in choosing a contraceptive mode truthfully, numbers of children consider good for the family about an ideal of child birth pause. Therefore she must be active in the program that was driven by local agency for family planning.

Such above illustration on a higher level could become a highlight as well as justification why each component of families member should be empowered through IEC (KIE), orientation, and training, namely capacity building. The vehicle of capacity building initially would foster and/or increase their commitment, knowledge and understanding. Furthermore, those efforts in turn would make each individual were able to initiate and create progress idea and concrete steps in accordance with their own capacities and capabilities.

Implementing the model of community empowerment displayed could be taken together and parallel. While the community empowerment steps and measure were carried out in conjunction with steps and measures as well to revitalize the management information system (MIS) of demography that has not been built yet at Village Sungaitohor. This step was philosophically adapting the concept of empowerment was based on the independence of information. The rest issue on how to recreate the data recording mechanism and demographic information that serves as an input in the process of formulating a wide range of policies, both at the village, district, county, was strongly seriously taken higher consideration by autonomy at the provincial level. For example, the remedy for the aspect of Availability of data about demography should be performed as a cycle. Not only transfer knowledge needed, it need orientation and training which would involved other parties especially local government at any business sectors. The community empowerment in term of information system should be revitalized and proceed continuously and interrelated.

Educational approach lead several programs associated with education, training, and counseling. Most enhancement programs were connected each other, and programs listed below was grouped orderly chronologically.

1. Formed community unit. Forming a community unit is a requirement step to facilitate the operation research. There was a community unit has formed, namely: PPKBD, a local development centre for family planning. This unit lead by the lady of village leader. Meanwhile, other community units have been established already previously, such as a PIK-R for Information and Counseling Centers for youth, and a BKB for Support program for family with toddlers, as written at the left box at

- the Fig. 2. It was done on the basis of KIE concept – or IEC Information, Education, and Communication.
2. Doing transfer knowledge and information periodically, related to knowledge on demography, infant care, building independence to elderly, participating family with toddler, teenagers, and elderly, and others. The subjects are individually as well as group interest basis. Part of this number was a training to practice filling out forms relating to population records. Next training topics would be on computerized outline.
  3. A visiting program. It is a comparative programs to a better or a running well community unit located outside Village Sungaitohor, jointly by cadre represent a three support programs – BKB for toddlers, BKR for teenagers, and BKL for elderly.
  4. Program of guiding and consultation for units. To improve participation of family member as well as community units, we created the programs of mentoring. This is a kind of capacity building goal. We encourage each unit, as well as community in large, to construct some agendas and implement them under our mentoring. Some programs created were a visiting program for elderly and pregnant women, and a competition program amongst health infant and toddlers.
  5. Establish collaboration between local community units with autonomy regionally such as government as well as inter-sector unit/organization related. The main is to build governance collaboration and maximize the purpose of the study. This program in the future should be a priority agenda to solve some obstacles occurred during implementation.

### **Conclusion**

There was an enhance level of demographic awareness for community in Village Sungaitohor on some particular aspects. Education approach that was suggested in this ‘operation research’ was appropriate and much beneficial. However, we had to realize that enhancement was not an easy to achieve in practice. Some reasons to say that any programs of community empowerment should be followed by action plans, monitoring them as a never ending process and scheduled for long term. In addition, since the community development was not a quick fix for day-to-day operation, it is necessary to educate people with the purpose of self-empowerment.

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### ***Acknowledgment***

Our sincere thanks and highly appreciation to the National Population and Family Planning Board (BKKBN) Riau Province on allocated funds in 2013 and 2014; and intellectual support from the Research Institute at the University of Riau, Indonesia. This edition was very much of a team effort.

**Contact email:** tiko22@ymail.com