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INFORMATION, COMMUNICATION TECHNOLOGY AND WOMEN'S PRODUCTIVITY AT COASTAL AREA

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ABSTRACT

Information and Communication Technology (ICT) is growing rapidly in Indonesia, especially the internet. Data Association of Indonesian Internet Network Providers (APJII) revealed that 132.7 million Indonesians have used the internet. This data shows almost all people using the internet. Not only in the city, but also in the countryside and in the coastal areas, many residents use the Internet by using a smartphone. Data also shows that the internet user is still dominated by men. Women are considered incapable and less capable in utilizing ICT especially internet. However, many research results emphasize that information technology or the Internet can help spread in improving social and economic processes. This paper examines about how ICT could empower women at coastal area where women have their productivity by produce fish production. The method is by interviewing women at coastal area who have productivity to help family income. A case from Indramayu District of West Java province becomes a sample for this study. It revealed that women are not significantly using internet in their productivity even though they know about it and women are willing to be empowered through utilizing ICT; also there is a gender biased or it is called gender digital divide.

KEY WORDS

Internet, women, coastal area, productivity, empowerment.

Information communication technology or ICT especially the internet is growing rapidly in Indonesia. From old generation to young ages use the internet. The Internet is used for various things, ranging from the use of email as a means of communication to the utilization of the internet in e-commerce and market the product.

Along with the development of ICT or internet, it is expected to have a significant role. Especially with the participation of women in utilizing ICT for development. Many literatures stated that the development of ICT especially the internet could improve people's quality of life including women. However, the reality is women's access to the internet is still behind compared with men. Women are seen as lacking in ICT skills and lack of literacy towards ICT. Most women do not have access to the internet. Yet if women are also given the opportunity to access the internet, the gender gap will shrink and women can also use the internet to increase women's capacity and ability to contribute in development.

It is interesting to underline that women should have an equal access to the internet. The Beijing Declaration of 1995 also highlighted the need for women's empowerment to improve knowledge, skills and access to communication technology; as well as in its strategic objectives of increasing women's participation and access to express and decision-

making through new media and communications technologies (the internet). Poverty, lack of access and opportunities, illiteracy and language barriers are a factor for women not to access communications technologies including the internet (United Nations Division for the Advancement of Women 2005).

Consequently women could enlarge their activity by utilizing ICT especially when they have produced some things. Coastal area becomes the attention of this study. It is because women at coastal area have a significant role in income generating. They will work any kind of occupation in helping the family income. It is because the coastal area is famous as the slum area where the rate of poor is high. Literatures say that coastal women not only manage financial resources to meet all the needs of their families, but also take responsibility for preparing funds if their husbands as fishermen do not bring home income (Kusnadi 2015).

This study investigates women in Indramayu District, a coastal area that is located in West Java. Indramayu is one of the biggest fish production district in West Java and women normally take part in economic activity to increase the family income by produce the fish product. They produce shredded fish, fish meatball and other fish consumption. Then they sell this product widely from local community to national market; but some of are still using a traditional way of marketing the product. They should be empowered in using a sophisticated technology such as the internet.

Based on the background above, this study is to explore on how women at coastal area use and utilize ICT especially in Indramayu district productivity, thus it benefits in development and women empowerment. This study aims to determine on how the ICT could improve women's life and their productivity.

METHODS OF RESEARCH

To answer the problems described, the method of research is based on observations and interview. The observation and interview are done with women in Indramayu district, a coastal area, the north coast of Java, who have a production in helping the family income. There are about 20 women interviewed and being observed. They are interviewed to find out how their productivity is run and how the ICT could assist it. The research is conducted from December 2017 to January 2018. The literature study or literature review is also used by analyzing theoretically about ICT, women's productivity at coastal area and how ICT and women could be assisted. Literature study is done by collecting reading materials related to the topic and the case will be discussed in the form of books, journals and other readings related to the theme of the paper.

RESULTS AND DISCUSSION

It is interesting that many scholars noted ICT could improve the quality of life. Reddi and Vemraju (2006) underlines that there are some effects of ICT ranging from the economic, political and social system. Thus, some people have the expectation that ICT will commendably dismiss inequality of social structure.

Therefore, the significant infrastructure of the ICT has to be developed well in order to fulfill women's needs. A research conducted by Kwapong (2007) in his research "Problems of policy formulation and implementation: the case of ICT use in rural women's empowerment in Ghana", recognizes that there is good allocation and cooperation between regional and local authorities as well as appropriate approaches to women's empowerment can improve women's capacity and empower women. In reality, however, women use less ICT than men in rural areas. This research underlines that women is still lack behind in utilizing the ICT. Other researches have the same results that women are still left behind in using technology (Hilbert 2011, Nath 2001, Metha and Metha 2014, and Satapathy 2012). Jensen (2006) emphasizes that ICT were clearly diagnosed to create discrimination:

"[W]omen have been slow to enter ICTs-based professions worldwide and have been largely excluded from designing and shaping information technologies... As a result, women have benefited less from, and been disadvantaged more by, technological advances.

Women, therefore, need to be actively involved in the definition, design and development of new technologies. Otherwise, the information revolution might bypass women or produce adverse effects on their lives" (Jensen 2006).

The statement above clearly says that women should have opportunity in accessing ICT or the internet. Women should have an equal access and opportunity in order to improve their quality of life and their productivity in any kind sectors. Most women are less in using ICT, it is because of some factors affected women such as education, low rate income, language barriers. Women's productivity cannot be run well if they do not recognize the benefit of ICT, mainly the internet.

In fact, women play an important role in food production and distribution. The implications of women's ability to access price and product information, market chains and others related to information or knowledge will be helpful in improving welfare and economic development. Increased capacity for ICT use by women can extend the range of actions they previously could not have done. This is because ICT conceptually connects every woman in the world.

From several research above, it is interesting to be noted that in some opinion, ICT specifically the internet could assist the development and women's empowerment and productivity, but for some cases it needs to be reviewed on its' implementation for women and rural area. Thus, ICT or the internet is needed in a new ways of communication throughout the society and community in improving the participation of development. Women should have access and gain the benefit from ICT. Let women be involved in making decision of development program and goal. If there is women's participation, women will be empowered and they have 'voice' in improving women's capacity in development. Finally women's productivity can rise.

In the case of Indramayu, a district in West Java province, where most of the villagers are the fishermen and the women mostly help the family by working or producing the fish production; the researcher could say that women do not empowered yet by using ICT. The researcher select Indramayu, it is because the rate of fish produced at this area is quite high. In 2017, the total fish landed in Indramayu increased by 15% compared to 2016. Fish production from Indramayu is the highest in West Java. In fact, every year Indramayu's contribution to fisheries production in West Java continues to grow. In the previous year, Indramayu's contribution was only around 50 percent (mediaindonesia.com 2017).

Having a high number of fish productions, and supporting the life, many women in Indramayu have their own productivity from small to large scale, but yet the ICT becomes an important way in distributing their product. The fish production that they produce is shredded fish, fish meatball, fish crackers, anchovy, and others fish consumption. From the interviewing of 20 women and they have fish production to help family income; it revealed that most of women know about the internet but some of them do not know how to operate and utilize it. Women who know about the internet and also use it is only 2 women out of 20. Interestingly, they confess that their children told them about the internet. These 2 women have a fish production and sell it into national scale. So that is why they also use a sophisticated mobile phone that can connect to the internet. What they mostly use is Facebook and Whatsapp; so they can share their fish production into everywhere else by posting a new picture on their walls. They said that it could enlarge their market and sometimes other people who just knew the product also order to buy their product directly. They receive a regular order from their market.

What all women know about the internet is the internet connects to the mobile phone and they need credit for charging the internet. One of women say that she does not have a sophisticated mobile phone and she cannot afford the internet credit. Therefore, her husband has it. Because of she does not have mobile phone, then she produce her fish production at local level and sell in a near neighborhoods. Even though she does not have mobile phone, she is willing to know more about the internet and how it works. In fact, there is no empowerment for women to utilizing the internet.

Further about the internet, women who did not know about the internet say that they did not have a sophisticated mobile phone which is connected by the internet or other

resources or internet facilities. While women who know about the internet, they also have a little time to get connected. What they do is only using popular application such as Facebook and Whatsapp on smartphone. It can be say that the internet they use is a common one. They revealed that selling their product by words of mouth and other traditional ways are more convenience for them at the moment.

The fact and based on previous research above show that women do not touched yet by the internet infrastructure. Most women still doubt in using internet due to their ability and opportunity in getting skills in using it. Further to these problems, the local government does not take it as one of women's program to be empowered. There some programs from local government but they are mostly for men or in group. There is no a specific program to empower women by utilizing ICT or the internet.

Most of the program from government or other institution do not appreciate ICT can be one of significant development change for women. Women's productivity cannot be reached significantly by utilizing the internet. They still prefer using the traditional ways or media because they have their own market. The woman who use the internet has enlarge her knowledge of marketing and area of production.

In line with some researches have been conducted in several developing countries state that the internet and other resources of ICT, cannot be indeed reach by women. Thus it becomes gender digital divide. When it comes to coastal area which is known as slum or poor area, the experts clearly emphasize that the poor need access to local networks of knowledge (Sundararajan 2006). In other literature. Consequently, the development of ICT should be questioned further especially in developing country. As highlighted by May (2012 in Obijiofor 2015) "access to information through new technologies must be seen as 'a question not only of connectivity, but also of other deprivations that influence the capability of individuals and communities to access and use the technology.'" This statement refers to the existing of competency and knowledge of people or the poor in accessing and taking benefit from the technology.

Answering the problems above, there should be empowerment for communities and women especially in adopting and making sense of the benefit of ICT. When people start to gain the understanding and accessing the ICT, it could impact their quality of life. It is described from a respondent above that when she understands and uses the technology, it helps her in enlarging her market and productivity. However, if women do not understand about it, they will still left behind and use traditional way in marketing their product.

CONCLUSION

It is clear that ICT could be benefit for women in terms of development and productivity. However, there is still lack women's empowerment program through ICT. Government should be aware that women have to be heard and participated in detemining the development goal. By this participation, women's capacity will improve and it is expected that increasing the prosperity as well.

REFERENCES

1. Hilbert M. 2011. "Digital gender divide or technologically empowered women in developing countries? A typical case of lies, damned lies, and statistics", *Women's Studies International Forum*, Vol. 34: 479-489.
2. Jensen, H. 2006. *Women, Media and ICTs in UN Politics: Progress or Backlash?* In *Gender in The Information Society. Emerging Issues*. Bangkok [TH]: UNDP Asia-Pacific Development Information Programme.
3. Kusnadi, 2015. *Pemberdayaan Perempuan Pesisir*. Yogyakarta [ID]: Graha Ilmu.
4. Kwapong O., Adwoa T F. 2007, "Problems of Policy formulation and implementation: the case of ICT use in rural women's empowerment in Ghana", *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, Vol. 3, Issue 2: 41-61.

5. Mediaindonesia.com, 2017. Produksi Ikan Nelayan Indramayu Melonjak. <http://mediaindonesia.com/read/detail/134478-produksi-ikan-nelayan-indramayu-melonjak>. Accessed on 10 March 2018.
6. Metha B S, Metha N. 2014. ICT and Socio-economic Empowerment of Rural Women: case of mobile phone in India. *Knowledge Horizons-Economics*. Vol. 6. No.4: 103-112.
7. Obijiofor, L. 2015. *New Technologies in Developing Societies. From Theory to Practice*. Hampshire [UK]: Palgrave Macmillan
8. Reddi , U.V., Vemraju, R. 2006. Using ICTs to Bridge the Digital Divide. In *Gender in The Information Society. Emerging Issues*. Bangkok [TH]: UNDP Asia-Pacific Development Information Programme.
9. Satapathy S. 2014. Information and Communication Technologies: An Agent of Social Change for Rural Women in Odisha. *Sociology and Anthropology*. Vol 2 No 4: 152-158.
10. Sundararajan, A. 2006. Empowering Communities through IT: Multii-stakeholder Approaches and the Akshaya Experiment. In *Gender in The Information Society. Emerging Issues*. Bangkok [TH]: UNDP Asia-Pacific Development Information Programme.
11. United Nations Division for the Advancement of Women. 2005. *Gender Equality and Empowerment of women through ICT*. New York [US]: United Nations Division for the Advancement of Women.