

THE ROLE OF THE PARTICIPANTS OF THE UNDERGRADUATES EDUCATING IN THE REGION OF FRONTIER OUTERMOST AND DISADVANTAGED (SM3T) PROGRAM IN CREATING EDUCATIONAL INNOVATION AND MAXIMIZING THE NATURAL RESOURCES POTENTIALS OF ENDE REGENCY, EAST NUSA TENGGARA PROVINCE

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The focus of the study is the role of the participants of the Undergraduates Educating in the Region of Frontier Outermost and Disadvantaged (SM3T) program in equitabling education services and maximizing the natural resources potentials of Ende Regency, Flores, East Nusa Tenggara (NTT), one of the remote areas in Indonesia. The research discusses 1). How is the role of SM3T participants in creating educational innovation in Ende, NTT; 2). What is their innovation in maximizing the natural resources potentials of Ende Regency, Flores, NTT.

The results shows that, first, the main problem SM3T participants faced is the habit of Ende people in using violence to educate their children. This has a negative effect for the children at schools. They used to obey what their teachers asked unless the teachers force them using violence. The participants of SM3T trying to minimize this bad condition by creating some innovations in educating, including practicing humanistic approachues, using simple props in learning, and using the environment as a learning resource. Second, Ende Regency is a fertile area with some potentials of crops and perennials but unfortunately these haven't been maximized optimally. The participants of SM3T guiding and training the the people of Ende in diversifying crops. They produced souvenir from potatoes, bananas, and natural stone.

This study finds, Ende people educating their children traditionally based on the local culture and customs, and so in processing the land. 1). They using violence in educating children. 2). They have no idea in planting more various crops. They just plants the same crops as their parents did.

Keywords: Undergraduates Educating, Outermost and Disadvantaged Regions, Creating Educational Innovation.

Introduction

Ende is one of the regencies in Flores, East Tenggara Timur Province, Indonesia. It has a huge potential geographic variation, with the hills and the beach coloring its physical existence. Its most potential sectors are tourism, plantation, agriculture, fisheries, and mining. There are 15 cultural tourist sites and 69 natural tourist sites in Ende, spreading over 21 districts. In plantation sector, it has cassava, corn, banana, hazelnut, coffee, and cloves that can be managed optimally.

The land of Ende is so fertile but it has't been optimized. The people have just planted what their parent planted. There haven't any idea in cultivating

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vegetables. It makes them eat vegetables rarely. They must buy the vegetables from the other area and there is no agricultural crops as the iconic of Ende. Located in the mountainous region Ende has water resources but it has't been well managed because of the limited access to the area. The people lived in the remote area has less access to get enough water for their daily life.

Ende is rich in natural resources, has potential as a travel destination. Abundant agricultural products, such as hazelnut, coffee, cassava, coconut, cocoa, cashew nuts, bananas, and corn, stone color. Community in Ende mostly sell natural results in the form of raw materials to the population outside Ende to be processed into finished materials ready. Example residents sell bananas to the island of Bali, the Balinese people processed into typical food sale Bali. Residents ende selling color stones found along the beach to the public outside of Ende for resale in the form of crafts or building materials. Knowledge society is less supported by the lack of willingness to go forward, people are less creative in leveraging its natural resources (Soesilowati, et al., 2015; Astuti, 2015). People have been locked in tradition, just planting crops that have historically been planted. They were enjoy in the comfort zone of tradition. They just cultivated cassava and banana as their parents did.

School-age population is 56 326 people, who attended school for only 18 516 people (32.8%). The level of education in the district of Ende is low. Contributing factors, among others: parents will not motivate children to school so that children's willingness to learn is low, poor school conditions, because of the number of teachers is very less and much less facilities and infrastructure is lacking.

This also happens in educational sector. With the limited access due to geographical conditions, it's not easy for the people of Ende to go to school. Besides, the bad facilities and road infrastructure in Ende make them didn't have good access to information. The system of education is still dominated by hereditary tradition, ie educating with violence. The SM3T participants are expected to be able to both teaching the children well and doing other activities in the community. Most of the local people think the SM3T participants can do and know anything so they must be able in handling any kinds of problems. Based on these facts, the participants of SM3T should be equipped with those skills so that they can interact with local people well.

The key problems the SM3T participants faced in Ende is; 1). How is the role of SM3T participants in creating educational innovation in Ende, East Nusa Tenggara; 2). What is their innovation in maximizing the natural resources potenciales of Ende Regency, Flores, East Nusa Tenggara (NTT).

Method

This research is a descriptive research. The subject of this research are 38 participants of SM3T program of Semarang State University who were sent to Ende Regency of East Nusa Tenggara (NTT) Province. The location determined based on the

research focus, namely the tourism and agriculture. The data was collected through questionnaire, Focus Group Discussion, interview, documentation, and observation (Syaodih, 2009; Widjaja, 2004). The questionnaire was filled by the SM3T participants. The triangulation process involved the principals, teachers, the office of education youth and sport, and the society (the headman). The data was analyzed by using simple statistics and narrative description method.

Result and Discussion

Ende is one of the regencies in Flores Island, East Nusa Tenggara Province, with an area of 2046.59 km² (204 660 ha). The population is 258.658 people, according to the Central Statistics Agency (BPS). The figures were from 2010. Geographically Ende is so strategic, locating in the central part of the island of Flores flanked by four counties in the west, namely Nagekeo, Ngada, Manggarai and West Manggarai, and two districts in the east, namely Sikka and East Flores Regency. Ende administratively covering 21 regencies, 191 villages, and 23 urban villages (Figure 1).

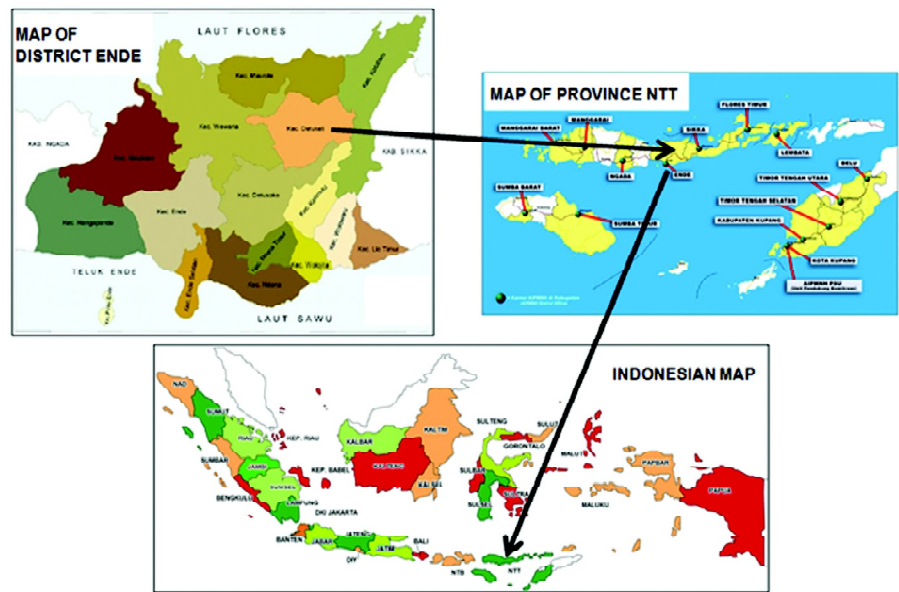


Figure 1: Location of Ende, East Nusa Tenggara (NTT), Indonesia

The population of Ende in 2012 was 269.629 people, consisting of 141.672 men and 127.957 women, with the population density was 137 people per square kilometer. The the densest population in the Central Ende of 3,698 inhabitants per km² and the lowest in Sub Detukeli with a population density of 37 inhabitants per

km². The population per household is not too varied, ie between 3-6 people per family in every district, while the average population per household for Ende is 4 people per family (Astuti et al., 2015). Totally there were 58.954 families in Ende.

The people of Ende practicing local cultures strongly such as in the ceremony of proposed marriage, marriage, death, open fields, and harvesting the agricultural crops. In the rural area the tradition is not so strong because of greater influences of other cultures. The cultural infiltration make us more easy in getting informations. A good access of transportations making people can go and leave Ende easily. This can be seen from the increasing number of people coming to Ende, which are from Ngada, Sikka, Manggarai, East Flores, Lembata, Sumba, Timor, Java, Padang, Makassar, Ambon, and Toraja, causing social life in Ende more dynamic.

The Role of SM3T Participants in Creating Innovations of Educational Sector in Ende

SM3T is a program in which candidate teachers must spend a year teaching in regions such as East Nusa Tenggara and other underdeveloped or remote areas, in order to qualify for civil servant status. SM3T Program provides an opportunity for scholars to participate in the process of accelerated development, particularly in education sector in remote areas. The goal of the program is to prepare the professional teachers to work in the frontier, outermost and disadvantaged regions. Thus, this program can be used as a strategic effort in preparing candidates for professional teachers through the teacher professional education program (PPG) PPG or Post-SM-3T (Rustad, 2014; Hidayah and Astuti, 2016).

SM3T is a program dedicated for scholars to participate in accelerating the national development of education. For a year the participants are trained to be professional teachers (Rustaad, 2013). There are 17 teacher training institutions or LPTK appointed by Higher Education or Dikti that implement this program. The undergraduates serving in eight provinces in Indonesia including Aceh, Riau Islands, Nusa Tenggara Timur, East Kalimantan, West Kalimantan, North Sulawesi, Papua, and West Papua, classified as the frontier, outermost and disadvantaged regions based on the data of the Ministry of Rural Development. After the assignment completion, they will be awarded the Teacher Professional Education (PPG) Scholarship.

The main goal of this program is to overcome the problem of the teachers shortage in Indonesia. It prepares professional, strong, and independent teachers who have passion to educate and enlighten the nation, so that the lofty ideals as mandated by the founder of Indonesia can be achieved (Rustad, 2013).

Generally Ende people strongly believes in traditions, including in educating children. Most families in Ende regency still apply the pattern of education by using violence. One community leader in Ende, Supriyanto who is a teacher and the foster parents of SM3T participants in Ende, said:

“Most people of Ende have been implementing traditional educational patterns, a legacy of the colonial or colonialism. They have been used to using violence in their daily interactions with indigenous communities. The pattern of violence in educating children is still enforced and it has been ingrained. Children are accustomed to be educated with violence. This makes the teachers also apply the same pattern or the students wouldn't obey what they asked”.

This opinion is corroborated by Wahyuni, Supriyanto's wife. Wahyuni said:

“Indeed, the violence seems to have become a daily habit in educating children at home. They, in fact, frequently hitting the kids with a wooden or bamboo slats so that there is an anecdote in Ende, “If there were bamboo trees in front of the school, the bamboo tree will be uprooted by a teacher to hit their students. Hehehehe,” Wahyu said, laughing. “Finally the teacher are accustomed in using violence as an approach to educate the students. That's because if you do not hit the students will not obey you.”

Off course this is not good for the children. They are used to be forced to do something dan don't have an initiative. Similarly, in schools, teachers are forced to use violence in educating students. These pattern of education has a bad effect for students psychologically. They will be modeled on the violence in educating their children. This model of violence finally would be an unbroken chain.

The participants of SM3T program trying to minimize this conditions by creating some innovations in learning, such as using humanistic approach, using simple props in learning, and using the environment as a learning resource. Teaching the students with persuasion and altruistic approaches they try to minimize the habit of using violence in educating. Off course, as Alfin, one of the participants SM3T in Ende, said, it is not easy.

“I did find it difficult to change the students, it's so hard hard to educate them without using violence. I'm so confused, how do I change this pattern of violence. Whenever I teach, they are not heeded. They have no attention on what I said. I share the problem I have to the local teachers and they said I have to beat them to make them obey me. We're familiar with this, so it's hard for us to yell and hit the students. So I try to use a personal approach. For example in extra activities, mainly scouts and sports, I started advising slowly. I made them playing together with me first and then I started telling them that the habits of violence must be eliminated. I advised them that they must obey the commands of the teachers although they didn't hit them. Alhamdulillah, over the time we can do it and we feel proud to do that.”

The participants of SM3T also apply some other innovations in teaching, such as using props and simple learning media to engage students in the learning process. It is intended to make the students interested in following the lesson without being forced or beaten. In addition to props and simple learning media, SM3T participants also tried using a humanistic and altruistic approaches in teaching. Humans are social creatures, meaning that humans need help or help others in their lives, from birth until death. Any behavior that is intended or aiming to help others is called altruism (Glassman, 2009). Off course every body has some reasons to become

altruist, for example, expecting something in return, hoping to receive the same kindness from the others, maintaining the viability of species in the world, or even being purely helping others without expecting anything in return and for a specific purpose. In the case of what the SM3T participants do in the district of Ende, they want to help students (altruistic) studying well without pressure.

The Innovations in Developing Ende's Potentials

Regional economic development is a process of creating new institutions, developing alternative industries, improving the capacity of the existing labor to produce better goods and services, identifying new markets, transfer of knowledge, and developing new companies. In the process of managing the resources, the cooperation and coordination between the local government and the community are needed. Or in other words, the purpose of economic development is to increase the employment opportunities for local communities.

Hadjisarosa (1994) suggests that the regional development is an act of building area or building areas or zones in an attempt to raise the welfare of the society. In line with this, Soegijoko and Kusbiantoro (1997) states, the regional development is an attempt to build a balanced development of certain regions through various sectoral activities in an integrated manner, so as to boost economic growth in the region effectively and efficiently so that the people welfare can be improved.

The agriculture, plantation, and forestry sectors in Ende have been focused in creating a strong, advanced, and efficient agriculture which is characterized by the ability to make the farmers and their families have a good life and to encourage the growth of the overall economy. On 2012 there are eight (8) major food commodities that have been become the focus of Ende regency, namely: 1). paddy rice, 2). paddy fields, 3). corn, 4). soybeans, 5). green beans, 6). peanuts, 7). cassava, 8). potatoes (Astuti et al., 2014).

These kind of crops become the main commodities of Ende, though in fact the people can cultivate some woody perennials as a the new ones. It seems that the people are used to be "chained" on these crops. To change this mindset is not easy. It takes time and process. You can't do it instantly as innovation basically is not revolutionary, it must be slowly phased. As Soekanto (2002: 318- 319) said, innovation is a big social and cultural process in a short period. The process includes a new invention, the spreading of new cultural elements to other parts of society, and how the cultural elements had been received, studied, and eventually used in the communities.

The new discovery as the result of the changes can be classified as discovery and invention. Discovery is the finding of the new culture elements, both in the form of tools and ideas that are created by individual or a group of individuals. It becomes invention if people admit, accept, and implement the new discoveries. Sometimes the process of discovery to invention is done by a series of creators.

The program of Undergraduates Educating in the Frontier, Outermost and Disadvantaged Regions, popular as SM3T, is a new innovation in the field of education. Ibrahim (in Ihsan, 2005:192) says, educational innovation is an innovation in the field of education or the one to solve the problems of education. In Ibrahim opinion (in Ihsan, 2005: 192), a new idea or method that found and is used to achieve educational goals or to solve the problems in education is both a discovery and innovation.

So SM3T program is one of educational innovations to overcome the problem of teachers shortage in the frontier, outermost and disadvantaged regions or 3T. It's also a community empowerment effort in 3T regions. Some educated workers are sent as agents of change to empower the people, socially, culturally, and economically.

The SM3T participants made some innovations in processing some agricultural products, such as cassava and bananas, into some kind of processed foods. They diversify cassava and bananas to be some new products, ie some various chips, cakes, and dodol so they have high economic value. In addition to creating innovation in agricultural products, SM3T participants trained the people in utilizing natural stone as accessories. Natural stone found in Ende utilized for souvenirs, brooches, jewelry such as bracelets, necklaces, and rings. These natural stones which formerly seems giving no benefit, can be processed into jewelry and souvenirs with high attractiveness and economic value (Table 1).

TABLE 1: COMMUNITY EMPOWERMENT ACTIVITY PARTICIPANTS BY SM3T IN ENDE REGENCY

<i>No.</i>	<i>Training</i>	<i>The Training Activities by Participants SM3T</i>
1	Making cassava	Training makes 'tape' from fermented cassava, location in the District Detukeli, remote areas, training is done simply with the tools and raw materials are easily obtained.
2	Making Beefsteak 'tape' and Rondo royal	Training continuation of 'tape' cassava, which makes a variety of cakes are made from 'tape' cassava.
3	Cosmetic	Cosmetology training given because participants were concerned with the results of cosmetology citizens at ceremonies is very simple and does not correspond with the theme of the event.
4	Cassava Cheese Making	Make cassava cheese, a variety of cake made from cassava processing.
5	Making Cassava Flour	Training makes cassava flour, as food alternative, substitute wheat for making cakes.
6	Making Banana Flour	Training making banana flour, a staple food stuff alternative substitute wheat, cultivate bananas into flour will be able to increase the economic value of bananas.
7	Making Brownies Casava	Brownies Casava is a product processed from cassava flour.

Source: Astuti, *et al.*, 2015

There are of course some problems and challenges in creating innovation, both in terms of cultural, social, and personal. Culturally, the problem is related to what people do in cultivating the land. They have been used to plant banana and cassava and have no idea in planting any other commodities.

Social barriers occur as the people have less access to education and information. They are lack of interaction with other communities. They didn't have any access to information related to the diversification of crop plantation. Their interaction with other people have been limited are so they think there is no other agricultural crops that can be planted unless cassava and banana.

Psychologically there is a social barrier related to how people can accept any innovation in their life. Sometimes people are not comfortable to accept an innovation. People of Ende have been doing the same agricultural activities for generations so they are afraid to do a new thing. They feel guilty and afraid when doing something that had not been done by their ancestors. These feelings are still shackled the society. Foster calls these barriers as a barrier Innovation (Foster, 1969).

In Ende, the natural stones resources are untapped as people have not known how to use it. SM3T participants trained the people to make the stone become some beautiful souvenirs, key rings, brooches, bracelets, necklaces, and rings. The SM3T participants as agents of change are expected to transform knowledge and capabilities to the local people during his time in Ende.

Transformation is a basic process to be mature. The process takes times. Transformation is a process of creating new things, generated by science and technology. It changes the cultural aspect of material, but not its norms and values.

Thus the future transformation is always related to human activities both on the present and the past. Transformation is a process of creating new things, generated by science and technology. It's the cultural aspects that have been changed, nor the norms and values (Salim, 2002: 20-21).

The SM3T participants are expected to have ability in creating innovations shared to the people and at the same absorbing the local knowledges and values. The assistance of relevant institutions namely the Department of Tourism, Department of Social Welfare and Labor, as well as the Department of Industry and Trade, is needed in the process.

Conclusion

The results of the study shows SM3T participants try to change the traditional education patterns—which is full of violence—used in Ende by creating some innovations in educating, including practicing humanistic approaches. In altruistic approach, people definitely need others and respect for others. The participants of SM3T also apply some other innovations in teaching, such as using props and simple learning media to engage students in the learning process. It is intended

to make the students interested in following the lesson without being forced or beaten.

The SM3T participants made some innovations in processing some agricultural products, such as cassava and bananas, into some kind of processed foods. They diversify cassava and bananas to be some new products, i.e. some various chips, cakes, and *dodol* so they have high economic value. In addition to creating innovations in agricultural products, SM3T participants trained the people in utilizing natural stone as accessories. Natural stone found in Ende utilized for souvenirs, brooches, jewelry such as bracelets, necklaces, and rings. These natural stones which formerly seems giving no benefit, can be processed into jewelry and souvenirs with high attractiveness and economic value.

The recommendations of this research is the continuing advocacy from some related institutions to Ende people so that some innovations the SM3T participants has been initiated works well. The related institutions should maintain Small Business Community with entrepreneurial training and providing access for the local products of Ende to the greater market.

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