

# CULTURAL FACTOR IN THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

By : Siwi Nugraheni<sup>\*)</sup>

## Abstrak:

*Analisis Mengenai Dampak Lingkungan (AMDAL) atau Environmental Impact Assessment (EIA) merupakan salah satu cara menganalisis proyek pembangunan sebelum dilaksanakan, untuk mengetahui apakah proyek tersebut berpotensi merusak lingkungan. Dalam pelaksanaannya, studi AMDAL sering tereduksi artinya menjadi analisis dari sisi lingkungan secara fisik, sementara itu faktor sosial dan budaya masyarakat di lokasi proyek acapkali terabaikan. Makalah ini akan menyoroti tentang perlunya studi AMDAL memasukkan unsur budaya setempat -sering disebut sebagai analisis dampak sosial atau Social Impact Assessment (SIA)- untuk mengurangi dan bahkan menghilangkan dampak yang mungkin timbul dari pembangunan suatu proyek, yang pada gilirannya dapat menghindari kerugian finansial yang mungkin timbul. Beberapa kasus akan dibahas sebagai contoh.*

## **Introduction**

The United States of America was the first country that implemented Environmental Impact Assessment (EIA) in 1969 in its National Environmental Protection Act (NEPA) (Ebisemiju, 1993). After that, EIA was adopted by some countries in the world as an important tool to achieve sustainable development goal (Biswas, 1987; Clark, 1983).

In importing EIA from developed to developing countries, however, cultural factors receive only little considerations. Cultural factors are only understood through talking to the stakeholder, and this is most effectively done through public participation. As Meredith states:

At the very least, however, the many culture groups whose knowledge and values lead them to favour environmental and economic circumstances that seem alien to modern Western culture must be recognised, as they have never been in practice, and given a share in determining the fate of their own habitat (1992:126).

In many cases this statement is true, but EIA generally is still appropriate for all countries, even though they have different cultural backgrounds. This paper will discuss Meredith's opinion and its implications with respect to EIA. Examples will be given in this paper, some of them drawn from Indonesian experience.

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<sup>\*)</sup> Penulis adalah dosen tetap pada jurusan Ilmu Ekonomi dan Studi Pembangunan, Fakultas Ekonomi Universitas Katolik Parahyangan.

## **Environmental Impact Assessment (EIA) and Cultural Factors**

United Nation of Environment Programme (UNEP) gives a definition of Environmental Impact Assessment (EIA) as: "a formal study process used to predict the environment consequences of a proposed major development project" (1988:2). As a study process there are several parties who should be involved in EIA, namely the proposed agent (both the developer and the investor), the government as an authority and the local community where the project will be conducted. The proposed agent and the government use the EIA result as a base for their decision, while the local community is a party that might be influenced by the project. In the guidelines for EIA produced by international agencies, such as UNEP, or many developed countries, one important step that works effectively in Western countries but does not always work in the same way in developing countries is public participation. By assuming that the situation and conditions in both those two country groups are similar, instead of different, the EIA conducted in developing countries will be less useful in achieving its goals, because in fact there are many cultural differences between developed and developing countries, and it is these differences that are so essential in the performance of EIA.

The basic difference between Eastern and Western culture, according to Koentjaraningrat (1974) is that, Western people tend to be more individualistic, while Eastern people tend to look at society as a centre. In other words, Eastern people always try to 'harmonise' their life to the society. Therefore, they will try to compromise if they have different opinion. When the opposite party is fair. Compromising is the best solution. However, if the people's opponent has a particular interest, especially that related to profit or power, then the local people are in a weak position, and will be neglected.

In addition, in the third world, the social structure is often based on a patrilineal and paternalistic pattern (Raharjo, 1988). They give respect and follow their, usually, male leader. The implication is that, whatever the leader says, whether it is right or wrong, they tend to agree. In a case where the government, as a project proponent as well as their leader, the people "have no faith" (Meredith, 1993:129) to be involved in the process of EIA. A study in Indonesia found that the people in Jepara, Central Java, the location where a nuclear power plant that was to be built by the government, particularly the aged people who mostly did not understand "what nuclear is", its advantages and risks, believed that the impacts of that project in the future would be part of the fate that God intends for them (Sugita cited in Laksono et.al., 1994).

Cultural differences also occur not only between country groups, but also within a country itself, for instance between rural and urban people. In the rural areas, people often lack of information, especially related to legislation, and so-called 'modern knowledge'. The lack of information about legislation may lead to improper actions, that could be illegal. An example is the case of PT Inti Indorayon Utama (PT IIU), a pulp and paper industry in Indonesia. When there was an exploded chlorine storage tank accident at PT IIU that caused both air and water pollution, the people around the factory panicked and destroyed the company infrastructure (Anon., 1993). This illegal response happened because

they did not know the mechanism for complained or maybe even they know that procedure, they felt it will be ineffective. Later, the people forced the government to close PT IJU. Until now, there is no activity at PT IJU.

Local knowledge is also sometimes ignored and not respected by the 'modern people' (Brown and McDonald, 1989), who base their knowledge on the Western culture. However, it does not mean that the local knowledge is not good and environmentally friendly. Laksono (1988) gives as an example of the different perceptions of volcanic hazards of Merapi Mt. in Central Java by local people and the government officials. Based on the great eruption in 1961, the government decided that the local people in Gimbale village should be resettled to Sumatra island. Although the local people disagreed with this decision, they moved to the new settlement because the government official as a village leader had agreed to the government personally, without consulting with his community. A few years later, some of the resettled people came back to Gimbale because they faced difficulties in adapting to both the new place's culture and environment. Due to this problem, some of them were killed. The people who came back to Gimbale then decided to stay in this place. They believe that, if the mountain will erupt they will be told in advance by God of Merapi Mt. Until now, although there are still victims of the mountain eruption, the number of killed people is far less than the number of Gimbale people killed in Sumatra island. The knowledge of the people seems to the government not to make sense, based on the 'modern knowledge'. However, the indigenous people have closely adapted to their environment, to such an extent that their 'local' knowledge is actually superior to that of the scientist.

The lack of information from the local people given to the project proponent, because the latter often think local knowledge is not necessarily useful or to be considered, can lead to an unsuccessful project. Another example from Indonesia is the irrigation project. The project, set up in several locations were not successful, because there was not sufficient water in the irrigation channel (Raharjo, 1998). Later, in the project evaluation, the proponent admitted that the project had been implemented without talking to the local peasants who, in fact, knew the location and its water source better, and their knowledge, if listened, could have contributed to a successful project.

Since the people, particularly those who lived around the project location are granted as a target of the development, to get information from them is absolutely essential. Meredith reminds us to consider the local people's participation by asking the question "sustainable for whom?" (1992:126). Because if the process of development ignores the local people's needs, then the development itself is only for the project proponent.

### **EIA and Social Impact Assessment (SIA)**

The failures of such examples mentioned above does not mean that EIA is not appropriate to the developing countries. By looking at the main objectives of EIA, which is as an instrument to predict, assess, estimate and communicate the environmental impacts of the proposed project (Ebisemiju, 1993; Biswas and Geping, 1987; UNEP, 1988 and Clark, 1983), it is important

to be done in the planning phase of a development project, both in developed and developing countries. The only problem is that the implementation of EIA in developing countries has a few shortcomings because of the 'unique' characteristics of this society, different from the developed countries. To improve the EIA practice in the third world, therefore. There are many 'additional' considerations that will be discussed in the following section.

EIA has to be complemented by social impact assessment (SIA) as an integrated and unseparated part of EIA. Although the definition of SIA itself is still variable, Burdge and Robertson (1990) give a comprehensive meaning of SIA which is the main objective of doing SIA is to identify, analyse, evaluate the social impacts of the proposed development project, and if possible also try to develop the alternatives to mitigate and alleviate the social impacts that may occur. By looking at this main objectives, it is clear that the centre of SIA concept is community. Since only the community itself can describe its needs, the only way to identify those is by talking to them.

SIA has at least two potential benefits, both to the project proponent and the impacted local community (Burdge, 1990). By doing SIA, the project proponent could improve the project performance, and may even save funds. Examples of this is the case of PT IJU closing and the irrigation project mentioned above. If the project proponent considered the local knowledge, then the project failure would not have occurred. The second benefit is coming to the community itself. The possible social impact can be predicted before the project is implemented, therefore the negative impacts of the project can be avoided or at least mitigated.

However, there are several problems with SIA. Four of these will be dealt with below. Firstly, sometimes SIA is seen as a different part of EIA, and there is an argument that doing SIA is not appropriate in several countries because of differences in culture, political system, education level and so on (Burdge, 1990). Example from irrigation project above have proven that EIA without SIA caused the project failure that also means waste of money. In addition, if it is looked at in more detail, the main problem is not whether or not SIA is important to be done, it is rather choosing the appropriate method according to the cultural, condition and situation diversity of the countries. It is important to keep in mind that to gather the so-called accurate information, the project proponent needs public involvement. Public participation itself is not similar to SIA, it is rather a part of SIA (Burdge and Robertson, 1990). However, public participation is very important part of EIA.

The key word in public participation is 'communication'. Usually communication between government officials and indigenous people in the third world is only one way communication. This is related to the paternalistic pattern mentioned above. Even sometimes, the term 'participation' is interpreted by local people as 'always agree and support government policy' (Raharjo, 1988). Another important thing in communication is in choosing a communication methodology. This must be related to the method accepted by the local community. For example in doing research among the Aboriginal people in Warmun, East Kimberley, Australia, where the informal interview is

more accepted than the formal one. When the researcher changed their method to the unofficial communication, the results then demonstrated that the information got from the interview was much more useful (Ross, 1990). Yet, this informal interview is not always appropriate in another place with different culture, situation and condition.

Two-way communication should also be based on the openness of the information from both sides. In the example of the plan for the Nuclear Power Plant in Jepara given above, the government as a project proponent should give balanced and detailed information about the project, not only from a benefit point of view but also from the possibility of its risks, ie. Its costs. Therefore, the people have complete, accurate and meaningful information as a foundation for their decision. As Reed (1994) said that the local community has to obtain information and expertise to assess the proposed project.

On the other hand, the people should be given a chance to give their opinion. In the case of the people who tend to feel that every impact of development project is part of their fate, and therefore they cannot avoid it, the belief that they have an opportunity to participate in a project that would influence their future life should be encouraged. This needs a certain amount of freedom of speech. The diagram below illustrates the flow of the information and its requirements between the local people and the project proponent in the "two-way communication".

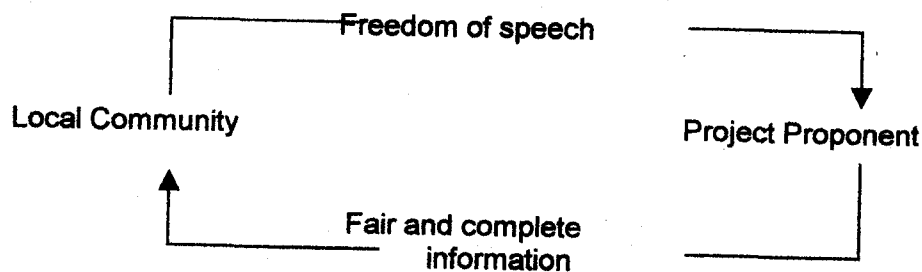


Figure 1. Information flow between local community and project proponent

Secondly, increasing the role of environmental non-government organisations (NGOs) that is particularly related to the public participation problem. One of the problem in public participation in EIA in developing countries, as stated above, is the lack of information and the weakness of people's position. Therefore they need support, and one of them can be from the NGOs, to assist the 'environmental victim'. It does not mean that the NGOs should be always an opponent of the government, as it has been perceived by people. The role of the NGOs is to act as a "neutral party", and hopefully they can see the problem proportionally. Therefore, it should be noted that the people will and should be able to choose the right NGOs, to avoid NGOs that represent a 'hidden interest'. By increasing people's environmental education, it

is hoped that the people will be able to make the best decision for themselves, including to choose a neutral party that will represent and support them.

Usually, even when the project proponent is from the private business sector, the government tends to support the proponent and neglect the need of the indigeneous people. This is because politically the government also has an interest in the project due to the increasing national income, employment and foreign exchange which may result from it. In this case the community needs support from the third party, and an environmental NGO could fulfil this role.

Thirdly, increasing environmental education is needed in order to improve the environmental consciousness of the people, including explanation of legislation. For example, there is a legal framework for environmental management in Indonesia that states that everyone has right to a healthy and clean environment. Additionally, they have right to ask for compensation from the polluter if they suffer from environmental deterioration. In the case of PT IJU, the destruction of the company's infrastructure would not have happened if the people had known what they had to do and where they could ask for their rights.

Environmental education in its wider concept has a goal to change people's behaviour towards the environment, and as Wilson says this is "basic, fundamental and urgent" (1986:20). By improving the environmental knowledge of the people, the local people can increase their ability to communicate to the proponent. According to Thomas (1987), the environmental education and information will improve the people's willingness to participate in a development project. They will be able to know whether or not the project will give a benefit, rather than cost them.

Fourthly, the understanding of the proponent, either private sector or especially the government, towards the local and listening to their opinions should be improved. The project proponent should be conscious that the indigeneous people have better knowlaedge about their place than an "outsider". The understanding of the local people also means the respect towards the local custom and tradition. Diagram below summaries the four issues regarding problem of implementing SIA outlined above.

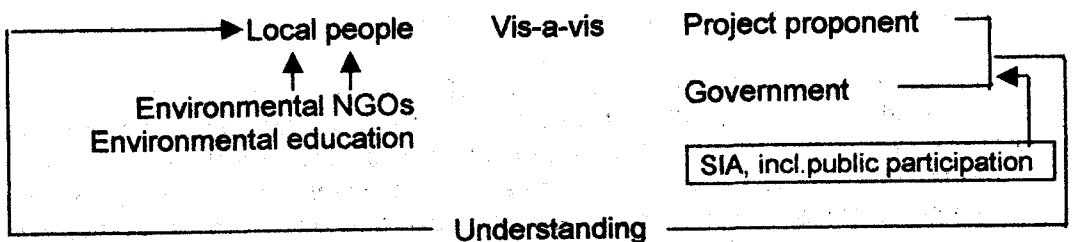


Figure 2. The role of environmental NGOs, environmental education and the increasing of project proponent's understanding in the public participation.

## Conclusion

The cases mentioned above show that there are many shortcomings in implementing EIA in developing countries, more particularly the lack of cultural consideration, especially if the development project contains a "cross cultural contact" (Meredith, 1993:128), which means that cultural backgrounds between the project proponent and the local community is different. Although it is believed that culture is a dynamic factor (Dove, 1988), it must change, it is still necessary to look at cultural diversity in the process of EIA, because the time for cultural changing is unpredictable.

EIA will become a worthy experience in planning phase the development process if it is completed by doing SIA, including to choose an appropriate methodology in public participation. Other supplementary actions should also be considered to make SIA more meaningful, namely increasing the role of environmental NGOs, improving the people's environmental education and developing a better understanding between the project proponent and the local community. Hopefully, by doing SIA that has been adapted to the local condition, EIA would be more useful in order to achieve its goal and still be relevant in both developed and developing countries.

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