

## **Sustainability And Culture: People's Perception Of Sustainability And Its Cultural Construction - A Sociological Study**

Dr. Ananta Kumar Biswas

### **Abstract:**

*Temporal and spatial concepts are crucial to sustainability issues and a concept of the 'future' may depend upon ethnicity, linguistic background, lifestyle and the life expectancy. Many currently threatened natural systems are in locations where the indigenous people have a linguistic and conceptual background very different from those in so-called developed countries. One example is the Bajau people who live off the southeast coast of Sulawesi in Indonesia, close to highly endangered coral reefs. How can we connect the "future perspective" mismatch between Austronesian people like the Bajau and conservationists from developed countries who want to protect the reef for future generations? These raise questions and moral challenges for us in dealing with cultural practices of indigenous people and cultural practices of modern people for the ways in which they shape the concept of sustainability.*

*This paper reviews socio-cultural practices related to an ecosystem and explore some barrier and their solution in order to achieve sustainability.*

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**Introduction:** The concise oxford dictionary defines the word 'sustain' or 'sustainability' as keep up adequately; keep from falling. Hence in the development literature sustainable development is used as a cherished goal for development although it is not easily achievable. Because its definition connotes several meanings as well as its dimensions encompass all aspect of society. Further its application in social development is under critical in different context and situations.

Sustainability as defined by the Brundtland commission in 1983, meeting the needs of the present without compromising the ability of future generations to meet their own needs... In other way sustainable development can be defined as the adjustment of human behavior to address the needs of the present, without compromising the ability of future generation to meet their own needs. These two definitions imply 'needs and 'behavior' but the notion of time is central to the concept of sustainability, as to sustain something we need to nourish and nurture it and keep it from falling over a period of time. On the other hand, spatial distribution of natural resources in the case of availability or scarcity of resources in a

region play a role in the use or abuse of resources which is significant to sustainable development.

“How long can we keep doing what we’re doing” is the central theme to the notion of sustainability where culture plays a role which can be conceptualized in the following ways?

Culture plays a role in defining human needs and interests making it critical to sustainable development. Cortese (2003) argues that a cultural shift is required to achieve a more sustainable society. Culture is central to society and defines people’s attitudes and goals. It informs our understanding of development and controls our behavior in the communities in particular and society in general. Agenda 21<sup>1</sup> for culture (2004) places culture at the heart of the sustainable development processes.

From the insight of sustainability, ‘future’ vision enables us to understand system sustainability, whether it is of a natural system for example, a rain forest or a coral reef, or human made system such as the automobile industry. But many currently threatened natural systems are situated where the indigenous people have a linguistic and conceptual background very different from our own, and therefore have varying models for the concept of the ‘future’ and ‘time’ as in the case of Suriname maroons (Heemskerk 2003). On the other hand, Western model of sustainability is to ensure the future generations for having ample options (Tonn 2004). Hence, this situation presents a mismatch in understanding and in application of sustainability, with severe consequences for Western and Indigenous people. So, how an ecosystem operates in different historical periods and what challenges they faced and their solutions in achieving sustainability are the focus of the present study.

#### Sustainability: Indigenous vs. Conservatives

Cultural practices related to an ecosystem located in South China Sea observed as follows<sup>2</sup>:

‘Baju’, the sea farming peoples whose scattered settlements extend across the South China Sea. They are known as Badjaw, Baju, Sama di Laut or Bajo. All are one of three major groups of nomadic, or formerly nomadic, maritime foraging societies’ native to Insular Southeast Asia. The Sama –Baju are the one of the three groups, and the most widely dispersed etho-linguistic group indigenous to the region. These groups appear to lack ‘western’ appreciation of the future. The reason is probably their inheritance of marital nomadism, their day-to-day dependence upon artisanal fishing, and their short life expectancy; seem to have contributed to their truncated view and apparent short-termism (M. James C. Crabbe 2006). The local Baju village in Wakatobi, Sample consists of approximately 200 houses located on top of stilts embedded into fine sand flats and is home to roughly 1,300 people. The Baju people depend on the sand flats and coral –reef community for food. This particular community has existed only since about the middle of the twentieth century and all the dwellings are built upon coral that has been mined from the area.

#### Socio-cultural practices related to coral reefs (ecosystem)

Coral mining: The use of corals taken out of the reefs by mechanical means and use as building materials is a real problem for the region’s reefs. There is currently a lively trade in the corals mined on the reef for use building materials, both in the village and on the large neighboring island of Kaledupa. Mining is responsible for the nearly complete loss of massive corals that settled and began to grow before 1950s.

The Bajau village experiences high energy storm waves during December through February and the loss of the protective coral barrier will have severe consequences for the erosion rates of the sand flats upon which the village is situated.

Bomb fishing is a major source of coral degradation. An estimate suggests a destroy of 3.75 percent of the live coral cover each year in some areas (Pet- Soede et al. 1999). Fishers use chemical bombs made from fertilizer and kerosene or diesel fuel to kill or stun fish, making them easy to collect. While bomb fishing may provide quick profits, the practice destroys the structure of coral reefs and the habitats that maintain fish population.

Cyanide fishing is another fishing that wreaks havoc on coral reefs. Divers crush cyanide tablets into plastic – squirt bottles of sea water and puff the solution at fish on coral heads. These destructive fishing practices are used by members of the Bajau community as well as by Indonesian from outside of the local Bajau area (Crabbe et al. 2004b).

Socio-economic condition and alternative livelihoods of the community:

The people of the community depend on wage labor, collection of coral reefs as main sources of livelihoods. This leads Coral reefs degradation in the area although no plight related to degradation has been recognized by similar linguistic background community, who lack future perspectives in sustainability, therefore degradation continued. They need resources, new opportunities, health care, education and sanitation in order to survive and remain the community intact. Alternative income sources are desperately needed for such people especially where conservatives initiate protection of coral by creating “no take” zone disrupting local livelihoods and resources. Some income generation scheme has been adopted for income like cooperative society, credit association where women are given preferences that gain success to some extent. Education is another approach that is adopted in order to connect “future perspective” mismatch between conservationists from develop countries in sustainability.

.These socio-cultural practices present two challenges, i.e. (i) practical (ii) moral (M. James C. Crabbe, 2006).

The practical challenge is for the Bajau, in particular and others in general how certain actions for example ‘no take’ fishing zones can help to achieve their aspirations? This intervention would need to address local economics and social concerns about the resources (for Bajau it is coral reefs), their costs and benefits and available options or alternative livelihoods.

The moral challenge is to reassess our own assumptions regarding people like Bajau and to acknowledge their rights and capacity for self determination. Here we need to hold in greater esteem the diversity of cultural practices, values, social contribution people make, authority, heritage, knowledge, choices that contributed in sustainability (ibid...)

In order to address the two challenges a broader concept of sustainability would be adopted widely in countries of the world. Traditionally the sustainability paradigm encompasses the interaction between humans and the economic, social and environmental aspects of living. However, it is believed that these dimensions alone cannot possibly reflect the complexity of current society. Complex presentsociety like ours interact with each other following the three laws of sustainability, such as (i) the laws of limits to growth (ii) the second law of thermodynamics and (ii) the law of self determination in the complex system (Wessels 2006). Here culture is given priority to other aspects of sustainable living. There is

now a call from agencies or institution such as UNESCO<sup>3</sup>, the World Summit on Sustainable Development (WSSD) and researchers to include culture in the sustainable development model, since culture ultimately shapes what we meant by development and determines how people act in the world (Fithian and Powell, 2009; UCLG 2010). Culture is linked to the economy through income generation and employment, to social programs that deal with poverty, equal rights and civic engagement; and culture is linked to the environment through the use of cultural capital to raise environmental awareness and responsibility (ibid...). A culture of peace, love, care, mutuality, harmony fosters development and social cohesion and sustainable development could easily be achieved when there is the involvement of the local population at the centre of the development efforts. So, culture is emerging as the fourth pillar of the sustainable development. Integrating the culture within the development efforts is crucial to tackle a huge number of global challenges more effectively and sustainably. This is a message that needs to be expressed through mass communication as well as through education.

**Communication and sustainability:** Communication is important in disseminating the message about culture and heritage conservation and its integration with the economic, environmental and social dimensions of sustainability but is challenged by differences in culture and language. For example, the unique cultural values of communities, linguistic differences, and life conditions lead to various interpretations of the Brundtland definition of sustainability, i.e. need, time and space. Therefore, efforts made by a diverse array of entities, which include citizen and governments, to broadcast one global message that can be understood by all communities about cultural sustainability include communications that inform, shape and shift our relations with other three dimensions of sustainability, i.e., social, economic and environmental. Following Wessels' (2006) first principal of sustainability, i.e., limits to growth, it is stated that moving from consumer society to sustainable living there need paradigm shift where interpersonal, group and mass media communication help to integrate different cultural groups, values, traditions of the world that influence to establish same goal ignoring negative views on their own culture, i.e., indigenous conservatives as well as by limiting influences of consumerist culture of developed countries. This shift moves from a linear model to a system model, where news, radio, newspaper, local discourse, Facebook, Twitter and other communication technology combine to produce a cumulative effects to develop world views on sustainability.

**Education and cultural sustainability:** The sustainability of cultural elements of society is promoted by education communication, public policies, and the work of organization like UNESCO. Through education careful attention to the affects of globalization will ensure that homogenization does not destroy culture at the local level. All public policies should take into account differences in the cultural values of each community. Take the example of the issue of global warming, which is not simply an environmental problem, but has aspects that affects social, economic and cultural dimensions of society too. One way to communicate the way that environment, social and economic issues affects culture is through story telling. 'Storytelling can be used to engaging people and motivates them at the local level to preserve a community's culture and sense of identity. Stories that resonate with people enable a paradigm shift in views, beginning at the local level and moving on to global views towards culture as an important dimension of the economy, environment and social works'<sup>4</sup>. Wessels (2006) also introduces second law of 'thermodynamics' also known as the law of entropy in order to educating negative externalities of energy system.

The second law of Thermodynamics says that 'although energy can't be created or destroyed, it can be transformed from one form to another. [but] no transformation is 100 percent efficient.' (Ibid...). Wessels(2006) use an example of the transformation of the process of turning a car's fuel into energy that show how energy is lost as heat into the atmosphere, and of a system that also create pollution. His idea is that educating people about this problem will make people aware of it and possibly lead someone to create a better fuel system that turns a renewable source of fuel into energy for cars and other machinery and that does not affect our environment through a loss of energy. Here education is an important element in communicating the facts about all dimensions of sustainability that affect a careful stewardship of our planet. Education about the complex integration of all four pillars and how they often overlap is key to an understanding of how culture can promote environmental, economic and social sustainability.

**Cultural construction of sustainability:** Cultural construction of sustainability emerges from people's perception of changing environment where awareness about negative consequences of the environment and available scientific knowledge and alternative technology for coping with the changing environment or problem are the central for the process. Here education and communication play a vital role. Through education people become known about causes and consequences of changing environment and their own role and responsibility which lead to modify their behavior relating to environment or problem. Here people began to see environment from economic orientation to moral orientation following some conditions as follows:

**Conditions for emerging moral behavior and generating moral norms instead of economic (profit-loss) behavior in order to accommodate the situation which lead sustainability:**

**Existing moral norms to influence behavior:** When person in a situation are aware of both of the consequences of their action and feel themselves personally responsible for them they will behave according to moral norms rather than economic expedience. Generally people tries to escape the situation particularly bad or negative, but when he or she feels that they are part of the decision taken before are not refusal of the situation. Here available alternatives, i.e., technology are important inputs provider to cope with the situation. In both cases education and communication in scientific knowledge and technology can play an important role for addressing the crisis. For example- littering behavior- anti littering norms expressed in public sentiment, advertising campaign and law, i.e., Swachha Bharat Mission would be activated to influence behavior when the decision maker was aware of the negative consequences of this action and felt personally responsible for these consequences.

**Generation of moral norms to influence behavior:** When a decision necessarily leads to actions which have consequences for others and the person who makes the decision is perceived to be responsible, a moral norm is activated to define (in the case of decision makers) or to evaluate (in the case of those affected by the decision). In a decision of this type when no specific norm applies, it is plausible that new norms will be generated to accommodate the situation, i.e., law, regulation, public, advertisement campaigns etc.

**Conclusion:** Culture includes social, economic and environmental aspects of society and these are combining to constitute a holistic view on society. Culture is linked to economy through income generation and employment, at the same way culture is linked to social programme that deal with poverty, equal rights and civic engagement, and culture is linked to the environment through the use of cultural capital to raise environmental awareness and

responsibility. Social sustainability includes economic growth, equitable social service, and environmental practices. Sustainability also includes a community's values and cultural heritage. A paradigm shift in the world view toward sustainability needs to include practices in a way that do not damage ecosystem, environment, social well-being and economy. This paradigm shift also needs to be inclusive and holistic. Social and cultural capitals are given high value and strengthened in community's action will build the foundation on which sustainability is empowered as people identity with their culture and sense of place (Scammon, D. 2012). Inclusion of culture as fourth pillar of sustainability constitutes a holistic view on sustainability studies which is capable for addressing sustainability problem of modern society.

### Notes:

1. Agenda 21 for Culture(2004) An undertaking by cities and local government for cultural development. Available at: [www.barcelona2004.org/.t\\_portoalegreeng.pdf](http://www.barcelona2004.org/.t_portoalegreeng.pdf). Accessed 12 mar 2014
2. A study conducted in Southeast Coast of Sulawesi in Indonesia among the people named Bajau who live close to highly endangered coral reefs. Here researcher examined cultural practices related to the ecosystem and explore how culture help to understand the notion of sustainability differently and question of self determination and aspiration of indigenous conservatives' people are given priority through education and employment without compromising protection of the coral reefs or environment.
3. UNESCO UN Education, Social and Cultural Organization
4. It is a method of developing a world view on culture where story based campaign engaged people at the local level to preserve a community's culture and sense of identity where enabling them to develop a world view on culture and sustainable development.

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