Abstract

This article introduces the maritime culture of the people living in the Sulawesi Islands. These include the traditional knowledge and fisheries management practices of the people in Sangihe, North Sulawesi, Selayar and Buton Islands in South Sulawesi. This discussion is framed in the context of coral triangle initiative (CTI) which main concerns are more on bio-diversity and conservation. In this context the narrative and programs of CTI focus on natural environment and defines the territory as eco-regions. By talking about maritime culture, this article argues that the regions are also rich of cultural diversity which also important. These maritime cultures are not only important to be identified and conserved as cultural heritage but also strategy for conservation and natural resource management. Current discourse of the common poll resource management shows that traditional knowledge and resource management practices can play as important elements of socially fair and sustainable resource management. With this, the article suggest that the narrative and programs of the CTI should incorporate the socio-cultural perspectives, thus the term eco-region should be replaced by the term socio-ecoregion.

Keywords: maritime Culture, Coral Triangle Initiative, Socio-ecoregion

Introduction

In the context of maritime realm, when people hear about Sulawesi Islands, they might directly think of Coral Triangle Initiative (CTI) and Ecoregions (CTE). This is because since the declaration of Coral Triangle Initiative, a multilateral cooperation of six nations (Indonesia, Malaysia, Brunei Darussalam, the Philippines, Timor Leste and Solomon Islands) to save guarding the productivity and sustainability of the Coral Triangle Ecoregions in 2009, these regions have attracted worldwide attention on its coral reef and associated ecosystem biodiversity. Sulawesi islands sit at the center of the regions (Figure 1). As the name implies, CORAL Triangle ECOREGIONS, people’s focus of attention is coral reef and associated ecosystems. Or, to put it in different words, the focus of attention
is the natural ecosystem. Thus, the mainstream narratives about CTE is about biodiversity, conservation and the ecosystem services to human being. The following information is what the main discourse notes about these regions:

The Coral Triangle comprises the highest coral diversity in the world, 76% (605) of the world’s coral species (798). The CT has 15 regionally endemic coral species, and shares 41 regional endemic species with Asia.

The Coral Triangle comprises the highest diversity of coral reef fishes in the world (Figure 2): 37% (2228) of the world’s coral reef fish species (6000), and 56% of the coral reef fishes in the Indo-Pacific region (4050). 8% (235 species) of the coral reef fishes in the CT are endemic or locally restricted species. Coral Triangle countries have some of the highest numbers of endemic reef fish species in the world (particularly Indonesia, Philippines and PNG). *(The Nature Conservancy 2008)*

It is also highlighted that “[t]he CT, referred to as the “Amazon of the Seas”, is the epicenter of marine life abundance and diversity on the planet. It has more than 600 coral species (more than 75% of all known coral species), 53% of the world’s coral reefs, 3,000 fish species, and the greatest extent of mangrove forests of any region in the world. In addition, the CT serves as the spawning and juvenile growth areas for what is the largest tuna fishery in the world.” *(CTI brochure)*

Nonetheless, there is a serious concern on the sustainability of the regions. International institutions, for example, the World Ocean Council notes that ‘as a global center for marine biodiversity, the CT is a major conservation priority. The CT’s environmental diversity and economic value are threatened by climate change, urbanization, overfishing, and other impacts. With these threats, leaders in the regions created the Coral Triangle Initiative (CTI). The official title of this initiative is the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (World Ocean Council 2016). Following the regional framing of the regions, Indonesian government also develops similar narrative on the ecoregions within the country. The following narratives are common in CTI project in the country. Indonesia is the largest archipelagic country in the world, stretching across three time zones, encompassing more than 17,000 islands, 86,700 square kilometers of coral reefs, and 24,300 square kilometers of mangrove areas, and supporting nearly 230 million people (Huffard, C.L., M.V. Erdmann, T.R.P. Gunawan. 2012. p xiii). Sulawesi Island waters fall into three ecoregions: (1) the Sulawesi Sea-Makassar Strait, (2) North-East Sulawesi and Tomini Bay and (3) Banda Sea Ecoregions. Each region is the home of 1785 coral reef fish species, 1561 (6 of which are endemic), and 1760 (3 are endemic) reef fish species respectively (Figure 2).

The diversity of reefs associated with stomatopod is also high. Each region is the home of 46, 29, 40 reef species respectively (Figure 3). So does the richness of mangrove in these three regions. Figure 4 shows that each region in Sulawesi Islands contributes to 23, 8 and 12 species of mangrove respectively.

I don’t think we need to add more to this information to believe that Coral Triangle as a whole and Sulawesi Regions are important. Their rich ecosystems and biodiversity are not only vital marker for the earth ecosystem but their ecosystem good and services are sources of life and livelihoods for millions people. Thus, the sustainability of these ecoregions is our responsibility. Establishing best
management, conservation and rehabilitation should be our first priority now and in
the future.

Nonetheless, I believe that if we want to really work toward the best marine
ecosystem management and conservation for natural sustainability as well as
optimum use for people’s welfare and food security, the narrative and understanding
that only focuses on ecoregions and biodiversity are necessary but not sufficient. We
have to be aware and understand well that these regions are also the home of many
coastal communities and sea oriented ethnic groups. The Sangihe in North Sulawesi,
the Bajau who scatter all over Sulawesi islands and beyond, Orang Selayar (the
People of Selayar), and the Butonese, are to name some of them. These people have
developed special relation with the sea through their belief system, depth (traditional)
knowledge on marine ecosystem, traditional fishing practices, etc. The culture of
these people has guided them to interact with marine ecosystem. These maritime
cultures do not only concern on exploitation but also take care and nurture the
nature. As we shall see below, these people do not see the maritime realms as ‘public
property’ which is the same as belong to no one (Hardin 1968). With this, I would
argue that unless we add the knowledge about these people and their culture to the
bucket of ecoregion, our work on natural resource management will be sufficient.
The narrative of ecoregion should be completed with the understanding about socio-
cultural issues to become socio-ecoregions.

This paper will try to provide some examples of maritime cultures of those
living in Sulawesi regions. In this regard, the paper will look at maritime knowledge,
fishing practices, traditional fisheries management of the Sangihe, Selayar people
and the Butonese in South and Sout east Sulawesi. These people have developed
special relation with the sea through belief system, depth (traditional) knowledge
on marine ecosystem, traditional fishing practices and strategies, etc. I would not
pretend that this paper will be a comprehenshion understanding of the people’s
maritime culture, but will highlight the fact that these people, with their culture,
have been practicing the culture of marine resource management. In the discourse
of collaborative marine resource management (Co-management), these practice
present important basis for a better fisheries management (see Ruddle and Satria
2010).
Cultural Diversity in Sulawesi Regions: Traditional Knowledge, Fishing Tradition and Traditional Marine Resource Management

The Sangihe People and Their Maritime Culture

The Sangihe people or in Indonesia is called Orang Sangir, is an ethnic group originated in the District of Sangir Talaud, North Sulawesi. The people of Sangir are well known for their maritime culture. Actually, this is natural if we look at the fact that they live in an archipelago of small islands (Figure 5). Maritime culture is a means of adapting themselves to their habitat, the place where they live and develop livelihoods.

Coastal communities in Sangihe Talaud have very intimate association with coastal water where they live. They identified fishing grounds with names which also indicate their familiarity with the characteristics of the ecosystem. In Kahakitang Island for example, people identified ten main fishing grounds specific for Malolagus (Decapterus spp.) (Figure 6). On coastal tenure, although, they do not claim ownership to a particular coastal water, fishing for demersal resources usually located in the water adjacent to their village. Fisher will avoid fishing in others’ people coastal water. This means that there is a sense of affiliation between coastal water with adjacent community for fishing demersal fish. Nonetheless, there are several fishing grounds that are traditionally considered as shared areas. In these areas people from different villages will fish freely. They might even share the catch or drive away those who are considered as non-member fishers.

A well-known tradition of the Sangihe is the tradition of Seke-Maneke. This tradition is associated with the fishing of Malolagus (Decapterus spp.) (Figure 7). The fish which comes to the area seasonally is very important source of income and food, the importance of which has triggered people to establish a special tradition to catch them. During the olden time, this fish can only be caught by a set of gear and boat called Seke which consist of Pandihe (wooden fence-like gear, Figure 8) and three boats (Londe; the boat for keeping and transporting the catch, Kengkang; the boat for keeping and transporting the Pandihe and Pamo; the boat for the fishers).

Maneke is the fishing for Malolagus using the Seke. This is done by a group of 40-50 people who form a seke group. Figure 9 shows the social organization of a seke group. The group is led by Tomaseng Karuane or Tonaas, he is the person responsible for led all the fishing activities. Other than considered as knowledgeable, he is also the one who has spiritual power. The second leader is Tomaseng Karuane. He leads setting the pandihe once he gets sign from Toaseng Peluite. He is also the one who has to lead activities related to the maintenance of the fishing gear. Mandereso is
in charge of keeping the harvest and distribute the share. *Mandore* in the position in charge for group mobilization during fishing prepartation. Finally, *Lokteng* is the rest members of the group, they are the ordinary fisher.

Every Seke group has their own fishing spot. Unless with the permit of the group that owns particular spot, other group is not allowed fishing in others’ fishing spot. For example, in Makalehi Island, they have six Seke groups. Each group is only allowed to fish in the fishing spot(s) they are appointed based on communal agreement. The group of Seke Potas can only fish at Dumpise and Pangkunung. The Seke group Yamangsara’s fishing spots are Liang Kambing and Malendang. Seke Rario can only fish at Saghe Kadio and Saghe Labo, etc. (Figure 10).

People of Karokotan village have been practicing a tradition called *Eha* for generations. This tradition is, in essence, a tradition of closing season for designated areas or resources. In the sea, this tradition applies in nine spots of three islands’ water. These include Lenggoto, Ale’e, Apan and Dansuman around the Island of Kakorotan, Ranne, Abuwu and Ondenbui around Intata island, Melele and Sawan around the island of Malo. People usually close each site from fishing for a year. Those who break the closing season will be punished in the form of physical punishment or fine decided by a customary court. The strict implementation of the closing season provides the opportunity for the fish to reproduce.

As the closing season ends another tradition follow. This is the tradition of *Mane‘e*. This is the tradition of harvesting the fish protected during the implementation of the *Eha*. The tradition of Mane‘e starts by a ritual of request for God’s blessing led by traditional spiritual leader. The blessing of God and ancestors are needed for the good harvest and safety during the communal festival Mane‘e.

Some people will start preparing the gear that will be used to drive the fish on the fishing day. The gear is a very long rope with woven of coconut leaves (Figure 11). On the day of the harvest, people will bring the gear to the fishing spot (Figure 12). They will half cycle the fishing spot and drive the fish toward a particular spot on the beach. Once the fishes are cornered in the shallow water, a traditional leader, usually the traditional king (*Raju*) will fish using a long spear and hold the captured fish up on his spear. Some other important leaders will do the same as the *Raju*. In
turn, all people will follow harvesting the fish, using various gear such as scoop or harpoon/spear.

**Traditional Fisheries Management in Selayar**

Selayar is an island to the south off Makassar city. The people of Selayar have some traditions of regulating fishing activities in their coastal water. These traditions are different from village to village. The following discussion refers to the tradition of Bungaiya village. This village is located on the north part of Selayar Island (Figure 13). Bungaiya villagers claim that they have the management right the coastal water adjacent to their land village area. Although anyone can fish in the village waters, they should follow the regulations pertaining to fish in the area.

Some regulations apply in the village waters are, first, that the coastal water is divided into three zones. These are no take zone, buffer zone (both are also called Daerah Perlindungan Laut or conservation area) and traditional fishing zone. No fishing is allowed in no take zone, while buffer zone is for non-extractive activities such as snorkeling or diving. Fishing is only permitted in traditional fishing zone.

The location of stationary fish trap (Sero in Indonesian language and Bilak in Local language (Figure 14) is private property. Only the owner of the location is permitted to set the gear. Once the owner of Sero sets the gear, the area within 40 phantoms from the gear should be free from fishing activities of other gear. This means that fishing with other gear is prohibited in the area. Destructive fishing, e.g. cyanide and blast fishing are totally prohibited. Diving with torch (head light) and spear-gun during night is also banned. This prohibition is applied for two reasons. First, because the gear is too effective thus threatening the sustainability of the fish. Second, the use of it is not fair for those fishers fishing with more traditional gear. The use of bottom scoop is prohibited in the seaweed culture location.

The village regulations also set the punishment and fine for those violate the rules. Usually the punishment involve the confiscation of the catch, gear or boat depending on the level of the violations. Fine is also levied for fishers use destructive gear or techniques such as potassium cyanide and blast fishing.

Other than the above mentioned rules, people in Selayar have a tradition called *Ombo*. This tradition refers to the secrecy of the knowledge on particular
fishing spot. Usually senior fishers have special knowledge on particular fishing spot that is hidden from other fishers. The fisher treats this special fishing spot as their ‘saving account,’ he will fish in this particular spot when he gets no fish from other spots. He usually fishes in the spot alone and hides from other fishers.

**Traditional Coastal Knowledge in Buton**

Buton is the name of an island, an ethnic group, a language and a district located in South East Sulawesi. It is one hour flight from Makassar (Figure 15). As an ethnic group the people of Buton (Butonese) are well known as the maritime ethnic group. They are skillful fishers, sailors and boat builders. The followings are some of their cultural/traditional knowledge on coastal territories. It should be noted that this knowledge is particularly taken form Wabula, a traditional domain in Buton.

The people of Wabula claim communal territorial rights to both land and coastal water. For land, they call their communal territory as Pangko and name their communal coastal water as Nambo (Figure 14). For Nambo, they differentiate several areas based on the characteristic of the area: Nambo Longka-longka is the area of mangrove, Nambo Parangkudu is sea grass bed, Nambo Pasi is coral reef area and Nambo Kito is the deep sea. People also names places with serve certain function. Nambo Picikoluano ponu is the place where turtle nests their eggs and Nambo Hou is the fish nursery ground.

Some regulations manage fishing in the Nambo area. These include the prohibition of destructive fishing such as fish poisoning and blast fishing. In order to protect the small fish, people also regulate the mesh size of their net and fish trap (bubu). Further, the people of Wabula also apply the tradition of Ombo. This is the tradition of closing season similar to the tradition of Eha in North Sulawesi. Ombo can be applied to an area within the nambo or specific resource(s) that lives in the area. Once ombo is applied fishing is totally close. Only when the Ombo is lifted, the access is open to local population.

All the management regulations are controlled by adat committee consist of Parabola (the adat leader) and Imam (the religious leader). In time of violation, this committee decides the punishment or fine for the culprit.

**Closing Remarks**

Sulawesi Islands are well known as a hotspot of bio-diversity, particularly coral reef, coral reef fish, mangrove and sea grass. They are located in the center of Coral Triangle Regions, the regions under the authority of six countries that have been the global attention for conservation. While most information concern on environment or ecological system, this paper focuses on cultural diversity of the regions. It shows that the people living in these regions are also diverse in culture, thus this regions are also rich with socio-cultural diversity. This paper also highlights traditional knowledge on marine territory resource management of these people. In the discourse of natural resource management, particularly the common pool resources, these knowledge and practices are very important as the basis for the development of sustainable resource management. In that regard, I would argue that the discussion on Coral Reef Regions should not only focus on natural environment but should also deal with socio-cultural aspects. This means that the discourse should talk about socio-ecological systems rather than only focus on ecological systems. With this, the article suggest for the use of the term of socio-ecoregions rather than ecoregion.
Notes
1 This article is an English version of an article from "The ethnography of Sea Nomad in Sulawesi, Indonesia" which is published by Koeza National Maritime Museum in 2019.
2 This section is generated from Ulaelan, A. J. S. Hoettagaul and M. S. Kaghoos, 2014.
3 The data used in this section is based on the project of Capturing Coral Reef and Associated Ecosystem Services, implemented by Queensland University. I worked with Prof. Helen Ross and Ali Yusriah Abdurrahim in gathering the information. Other information on coastal community-based management in Selayar can be checked in H. Ross, A. Y. Abdurrahim, A. Phehan, 2019 and Nils, A. Y. Abdurrahim, P. Murny, H. Ross, 2019.
4 This section is based on Subdit Masyarakat Hukum Adat 2017. Identifikasi dan Pemetaan Masyarakat Adat Masyarakat Adat Walhala, Kabupaten Buton, Provinsi Sulawesi Tenggara.

References