

“We don’t want to get caught in the downpour”: Sport Tourism Activities and The Local Rainy Season in Gorontalo, Indonesia

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Abstract: The aim of this study is to identify tourism and to determine the period of sports tourism activities according to the local season in Gorontalo Province. This study is using a qualitative approach with a descriptive-analytic method. Sports tourism data was obtained through direct visits, observations, and interview with tourism office, tourism object managers, while local seasonal data of Gorontalo Province was obtained through literature study, and interviews with BMKG Climatology, and Maritime Station. Based on study results, beach swimming was conducted in March April May, and September October November during the transition (shady season). Diving and snorkeling in the Gulf of Tomini were conducted in October to April. Hiking, trekking, paragliding, rafting, and tubing in the southern of Gorontalo are conducted in March April May, and September October November during the transition from the first and second rainy seasons. While in the northern should be conducted in April to October during the dry season and transition.

Keywords: local season, rainy season, tourism, sport, activity

INTRODUCTION

Sport tourism is the utilization of the two discipline of tourism and sports. It is the largest and fastest growing industry of tourism and sports, impacting economic growth (Cahyadi et al., 2021; Dóczy, 2008; Gozalova et al., 2014; Honari et al., 2010; Isnaini & Hasbi, 2021; Kurtzman & Jauhar, 2003; Kuswan et al., 2017; Soedjatmiko, 2015; Taleghani & Ghafary, 2014; Tangkudung & Tangkudung, 2022). Sport tourism is defined as travel for a limited time outside of the usual environment, with sports as the objective (Gonzales-Garcia et al., 2018; Hinch & Higham, 2001; Preuss et al., 2007), some activities are called special interest tourism (H. J. Gibson et al., 2003).

In Indonesia, academic efforts to introduce sports tourism and its benefits to the economy, began in 2008 (Wedagama, 2008). It came to the attention of the government after Toho Cholik

Mutohir, an Indonesian sports expert, presented his paper “Sport Tourism Industry: A Case of Indonesia” at the International Conference of Sport Industry; Tapping Economic Value of Sport Tourism in Denpasar, Bali in 2012 (Ketut Sudiana, 2018). Encourage the development of sports tourism as a headline in tourism sector programs. This motivated each region to develop the tourism potential they have through their respective work programs, utilizing regional resources to create regional tourism products.

Gorontalo, the 32nd province in Indonesia, is called a hidden piece of paradise in Wallacea. It inherits the beauty and potential of Indonesia’s nature, maritime, and culture. There are 48 marine tourism destinations and 16 nature tours that utilize sports tourism attractions (e.g beach swimming, diving, snorkeling, canoeing, kayaking, forest hiking, trekking, paragliding, rafting, and tubing) (Dinas Pariwisata Provinsi Gorontalo, 2020).

The high-season tourist visits to destination in Gorontalo usually occur during long holidays or joint leave. Domestic tourist visits are usually in June July and December January. An important thing to consider in tourism activities is the season during the holidays. The rainy season is a natural phenomenon that can affect tourism activities (O’Mahony & McMurray, 2008), especially marine tourism and nature tourism. Based on these conditions, this study aims to identify tourism and to determine the period of sports tourism activities according to the local season in Gorontalo Province.

Literatur Review

Sport tourism

A definition of sport tourism given (Weed & Bull, 2004), as “Social, economic and cultural phenomena that arise from the unique interaction between people, activities, and places”. (Taleghani & Ghafary, 2014) Recommends “several types of sports activities that can be developed into sport tourism attractions; hunting, fishing, riding a horse in the mountain area, canoeing in fast and calm rivers, skiing, shooting, public swimming pools”.

The conceptual model for sport tourism was developed by (Woo-Sik Choi et al., 2016), according to the classification of tourist behavior (H. Gibson, 1998, 2005), which are: 1) active sport tourism, such as active road races, adventure and obstacle races, golf travel, marathons, outdoor adventure (hiking, backpacking, biking, snorkeling, scuba diving, horseback riding), ski travel, triathlons; 2) event sport tourism; and 3) nostalgia sport tourism, such as sports buildings and sports museums. (Embassy of The Republic of Indonesia in Madrid, 2021) Types of sport tourism in

Indonesia consist of; land sports tourism (running and cycling), mountain sports tourism (hiking, trekking, and paragliding), marine sports tourism (snorkeling, diving, skiing, surfing, canoeing, and kayaking)

Season in Indonesia

Weather and climate are similar but different conditions over time (Ndu Ufi et al., 2021). Weather is the state of the air at a particular time and region, relatively narrow at short period of time (Novandya, 2017; Sumampouw, 2019). Climate is the habitual weather in a place or region or area (Mahubessy, 2018), known through average statistical measurements of temprature humidity, wind, atmospheric pressure, precipitation, atmospheric particle count and meteoroly of a particular region over a long period of time (Sumampouw, 2019), minimal 30 tahun (Dayantolis et al., 2016; Yulianto & Putri, 2020). Seaons are broader than weather and narrower than climate. Seasons cover large areas and span months or even years.

Research by (Setiawan, 2018), examines the grouping of "Season Zones in Indonesia", and classifies, as follows: (1) monsoon-type seasonal zone, with a monsoon rainfall pattern that has a clear distinction between the wet and dry season periods. Unimodial rainfall type or one peak rainy season December January February, and Jnue July August dry season (Wardhana & Susendi, 2015), (2) Semi-monsoon type zone, with equatorial rainfall pattern that does not have a clear distinction beetween the wet and dry season periods. Biomodial rainfall type with two peaks in the rain season usually in March and October or at the time of the equinox (Wahid & Usman, 2017), (3) Anti-monsoon type zone, a localized rainfall pattern that has a unimodial monsoon period as opposed to the monsoon (Rouw et al., 2014).

METHODS

This study is using a qualitative approach with a descriptive method of analysis. Sports tourism data was obtained through direct visits, observations, and interview with tourism office, tourism object managers, while local seasonal data of Gorontalo Province was obtained through literature study, and interviews with BMKG Climatology and Maritime Station. A qualitative approach is applied to achieve the aim. Research data consisted of primary data and secondary data. The sources of primary data were 1) the Department of Tourism, Youth, and Sports (Locally named DISPORAPAR); 2) Meteorology Climatology and Geophysics Agency (Locally named BMKG), Climatology stations in Gorontalo, and Maritime stations in Bitung North Sulawesi, 3) the

cultural expert, and 4) the tourist destinations manager. Next, secondary data as the support for primary data comprised documents that are related to seasons in Gorontalo. Data collection through observation, interview, documentation, and literature review.

RESULTS

Local Calendar of Gorontalo

Research results (Tamu & Dako, 2018) successfully identified the local seasonal calendar used by the Gorontalo community, namely: 1) land season calendar, dan 2) marine season calendar. Based on the land season calendar shown in figure 1, the seasons in Gorontalo consist of: Rainy (marked in green in November, December, January, February), Transition (mark in black in March, April, May, June), and Dry (mark in Red in July, August, September, October), while the ocean season calendar shown in figure 2, divides the seasons into 4: West wind (marked in blue October, November, December), Calm (mark in green in January, February, March), Transition (marked in black in April, May), dan East Wind (marked in red in June, July, August, September).



Figure 1. Land calendar by some of Gorontalo society
Source: (Tamu & Dako, 2018)



Figure 2. Marine calendar from the season calendar system of Gorontalo society
Source: (Tamu & Dako, 2018)

This local season calendar was then readjusted with data obtained from BMKG Climatology stations in Bone Bolango, Gorontalo, and BMKG Maritime stations in Bitung, North Sulawesi. The resulting local season calendar was used in this study. Shown in figures 3, 4, dan 5.

Rainy Season in Gorontalo

The period of the rainy season over land and ocean can be seen in figures 3, 4 dan 5. From Meteorology Climatology and Geophysics Agency is known that the difference in this calendar is due to the different seasonal patterns between the northern (called monsoonal), and southern (called equatorial) regions of Gorontalo.

Land season in Gorontalo is strongly influenced by seas condition and regional physiography. Geographically, Gorontalo has borders with North Sulawesi Province to the east and Central Sulawesi Province to the west, while directly facing the open waters of the Sea of Sulawesi to the north (Habibie et al., 2018; Muslimin et al., 2017) and the semi-closed waters of the Gulf of Tomini to the south (Muslimin et al., 2017). Physiographically, Gorontalo is divided into four zones: (1) the northern—the Tilongkabila-Boliyohuto—and (2) the southern—Bone-Tilamuta-Modelo—mountain zone (Tolodo et al., 2019), (3) the cavity in the middle of the province, the Paguyaman-Limboto inner plains, and the Lombongo broad plains that stretch to the west and separate the northern and southern mountains, and (4) the relatively limited zone of the Pohuwato coastal plains.



Remarks: The peak of the rainy season for the southern of Gorontalo is not permanent and may shift forward or backward from the average.

Figure 3. The Southern of Gorontalo Land Seasonal Calendar Equatorial Pattern
(Source: data 2021)



Remarks: The peak of the rainy season for the northern Gorontalo is not permanent and may shift forward or backward from the average.

Figure 4. The Northern of Gorontalo Land Seasonal Calendar Monsoonal Pattern
(Source: data 2021)



Remarks: (1) Applies for marine areas of Gorontalo in Sulawesi Sea and Gulf of Tomini; (2) Transitional Seasons I and II are not permanent and may shift forward or backward from the average.

Figure 5. Gorontalo Marine Seasonal Calendar
(Source: data 2022)

Marine season of Gorontalo in the southern and northern same as the marine season in Indonesia generally. (Asruddin et al., 2020; da Cruz Tita et al., 2020; Kadim et al., 2018; Mustikasari et al., 2015) explain the marine season in Indonesia: west season (December January February), east season (June July August), transition I (March April May), and transition II (September October November). Wave height is higher during the west and east season than during transition periods (Kurniawan et al., 2011).

Seas are one of the reasons for different rainfall patterns (As-Syakur et al., 2013), while the mountain ranges become a physical barrier to wind movement (Ardhitama & Sholihah, 2014). The local topographic condition has great potential in modifying the Asia-Australia monsoon circulation and creating seasonal variations (Mulsandi et al., 2021). These factors create seasonal differences between the northern and southern lands of Gorontalo.

Sport Tourism Activity in Gorontalo

Sports tourism activities in Gorontalo, which are included in the realm of this study can be seen in table 1, which consists of: 1) marine sports tourism (beach swimming, snorkeling, diving), 2) nature sports tourism (hiking and trekking, paragliding, rafting and tubing). Sport tourism activities in Gorontalo Province are classified based on the seasonal calendar as shown in figure 6.

Table 1. Sports tourism attractions, destinations and objects

Region	Destination	Object	Sport Tourism Activity
The Northern			
North Gorontalo	Papualangi	River	Rafting and tubing
	Minanga	Beach	Swimming
The Southern			
Bone Bolango	Botubarani dive with Whale Shark	Underwater	Diving and snorkeling (4 dive sites)
	Olele	Underwater	Diving and snorkeling (9 dive sites)
	Bototonuo	Beach	Swimming
	Tulabolo	National Park	Hiking and trekking (looking for Maleo?)
	Longalo	River	Rafting and tubing
	Lonuo	Mountain	Hiking and paragliding
	Poduwoma	River	Rafting and tubing
Boalemo	Bolihutuo	Beach	Swimming
Pohuwato	Libuo	Beach	Swimming
		Underwater	Diving (8 dive sites)
	Lomuli	Mountain	Hiking and paragliding
	Torosiaje	Underwater	Diving in the shark residence (5 dive sites)

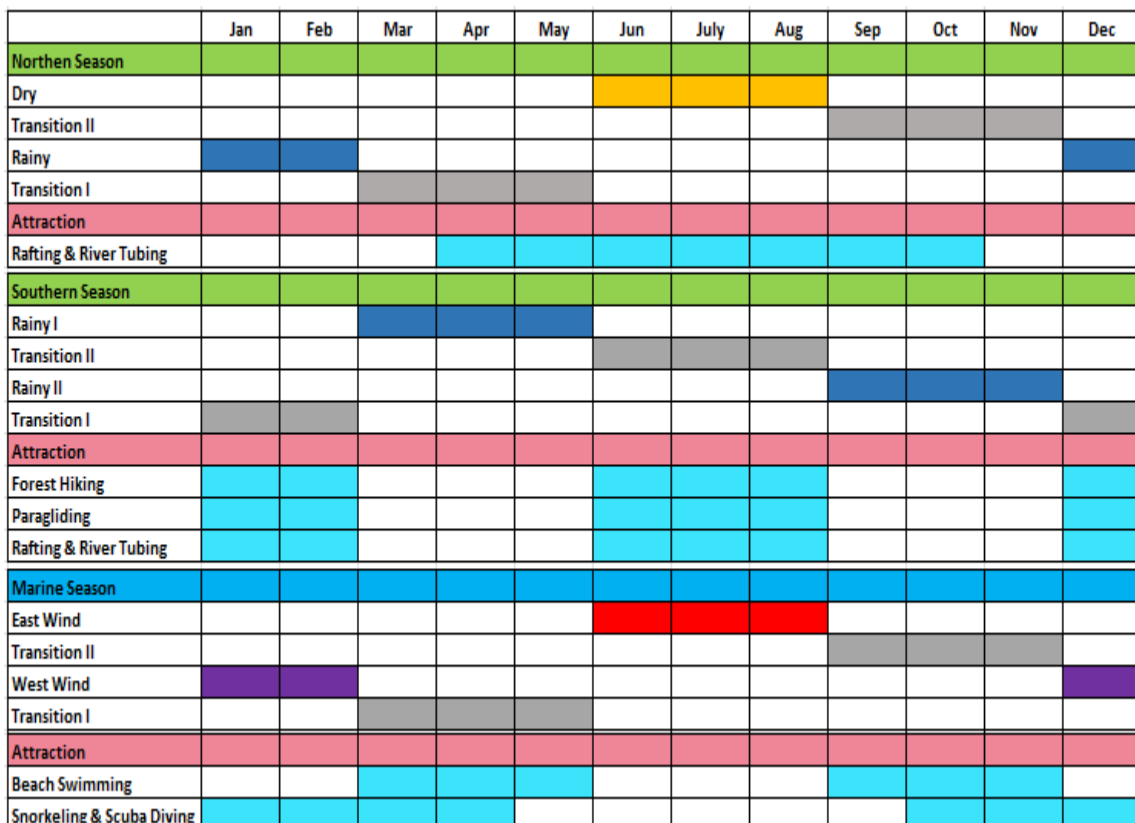


Figure 6. Sport tourism activity in Gorontalo Province (Source: data 2022)

DISCUSSION

Marine Tourism

Beach swimming is conducted in transition I (March to May) and II (September to November). While Underwater sport activities in the Gulf of Tomini should be conducted in the middle of transition II up to the middle of transitional I (October to April). Outside this period the upwelling phenomenon becomes a disturbing factor for divers. Upwelling is the shift of a mass of water to the surface of the sea, which carries plenty of nutrients and possesses a high level of primary fertility. Upwelling usually occurs in shallow waters that are 20-40 m deep, up to waters that are 200-300 m deep (Bowden & Ferguson, 1980; Cole & McGlade, 1998). Marine regions with the upwelling phenomenon represent potential fishing grounds. Due to this phenomenon, the visibility decreases, making it less safe for diving.

Table 2. Upwelling Phenomenon in the Gulf of Tomini

Season	Condition of Waters in the Gulf of Tomini
West Wind Transition I	Weak to strong and relatively broad in the north and west Weakening in the north
East Wind Transition II	Dominantly strong and broad Strong in the south

Source: (Mustikasari et al., 2015)

Nature Tourism

Forest hiking and trekking

Forest hiking and trekking are conducted in transition I and II. It is strongly recommended not to conduct hiking and trekking while in the peak period of the rainy season in March to May and September to November. In the region of equatorial pattern, the phenomenon that must be watched for vigilantly is the phenomenon of shear line or a strong turn in the wind direction, which causes a buildup of a mass of clouds that consequently results in the intensive growth of rain clouds. Intense rain will suddenly fall in a region that experiences the shear line phenomenon, as that which occurred in Gorontalo in December 2016 (Lumbangaol et al., 2017). In June 2020, the shear line caused rainfall of long duration in Bone Bolango (Pranita, 2020). Both occurrences were triggered by Tropical Cyclone Nock-Ten. Type of typhoon in the Philippines (Abdullah et al., 2015; Ali Khan, 2020; Bagtasa, 2021; Lam et al., 2017; LeComte, 2017; Loo et al., 2015; Soria et al., 2021).

Paragliding

The takeoff point for paragliding is on Bukit Arang in Lonuo Village. As with forest trekking, the paragliding is conducted outside of the peak period for the rainy season, from March to May and

September to November, while still taking into account daily weather forecasts in regions of the equatorial pattern. The best time for execution is in the morning up until 11 AM midday. This sport very much depends on wind speed. For the safety of the paragliders, wind condition is a determinant (Falavarjani, 2015; Kuşçu Şimşek et al., 2019; Mekinc & Music, 2016). Wind conditions are composed of wind speed and wind direction (Sahri et al., 2020). The utilized wind direction for takeoff at Bukit Arang is the wind from the southeast to the northwest.

Rafting and tubing

Rafting and tubing in the Bone Bolango with an equatorial pattern may be conducted in transition I and II. However, it is best to be conducted it from December to February and from June to August. The reason is that the discharge in the watershed that becomes the location for rafting and tubing is quite sufficient in the transitional seasons. (Pauweni et al., 2021). An example is the Bone watershed which has a river area of $\pm 265,000$ Ha with a river length of 100 Km that flows into the Gulf of Tomini. The flow velocity of Bone River is 0.41-1.56 m/s with a river width of 38.5-101.25 m, maximum depth of 3.27 m, and river flow discharge potential of 43.26-148.07 m³/s. The height profile of the upstream region is 286 m asl (above sea level). Another watershed that is utilized for the sports activity of rafting is the Tolinggula River in the Gorontalo Utara, which has an area of 204.20 Km². The discharge of Tolinggula River is 1.76 m³/s and 22.14 mm/month, stable in the dry season. The Tolinggula Watershed is located in a region with a monsoonal pattern, with distinct boundaries between the dry season and the rainy season. It is best to be conducted rafting and tubing in the middle of transition I up to the middle of transition II, from April to October.

CONCLUSIONS

Overall, this study provides recommendations for a good season for sport tourism activities, for object managers, tour guides, and tourist. However, there are limitations in this study, namely: sport tourism attractions are limited to marine, mountain, and river sports tourism. Further research must be carried out at tourist sites that are not included in the research area.

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