



Use of Beaches and other Public Places for Social Gatherings

A Study to carry out an assessment and to make proposals for the management of such places









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Use of Beaches and other Public Places for Social Gatherings — A Study to carry out an assessment and to make proposals for the management of such places

1. Background and Rationale

It has become common practice for people to organize large beach parties during weekends to celebrate a wide range of 'special occasions'. While this practice may be viewed as normal by participants at the gatherings, the direct and indirect impacts of such activities on the immediate environment and on people in the wider community have so far not been studied systematically. In response to growing community concerns about such gatherings, especially the disturbances they cause to others, the CEPS Board raised this issue during its meeting with the President of the Republic on 18th May 2017. The President proposed that the best course of action would be for civil society to put forward some proposals as to how best to address the perceived abuses related to the use of beaches and other public places.

It was agreed that prior to making recommendations to Government a thorough study of the actual situation should be made so that we may come up with realistic proposals that are implementable. Sustainability for Seychelles (S4S) as a member of the CEPS Commission for Environment and Natural Resources, took the lead in developing a project proposal for the study.

As the study was going to be time-consuming and necessitated the assistance of a relatively large number of data collectors, the project team sought funding from various sources to get the work done. The project finally received the assistance of the Environment Trust Fund in November 2018, for which S4S and CEPS are very grateful.

The overall **goal** of the project is to establish the basis on which clear policies and regulations may be developed for the control and appropriate use of beaches and other public places.

2. Scope of the Study

The study covered large beach parties, other specific and noisy activities, group gatherings in the vicinity of beaches, and other special events on beaches that attract large groups, on the three main islands of Mahe, Praslin and La Digue. It sought the views of party participants, residents and visitors relative to their experiences of such events and also asked for their views on how the situation may be improved for all concerned.

3. Objectives of the Study

The research aimed to establish the nature and extent of issues related to large beach parties and other such gatherings in coastal public spaces, and by extension in residential areas. It had the following objectives:

- 1. Establish the legal framework within which such activities may be organized and consider models of good practice internationally.
- 2. Explore the types of activities organized.
- 3. Identify the types of groups involved in the activities (eg families and friends; work colleagues; particular associations such as a sports clubs, etc...)
- 4. Seek reasons/ justifications given for organizing the events.
- 5. Examine observable and reported impacts on the participants, other beach users and the immediate natural environment.
- 6. Examine observable and reported impacts on people and the environment in the neighbouring residential areas (where applicable).
- 7. Make recommendations on how best the issues identified may be addressed.

4. Methodology

Three main methods of data collection were used: documents review, an observation check list and questionnaires:

- 1. A documents' review of all laws, regulations and reports local and international pertaining to issues related to the subject.
- A survey of the activities organized on beaches and other public places was done through observation guided by a check list that was completed by the data collectors on site – refer to copy of the checklist at Appendix 1.
- 3. The views of party participants, residents and visitors were sought through questionnaires refer to copies at Appendices 2 and 3. The questionnaires were devised by members of the working group set up to lead the implementation of the project, in consultation with other partners. They were trialed and adjusted prior to the main data gathering event.
- 4. Sound levels were recorded using the A-weighting sound pressure level measured in decibels (dB), at gatherings where loud music was being played. For this purpose the project team downloaded the 'Sound Level Meter' App by Bolden and installed it on all data collectors' smart phones. One factory calibrated sound meter the Cadrim Digital Sound Level Meter MS10 was used to calibrate each smartphone.

NB: We note that a smartphone has limitations as a sound measuring device and will only provide approximate measurements. It does however, provide a fairly clear indication of noise levels as well as enable relative comparisons to be made between venues. Unfortunately it was not possible to use the officially approved sound meter of the Department of Environment as special permission had to be obtained (a lengthy process) and the number of sites surveyed were considered too many to be handled by the Department's trained staff.

The project working group was assisted by 18 experienced teachers – mainly Environment Club leaders from schools – in carrying out the survey on Mahe, Praslin and La Digue. A training workshop was organized for the data collectors on 31st April 2019 to familiarize them with the data collection tools and to agree on a schedule for data collection on the sites. Almost all the data was collected during the period of 1st to 26th May 2019, mainly over the weekends.

5. Findings and Analysis

5.1 Documents Review

A number of documents related to existing laws and regulations as well as international guidelines were reviewed.

5.1.1 The legal framework

The main laws and regulations that govern the use of beaches and other public places are contained in the Beach Control Act (Cap 14, revised in 2010), the Environmental Protection Act, 2016, the Environmental Protection (Noise Emission Standards) Regulations 1999, and the Amplification of Sound and Playing of Music (Control) Regulation, 1976 (amended in 2001) of the Penal Code. Refer to Appendix 4 for relevant extracts from the Acts.

Sections 17 and 19 of the Beach Control Act address activities that may or may not take place on beaches (as opposed to water-based activities) such as games and sports that may inconvenience or cause danger to others; whereas sections 56(1) and 68 of the Environmental Protection Act prohibit actions that may cause damage, annoyance, inconvenience and nuisance to the public. In all instances the onus is placed on the Commissioner of Police to give permission for exemptions where this is considered appropriate. No clear guidelines or criteria are provided on which the Commissioner may base such decisions.

From observations made as part of this study, in most instances these laws were generally not fully adhered to, nor enforced. In the majority of instances where the laws were being ignored (eg loud music played in open spaces, discos on beaches, parking on the beach verge) no exemption from the Police Commissioner had been obtained.

In an SBC 'Dyalog an Direk' programme aired on 22 May 2019 focused specifically on noisy parties on beaches, the police officer on the panel maintained that the laws regarding these issues were not clear and they didn't have the necessary equipment to measure noise levels.

In addition to the Acts mentioned above the 'Policy on Restaurants', approved by Cabinet in 2012 stipulates that:

"A restaurant is allowed to host other activities or private functions subject to having been granted the necessary approvals from the relevant authorities".

"Normally, a restaurant may hold private functions until 11 pm as per the Noise Pollution Act and other laws and regulations enforced by the ministry responsible for environment. Any function that will last later than 11 pm needs the approval from the relevant authorities, which includes the Seychelles Licensing Authority, the Police and others." (Policy 7)

It should be noted that the 'Noise Pollution Act' referred to in this policy does not exist.

5.1.2 International guidelines

In a review of existing guidelines on environmental noise, the most comprehensive was found to be the World Health Organisation's (WHO) "Environmental Noise Guidelines for the European Region" last revised in 2018. They were published by the WHO Regional Office for Europe, but

it is pointed out that "...the recommended exposure levels can be considered applicable in other regions and suitable for a global audience, as a large body of the evidence underpinning the recommendations was derived not only from European noise effect studies but also from research in other parts of the world – mainly in America, Asia and Australia" (p 7).

In the guidelines noise is described as "...one of the most important environmental risks to health and continues to be a growing concern among policy-makers and the public alike" (p vii). The guidelines cover five main categories of noise, namely transportation (road traffic, railway and aircraft), wind turbine and leisure noise.

It is pointed out that leisure noise, and music in particular, is deliberately created noise for the purpose of enjoyment. At the same time there is now a growing understanding of the health impacts of such environmental noise, and hence the need for stronger policy action to protect communities from the adverse effects of such noise.

The WHO guidelines as developed by the 'Guidelines Development Group (GDG) recommends the following:

For average noise exposure, the GDG conditionally recommends reducing the yearly average from all leisure noise sources combined to 70 dB $L_{Aeq,24h}$, as leisure noise above this level is associated with adverse health effects.

For single-event and impulse noise exposures, the GDG conditionally recommends following existing guidelines and legal regulations to limit the risk of increases in hearing impairment from leisure noise in both children and adults.

Following a precautionary approach, to reduce possible health effects, the GDG strongly recommends that policy-makers take action to prevent exposure above the guideline values for average noise and single-event and impulse noise exposures. This is particularly relevant as a large number of people may be exposed to and at risk of hearing impairment through the use of personal listening devices (PLDs). There is insufficient evidence, however, to recommend one type of intervention over another.

This brief review indicates that the reach of the Seychelles laws (refer to extracts Appendix 4) does not consider the effects of noise on health. We recommend that the Ministry of Health gives this matter its urgent attention and undertakes an in-depth study, especially as the adverse effect of noise is painless and not immediately noticeable.

5.2. Survey Results - Participants

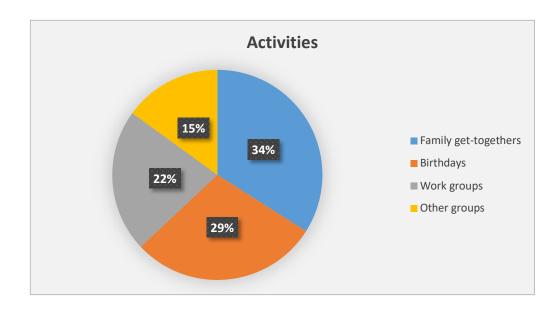
5.2.1 Participants and Locations

A total of 80 persons who were participating in group gatherings and parties on beaches were interviewed at eight different locations on Mahe, Praslin and La Digue. Observation of the gatherings and activities taking place was also done by the data collectors in accordance with the checklist provided (copy at Appendix 1). The persons interviewed and activities observed were in the following locations:

Locations – mainly beaches	No. of persons interviewed	No. of activities observed
Anse Royale	10	10
Au Cap	16	16
North East Point	14	14
Beau Vallon	10	10
Anse Gaulette, Val Mer	11	11
Anse Boileau	01	01
Praslin – Cote D'or, Grand Anse	08	08
La Digue – La Passe, Anse L'Union	10	10
Total	80	80

5.2.2 Purpose of Gatherings

The largest number of gatherings (27 in total - 34% of all gatherings) were for large family gettogethers while 23 (29%) were for birthday celebrations with close family and friends. As the data collection period included 1st May, 8 of the parties were to celebrate Labour Day and 10 were gatherings of friends from work, making a total of 18 work group activities (22%). The remaining 15% of the social gatherings involved 12 small groups of friends celebrating one-off events such as a farewell party, an NYS year reunion and groups of friends catching up.



5.2.3 Numbers Attending

Overall the size of groups ranged from 75 (recorded at a birthday party at Au Cap) to 4 for a small family gathering on La Digue. Considering that 1,260 participants were observed over the data collection period (1st to 26th May 2019), this averages to 17 participants per party. The largest numbers of participants observed over two weekends were at Au Cap (314), Anse Gaulette (292), North East Point (202) and Anse Royale (146). About one third of the group events (a total of 25, ie 31%) consisted of less than 10 participants.

Purpose of Activities	Maximum	Minimum
	No.	No.
Family get-togethers	30	5
Birthdays	75	9
Work groups	70	6
Other social events	12	4

Participants travelled to the various gatherings from different parts of Mahe, although there was a tendency for people to remain within the regions where they lived, eg most participants at gatherings in the areas of North East Point and Beau Vallon resided in the northern parts of Mahe.

5.2.4 Age Groups of Participants

90% of the beach gatherings involved mixed groups, slightly more females than males, within the age range of 2 years and 60+ years. Children between 2 years and 17 years were present at 75% of the events. The largest number of participants were between the ages of 18 and 48 years, and judging from their types of occupation, the majority were from the middle income groups.

5.2.5 Frequency of participation

The majority of persons interviewed (out of the total of 80) explained that they participated in such events frequently: 45% attended between four times a month and once a month. 32% attended between four times a year and once a year. Only 23% stated that it was either their first time or that they rarely attended such events. Those who participated most frequently also confirmed that they went to different locations depending on the purpose of the events and who were organizing them.

5.2.6 Time spent at the gatherings

69% of participants arrived at the beaches between 10.00am and 1.00pm, and 74% (generally the same groups) left between 5.00pm and 7.00pm – spending an average of 7 hours at the parties. Only 9% went to the beaches between 6.00am and 9.00am to 'claim the space', while 16% started their outings between 2.00pm and 4.pm. Those groups that started later tended to stay on the beaches until night-time – leaving from about 8.00pm to 3.00am the next day, spending an average of 9 hours on the beaches.

5.2.7 Types of activities organized during the events

The main activities observed were the sharing of food and drinks in almost all the gatherings (96%). Swimming (40%), beach sports such as football and volleyball (24%), dancing (15%) and

domino playing (13%) were among the most common activities noted. Relaxing together and chilling out to music were also mentioned by 23% of participants interviewed. Dancing to loud music was observed in six of the eight locations; there was no dancing recorded at Beau Vallon and La Digue.

The **provision of food and drinks** was organized in different ways: the most popular method was for people to bring-and-share, and this was reported by 58% of the respondents. Food brought from home by different members of the group and barbecued on the beach accounted for 20% of the gatherings while 12% of participants sought the services of outside caterers. Drinks were usually provided by the whole group; participants contributed an agreed amount of money or supplied some drinks.

Alcoholic drinks were observed and reported in 87% of all gatherings, in abundant supply. Beer was the most popular drink – present at 58% of the events, while spirits were being consumed at 44% of the gatherings. Wine was observed at only 6 parties. Soft drinks and water were also available at almost all the events. In 13 instances (16% of the events) children below the age of 18 years were observed consuming alcoholic drinks.

Decorations had been put up at 15% of the gatherings in almost all locations (except for Beau Vallon, Praslin and La Digue), and they consisted mainly of balloons and plastic ribbons. Most of these groups were celebrating birthdays. Anse Gaulette had the largest number of such events – 4 in total.

5.2.8 Environmental Concerns

The large majority of respondents stated that they were aware of certain environmental impacts large beach gatherings could have. Only 15% said they had no idea of the regulations in place regarding environmental issues such as noise, waste and the possible impacts of such activities on the immediate environment. Noise, waste and damage to the beach ridge and vegetation were the major issues observed and discussed with the participants.

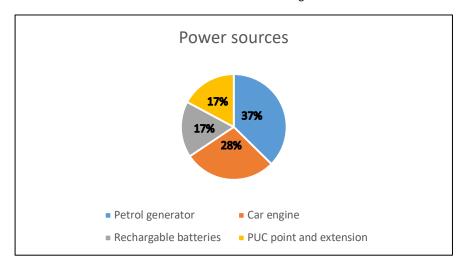
Noise

Sources of noise

The main source of noise was amplified music, with raised bass, being played at two thirds of the beach parties. In 56 of the 80 gatherings observed in all locations (ie in 70% of cases), loud music was being played throughout the time the groups were on the beach, an average of 7 hours per group. The volumes tended to increase when people started dancing in the afternoons. Music systems of various types were brought to the beaches: music players plus amplifiers (64%), car music systems operated from open car boots (26%), laptops or pen drives plugged into amplifying systems (10%).

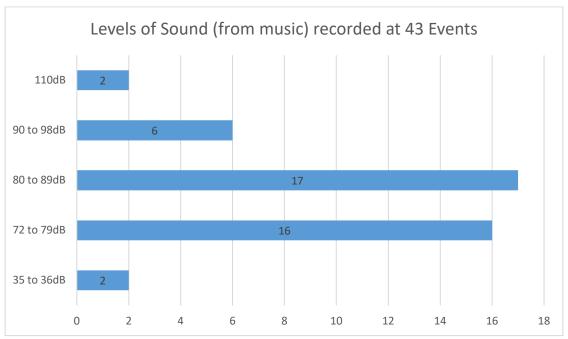
Sources of power

The sources of power were either from generators (37%), running car engines (28%), rechargeable "boombox" (17%) or from a nearby private house (17%) often with connecting wires running across the main roads.



Measurement of noise

The data collectors used the "Sound Level Meter" app on their smartphones to measure the volume of music being played. The bar chart below gives the number of events where music was played and the levels of sound measured in decibels (dB).



0-18 = Number of events where these levels were recorded

While the measurements were approximate (as explained in the methodology section) they provide a strong indication of the high level of sounds blasted out in open spaces for long periods – an average of 7 to 9 hours continuously. At almost three quarters of the gatherings where there was loud music the noise level far exceeded recommended levels – 70dB. According to WHO guidelines for the EU (2018) noise levels of between 80 and 85dB can be damaging to hearing after two hours of exposure. It is noted that the higher the levels, the worse are the effects on hearing loss. However, as hearing loss happens over extended periods of time and usually without pain, it seems difficult for people to make the causal connections.

The large majority of respondents (95%) said they were aware of the negative effects of loud music on hearing, especially in young children, but they were mostly of the view that their music was not too loud. However, groups that had no music (30% of those interviewed) thought the music nearby was too loud, and most said they were disturbed by it.

Waste

Waste observed during and after the gatherings included packaging, disposable cups and plates, plastic and glass bottles, bottle caps, paper tissues, disposable nappies, popped balloons, plastic strings and ribbons, and left-over food.

Almost all gatherings (96%) used plastic or paper plates, cups and cutlery. 19% of the groups also brought food in foil containers. In 25% of cases some of these items were found left as litter on the beaches immediately after the parties or the next day. Litter also included the remains of balloons and ribbons (5%), used tissues (4%), bottle caps (4%), cans (4%) and pet bottles (3%). There was evidence of participants relieving themselves in the nearby bushes in all locations (people sighted using the bushes as toilets and soiled tissues left around).



There was very little food waste observed in any of the locations. Some food waste was found in one spot in the bushes at Au Cap, and another small amount at Anse Gaulette was being eaten by rats. 82% of participants interviewed confirmed that left-over food was taken home either to be eaten later (61%) or for their dogs (22%); 14% said they placed such food in the bins.

Damage to beach ridge and vegetation

The main destructive factors observed were (1) density – ie the size of the groups involved; (2) vehicle access to beaches and parking; (3) cleared spaces made for tents and picnic furniture; and (4) types of activities organised. Over 60% of the respondents said they were aware of possible damage that could be caused to the immediate environment of the sites where they were partying, (such as erosion, pollution, the effects of littering, loud music disturbing others, loss of other species) but no-one felt that the activities they were involved in would have such damaging impacts.

Density

As noted above approximately two thirds of the parties involved between 10 and 75 persons, with an average of about 17 persons per group. The large groups occupied approximately 20 to 30sq meters of beach space per group, usually very close to the beach ridge or beyond it, because of the tides.

Access and Parking

Almost all participants travelled to the locations by car or truck and parking had to be found near the beaches. At all eight locations in 75% of cases vehicles were observed driving into gaps in the beach vegetation to drop off people, picnic furniture, food and music systems. This has the effect of further widening and eroding the gaps, allowing more sea water to flow through

at high tide, which was also observed. Considering that such large gatherings are organized at these locations practically every weekend, parking spaces have been forced into the beach ridges along most of the beaches. Designated parking is found only at Beau Vallon.

At 28% of the events where music was being powered by car engines, the vehicles remained on the party site (ie on the beach) all through. Over the duration of the parties a certain amount of traffic movements also occur, with more people arriving or leaving, and participants going to the shops.



Space for tents and picnic furniture

At 60% of the events at 5 locations participants had set up tents with tables and garden chairs, barbecue grills and music systems. The space thus occupied is also the area most used by all participants in a group. It was noted that no new vegetation was growing in the areas most used by large beach parties and the high water mark was moving further inland as the sites levelled out. In a few instances branches, mainly of *veloutye*, had been cut down to accommodate the tents.

Activities organized

The activity found to be most damaging to the beach ridge and vegetation was dancing. Compaction of sand, broken tree branches and trampling over young shoots of plants were some of the effects observed. At a social level, by the time participants got to dancing they often appeared to be under the influence of alcohol, with limited control over their movements and paying scarce attention to others around, especially children.

Reasons for having large gatherings on beaches

A total of 76 respondents gave various reasons for having such gatherings on beaches, summarized as follows:

- There is more space, it's free and easily accessible 33%
- It provides a change of scene, you can relax and enjoy the open air 25%
- The space is free (no rental cost) and easily accessible 21%
- There is no house cleaning afterwards 18%
- It avoids disturbing neighbours (noted especially by respondents who live in flats), and there are no 'veyer zaksyon' (inquisitive neighbours wanting to know what's going on) – 12%.

5.2.9 Participants' Proposed Solutions

Participants put forward a wide range of proposals, the main ones (in order of priority) being:

- 1. Provide special recreational spaces such as beach kiosks, fun parks, picnic parks, public gardens, forest venues, all with appropriate facilities including water and electricity supplies, parking spaces, toilets and bins, all maintained in good condition over time.
- 2. Provide free space for family parties at community centres or other similar venues.
- 3. Organise family parties at home (proposed by beach users who did not appreciate loud music and other disturbance).
- 4. Large group parties with loud music should be held in closed spaces which are sound-proofed equivalent to discos which should not be in open areas.
- 5. Go to restaurants and hotels for large family celebrations.
- 6. There should be effective beach patrols (not like current tourism police and other police who have little effect) to control littering, noise and disturbance to other beach users.
- 7. Create awareness among users, to be respectful and show consideration towards other beach users.
- 8. Provide appropriate venues for group gatherings on Praslin and La Digue as there are no such facilities presently.

5.3 Survey Results - Residents

The residents' questionnaire (Refer to Appendix 3) was administered to 109 persons including people from private homes - 76%; owners or managers of guest houses and self-catering facilities - 14%; and visitors /tourists - 10%. The large majority were aged 30 years and above, and 60% of the respondents had children living at home. Almost all respondents resided in the eight locations mentioned above (at 6.1) except for a group of 10 from Bel Ombre and one person located on Cerf Island. Most of them lived in close proximity (between 30 and 500 meters) to places where large group gatherings or noisy activities were held.

Residents from:	No.	
	interviewed	
Anse Royale	12	
Au Cap, Au Cap	18	
North East Point, Glacis	11	
Beau Vallon	20	
Bel Ombre	10	
Anse Gaulette	11	
Anse Boileau	04	
Cerf Island	01	
Praslin	13	
La Digue	09	
Total	109	

5.3.1 Main Causes of Disturbance and their Effects

92 residents responded to this question, and 88% of them stated that their main area of concern was noise coming from the following sources:

- (i) large beach parties or restaurants playing loud music (64% of the 92 respondents);
- (ii) loud music in cars with upturned bass and/ or loud revving of cars and motorbikes with modified exhaust systems 22%;
- (iii) Neighbours' arguments and swearing 5%;
- (iv) Noise from nearby building works 5%;
- (v) Engines of jet skis and racing boats, and music from leisure boats 4%.

In all 92 cases the residents pointed out that the noise was "loud" or "very loud". Respondents who had children (65 in total) confirmed that they were aware of the harmful effects of loud music/ noise on children especially, and that their children were disturbed by the noise.

The effects of such disturbances were considered by residents as:

- Annoying, and disturbing the peace 53% of respondents.
- Disturbing for tourists; and they complained or checked out of the premises in 23% of cases.

- Preventing people from getting a good night's sleep, especially when the house is shaken by bass noise from cars' music systems – 15%.
- o Interfering with children's studies, TV watching and sleep, in 9% of cases.

5.3.2 Time and Frequency of Disturbances

68% of the 84 residents who responded observed that beach parties usually started around 10.00am and lasted for an average of 7 to 8 hours. Parties that started later in the day, eg at 2.00pm or 3.00pm went on for longer – to 2.00am or 3.00am the next day. Noise from cars and motorbikes (loud music and/ or modified exhausts) could be at any time of the day, while noise from jet skis and leisure boats were mainly during the day, usually afternoons to early evening.

64% of respondents from all locations confirmed that the disturbances occurred mostly at weekends, whereas 18% stated they experienced them daily. Another 18% said such disturbances happened on random days, depending on the activities being organized.

5.3.3 Complaints and Actions Taken

A total of 62 residents responded to this question. 56% of them explained that they had made complaints to the police, and 30% to the district administrator (DA) or the green line. 40% of the complainants who said they called the police stated that the police took no action. In instances where the police came to the scene (32% of cases reported) the loud music resumed after the police left. In 12% of cases the DA also took action — mostly calling for help from the police. The respondents expressed a high level of frustration, especially as 80% of them claimed they were having to put up with such disturbances almost every weekend for a number of years.

5.3.4 Reactions of Tourists Interviewed

While we note the small size of the sample involved, we would maintain that the responses of visitors still provide an indication of views of those staying in accommodation closer to the district communities. Of the 11 tourists interviewed all except one expressed concern about the level of noise and disturbances they had encountered on beaches or in the vicinity of their accommodation. Almost all of them pointed out that they had come to Seychelles to relax and find peace and listen to the waves on the beach, not to party. And if they had wanted loud music they would go to a disco. About one third said they complained about noise to their guest-house managers, and they were told this was a rare occurrence, but their experiences indicated otherwise.

5.3.5 Residents' and Visitors' Recommendations

The residents and visitors made the following recommendations, listed here in order of priority:

- 1. The authorities must enforce existing laws and also make stronger laws that should help to protect the rights of all citizens.
- 2. The laws should ban the use of amplified music on beaches and in other open public spaces.

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- 3. Put in place and enforce clear laws that regulate the level of sounds inside cars and emanating from car and motorbike exhausts, considering that such noise can contribute to hearing loss, especially in children.
- 4. Control the importation of loud music systems for cars, as well as accessories used in exhaust modifications that create noise.
- 5. Construct special party venues within communities so that beaches are not used on a regular basis for large parties, in order to reduce environmental degradation and nuisance.
- 6. Strengthen all laws related to the control of sound/ noise in line with EU and international standards.
- 7. Organise public education campaigns on the harmful effects of noise (and loud music in particular), on hearing loss, stress, sleep deprivation and other aspects of human health.

8 Conclusion

This study (a first of its kind) has provided us with very useful data highlighting a number of issues to be addressed by all parties concerned, as soon as possible, if Seychelles is to maintain its reputation as a peaceable country and a pristine tourism destination. Further studies will need to be done to explore more deeply some of the areas discussed here - such as the adverse effects of noise on health, the recreational needs of communities at district levels, the views of visitors /tourists on holiday, and alcohol abuse and its effects on productivity and the country's economy.

The main outcomes of this study suggest that, at one level, there is a lack of affordable access to places where large family and other groups can gather for social events – hence the use and abuse of beaches and coastal areas. With people becoming more affluent and mobile the options for leisure activities have increased, including greater demands being made on beaches and coastal areas. The beaches however, are not equipped with facilities to accommodate large gatherings (30 to 80+ persons) for long periods. At the same time numerous beaches in more isolated parts of the islands have become inaccessible to groups of picnickers because of the nature of hotel developments that have taken over these locations – eg. Carana, Northolme and Sunset beaches, Petite Anse, Val Mer, Anse Louis and Port Launay beaches, to name a few. As a direct consequence, the same locations visited through this study are used constantly for large gatherings, leading to serious environmental degradation, high levels of nuisance and annoyance to people in adjoining residential areas, as well as to those who wish to spend a quiet time on beaches. While party participants feel entitled to using beach space as they see fit, there is little consideration for other beach users and for the immediate environment, especially as they get more inebriated as the events progress. These untenable circumstances place the different groups (participants, residents and tourists) on a collision course that needs to be addressed urgently.

Additionally, the survey reveals that there is a substantial increase in noise levels in public areas which are becoming intolerable – in particular loud music next to public roads, traffic noise exacerbated by loud music from cars, along with modified car and motorbike exhausts that produce excessive noise. Current legislation, especially those related to the control of noise pollution are not comprehensive enough, they are not properly understood and they are generally not fully enforced.

There is clearly an urgent need to address these issues, in particular the protection of coastal areas and the growing annoyance and nuisance of noise in open and public places. Growing scientific evidence also points to direct causal links between exposure to noise and hearing loss, as well as to states of annoyance and ill health. Legislation therefore needs to be reviewed to ensure that they are in line with international standards, easy to understand by the public and enforceable. At the same time communities must be sensitised on the negative effects of noise and annoyance, and on the importance of protecting the environment.

Therefore, in addition to the recommendations of the party participants (section 5.2.9, p13) residents and visitors (section 5.3.5, p15), S4S, through its project team, wishes to make the following **recommendations**:

In the short term:

- 1. Ban the use of amplified music at picnics/parties on beaches and in other open public places.
- 2. Ban the use of loud car stereo systems, other than the factory-installed stereo equipment in cars.
- 3. Ban the use of balloons and other synthetic decorations at picnics/parties on beaches as they are a source of land and sea pollution.
- 4. Limit the size and number of tents that can be erected on beaches for picnics/parties.
- 5. Apply existing laws consistently, especially in the interest of residents and the immediate environment of coastal land and sea.
- 6. Amend the Environment Act to make it a requirement for special permission to be sought for beach gatherings of more than 10 people, and such gatherings should be restricted to beaches not adjoining residential areas. A centralised 'Events licencing office' with a data-base of all approvals issued to applicants should be maintained.
- 7. An in-depth study on the adverse effects of noise should be undertaken urgently by the Ministry of Health and other partners, and which will inform future policy decisions.

In the medium term:

- 1. Review all legislation related to the issues raised here as part of the process of producing a comprehensive 'Integrated Coastal Management Plan' for Seychelles. The piecemeal approach taken so far is clearly not working.
- 2. Clear laws and guidelines must be established for the control of noise in communities and in public spaces including beaches and roads, taking into account the growing knowledge related to the adverse effects of leisure and traffic noise on people's health.
- 3. Put in place Demerit regulations for drivers causing noise pollution in vehicles including loud music, hooting and revving of engines. Drivers of offending vehicles (cars, trucks, motorbikes and scooters) should receive commensurate numbers of demerit points on their driving license records according to the extent of the disturbances caused.
- 4. The role of the Environmental Police Department should be reviewed accordingly, to ensure a more comprehensive and co-ordinated approach to enforcement of laws that aim to maintain a more quiet and peaceful environment.
- 5. Laws that are put in place should be reasonable, easy to understand, enforceable, and in line with international standards.

References

1	Sound Level Meter Apps – How Accurate Are They	https://www.cirrusresearch.co.uk/blog/2017/09/sound-level-meter-apps-accuracy/
2	Environmental Noise Guidelines for the European Region, 2018	WHO Regional Office for Europe
3	Environmental Protection (Noise Emission Standards) Regulations, 1999	SEYLII
4	Penal Code – Amplification of Sound and Playing of Music (Control) Regulation, 1976, amended in 2001	SEYLII
5	Beach Control Act (Cap 14, revised in 2010), Sections 17 and 19	SEYLII
6	Environmental Protection Act, 2016 – Sections 56(1) and 68	SEYLII
7	Environmental Noise: Valuing impacts on: sleep disturbance, annoyance, hypertension, productivity and quiet	Department for Environment Food & Rural Affairs www.gov.uk/defra
8	WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Annoyance	International Journal of Environmental Research and Public Health, 2018
9	Sound and Vibration Basics Leq - Equivalent Continuous Sound Level - LAeq	Gracey & Associates: www.gracey.co.uk
10	Environmental Noise	EMS Bruel & Kjaer, 2001
11	Guidelines for Community Noise Impact Assessment and Mitigation	International Institute of Noise Control Engineering (INCE) Publication 11-1, March 2011
12	Seychelles Sustainable Development Strategy, 2012 – 2020.	Government of Seychelles, 2011
13	Sustaining social development in a Small Island Developing State? The case of Seychelles	L Campling and M Rosalie. Sustainable Development, Sust. Dev. 14, 115–125 (2006)

Appendix 1 - Data collector's checklist

SECTION 2 – CHECK LIST



NOTE: Please discretely take photos of the venue, groups, décor, food & drinks, litter,etc..

Time of day (of observation)		
How many persons are present?	Approx: 20 / 30/ 40 / over 50	
Estimated average age	Mixed group / under 40 / over 40 years old	
Are there small children in group?	estimate average age - under 10/ 10- 18 years	
Are children being supervised?	Yes/ No / Couldn't tell	
Are there chairs and tables at the venue?	Yes No	
Is there a BBQ?	Yes No	
Is there alcohol available and being used?	YesNo	
About how many crates/ or bottles of alcohol can you see?	No. of crates of beer –	
	No. of spirits bottles -	
What do the children drink?	Water/ sodas/soft drinks,	
Any observed drinking alcohol?	Yes No	
What type of dishes, crockery and cutlery are being used?	Plastic / paper / glass/ ceramic/ other	
Type of decorations put up	Balloons / plastic flowers / fresh flowers / others Specify:	
Is there music playing? From what source?	From a Radio/ In open boot of vehicle / amplifiers on ground or beach/ other - specify	
How loud is the music?	Measure on audio meter and record here:	
What is the power source?	Generator on beach or back of a truck/ cable from a nearby house/ running car engine /other – specify:	
Was litter left behind?	Note type and quantity	

4

Appendix 2 - Participant's questionnaire



Use of Beaches and other Public Places for Social



or seychelles recommendations for the management of such places and activities QUESTIONNAIRE – Participants in beach parties and other gatherings in public places April 2019						
	JE: District/Bead					-
Exact Locati	ion: tick the ap	propriate box	•			
Beach	Other public area	Hotel poolside	Residential private garden	Public car park	Community Centres	
Sustainabili other public	n ame isty for Seychelle c places for socia use the public f	s and citizens al gatherings	generally to fin . The aim is to m	d out more ab nake recomme	out the use of l	beaches and
minutes and	ld like to get you d ask some ques nswers will be k	tions, so we d	an get your vie		-	u for a few 10 minutes. And
piblik pour f nou ti a kon	mandasyon ave	syon/ rankon detrwa kesty	t sosyal. Nou ti d on lo diferan las	a voudre gann spe sa bann ko	y zot pwendvi lo alite aktivite. Sw	o sa size; e alor rivan sa letid S4S
THE OCCASI 2. What are	I ON you celebrating	? Ki lokasyon	zot pe selebre?	(draw a circl	e round the eve	nt))
	out / Birthday / ase specify)	=				roup gathering/
2.1 How ma	ny people will b	e/are attendi	ng the event? K	์onbyen dimoเ	ın ou pe ekspek	te?
2.2 What ag		participants	you belong to?	Ki group laz bo	ann envite? (Ent	ter the number for
	18 – 27	28 – 37	38 to 47	48 to 57	57 plus	
2 - 17					<u> </u>	
	do you and othe	r people in th	ne group live? <i>k</i>	ote zot reste i		

	did you arrive here and how long will the group be staying? Kel er zot ti ariv la, e konbyen letan zot
2.5 What k	kinds of activities are being organised for the day? Ki bann aktivite zot pou organize pour lazournen?
•	provisions do you make for food and drinks? Koman manze ek labwason i ganny organize pour sa (Prompts: everyone contributes in-kind, or money Caterers or home cooked, or bbq?)
- How mu ozordi?	ch do you bring to drink, and what type of drinks? Ki kantite e kalite labwason ki'n ganny anmennen
No. of BOT	TLES TYPES
	e much food and drink left over? What happens to the leftovers and other waste? Ki kantite manze on ki reste normalman, e ki zot fer avek tou bann restan?
the balloo	e balloons and other decorations along with much plastic packaging are evident) What happens to ns, other decorative materials and packaging at the end of the day? Ki arive avek sa bann balon e rasyon ki la?
Konbyen f	nany times in a year do you and/or your friends gather in this location, or in similar locations? wa zot zwen isi, ouswa dan landrwa parey isi, pour zot selebre? And which other
	do you think more and more groups organise such gathering on beaches and similar places? <i>Pour ki</i> rwar dimoun i organiz bann parti konmsa lo lans e lezot landrwa parey, de plizanpli? (Prompt: costs?
ACTIVITIES	
	back to the activities of the day, apart from eating and drinking, will there be dancing? Swimming? nnou retourn lo bann aktivite lazournen – pou annan danse? Naze? Lezot?
3.2 When	will the dancing start? And how long will it go for? Kan pou komanse? E pour konbyen letan?
3.3 What o	do you think of the volume of the music? <i>Ki ou panse lo sa volim lanmizik</i> :
ок	Could be lower Could be louder
lalwa I dir	u aware of what the law says about the level of loud music in public places? <i>Eski ou o kouran ki</i> lo lanmizik for dan landrwa piblik? Yes / No (In the case of 'Yes': What does it say? <i>Ki lalwa</i>

3 4 Are you aware that continuous loud music (for over an hour) can damage our hearing, especially children? Eski ou o kouran ki lanmizik for i kapab afekte nou zorey e fer nou vin sourd ek letan, sirtou zanfan? Yes / No
3.5 Have you had any complaints from people living in the area or other users of this place/beach (eg tourists), or the police about noise or other issues? Eski ou'n zanmen ganny konplent ek dimoun ki reste dan zalantour oubyen ki osi pe servi sa lespas / lans, ouswa lapolis lo kestyon tapaz oubyen lezot problenm? (Give details of the complaints and your reactions)
3.6 Are you aware of the issue of sea level rise and its effects on beaches and the surrounding grounds? <i>Eski</i> ou o kouran bann problem konsernan nivo lanmer ki pe monte e lefe ki sa i kapab annan lo nou bann landrwa lakot?
PROPOSALS
4.1 Would you have any suggestions as to how everyone could enjoy this place without upsetting each other and the environment around? Ou annan okenn sizesyon lo koman tou dimoun ki anvi i kapab 'enjoy' sa landrwa san koz nwizans pour lezot?
4.2 Do you know what damage to the backshore and beach vegetation could be caused by frequent big gatherings like we have here today? <i>Ki domaz ou krwar sa bann kalite gro aktivite ki fer isi preske tou le wiken i kapab fer lo sa lanvironman otour nou la?</i>
4.3 Any other suggestions? What other options / venues can there be for large social gatherings? <i>Lezot sizesyon? Ki lezot landrwa ki dimoun i kapab servi? Lezot fasson fete?</i>
Thank you for your help.
3

Appendix 3

Resident's questionnaire



Use of Beaches and other Public Places for Social gatherings: a study to carry out an assessment and make recommendations for the management of such places and activities



QUESTIONNAIRE – Residents of adjacent areas to the beaches or other

public places where such gatherings take place, including visitors/ tourists

April 2019						
District		d	ate Tin	ne		
private house /	guesthouse/ self-	catering flats/ bea	ch hotel (Tick as	appropriate)		
1. Introduction						
and citizens gen	erally to find out m aim is to make reco	ore about issues rela	ated to the use o	beaches and other	O Sustainability for Sey r public places for socia c facilities can be used	al
Can we ask you a be kept strictly o		we can get your vie	ws? It will take no	o more than 10 min	utes. And all of your ar	nswers wil
First, we need ju	st a few details abo	out you:				
1.2. What age	group do you beloi	ng to? (Tick appropri	ate box)			
18 – 27	28 – 37	38 to 47	48 to 57	57 plus		
1.3 Where do	you live?					
Address (village)	:	Occu	pation:			
1.4 Do you hav	e children living wi	th you? Yes / No)			
How many?	. How old are the	y? Ages: A)	, B), C)	D)		
2. Proximity to i	noisy public places	or events:l	cmsMeter	5		
2.1 Do you (or ye	our family or guest	s) get disturbed by lo	oud music? yes	/ no.		
Please describe	what it's like? (Pro	mpt: in terms of leve	el, type of music a	nd their disturbing e	effects):	
Level:	TYPE					
EFFECTS						
2.2 How often d	oes it happen?					
		ce a week / on	ce a month /	other	(tick one choice)	
		nost disturbed by th				
-		/ed, Thur, Fri, Sa		ne applicable day/s (of the week)	
		you hear the music				
	•			.,	• 1	
2.5 What other l	kinds of noise is dis	turbing you? (tick m	ore than one typ	e of noise, if applica	ble)	
Loud music	Dogs barking	Builders nearby	Motorbikes	Leaf blowers	Other noise	
			racing		(specify)	

2.6 Have you been disturbed by such noise/ loud music for a while? Yes / No
If Yes, how many months/ years ago did this problem start? Months ago / Years ago
2.7 Where is the noise/ music coming from?
Neighbour's house (Name the street)
from cars parked nearby (specify location/ street)
beach party nearby (specify which Beach)
Hotel Party nearby (Specify which hotel)
Yachts/ Boats cruising nearby (Name the Bay)
3 Effects On Children
3.1 Do you have children under 18 staying with you? Yes / No
3.2 Does the noise disturb the children during the day? Yes / No. At night? Yes / No
3.4 Do you know that continued loud noise can harm a child's hearing? Yes / No
4. Complaints Made / Action Taken
4.1 Have you made complaints about the noise? Yes / No
4.2 Who did you complain to?
4.3 If you lodged a complaint with the police, do you have a reference number from them? Can you show us?
4.4 What was the outcome of your complaints?
5. Recommended Solutions
5.1 Do you have any suggestions on how the government could control loud music from public places?
5.2 Do you have any suggestions on how to control other types of noise pollution that are disturbing to you and the immediate surroundings?
6. For tourists: Do you find beach parties particularly disturbing? (Explain why)
Thank you for your time. Would you like to be kept informed of the results of this survey? YES NO

Appendix 4

Relevant Laws - Extracts from Seychelles laws and regulations pertaining to noise:

Environmental Protection (Noise Emission Standards) Regulations, 1999.

Sections 6 and 40 Environment Protection (Noise Emission

SI. 49 of 1999 Standards) Regulation

Citation

1. These Regulations may be cited as the Environment Protection (Noise Emission Standards) Regulations.

Noise emission standards

2. The limits of noise level in respect of areas and times referred to in the Schedule are hereby prescribed as the noise emission standards for the purpose of sections 6 and 9 of the Act

Application of Regulations

3. These Regulations shall not apply to noise generated by aircraft, or vehicular traffic or animals.

SCHEDULE

In this Schedule -

"Authority" means the Authority within the meaning of section 4 of the Act:

"noise" means the vibration of a frequency within the range of 0 - 20,000 Hertz;

"dB(A)" means decibels on the A-weighting scale;

"Leq" means the continuous sound level which gives the same total energy as the varying sound level;

"L(10)" means the sound pressure level exceeded 10% of the time;

"pristine" used with reference to an area denotes a natural environment of particular value because of its quietness, beauty or natural sounds;

"impulse" means an abrupt variation of short duration of noise level followed by a rapid return to the initial state;

"industrial" used with reference to an area means an area of land developed for the sitting of trade and manufacturing enterprises;

"residential" used with reference to an area means an area mainly occupied by private houses.

continued

2. Noise Emission Standards

Description of Area	Time	Limits in Decibel dB(A)
Residential	0600 hrs - 2300 hrs	60 Leq
	2300 hrs - 0600 hrs	55 Leq
Industrial	At all times	(L10) 75
		Measurement shall be
		done at boundaries of
		industrial site
Audible intrusion in		60 Leq
pristine acoustic		
environment		

3. Testing

Testing shall be carried out in accordance with Appendix A of SS43: 1998 or any other test methods approved by the Authority.

Equipment used for measurement of noise level shall be approved by the Authority.

A sampling time of 15 minutes shall be adopted for test unless the Authority decides otherwise

Penal Code – Amplification of Sound and Playing of Music (Control) Regulation, 1976, amended in 2001.

SUBSIDIARY LEGISLATION: THE AMPLIFICATION OF SOUND AND PLAYING OF MUSIC (CONTROL) REGULATION

[30th August, 1976]

S.I. 81/1976 S.I. 6 of 2001

- 1. These regulations may be cited as the Amplification of Sound and Playing of Music (Control) Regulations.
- 2. In these regulations words and expressions used shall, unless the context otherwise requires, have the meanings assigned to them in the Penal Code.
- 3. No person shall in any ballroom, dance-hall, "discotheque", business premises, restaurant, house, shop or other place whatsoever operate, cause, play or suffer to be operated, caused or played any radio, wireless gramophone, record-player, loudspeaker or other instrument or instruments, whether of the same nature or otherwise, made or adapted for the production, reproduction or amplification of sound or music, in such a manner as to cause annoyance or disturbance to any person, or causes any annoyance or disturbance thereby, whether in or outside such places:

Provided that the Commissioner of Police may, on the application in writing made by any person, and for good and sufficient reason, grant an exemption from the provisions of these Regulations for any specified period of time, in consultation with the Ministry responsible for Environment.

- 4. Any application for exemption from the provisions of regulation 3 shall be made to the Commissioner of Police and shall contain such information as the Commissioner of police may require to satisfy himself as to the nature of the application and any exemption granted by the Commissioner shall be subject to such conditions as he may lay down including a requirement to take specific measures for the protection of persons likely to be exposed to excessive noise.
- 5. The Commissioner of Police or any police officer may enter upon any premises or place mentioned in regulation 3 and may require that any noise, music or sound be abated or lowered in volume and if such request is not complied with may arrest or cause to be arrested any person whom he reasonably believes to be responsible for such noise, music or sound and may seize any radio, wireless, gramophone, record-player, loudspeaker or other instrument or instruments which he reasonably believes to be the cause of such noise, music or sound.
- 6. Any person who gives false information to the Commissioner of Police or any police officer or who fails to comply with or is in breach of any of these regulations or any condition laid down in regulation 4 shall be guilty of an offence and shall be liable, on conviction, to imprisonment for one year and to a fine of Rs.500, and, in addition the Court may order the confiscation of any radio, wireless, gramophone, record-player, loudspeaker or other instrument or instruments which may have been used in the commission of the offence.

Beach Control Act (Cap 14, revised in 2010), Sections 17 and 19:

17. Any person who -

- (a) without the prior written consent of the Commissioner of Police, engages in or plays on a beach any game, sport or other activity likely to endanger, obstruct, inconvenience or annoy any other person using the beach;
- (b) fails to comply with a condition subject to which the written consent of the Commissioner of Police is granted,

shall be guilty of an offence.

Section 19:

- (1) The Commissioner of Police may make such arrangements as he considers necessary for the parking of vehicles adjacent to the beach, for the control of refuse and generally for ensuring the cleanliness and good order of the beach foreshore.
 - (2) Any person who:-
 - (a) without the prior written consent of the Commissioner of Police, or other than in an emergency, drives or parks any vehicle on the beach;
 - (b) without the prior written consent of the Commissioner of Police, erects any temporary booth, tent, shed, stand, stall or other structure upon the beach;
 - (c) other than in receptacles provided for that purpose, throws down, drops, leaves or otherwise deposits on a beach or inshore waters of the sea anything whatsoever in such circumstances as to cause, contribute to or tend to lead to defacement by litter of that beach or the inshore water of the sea;
 - (d) begs, solicits or in any way importunes the public or any person on the beach and the inshore waters to which these regulations apply,

shall be guilty of an offence.

Environmental Protection Act, 2016 – Sections 56(1) and 68: Section 56(1):

Any person who does an act or omits to discharge a duty and thereby causes any common injury, or risk, or danger, or damage, or annoyance or obstructs or cause inconvenience to the public in the exercise of their common rights, whether the act or omission complained of is convenient to a larger number of the public that it inconveniences, commits the offence of nuisance under the Act.

- (2) Where the Administrator is of the opinion that a person has committed a nuisance, the Administrator may cause a nuisance notice to be served on the person.
- (3) A nuisance notice under subsection (2) shall -
 - (a) state that the Administrator is of the said opinion and specify the source and nature of the nuisance;
 - (b) specify the measures that shall be taken to abate the nuisance; and
 - (c) specify the period within which the abatement under paragraph)b) shall be implemented.
- (4) The Minister may prescribe the different types of activities or zones to be exempted from committing a nuisance
- (5) A person who fails to comply with a nuisance notice served under subsection (2) commits an offence.

Section 68: A person who commits an offence under section56(5) is liable on conviction to a fine of not less than SCR 25,000 and not exceeding SCR 100,000 and to 2 years imprisonment or to both such fine and imprisonment.