

A Case Study of the Kithulgala Adventure Base Camp, whitewater rafting: Standards and Risk Management

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ABSTRACT- Risk is and in inherent part of adventure recreation and is often a main reason for participation in activities such as whitewater rafting. The particular study titled “The Kithulgala Adventure Base Camp, whitewater rafting: Standards and Risk Management” was carried out with special reference in Kithulgala Adventure Base Camp. This study was thoroughly undertaken by researcher by focusing on the problem that was identified from the preliminary observation and through experience. The main purpose of study was to explore current standards of whitewater rafting and to explore risk management practices of whitewater rafting. The researcher carried out an exertive literature review to provide conceptual background for the study. Simple random sampling method was used and selected 20 participants for the sample for this study and also organizational manager included. Data collection occurred using a single case design, which included interviews, observation and visual analysis. Three types of method, what are the qualitative analysis technique was used to data analysis proceed. The result provides that, organization which currently involve in Adventure Base Programs are practicing their own formulated standards. When it comes to conclusions with the consideration of findings it can be said, in Sri Lanka Whitewater Rafting Standards is in a very low level. There are no answerable persons connect in to this. The persons who are working about this field also haven't more concentration about this. Looking at the standards in the world, it is clear that we must bring Sri Lanka even to a closer level. According my point of view as the researcher to expand rafting more in Sri Lanka, we must develop Whitewater Rafting Standards.

INDEX TERMS-: Whitewater Rafting, Adventure, Standards, Risk Management

I. INTRODUCTION

At the moment, it has been started to create a trend for adventure based programs. During past period, it could be seen rapid progress in adventure based programs. So, it's necessary to consider about the sides which would be developed in this field. As a step of that consideration, here it has been studied about international standards of adventure based programs and way of practicing those standards.

Risk is an inherent part of adventure recreation and is often a main reason for participation in activities such as white-water rafting. However, as an awareness of the need to mitigate risk in the adventure recreation industry has arisen in recent years, owners, managers and

participations are faced with the challenge of balancing the inherent risk in adventure recreation activities.

At the same time, it would seem contradictory that adventure recreation participants seek to engage in programs in which elements of risk serve

as motivation for participation, while concurrently feeling a need for their safety to be ensured. It is even possible to offer a safe, yet risky experience for participants whose image of adventure is often falsely created and fueled by the popular media? Is this what sell adventure?

Adventure recreation companies' pamphlets and brochures advertise excitement, thrills, adventure, fun and exhilaration through participation in activities involving elements of risk. This research seeks to uncover how white-water adventure recreation in Kithulgala Adventure Based Camp make decision in adopting risk mitigating standards and regulations and their perceptions of how proposed standards and regulations impact their service provision.

There would be a limited need for standards and regulations if injuries were not occurring in adventure recreation. Studies of accident and injuries in the New Zealand adventure industry highlight the current and past realities of pursuing adventure recreation and suggest that an increased awareness of the realities of risk in offering adventure recreation activities is needed (Bentley & Page, 2001; Bentley, Page, & Laird, 2000).

In a North American context, a study of The National Outdoor Leadership School's (NOLS) incident profiles calculates rates, causes and severity of injuries occurring during the operation of their trips which highlights the occurrence of risk on these types of experiences (Leeman & Schimelpfenig, 2003). Specific to the white-water adventure recreation industry, studies have identified common injuries associated with white water kayaking (Fiore, 2003; Fiore & Houston, 2001) and rafting (Fiore; Whisman, 2003; Whisman & Hollenhorst, 1998) as well as the severity of these injuries and the impact that these activities have on the human body (Burrell & Burrell, 1982; Wallace, 1992).

In order to mitigate and prevent injuries and fatalities occurring in white water adventure recreation a variety of standards, regulations, qualification and policies can be implemented.

Several studies have looked at the deficiencies of government-initiated regulation schemes (Chisholm & Shaw, 2004; siderelis & moore, 2006; Woollenvan, Allison & Higgins, 2007). However, these studies found that these regulation schemes were usually developed by officials with limited knowledge of the actual needs and practices of the activity for whom the regulations were intended.

Previous attempts by the Canadian Government to regulate white water rafting have failed to address the increase in injuries and fatalities and little research is available with regards to the effectiveness of government-initiated regulations in the white-water adventure recreation industry.

However, research into a government initiated licensing scheme in the United Kingdom offers some insight into the implications government

regulations have for the recreation providers and the industry, particularly if the regulations are developed in response to a widely publicized incident (Woolleaven et al., 2007). In New Zealand, the whitewater industry is highly developed and has a variety of government initiated accreditation processes and qualification standards for white water adventure recreation (Chisholm & Shaw, 2004).

Although qualification standards for adventure guides have been discussed in-depth through the literature (Ewert, 1985, 1987; Gass, 1999; Priest & Gass, 1997; Webb, 1999), whitewater adventure recreation providers currently employ unofficial industry qualifications standards to show guide/leader competencies in the Kithulgala Adventure Based Camp. Very hard to find International Standards for guide competency exist

New regulations have been proposed to regulate commercial white water rafting across Canada. These regulations will govern all aspects of commercial white-water rafting, from equipment requirements to record keeping procedures. The impacts and influences of these regulations and how they are similar to and differ from the current standards, qualifications and policies practiced by white water rafting in the Kithulgala Adventure Based Camp is the main focus of this research.

II. IDENTIFY, RESEARCH AND COLLECT IDEA

Based on this, the key objective of this research is, to examine the variance between Sri Lanka standards and world standards in white water rafting. The Specific Objectives are, to identify world standards practices for adventure based camp in Sri Lanka and to identify the standards in white water rafting in Sri Lanka.

This study used the qualitative case study research design to guide the study and the collection of data. Data collection took the form of unstructured interviews of unstructured interviews of owner and manager of the Kithulgala Adventure Based Camp, selected 20 participants and document analysis of program policies related to qualifications and regulations. In this regard, external secondary data were simultaneously utilized. To collect the external secondary data, the sources such as textbooks, Journals, Publications and World Wide Web were referred.

III. DATA PRESENTATION AND ANALYSIS

There are many international standards which are considered as necessary for Adventure Base Camp and Whitewater rafting activities. Basically, British Canoe Union, an internationally recognized institute has put forward these accepted standards.

Accordingly, the researcher has used the standards mentioned in "Camping Standards Manual – Revised Edition 2014" issued by "The United Church of Canada" and "River Rafting Adventure Activity Standards" published by "Outdoor Recreation Center – Victoria Inc." in this case study. Thus, these standards used by the researcher are considered as the internationally recognized standards. (Appendix A)

The researcher intends to make a comparative analysis of the difference between international standards and the standards and the used in Kithulgala Adventure Base Camp through this study. A final summary will be given as to how the local conditions in Adventure Base Camp could be improved to full in line with the international standards through this. For the successful presentation of this study, the research has used "interview" method which is chiefly used for collecting data. Having visited Kithulgala Adventure Base Camp and having discussed with the manager and the participant, the researcher managed to collect all the necessary data. Apart from this method even the observation

method was adapted in this venture. The study will be continued analyzing the data collected through interviews and observations with the international standards comparatively.

The findings for this study are derived from two primary data sources. First, camp director who, Kithulgala Adventure Base Camp was interviewed. Then, first day three male local participant and three male foreign participant were interviewed. And two female local participant and two female foreign participant were interviewed. And also, the second day three male local participant and three male foreign participant were interviewed. And two female local participant and two female foreign participant were interviewed. Each interview ranged in duration from one hour in length. Interview questions were guided by the interview guide/ interview protocol. Participants were asked initial questions pertaining to their personal experience and roles. These questions were followed by the pertinent research questions and their associated sub-questions as represented in the interview guide. Interview questions did change during the course of each interview as participants began to divulge specific information that required direct and specific question rewording. However, no questioning went outside of the general area of the research guide. Observation is the second data source for this research. That was limited to researcher's eye and the photos.

First the researcher interviewed a camp director. As the researcher I questioned him about what is water rafting? Discussing it, I understood that he has a great knowledge about international standards. He replied about the levels which should the rivers have.

Camp Director

The Director of the camp has the power and responsibility to carry out the programmers. When the Director is away, another special person should be appointed as the Acting Director. This requirement is fulfilled even in Kithulgala Adventure Base camp. On a particular day when the researcher was observing the camp, a special person had been appointed to cover the duties of the Director as he was away.

Site Area

Another two very important factors that are considered according to the international standard are having the best site area for Adventure Activities and having a personal safety assumed environment. It is quite obvious that the location of Kithulgala Adventure Camp meets those environmental requirements. It can be concluded that no problem regarding safety has never arisen.

Kelani River

The Kelani River is used for whitewater rafting Kithulgala Adventure Base Camp. For confidence jump activity, Kataran Oya, a branch of Kelani River is used. According to the camp director in Sri Lanka, level 3 which is the most apposite level from the levels of rivers in the world is used. It is not a very dangerous level or not a very simple level. This river is considered as that participants can get a good rafting experience. These levels of the rivers are introduced in Rivers Levels. Mr. Peter Blug who introduced 3 places as,

- Butter Crunch
- Killer Fall
- Whitewater

Camp director said to me, who is the researcher that there is a main reason that tourists come up to Sri Lanka for rafting, in 1956 a film named "A Bridge in the River Quay" was photographed in Kithulgala. Numerous tourists who come to Sri Lanaka to see that place participate rafting.

Guide

Involvement in risky activities is a characteristic of Adventure Camp. Therefore, all the staff members should have a better understanding about the risk assessment of the position and level of screening etc. the staff should also possess specific qualifications and skills in managing such risk promptly. The researcher found through interviews that the staff possessed such skills and experience of respective situations.

Staff discipline also stands very high among standards rules and regulations. During duty hours, taking drugs and illegal medicine is banned according to standard law. "Basic minimum standards for water base activities" stresses that no drug what so ever must be taken six hours prior to any water related activities, the acting camp manager admitted that there is a possibility of the staff members using drugs without the knowledge of the director board in spite of the prohibition. This show that the staff members take drugs.

During observation, the researcher was able to witness every guide who does whitewater rafting smoking before getting on the boat. This is a very common sight in Kithulgala Adventure Base Camp.

It is expected that the camp displays a set of written rules and regulations regarding unlawful sexual relationships. However, this was not seen in the premises of this camp. The acting camp manager emphasized that there had not be such incident reported so far.

To the questions about the training period of a new guide, the camp director said that they have been trained for six months.

"The starting period of a new guide was being qualified for one year, but in present as the great demand, after six months a guide is being given permission for rafting tours. In a short period, he is given an opportunity to paddle, when a chief guide is behind. After that he is given an opportunity to ride a boat alone."

Through the information that the camp director said, it is understood that with the great stipulate and the popularity the standards in the present is not similar as the standards in past.

Record Keeping

It is essential that a guide must record about the tours he has gone. It is considered as a main standard. It is essential that those records are certified by a camp director. There is such a sample of record of British Canoe Union through appendix. To the questions which were asked by the researcher it is understood that many international standards has been cancelled, and Kithulgala whitewater rafting industry has become an industry which is obtainable after capital. Through that, the Sri Lankans as well as tourists have to do activities been given danger to their lives.

There is a standard empowering the camp to collect personal data of the staff in the camp. The interviews done by the researcher showed that the camp had not received any such reports on the personal data. The acting camp manager stated that the members of the staff were the residents of the closer by areas. The staff members are known to each other by name only and their personal files of five main staffers are kept in the camp. Only the main staffers are kept in the camp further inquiry revealed that the personal files of the other 33 members are not available.

"Camping Standards Manual" records that there is a very important standard stressing the significance of maintaining the reports including the personal data and confidential data of the staff members. It was revealed that the files were in the custody of the director in Kithulgala Adventure Camp too.

International standards mention camper files, personal files and so on should be maintained at least once in every seven years. However, the researcher who visited Kithulgala Adventure Base Camp and inquired on 24/09/2015 found such a practice as mentioned above was not be seen. Through records such as health and safety are essential for a camp, such records could not be seen here. On inquiry, the acting manager happened to say that one person's forehead was wounded a week before and one got a mild injury were common. Yet what should happen is that all the information reporting injuries with the dates

should be recorded and seriousness of such situations should be well handled. Such practices cannot be seen here.

It was revealed that insurance policies and previous reports regarding this satisfactory in this camp.

Equipment

The equipment used in all the games must be of a good standard. But it is not certain whether some of the equipment reaches the standard level. Even the strings and ropes in the boats to be used in an emergency are broken. The paddles, life jackets etc. are mostly the ones which have been mended.

Checking the equipment before each trip could be seen. Yet inflating the boats is not done according to an accepted standard. It was observed that the boats were inflated by the guides as they wished before each trip. When the researcher questioned a guide about this he said, that he inflated the boat as he felt by his hand.

According to standards, new equipment must be brought and the old equipment must be replaced with the new equipment once in these years, that does not happen in this camp. Experts on equipment are not employed to check the quality of the equipment used or brought. The acting camp manager declared that a new boat after unpacking could be used for four years and another one year and a half after service.

In spite of the fact that good boats for rafting are manufactured in the countries like China, America, Japan and Korea it was related through observations and interviews that the boats used there were Korean products known as "ZEBEC".

Safety

One of the most important things in adventure programs is keep a vigilant eye on those who suffer from sicknesses. Especially those who suffer from heart ailments should not be involved in these activities. Even through the acting manager assured that the people were questioned about their health condition, the application given to those who come for whitewater rafting activity is printed in English. Everyone irrespective of their knowledge of English has to put their signature on this form. The application states that even the life of those who do rafting activity could be lost yet the camp will not be answerable for any such haggard while the person himself will be held responsible. What is surprising is that even the content of the application form is not explained to the participants. What happens here is getting them to sign and sending them for the activity in a hurry.

- A licensed medical physician
- A registered nurse or licensed practical nurse in good professional standing with the provincial licensing body
- An emergency medical technician
- A standards first-aid certificate with CPR

According to the international standards, at least one of the above-mentioned qualifications should be made available in the camp. Through there is a valid medical practitioner is employed in Kithulgala Adventure Camp, he is just an Ayurvedic doctor. The interviews revealed that he was employed to promote Ayurvedic medical treatments and massage system among the foreign participants. And also, the camp has not employed a properly qualified nurse or an emergency medical technician. Only a person with CPR qualification is available here.

The medical staff in the camp should give treatment under curtains limitation according to their qualifications. This standard is properly followed in Kithulgala Adventure camp. The reason for this is taking the injured person to Kithulgala Base Hospital at all time.

First-Aid

To the questions about the method about captivating the persons who is in poor health and injured in the camp. The camp director has said that, "Really our institute has a weakness. We must have a bed in the camp to take the persons who is in poor health and injured to the main road, but we haven't a such facility. But in such situations that patient is been taken on a sheet which has made from strong polythene."

It is a situation that the protection is in minimum. When they are taking, the polythene may be broken down. But it can be exposed that such facility is not in Kithulgala Camp even in the present day.

Through interview and observation, I have experimented as the researcher that there is 8 km from Kithulgala Adventure Camp to Kithulgala Base Hospital. By experimenting the distance between the two places and the facilities which the camp has, there is much weaknesses in it.

This camp does not have First-Aid Kits in activity areas although this is compulsory in every area where this type of programmers is done. Yet this camp has a first-aid kit which cannot be used in the activity areas. It must be emphasized that for this type of risky activities, keeping first-aid kits in vital areas is a must.

Emergency

Kithulgala Adventure Camp seems to have broken the accepted standard which states that local emergency telephones numbers must be displayed near all the telephones. Even the simplest opportunities necessary for risk management have been neglected.

Local participants

However, through discussions for two days it is understood that the Sri Lankan participants are the persons who haven't knowledge about the risk. Mostly, they aim only to get a cheerfulness from a leisure pursuit. By interviewing 10 Sri Lankans, the researcher has collected details for two days. From that, the data is collected from 6 gents and from 4 ladies.

It is a special fact as well as gents, the ladies like to participate in rafting. It is known that it is the first rafting experience of the 10 persons whom, I have interviewed as the researcher. To the questions about the list which has to be signed by them before going rafting, they have said that they haven't considered it so much. At that moment also, there were many persons who have come up to take part for rafting, and all of them have signed for that document. They have signed to that, not considering much about that.

To the questions that "did they have knowledge about rafting is an activity which has danger?" all 10 of them said, that before they know that it is a game with danger, but they have experienced the danger more than the danger they had known.

It is understood that the guide who went rafting with them, is a person who had an excellent acquaintance and a good skill and experience. The participants said that they haven't feel like the guide who went rafting with them has drunk liquor.

To the questions, by the researcher that "did they observe about wearing helmets and life jackets?" They have said that the guide had observed about all and he explained the importance of it.

Before the tour, a video scene about the rafting level of the river must be shown to the participants, but the persons that the researcher has interviewed said that it had not been done.

Foreign participants

During the two days, the researcher has interviewed 10 Sri Lankans and 10 Foreigners. For that 6 gents and 4 ladies have been selected. Among 6 gents, 3 of them have experienced rafting in a foreign country before this. Those 3 have said, in Sri Lanka they have experienced a comparable experience to that. Their another wish is to wristwatch the place of "Bridge in the River Quay."

Researcher has questioned not only the Sri Lankans, but also from the tourists. They have said that it is a normal situation to sign in written about the responsibility of the activities similar to rafting. It is understood that they have a good knowledge about the danger of it.

Except those three persons, all the others have gained their first rafting experience in Sri Lanka, and they have said it very joyfully. They have said that it was a tour with much danger and many experiences.

The tourists who have experienced rafting before that, said they had signed a more detailed document, than the document they have signed in Sri Lanka. The tourists who have knowledgeable first, said that such signing is essential for a danger activity like rafting.

They all have assumed that they did rafting activities having a good understanding about the jeopardy of it. They have said that it is understood after the tour also. That the guide was a person who went rafting with them had excellent experience. They have said that they did not feel like the guide had drunk alcohol, but they had seen the guide had smoke cigarettes. Always they have to do activities in water, to control the coolness of the body, that it is typical situation, smoking cigarettes approximating that.

The guide has observed about the life jackets and helmets, and it is observed about wearing them in the approved manner. But before the tour, they had not shown the video about the temperament of the river.

"If they had seen such a video before the tour, the occurrence of that tour can be known sooner than that. So, my idea is it is suitable of not doing that".

"If they had seen such a video, they go for rafting, known the experience of that. It is good quality for our acquaintance. That is my suggestion".

The persons who had gained their first experience, assumed the first idea. The persons, who had gained the first rafting experience before that, presented the second idea.

Finally, there is a visual analysis between Sri Lankan equipment and the world standards equipment.

When considering all the above factors, it can be decided that Kithulgala Adventure Camp does not meet many of the requirements according to international standards. It should be emphasized that there must be such accepted standards when considering the big publicity given through media and the tendency of the youth. Even if no such precarious incidents have been reported so far, it must be stressed that today's younger generation can be vulnerable to future hazards. If timely measures are taken to guarantee the international standards. Adventure activities can be made more popular in Sri Lanka and the country will be able to earn a lot of foreign exchange through this in time to come.

IV. FINDINGS

- There is a good demand for whitewater rafting in Sri Lanka at in attendance.
- During the week days, there are 100 – 150 participants and during weekends 200 – 250 participants can be seen.
- Many tourists who come to Sri Lanka, go to Kithulgala and have gained experience about whitewater rafting.
- There are accepted international standards for rafting in the world.
- Sri Lankans who play a part for rafting have not a good knowledge about standards.
- Although tourists have knowledge about it, they gain satisfaction by giving first place to the experiences to the jeopardy and the risk.
- Although the camp director is a person who has a good knowledge about international standards, he is not attentive about it because of the enormous stipulate.
- According to the survey data, rafting standards of Sri Lanka has not reached even international standards.
- According to the survey data, risk management about rafting has been done in a great limited level.

V. CONCLUSION

When it comes to conclusions with the consideration of findings it can be said, in Sri Lanka Whitewater Rafting Standards is in a very low level. There are no answerable persons connect in to this. The persons who are working about this field also haven't more concentration about this. Looking at the standards in the world, it is clear that we must bring Sri Lanka even to a closer level. According my point of view as the researcher to expand rafting more in Sri Lanka, we must develop Whitewater Rafting Standards.

IV. RECOMMENDATION / SUGGESTIONS FOR FURTHER RESEARCHES

- A great concentration should be given to Adventurer Base Activities by Sri Lanka Government.
- By observing international standards of it and it must be ongoing the activity doing in Sri Lanka.
- According to the data in this research the standards which connects rafting is in a very low stage, comparing to the international standards. But responsible persons have not been deciding on yet. So responsible should be admitted for it.
- There must be a fixed activity about how can we manage the ganger of the whitewater rafting game.
- Sri Lankan government should stimulate more researches about these factors and keep updates.
- Whitewater rafting activity which is very trendy among the persons in present is somewhat jeopardy. So, we have to recompense much attention for that. By paying much attention, we can convey it popular in the world also. Then we can earn foreign exchange too.

APPENDIX A: International Standards

Basic Minimum Standards for Water Based Activities

River Running

01. Any company operating river running trips or commercial white-water rafting trips must be registered with Indian Association of Professional Rafting Outfitters/Adventure Tour Operators Association of India and Ministry of Tourism.

02. All trips on white water for tourists will be conducted with at least one qualified guide on each craft. A senior guide or trip leader must be present and supervise the activity at all times.

03. **The Guide accompanying the trips should:**

- a) be at least 18 years of age;
- b) be able to swim;
- c) hold a valid first aid and cardiopulmonary resuscitation (CPR) certificate or equivalent.

04. **Training:** Guide trainees should complete a course (or equivalent training) that equips them with the necessary skills and knowledge to safely and competently guide a raft. A guide training course should include the following topics:

- a) skills -rafting techniques, crew training and management, emergency and rescue techniques.
- b) knowledge - equipment, safety and emergency procedures, rapid theory, leadership, signals, environment protection.

05. **Recognition Experience:** Guides should:

- a) have guided a raft under the supervision of and to the satisfaction of a Trip Leader on at least ten white water runs within the past two years in rapids of the same class or higher than the run they intend to guide on;
- b) complete a familiarization run on any new stretch of white water they intend to guide on;
- c) maintain a log book recording each run and signed by the Trip leader as proof of experience;
- d) should have good communication skills in Hindi and English

06. **Special Requirements for Trip Leaders:** Trip Leaders should:

- a) have been qualified guides for at least two years;

b) have a high level of guide skills and knowledge;

c) have a thorough knowledge of trip planning, white water rescue techniques, emergency procedures and advanced first aid;

d) have guided a raft as a qualified guide on at least twenty white water runs within the past two years in rapids of the same class or higher than the run they intend to lead on;

e) should have excellent communication skills in Hindi and English.

07. **Kit:** All trips must carry a well- equipped first Aid kit (it must have triangular bandages, sterile pads, gauze roller bandages, pressure bandages, first aid adhesive tape, splints, scissors as bare minimum), a repair kit (it must contain approx. half meter of repair material, a sufficient amount of glue and accelerator, sand paper or roughing tool and waterproof repair tape/ duck tape). Oar rafts must carry at least one spare oar. All rafts must have a safety line going all around the raft, a bow- line and preferably a stern line as well. All rafts must have a throw bag and a bailing bucket (in case of non-self-bailer bucket boats). A flip line is recommended for all big drops.

08. **Personal River Equipment:** All rafters/ kayakers must have a life jacket on all times while on water. This includes the guides also. The life jackets must have adequate buoyancy (minimum of 6.14 kgs, and preferably 9 – 10 kgs.), must be the proper type (U.S. coast Guard Type III or V) with a provision of ensuring a snug fit by straps etc. and the life jacket must be worn correctly. Inflatable life jackets and the „keyhole” type jackets should not be allowed. Guides must ensure that the life jackets are on in a secure manner before the trip starts and above all major drops. Helmets are mandatory on all rapids and it is recommended that helmets be kept on throughout the trip. The helmet should be properly strapped. Rafts must be of good condition with no leakage or compartment damage. A baffle / compartment inflation check must be carried out at regular intervals to ensure that each compartment is air tight with no leaks. A minimum of 14 – 16 feet boats are recommended for commercial rafting. Self-bailing rafts are recommended.

09. **Age Limit:** Fourteen years on all stretches except float trips (grade II and below), where it may be relaxed to ten years.

10. **Non-Swimmers:** Non-swimmers should not be allowed on any serious rapid (grade III +/IV)/ or hard section.

11. **Safety Briefing:** Guides/ trip leader must ensure that a thorough safety briefing covering all pertinent details for that particular trip is given before each trip. The trip leader must ensure that clients are in suitable attire (bulky clothes, series, neck ties, long skirts and three-piece suits should not be permitted). People suffering from any serious ailments, weak heart conditions, epilepsy and expecting mothers should not be allowed. Non- swimmers should be allowed to body surf only with rope back up. Shoes/appropriate sandals/ booties are a must for rafting. Appropriate clothing must be worn during winter/ on glacial melt rivers with cold air temperatures. For such rivers, dry suits/ wet suits are recommended. If not, light woolens/synthetic clothes are a must. Trips must be timed carefully to finish at least an hour before sunset.

12. **Alcohol and Drugs:** Consuming alcohol in any form or quantity or illicit drugs at least six hours prior to the river trip must not be allowed.

13. **Senior Guide:** A senior guide must have spent at least three consecutive seasons on any of the above three rivers with a minimum of sixty days on the river per season. He must have all requisite first aid and cardiopulmonary resuscitation (CPR) qualifications and must have a clean safety record. A senior guide must have river- running experience on at least three different rivers.

14. **Safety Kayaker:** A safety and rescue kayaker must be thoroughly trained and experienced in all safety norms, river rescue and first aid/cardiopulmonary resuscitation (CPR) certification. A minimum of thirty days on the river is mandatory before kayaking with commercial trips.

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