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SPECIAL ISSUE ON IRRAWADDY SOURCE

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CLOCKWISE FROM TOP:
CERS team at Irrawaddy source in October.
CERS team near source in May.
Expedition on way into Tibet.
On horseback to the source.
President’s Message

Exploration is as old as when the first cave man came out of the cave and search the world around him. But it is also as young as any three-year-old kid, and as new as today and every day with new discoveries. For this reason, the work of CERS is attractive to both older supporters as well as younger adherents.

This issue of the newsletter brings to our readers the evidence not of our renewed interest in China, but a sequel to what we have been known for – in the forefront of exploration of this vast country. The Irrawaddy source is the fifth river source CERS has embarked upon to reach. By fortitude, detailed research, and hard work, we reached our goal, not once, but twice, within four months.

The CERS team successfully arrived at the Irrawaddy source lake on May 26, 2017 and defined this important and monumental river origin and its geography at its source, and returned safely. But due to early season snow cover, the 1.4-kilometer feeder stream to the lake could not be accessed, thus stipulating a return visit four months later, to trace this tributary, the real scientific source, of the Irrawaddy.

That report is included here, not just as an Appendix, but a definitive point on the map as we reached the origin of the Irrawaddy River. We have also decided to publish the source water analysis report as a matter of interest to scientists. The several articles here are written by members who participated in both expeditions. They are both factual and reflective. It gave me pleasure and pride to share with you our findings at the source of this great river of Asia, and of the world.

Just a ridge and watershed apart is another tributary which merges with the source river eight kilometers downstream, and is a meager 40 meters shorter than the other one. That 40 meters difference of the Irrawaddy, which is over 2200 kilometers in length, is minuscule in relative terms, yet must be accounted for.

These two tributaries are like twin siblings. One has more hair the other less, maybe even with seasonal variations, it may even reciprocate. I feel that a judgement cannot be called, seasoned as I am as a river source explorer. I hope my readers, both lay and academic, would concur.
It is now barely over an hour since I returned to base camp, at just over 4000 meters in elevation. Our camp is extraordinarily quiet. Everyone has retired to their tent to take a much-needed rest. My legs and thighs are sore. So are my toes, having hit my boots constantly on the long down-hill hike.

But all that doesn’t matter anymore, as my team and I have reached the source of the Irrawaddy River, at a dizzying 4,700 meters, and returned safely. And all within a matter of eight hours, with a climb of 700 meters in elevation. My Galileo software which produced real time GPS and satellite map of our route showed that we have traveled 13.3 kilometers. That doesn’t seem all that far, but taking into consideration the steep incline, it has been a most trying 13.3 kilometers.

It is a feat I have been contemplating since 2014, squinting to check on every little detail of multiple satellite maps. Roads, foot paths, village settlements, pastures, cow sheds, river systems, glaciers, peaks and mountain passes, I had become familiar with all the geographic and physical features of the headwater region long before I set my feet on the ground. And now it has taken us on a two-week huge circuitous journey driving around the Tibetan plateau, scaling several high snow passes, before we finally reached the tributary of the Irrawaddy River in Zayu County of southeastern Tibet.

Then there were also bureaucratic and government restrictions. Tibet has become more sensitive for foreign travelers, and I could not bring my usual team members from outside of China, not even Taiwanese. Thus, several...
close friends and associates who have been along to four previous river sources could not join me on this trip, unfortunately.

So there are only eight of us in my team, including three of our long-time Tibetan staff. Yuan Xinguo is only five years younger than myself and stayed behind to watch our camp. The rest of us each took some dry snack food and water and started off at 7:15 in the morning. I had calculated the hike to last eight to ten hours, given that two straight lines with an angle connecting our camp to the source were 2.13km and 2.72km respectively, adding up to less than 5km. But the steep gradient and numerous switch backs needed to gain 700 meters in elevation added much more distance to our hike.

Thirty minutes before we started off, a group of nine Tibetans walked past our camp. There were eight men carrying simple packs and one young girl who looked to be at most ten or twelve years old. They were heading the same direction as us but would go a couple of passes beyond to dig for cordyceps. They would stay for a couple of weeks before returning home, perhaps for a month or longer. These Tibetans were the first group this spring to head out from nearby Quwa village, as the deep snow at the pass had not yet fully melted.

Seeing the little girl marching along, I felt humbled. They said it would take them three hours to hike to the source lake that was our destination. They generously estimated that for us it might require four hours to reach the pass. That pass is the divide between the Irrawaddy and Salween watersheds. I cautioned our group that the distance seemed manageable, except for the snow. If the snow was too high
for us to cut a path forward, we would have to retreat and come back in the autumn when the weather is dry. Heading in during the rainy season of the summer can also be quite dangerous and prohibitive, given the constant mudslides.

About half an hour into our hike, we reached a pasture. By then I was breathing a bit hard due to the altitude, but my pace was steady. Further ahead, I could see that soon we must start climbing. I began wondering whether I could make it up that long steep hill ahead. Suddenly I heard bells from behind us. Looking back, I saw a guy on a horse catching up to us fast. He had a second horse behind him, tied by a rope to the front horse.

This was obviously a godsend. We had been contemplating renting horses to get to the source, but we knew that Tibetans had long since moved on to motorcycles and that their horses were on the loose far up in the hills. Furthermore, the horses are ridden little, thus can be quite wild. But here came two with saddles and harnesses, a gift from heaven. It turned out that 55- years-old Agor was carrying a supply of tsamba, the staple for Tibetans, to deliver to the cordyceps harvest grounds several hours away. He would also be staying there for the cordyceps season.

It took a bit of convincing, arm-twisting, and price-haggling, but finally we negotiated that the two oldest of us would get to ride the horses. Most senior in our group was obviously me, and eight years behind, Berry. I got the young horse, a bit wild at three years old, and Berry rode the mellowed ten-year old. This was perfect timing, as the hill was right in front of us, but we were saved, climbing on horseback rather than on foot.

Had it not been for Agor, we would probably have been on the wrong path, trying to follow the river upstream and into a precipitous gorge with no way to climb higher. With
him as guide, we moved to the right and followed a long path of switch-backs. Along the way we stopped to rest, and I was able to ask Agor the local names of the main tributaries at this headwater of the Irrawaddy.

He told us that the stream on the left starting with a glacier and melting snow was called the Moyu. The one in the middle, slightly longer, was called the Chamai. The longest, leading from a small alpine lake and our destined goal, was called Dultong (or Jiutong), the same spot Professor Liu Shaochuang of Beijing pinpointed through measuring satellite images. Further to the right, another shorter stream was called the Depo. The two mountains sandwiching the alpine lake and the pass were Hon Guangtu and Rejacha respectively. Most important of all, the lake that was the source of the Irrawaddy was called Jingla Co (named differently from Prof Liu’s Lake Laka). These names might be unimportant to others, but they are all relevant and crucial information for a geographer.

Martin Ruzek, my old friend since the early 1980s when he was working at NASA’s Jet Propulsion Laboratory, had joined me to the Yangtze, Mekong and Yellow River sources. He has managed our remote sensing data and scientific analysis of all these river source expeditions. Today he is a Director with the Universities Space Research Association, still working closely with NASA, and has measured the various tributaries of the Irrawaddy for comparison in support of my endeavor. His ultimate calculation was instrumental and crucial in pointing us to the alpine lake source.

Martin however commented that a close and nearby contender, barely 40 meters difference in length, or two
decimal points of a kilometer behind (8.00km versus 8.04km), is another headwater river. The two tributaries are just a couple kilometers away as the crow flies. Such minute variations make it very difficult to determine a river source when both are in the same region, and with such small differences. Perhaps seasonal flow and size of flow are also debatable issues for consideration.

Previously when I checked online with Chinese sites about this region, I learned that a group of Chinese entomologists recently visited the area and found that Quwa village was a dead-end. Little did they know that this dead-end was also a life-spring, giving rise to one of the mightiest rivers of Asia. And had it not been for a marginal road which recently connecting Zayu in southeastern Tibet to Bingzhongluo of northwestern Yunnan, my expedition may require ten days or more on horseback.

But for now as we were riding this last stretch to the source, my remaining team fell further and further behind; understandable given the fast-rising slope we were now approaching. By now, three of our members were about half a kilometer behind us, and Wang Jian was a tiny dot still further back.

But our youngest Tibetan member, Tashi Drolma, was right behind the horses. She has lived all her life on the plateau. Her home is at 3200 meters in the village where the CERS Zhongdian Center is located. But even she found it a bit tough to be at such dizzying altitude. Here we were at 4500 meters and upwards, and she was out of breath.

Suddenly I heard a series of snorting sounds from the horse behind, which Berry was riding. It certainly didn’t sound
like the horse neighing or grumbling when tired. I asked Agor about it, and it turned out the bamboo basket behind the saddle was holding two small pigs. They were to be released as an act of mercy called “let live” once Agor reached his cordyceps harvesting ground. But at such prohibitive altitude, they would more likely become a sacrifice, soon frozen to death.

After 10am we finally reached the snowline. From here on, our move forward required breaking through the snow. For the horses, it might seem easy, especially because another group of Tibetans had gone before us just an hour before. At 10:30 and within 200 meters of reaching the top, it was snow all around us. Clearing a last ridge, I finally set my eyes for the first time on a frozen lake, a lake I had looked at intently uncountable times from space images. I looked at my Omega watch on my left wrist, the same watch I had worn to the Salween source. It was 10:34. I checked my altimeter watch on my right wrist; 4510 meters, calibrated as 200 meters lower, thus real elevation should be 4710 meters to be conservative, though my Galileo software showed our elevation to be 4744 meters. More importantly, I recorded my GPS reading as 28.7351N 97.8749E, a slight variance from what Professor Liu Shaochuang of the Beijing Remote Sensing Institute has established. Quickly, I marked all these new data on my iPad Galileo map with a diamond icon.

From the ridge, I looked down twenty meters below at the source lake, a half-moon of frozen ice with its edges just starting to melt to reveal its crescent shape. Below my feet, the melting snow gathered as a wide stream about two to three meters wide. This tributary to the east of the lake is one of two larger streams in a bowl-shaped basin that drains into the lake, a rather stable body of water.

If however one were to be exact, these tributary streams, especially the longer one from the west but at this moment obliterated under heavy snow yet fully visible during dry season on satellite images as being 1.4
km further up the watershed, are the actual source of the lake. Jingla Co the lake, on its south side, drains into a larger stream, now called the Dultong, and quickly drops off the side like a waterfall into the gorge below. I would have liked to study the lake closely, as well as the streams that feed this body of water. But it would be dangerous to tread on snow or ice which may have empty crevices below. Such detail exploration have to wait, until the dry season come in autumn.

From here, the Dultong river changes several Tibetan names further downstream (Zezhong, Azan, Gedao, Xhifui) before it merges to become the Kelaoluoo, and finally the Dulongjiang as it enters Yunnan from Tibet. And as the Dulongjiang leaves China into Myanmar, it became the May Kha river, above Myitkyina it merges with the Mali Kha coming from the west and became the Irrawaddy, or locally the Ayeyarwaddy. It will continue its flow southward, passing through Mandalay to merge with the Chindwin when it makes its last stretch all the way to west of Yangon before entering its multi-channel estuary and into the ocean between the Bay of Bengal and the Andaman Sea.

Over the years, I have visited the river at various sections; in Tibet where the river is fed by multiple tributaries and with various names, later on as Dulongjiang I followed it into Myanmar, further on seeing it at the confluence of the May Kha and the Mali Kya, then from Myitkyina toward Bhamo, and from Bhamo to Mandalay and beyond. We have also sailed the Irrawaddy’s main tributary, the Chindwin, upriver all the way to where navigation is no longer possible. And now finally we are at the source of all this labyrinth of waterways.

Soon after I arrived at the source lake, the other three members arrived and began taking pictures all around us. It was another half hour before Wang Jian, the last member of our team made it to the ridge. This will be the fourth source he has reached, and likewise for Berry, whereas for Song Haokun, this is his third. For Tibetans Drolma and Zhou Shouchang, as well as for Li Na from our Kunming team, it is their
first river source. As for me, the Irrawaddy source is the fifth checked off on the list of river sources I hoped to visit.

We gathered for a group picture with the source lake behind us. Each of us took turns to throw into the sky some Lungda, or Wind Horse. It is a religious offering scattered on the wind with blessings heading to heaven. For each of the four river sources I previously went to, the Yangtze, the Mekong, the Yellow River and the Salween, we brought along a bottle of champagne to toast the final moment of triumph. Every single time, I found the source water sweeter than anything else I drank. Finally I’ve learned not to challenge the natural taste and brought no man-made stuff to toast. As a ritual, I drank again from the river source. Once again, the water was freezing, and it warmed my heart!

Unlike many explorers who choose to name places they discovered or first set foot upon, I only thought of naming this alpine lake, the scientific source of the Irrawaddy, by its shape as Half Moon Lake. Perhaps the local Tibetan name of Jingla Co is even more appropriate.

So far, everything ran according to script or even better. A guide and two horses appeared without planning. The weather was cool and conducive to our hike. We reached the source in just over three hours. As we began to turn back, however, snow started to drift down and fog was coming in.

For this expedition, I had gone back to work in the same way I had over thirty years ago. I was not only expedition leader, but also the geographer, writer, photographer, and videographer. Both our filmmaker and cameraman were faced with unexpected personal emergencies when senior members of their families were hospitalized, in one case on the evening of our departure. So it was left for me to do the minimal filming that my limited energy allowed.

I was taking a clip of us pushing our feet one after another through the snow as we left the river source when I heard the film camera give out two beeps, and then it went dead. It just about coincided with the failure of my own body’s battery, and I knew I must focus on making the long hike back to base.

The return journey took almost four hours, despite that it was mainly downhill. The entire team stayed pretty much together as now the decline in altitude made life, and breathing, much easier. We stopped to rest and eat a bit of snack. When we were within one kilometer of our camp, I deliberately stayed back and paced myself slowly. For our outer journey, I needed my team and colleagues as companions. But now that we were within reach of safety, and I must take my own inner journey, reflecting on the special moment still lingering in my mind.

I thought of the old Chinese idiom that I learned as a child. It had stayed with me throughout my youth and adult life.
“When drinking water, think about the source.” This was repeated to me by my parents as well as by my teachers since I was little. While my science and geography teachers taught me how to use a compass, which allowed me to stray into the unknown, my parents had given me my moral compass. At times I may have deviated from it, but not far.

I thought of the Time Magazine 25 Asian Heroes honor bestowed on me in 2002, calling me “China’s most accomplished living explorer.” That accolade was given only after I have led two expeditions to define a new source for the Yangtze, and both times I had been wrong. It wasn’t until 2005 that I led a team to finally find the definitive and scientifically correct source of the Yangtze. That was followed by the Mekong, Yellow River and Salween sources in 2007, 2008 and 2011, respectively. And now we have the Irrawaddy source to our credit. Are these accomplishments just a corollary to the Yangtze? I don’t think so. Exploration is my life-long pursuit, and there is no pinnacle to such accomplishments.

Seeking out river sources seems a perfect undertaking for an explorer of my type. I lack the stamina and courage of those who conquer mountain summits. Instead, when I look at a mountain, I wonder what hides behind it and seek to scale the lowest pass in order to satiate my curiosity. So seeking out the sources of great rivers has become a life-long pursuit.

Some may ask, “What is so important about a river source?” I have met both Buzz Aldrin and Gene Cernan; the former was on the first Apollo Mission to the Moon and the latter was the last man on the Moon. We all know there is a moon, but we admire the astronauts’ courage in the pioneering undertaking of exploration that stretches our imagination. It is the same with river sources; it is relevant to hundreds of millions of people living along the river’s course.

Others may have looked at river sources from space images, but for a geographic explorer, groundtruthing means everything. I have been looking at satellite images since the 1970s, when I got much help in interpreting them from friends working at NASA and the Jet Propulsion Lab at Caltech. In the 1970s it was MSS data, and then we graduated to TM images, and later Large Format Camera (LFC) and multiple generations of radar images from the Space Shuttle. Today, GPS and Google Earth are within anyone’s reach on their mobile phone. Others may have worked on space images on paper, or in a lab and in comfort of an office, ground-truthing is essential for an explorer in the classic sense. Only a few will ever set foot on such a remote spot.

After the Irrawaddy source, some may ask “What’s next?” That will remain a secret. We did not make any noise before embarking on this Irrawaddy source expedition. Several friends and guests saw us at our Zhongdian Center before our departure. None knew that we were attempting to find and define an important river source. In my time, I have seen many who made a lot of noise, through publicity and press conferences, before embarking on an expedition of exploration. They often return with little or nothing. As always, CERS believes in delivery, not promises. Fame and glory are but a by-product; satiating my own curiosity is the main goal.

One thing however remains to be done on the Irrawaddy River. As with other great rivers for which we managed to get to the source, I usually also go to the mouth, or estuary, to have a look. Surely that will be much easier than going to the source. At the source, I drank from its water. And at the mouth, I shall wash my feet!
My hands are frozen and numb. My camera has gone wild, taking photos in delayed mode a few seconds after I push the shutter. Then it momentarily dies and I have to reboot it. The wind is blowing and the temperature must be below zero as rain turns to hail. It must be the altitude, 4821 meters in elevation. Otherwise it has to be the river god, as my team and I reach the watershed and source of the Irrawaddy River.

“This is it,” I gave out the order, marking a small drop-off where two tiny streams trickle downward joining each other. Beyond and above are marshes with water holes, merging to become the source stream. My iPad has been on all morning, with my special App tracking our route, time, distance and several other crucial data from our basecamp to here.

“Let’s mark the spot with the prayer flag,” I give out another order to my team. Soon three poles are stuck in the ground and a string of colorful flags span the source of the Irrawaddy. My next move is almost like clockwork, something I had dreamed of, as well as performed, several times before, each time when I reached the source of a great river; the Yangtze, Mekong, Yellow River, or Salween. I kneel down striding the creek, and with my two hands I bring the water to my mouth. Drinking from the source is always a very sacred moment, especially for an explorer.

I make several screen-shots on my iPad satellite image to record the necessary data, most importantly, the coordinates.

COORDINATES: 28°44'04”N 97°52’35”E (28.7340°N 97.8725°E)
ALTITUDE: 4,821 METERS (15,909 FEET)
of this spot – 28°44’04”N 97°52’35”E. Time of arrival is of course noted. My Omega says 10:38. It’s been almost three hours of continuous riding on horseback since we left basecamp at 7:48 this morning. Next my team passes me three Aluminum water bottles which I use to collect the source water for later analysis back home. Our caravan helpers are watching with amazement. Why do these people make such a big deal about a tiny stream?

Despite high wind at the watershed pass, Xavier launches the drone and takes an aerial view of the source just as each of us lets off into thin air a stack of Lungda, or paper Wind Horse, which are sacred offerings to the gods. As the Wind Horse take to flight, our horses on the ground got into frenzy and almost went into a stampede, stirred on by the drone. Fortunately our caravan helpers quickly held them down as commotion gradually subsided. Several members of the team are searching the ground, looking for special rocks as memorabilia to take home. I get a bit greedy and take in a few more sip of the source water, until my hands are too numb to continue.

Before we turn to mount our horses on the return journey, we take out the CERS flag and make our group photo, all nine of us from the CERS team. Everyone has a smile of contentment on his or her face. I, too, feel another mission accomplished. The fifth river source that I have had the good fortune to reach and define; not a small geographic feat.

The less than six hours roundtrip on horseback from basecamp to the source, covering 15.5 kilometers, seems...
little compared to my first journey to the Yangtze source in 1985. That roundtrip took me nine days on horseback. But the Irrawaddy source is no less important in my mind. It’s like having five children, each important and unique in his or her own way.

It may seem obsessive to return to the river source of a great river of Asia within slightly over four short months. But in the past, I have returned to the Yangtze source three times, 1985, 1995 and 2005, just to verify and correct our own work results. For the Irrawaddy, it had to be done, the sooner the better, given my gradually waning energy. High elevation work is not compatible with someone soon to reach seven decades in life. But for now, I still have a bit of mileage remaining.

Upon returning from the Irrawaddy source in late May, our long-time friend Martin Ruzek, formerly a NASA scientist, revealed to me that beyond the source lake, Jingla Co, there was a feeder stream under the snow that stretched another 1.4 kilometers further up the watershed. When the snow melted during the summer, satellite images would show clearly this feeder stream. We must return to mark this definitive source of the Irrawaddy.

From our Zhongdian Center we headed for Zayu County in southeastern Tibet. Along the way, three rockslides, products of tail end of the raining season, deterred our progress. One took six hours to clear, the other two, one half day and a full day. Other unexpected deterrents were the result of recent border tension between India and China, making security check points more frequent and thorough. This wasn’t the case back in May. The upcoming 19th Party
Congress added another layer of security as government and police do not want to see any disruptive incidents during that time.

Due to such measures, negotiating for horses took longer than usual as the villagers needed to get permission from above to rent us their horses. We needed a total of 15 horses and six caravan helpers. True to form of the old commune tradition of fairness, the villagers made a draw on whose horses would get rented, as well as which individual would become a helper. During the day and a half in waiting, I had the opportunity to visit and interview the first herding family tending to their livestock near our basecamp; literally the first family at the source of the Irrawaddy.

The river we followed to Jingla Co (the source lake) and onwards to the 1.4 kilometer feeder stream source is called Jiutong (or Dutong depending on pronunciation). Two ridges away is another stream, the Yepo, which is only 40 meters shorter in length from its source to its confluence with the Jiutong. This created a dilemma in my mind.

For a river as great as the Irrawaddy, which flows for over 2200 kilometers before reaching the sea, what is 40 meters in difference? Let alone that the two sources are so very close to each other. This seems a perfect case to make a call that the Irrawaddy River has a twin source, no different from two twin siblings, one having a bit more hair than the other.

The world is full of contention among people or countries wanting to be the greatest, strongest and most powerful. With greatness and power, there should also come more responsibilities and obligations. But we can also live alongside each other peacefully, each serving its purpose towards a greater world. The two twin streams of Jiutong and Yepo are a perfect metaphor; together with hundreds and thousands of streams, they make up the great Irrawaddy River.
X! Hurry up! We are not movie stars;” How Man, leader of the expedition, shouts out loud. The whole CERS team is ready to conduct the ceremony of throwing longsta prayers at the source of the Irrawaddy River, altitude 4821m. It is cold and windy, and nobody wants to stay there for any longer than necessary. I am still calibrating the DJI drone camera that I plan to fly above the team as they throw out the light paper slips printed with prayers. It would be a great shot of a great moment to be captured forever. I move my freezing cold fingers fast. As expected, the remote controller reacts a bit slower than it should. GPS signal is strong. The gimbal camera, however, detects an under-exposed image quality, probably because of the dull sky with white clouds beneath it. Fog spreading around has also confused the camera sensor as to whether it is bright or dark. The monitor reveals very low visibility. I have to switch all settings to manual control and hide myself in the down jacket to protect the remote controller. Adding to this hectic rush, rain starts to fall, occasional changing to hail. Drone cameras are not supposed to fly in rain. The four electric motors of the propellers are easily short circuited if penetrated by water. A tiny drop on the camera lens will ruin the image and the list of possible damage continues. What the hell, there is no time to reason with nature. “I believe I can fly, I believe I can touch the sky!”
Lift off.

This journey to the source of Myanmar’s Irrawaddy River and China’s Dulong River (獨龍江 “Lonely Dragon River”) is the second attempt for the team. I was absent from the first due to a family matter, therefore I have prepared myself well to compensate for the loss. I am ready to film at the source. I am eager to fly above 4800m. Let’s go.

Perhaps because I have a movie making background, it always seems to me that the behind the scenes footage is more interesting than the final product. The journey from CERS Zhongdian headquarters to the source is approximately 600km, but it is by far the most comfortable river source expedition, as I am told by veteran team members who have explored the other four river sources, which were two to three thousand kilometers and weeks away. We planned to reach the source within two easy days of travel. It is a journey to the west that crosses the famous three rivers in one go; the Yangtze, the Mekong and the Salween or Nu. All roads are cement paved with spectacular scenery along the river gorges. So how come we end up reaching the source only on the fifth day?

Just three hours drive from the starting point, we encounter the first obstacle, a multi-layered land...
slide by the Yangtze River. Coming from a small city like Hong Kong, my definition of a landslide is something like a car-size mass of mud and rock blocking the road. Occasionally, there is an unfortunate vehicular victim nearby. Drivers can detour to avoid the traffic even though the landslide will be cleared within the next few minutes. Landslides in China, however, have opened my eyes wide and haunted my notion of scale as a city dweller. Along the hundred miles of river bank, there is no other choice of road unless you take a U-turn to the nearest detour, which is normally a few hundred miles away. You are absolutely stuck.

The CERS team will waste no time in waiting. One driver stands by with the cars and the rest of the team explore the vicinity. Blocked by a second landslide, we walk across a suspension bridge over the Nu River to visit “Foggy Village,” 霧里村. There we discover an isolated village of Nu minority people with less than 150 residents, mostly toddlers and aged grandparents. We visit the village vice-chief’s house where we buy for our museum a few old pieces of farming and weaving equipment, and a carved bamboo smoking pipe.

The good thing is that there are bulldozers everywhere, a sign of China’s economic growth, but they may charge you for clearance service. Some villagers would take this life-risking opportunity to make a few dollars, RMB100 per car. Pay them if you want to move on. It happened to us on the third road block, when we reached the “Great Sand Slide” 大大大 on the third day. The scale of the rolling stones is stunning. My visual estimate of the slide is 2500m high and 1200m wide. I feel like Hawaii’s long beach is leaning 45 degrees above me. From afar, a human is like a sesame seed underneath a giant leaking sack of rice. Sand and rock are occasionally sliding down on the road, then into the river, creating a thundering noise, very much like a storm. In weird contrast, it is a beautiful, sunny, blue-sky day. Tragedy happens when people mistake the nice weather and cross under the slide. They neglect the fact that strong wind on the top of the mountain is blowing things up.

We take our chance once we feel the wind has quieted down. The 20 meters section that is covered by falling sand below the slide would take us less than 5 seconds to cross. It looks easy, but luckily, we don’t make it. A giant rock suddenly falls in front of us. We retreat and settle a mile away from the danger zone to witness this natural rock and roll show. After nearly five hours of filming, we set up our tent further away and talk to a few travelers who are also affected by the blockage. It will soon be the Mid-Autumn Festival, a day for Chinese families to get together. By the Nu River, we
are warmed by the light of an almost full moon night. Moving on, we pass the gorges of the Nu River and reach the natural forest area. There, inevitably, we encounter multiple road blocks again, man-made this time. Security level is high, as the China government will soon be hosting the 19th National Congress. Everywhere, everyone and every moment must be kept stable; nothing should happen and nothing can happen. At every check point, we and our cars were stopped, searched and identity cards checked. Usually, for each car and passenger, it takes around 30 minutes. We have ten people and three cars, enough time for a soccer match.

No one can bargain with nature, but we keep our momentum and reach the nearest village to the source on the fourth day. Some members of the team have already experienced the hardship of hiking up this mountain, as last time only two horses were available. This time, 11 horses are hired to carry us and all our gear up the mountain. However, horse riding has never been my favorite sport. As an Oxfam 100km Trailwalker for four consecutive years, I actually prefer hiking rather than riding an unfamiliar horse. In my role as the filmmaker, I have to ride a horse if I am to catch up with the action. Rolling a camera on horseback, recording every crucial moment at the front and behind the team as they proceed, is truly a test of a videographer. Every horseman, as always, claims his horse is a good breed. I can feel that my horse, named Lokpei, is annoyed with me, as I constantly move back and forth to find a good angle. I’m glad that she does not bump me off in retaliation.

For me, the significance of defining the location of a river source is that the place and its vicinity can now be well protected, be it for religious, spiritual, cultural or scientific reasons. I want to see this place left untouched and let it be there for another million years. No doubt as to the Tibetans’ belief; this is a sacred spot.

The weather turns sour as we arrive. We have planned this trip for months but were only permitted by the weather to spend 8 minutes there. I constantly remind myself that two past expedition team members, Wang Chih Hung the journalist and Chris Dickinson the videographer, went missing in a blizzard white-out after happily reaching the source of the Salween River in 2011. They were located the next morning, luckily still alive. An occasional change of weather could permanently change one’s life. Throwing the prayer cards may buy you another minute of leniency, but it seems we have awoken a lonely dragon. Quickly, we should leave quietly before it gets angry, very angry.
The source of the Dulongjiang River was the third big river source that I have explored. The previous two were the sources of the Mekong and the Nujiang Rivers. These three river sources were all located on the Qinghai-Tibetan plateau, a huge land mass more than 4,000 m above sea level. The treks to all the three sources were very hard and trying for me, with the one to the Nujiang River source almost killing me (see CERS’ articles on that expedition). So before setting out to explore the Dulongjiang River source, I had seriously questioned myself, “You’re more than 50 years old now, do you really think you can make it?” But nonetheless I decided to take the challenge.

My first encounter with the Dulongjiang River was some 20 years ago. I was then a voluntary worker performing poverty alleviation work in Fugong County, a small town on the bank of the Nujiang River. The work required me to climb over the Ligong Mountain and descend to the Dulongjiang River area to procure breeding bulls for the Fugong farmers. That part of the Dulongjiang River area was famous for its breeding bulls, which we called the “Dulongjian bulls”. For some strange reasons, the local people there did not like us calling their bulls the “Dulong bulls”. In order not to irritate them, we used the name they used, calling these bulls “the huge-headed bulls”.

This time I was going to venture upstream to the very source of the Dulongjiang River. The place where we set up over base camp had an elevation of 4,030 m.
From the satellite map, the straight line distance from this point to the source was 4.2 km, and there was an ascend of 500 m. The oxygen content in the air here was only about 60% of that at the sea level, I knew that for an “elderly” man like me, the trek to the source would again be a very trying one. Despite that, I wasn’t worried. I had confidence, I knew that I must make good planning for challenging tasks like this. “For every 50 m gain in altitude, I am going to do it in about 1,000 paces. This humble target should be okay for me,” I said to myself.

We set out from our base camp at 7:30 in the morning. After walking and climbing up and down many small hills, we reached a point where I thought I could see the river source. To my great disappointment, this wasn’t yet the place. I was very tired already. I was told the source was behind a snow covered ridge a distance ahead. Several more kilometers to go and some 200 m in height to climb, oh my God. I had a strong urge to give up and turn back. Fortunately after resting and eating my ration, I felt better and was able to suppress this urge. I bravely marched on and finally made it to the source --- the “half moon lake”. This last leg of the trek took me more than one hour to complete.

In the tranquil surrounding of the source. I felt so peaceful. I was also proud of my achievement. The trek was an arduous one but I learnt a good lesson from it : Good planning alone doesn’t guarantee success, good planning combined with unyielding determination do.
Two years ago when HM showed me pictures and gave me the latitude and longitude of the source of the Dulongjiang River, I started to gather information on the best route to get to the place, and on what problems we might encounter, etc. I had heard of the difficult road and weather conditions in the source regions before. And just before we kicked off the expedition, Cao, who I always saw as CERS’ lucky star, had an urgent family problem that prevented him from joining the expedition team. This made me a bit worried.

We spent the first night of our expedition in tents in Litang. As we set up our tents snow began to fall. The next morning all the surroundings were covered with snow like a fairyland. The two team members from the Philippines and Myanmar, who probably had never seen such beautiful scene before, were so engulfed in joy and excitement that they totally forgot their headache due to altitude sickness.

On the sixth day of our journey our cars reached Ganzi where we forked with a minor road on which HM had traveled solo in the eighties. This was a road along the Yalongjiang River valley. He did not get through because the road conditions were so bad then. We drove upstream along this minor road which HM had traveled before. At night fall after passing Wentuo, we set up tents on the river bank and spent the night there.

The next morning we entered a Sichuan-bound national highway and moved towards Yueshu, after eating lunch at Shiqu. On the way we passed a grassland where we sighted 19 Black-necked Cranes. We later crossed a small river with plenty of fish in it. We could not resist the temptation to fish in the river. So we stopped to fish. We got ten fish so we had fried fish and fish soup for dinner that evening. The tranquility and beautiful scenery at this location reminded me of the expeditions to Tibet I did with HM in 1994.

Noon time the next day we arrived Yueshu. There we saw the remains of a big monastery that was damaged in the last earthquake. After the quake, the local government had rebuilt the town and the newly built town areas was much bigger than the old one. In the afternoon we arrived the small town of Nangqian where we replenished supplies and took hot shower.

The next day we proceeded to the Dana Monastery, a provincial grade protected cultural relic. The 800 years old monastery was the only Yeerbagaju Sect monastery now left on the Qinghai-Tibetan plateau. We did not know the way to get there so we had to ask people as we drove along. We were unlucky at first: people either
did not know the way or did not understand Putonghua (the language we spoke). We tried different routes but they all led us to nowhere. When we almost wanted to give up we met a lama and a nun pitch hiking in the wilderness. To our surprise the place they wanted to go to was the Dana Monastery. We were so pleased to let them get on our cars. With their help we reached the monastery smoothly, fulfilling over wish to visit this scare cultural relic.

On our way leaving the Dana Monastery, we found that the majority of tires of our cars were punctured. After repairing and changing tires in the small town of Wuqi, we were left with only one spare tire. To play safe HM decided that, instead of adhering to our planned route, we should go to Bangda via Dingqing, Bianba, Yigong and Tongmai. There we would wait for our Shangri-La colleagues to bring additional spare tires and supplies to us. While waiting at Bangda, we visited a hot spring nearby. We were surprised to see many tourists from Shenzhen camping and bathing in hot springs there.

On the twelve day of our expedition, we were joined by our Shangri-La colleagues. After the union in Bangda, we (now we had three cars) moved on to Bashu, passing the famous ninety-nine bends. Road condition was very good as the entire length of the road was now paved. At Ranwu Lake, we forked in the direction of Chayue. The hilltop section of this road was very beautiful, with

CLOCKWISE FROM LEFT:
Snow range of the source region.
Alpine source lake Jingla Co.
Releasing Lungda at source lake.
CERS group photo at source.
a glacier lying next to it. The entire length of the road had vertical red concrete poles (about 3 meters high) along its side. Many of us were puzzled by these poles’ purpose and we started guessing and debating. Hearing our debate, HM gave us the answer. These red poles were meant as indicators of how deep the road was buried in snow after a snow storm, so that bulldozers operators would know how much deeper they still needed to dig.

After climbing over a 5,000 meters snow-covered mountain pass, we started to descend to the 2,327 meters Chayue. The scenery on this descend section was very beautiful, with green forestation, grasslands and valleys all the way. At Chayue, we drove further down along the roaring Chayue River towards the small village called Lower Chayue. We intended to visit an ancient Deng tribe settlement there. Further down the river was India. Just before reaching Lower Chayue there was a frontier guards’ check point. The soldiers there told us that as we did not have the necessary authorization papers, they could not permit us to pass through. We had no choice but to turn back to Chayue. At Chayue we filled up our cars’ gas tanks at the only petrol station there. We were surprised to find that this was a privately run petrol station. There used to be a Petro China gas station there but it was shut down due to lack of business.

At the petrol station we tried to check out with the people there on whether the road to Chawalong was passable. We needed to go there in order to proceed to Muruo, where we would move on to the river source on horseback or on foot. However no one was able to give us a definite answer. Despite the uncertainty, we drove on towards Chawalong nonetheless. On the way we met a young couple from Guangxi. They requested HM to give them a lift to Muruo which HM agreed. After five hours’ drive and climbing over two snow-covered mountain passes, we arrived Murus. The young couple left and we briefly settled down for lunch. After lunch we drove to the nearby Quwa Village to see if villagers there had horses that we could hire. We did not succeed in getting any. At Quwa Village, we noticed that (and HM’s map also indicated that) there was an uphill path. We therefore drove up this small path. Then kilometers later the path ended in front of a high mountain pasture. We set up a camp site on the peripheral of the pasture land.

From HM’s map, we noticed that the elevation here was 3,900 meters, and its direct distance to the river source was 4.7 km. We decided not to turn back to Quwa Village to look for horses any more. Instead we would trek to the river source straight from here the next morning after breakfast. We estimated the walking distance would be about 7 km.

Seven o’clock the next morning we started our trek to the river source. There were seven of us, Yuen did not trek to the source with us because he was responsible for staying guard at the camp site.

About an hour later, we met a local herdsman on the way. He was on horseback and he had another horse with him. We succeeded in talking him into renting us his two horses and also acting as our guide to the river source, a water pond from melting snow called Jinglacuo by the local people. Respecting senior persons and the fair sex, we let HM and Berry ride the
horses. The rest of us proceeded on foot. Hills after hills (some were quite steep) we went and as we moved on, HM and Berry became further and further ahead of us. Shortness of breathe made it impossible for me to try to catch up with them. I was very exhausted. At one stage I almost wanted to give up. Fortunately I persisted and made it to the source eventually. When we arrived the source at 11am, HM and Berry were already there for nearly one hour. The trek had taken us four hours. The elevation of the source was 4,800 meters, a rise of 700 meters from our campsite. The walking distance was 7 km.

We left the source at noon. As our herdsman guide had to push on with his journey elsewhere, he did not agree to let us use his two horses any more, despite our offer to double the payment to him. So HM and Berry had to walk back to the campsite like us. At 3pm we were back to the campsite. Resting there, my heart was filled with joy and satisfaction. I said to myself, “Well done, you have by now reached the sources of four great rivers.”

The next morning we drove back to Quwa Village where we bought some minority peoples’ handicrafts. At 10am we left Quwa Village for Chawalong. On the way we saw many SUVs running in the direction of Tibet. The drivers told us that they were on their return journey after visiting beautiful Bingchacha, a remote place difficult to get to even nowadays. This reminded me of a graffitii I saw on the wall of a guest houses in Murus. It read “a visit to Bingchacha will give you sufficient topics for boasting for at least three years.”

Chawalong was a big town and had many shops now, we lunched in a restaurant there. The restaurant owner, a chap from Lijiang, Yunnan, told us that about two thirds of the shops in the town were owned by non-locals from Yunnan. The rest was owned by people from Sichuan, also non-locals. After lunch we headed for Bingzhongluo, which was 54 km away. As road work was going on all along the way, it took us three hours to arrive there. While having dinner there, we received a telephone call from the young Guangxi couple to whom we gave a lift earlier. They told us they had arrived Deqin in safety via the newly constructed Degong highway. This was very useful information to us because we were now sure we could use this highway for the journey back to Shangri-La. And there would be 600 km shorter than the route we originally planned.

So the next morning we drove along the Degong Highway until we reached a mountain pass where we had to divert into a minor road to continue our journey. We did not get this minor road’s entrance right at the beginning. Fortunately we met some road workers who told us where the entrance was. So we entered the minor road and moved on. Some sections of this road was quite steep and rugged. Not a problem for us because our cars were four wheels driven. At one place, the road was blocked by a large heap of rocks and stones from an earlier landslip. All of us had to get off our cars to move away some of the rocks and stones to enable passage. This took us about one hour. After that we moved on and the rest of the journey was rather smooth. At 7pm that evening we were back to our home Shangri-La. Sweet Shangri-La, we’re finally back.
I have been with the CERS for 13 years now. During this 13 year period, I have participated in numerous CERS expeditions to very remote and desolate places. In 2005 we went to the source of the Yangtze River. In 2011, we went to the source of the Nujiang River where the expedition team’s forward party went lost amidst a blinding snow storm and narrowly escaped death. In all these expeditions, my task was only to provide support services at the base camp, never having the opportunity to proceed to the target location with the forward party.

This time, the expedition to the source of the Irrawaddy River was different. It was a pleasant surprise to me because HM had agreed to place me in the forward party. I knew making it to the source would be hard work for me but I
was determined to try it out.

On May 25, we set out very early in the morning from Sangjiu, Chayu. Around noon time we arrived Muruo for lunch. Afterwards we drove pass Quwa and reached a place about 4.2 km direct distance from the Irrawaddy River source. We could not proceed any further by car because of the rugged terrain here. It was 4pm and we had driven for eight hours. Yet the distance covered was only 120 km so you can imagine how difficult the road condition was. After setting up over base camp, we settled down and discussed the best way to get to the source. We thought we were able to have some horses from the local people so we could go to the source on horseback. To our disappointment all the horses were out. Their owners had rode them to far off places to dig cordyceps (a precious herb that they could sell for good prices) as the herb was in season. This meant that we had to proceed on foot for the 15 km round trip journey to the river source the next morning.

We started rather early the next day. The scenery was so nice and the vegetation on the way was so diverse and beautiful. The first hour or so of the walk was enjoyable as I was still full of strengthen and energy. I took many photographs and listened attentively when our plant expert stopped to show us the various plants and herbs on the way. As the elevation increased, I began to feel unwell. My heart beats increased and I was gasping for breath in the rarefied air. I felt very tried and weak. I almost wanted to give up when I saw a distant snow covered ridge that we must climb over.

Before setting out for the expedition, I had promised my daughter that I would make it to source, pick a stone there and bring it back and share the joy with her. The thought of this promise gave me great encouragement and enabled me to persist. Slowly and steadily, I finally made it to the source.

Surrounded by snow, the source was so pure and tender like a fairy. It was lying there peacefully. Flowing downstream it carried with her the gift of nature and the blessings from heaven. For me, it had taught me a good lesson: difficulties could be overcome if you are determined enough.
The low shrub above our basecamp is changing a coat of colors, into yellow, orange, and crimson red. We are at 3900 meters. It indicates that frost has arrived at 4000 meters, thus the foliage change. Not far from our camp is the high pasture for the Tibetan yak and zho (a hybrid between yak and cow) grazing ground.

Tseren Sangmo and her aunt Yishi Lacho are the only souls at this high pasture. The log shed they built some seven years ago can be considered the first household at the Irrawaddy source. Here they would spend two months of the year, from August to early October. In another five days, their family members, perhaps three men, would arrive from home, four days march away, to help them decamp to go home.

For the previous two months, June and July, Sangmo and Lacho were at a higher camp, another 200 meters higher, at another grazing ground. There, they live in a shed similar to this one. Back home in the village of Gula, pasture is scarce and thus kept only for winter grazing. They herd their livestock here to the adjacent Quwa village and paid a fee to use their pasture for summer grazing. For each
animal, they would pay 30 Yuan for seasonal usage. Herding over 30 animals belonging to three families from their home, they would pay upward of a thousand Yuan.

But things are not as rosy as generations ago, or even just ten years ago. This will be the last season for Sangmo and Lacho to herd their animals here. Lacho told me that her family would soon sell all their animals while she would look for other work. Going to work in towns or cities promise better pay, and easier work. Xangmo is not sure whether she alone could handle the remaining livestock and would unlikely return to the herding ground next year.

“Won’t you miss this place?” I asked of Lacho. “Yes, I would, though work is really hard,” answered Lacho. Be it rain, shine or hail, they’ll be working all day long. “I think I would only keep a couple of our animals at home, while the rest would be sold,” she added. “I knew each animal by name and by heart,” she said with a slight smile of intimacy as she squatted low while milking her cow. “We are already the last three families to keep to our livestock,” Lacho spoke with a soft tone of sadness.

It seems less and less equitable as the years go by. The nineteen yaks and cows they own yields enough milk for one season which are churned by a hand-crank machine into maybe a hundred kilos of yak butter. The residual milky water is dried and made into a hard yogurt. Both are mainly for their own consumption, with the hard yogurt mixed into congee as part of their staple. Perhaps a few dozen kilos of yak butter would be sold to friends and neighbors.

As in past years, when the two ladies arrived at the high pasture, it would be also cordyceps collecting high season. Lacho is more experienced in looking for such high-country fungus and took in about 350 pieces, each worth Rmb 35 Yuan. Sangmo is new to this and only managed slightly over 100 pieces.

A thousand-year-old tradition is coming to a close. Livestock raising is no longer even enough for subsistence, replaced by newer
and more lucrative work and business opportunities. The new condition and transportation convenience have made much of the Tibetan traditional lifestyle obsolete. Nomadic culture, even pastoral tradition, that of tending to both livestock and agriculture, are no longer in style.

Sangmo is 18 years of age. Her aunt is twelve years older at 30, with two children. Both Sangmo and Lacho were born in the Year of the Dragon, an auspicious sign. “Are you married and have kids?” I asked of Sangmo, seeing that she is very beautiful and standing tall at over 1.8 meters. “No, I’ve never even had a boyfriend or ever been in love,” came her reply.

“But you are so beautiful you must have many suitors,” I pursued further. “At my family, I cannot choose to get marry by my own free will. My parents would arrange whom I should marry,” said Sangmo while looking down with shyness. Her Chinese is totally fluent, thanks to six years attending a local school before she started herding animals at age 15. As for Lacho, she and her elder sister are both betrothed to the same man. Each has produced two kids for the husband.

Through Sangmo and Lacho, I found out that practically all marriages at their village are arranged by parents. In that sense, their livestock seems to have a more liberal and free life than their masters, being able to choose their own mate. When it would be Sangmo’s turn to get married, the five hybrid yaks belonging to the family would become her dowry, going with her to her husband’s home.

I invited Sangmo and Lacho to visit our camp and join us for dinner. But they declined, citing that their day’s work would take up all their time. For us, the two are very special, the first household closest to the Irrawaddy River source. Downriver there are thousands and tens of thousands of families living along this great river which flows for over 2200 kilometers until it reaches the sea.

Yes, this is literally the First Family at the Irrawaddy source. No, they don’t have an Air Force One to travel in. But as they begin their last journey home from this grazing ground, they would be on their horses, driving with them their yak and cow herd, breathing the fresh mountain air that many of us in the city has never even know to exist.

TOP TO BOTTOM:
Sangmo preparing yak butter residue.
Dried to become hard yogurt.
Inside of nomad’s camp.
Sangmo and Lacho around fire hearth.
Sangmo inside camp shed.
A CHANCE FOR RE-APPRECIATION: MY IRRRAWADDY SOURCE TRIP

By Tsering Drolma
Zhongdian

This was a huge accomplishment, especially for those who grew up in metropolitan cities and lived there their entire life. They had reached the source of the Irrawaddy River; the fifth source discovery for the CERS team. For me, however, it was a journey to revisit my childhood memories and appreciate them from a different angle.

I grew up in a tiny corner of Sichuan in a Tibetan village. There, I learned to appreciate the source of even a small stream, because our life depended on it. When my brother and I were young, my parents made us plant trees every spring around the source of our stream so water would not dry out. Today tall willow trees stand all along the small stream as a result. We were never allowed to go to the bathroom near the stream, otherwise, we were told, we would be punished by the klu - the water-deities.

The saying “when drinking water, think about the source” was deeply rooted in my culture. We Tibetans are fortunate to live near the sources of all the major rivers in China and we are all culturally sensitive to keeping them clean. Traditionally people heavily depended on natural materials and resources to sustain their daily life, so there was almost no pollution. Nowadays, massively manufactured products are available at cheap prices even in the remotest villages. Nomads, the most primitive people on the Tibetan plateau have abandoned many tools that were major parts of their daily lives. This, however, has given CERS the chance to acquire them.
We have a whole collection of handicrafts and tools from Tibetan nomad culture back at our CERS Zhongdian Center, which we use for educational purposes. So whenever we visit a Tibetan village we bring back traditional items that are no longer being used in local people's lives. I am a devoted believer in education, and I believe that education is not only about learning knowledge, it is also about the interaction between people and the impact we have on each other.

Every summer I host groups of students from overseas at our center in Zhongdian and, each time I show them our museum collection of Tibetan nomad culture. This is a typical story that I would use to tell them about the complexity of cultural preservation in the midst of modernization, commoditization and commercialization.

It was not difficult to realize that local people do not value, for example, a piece of worn out blanket, but they would not want to give them away because obviously somebody else was interested in it. Local people seemed not to care that a tiny bit of their culture would be gone if they sold, for example, an old traditional robe which was the only available piece in the entire village. They could so easily buy a modern replacement to wear.

Our base camp was near a summer pasture, which was run by two Tibetan women—a thirty-some-year old aunt and her 18-year-old niece. My colleagues got up really early in the morning to film them milking the yaks.
joined them later on just to see how different it was from my father’s work as a herder when I was little. I realized that they were using many utensils that were purchased from the market, like a plastic bucket to milk the yaks, instead of using a traditional wooden one.

In the past when a wooden bucket was no longer functional, it would just be thrown away somewhere in nature and would decay and disappear without a trace. However, it is another story with, for example, plastic products brought by the modern world. The problem is that local people are not equipped to deal with modern garbage. They throw things out just like they used to and end up living with them for the rest of their lives, or even generations after.

With modernization reaching every corner on Earth, local people give up their traditional way of life without giving a second thought. Only recently, I started to remember that I used to herd yaks with my father when I was really small because I met some friends who were really interested in my childhood. I had totally forgotten that we used to value our water source so much until I joined this source trip. We are unconsciously letting go of something important to us, loosing it piece by piece, and we do not realize until a whole way of life is gone. However, we will have to face the consequences eventually, no matter if they are good or bad.
## WATER TEST

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**Notes:**

- **APHA** - American Public Health Association, American Water Works Association and Water Environment Federation, Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WEF, USA.
- **DoE** - Department of the Environment (1994), The Microbiology of Water Part I, Drinking Water, U.K. Section 7.5 & 7.7
- **USEPA** - United States Environmental Protection Agency
- The analysis was performed by an outside laboratory assessed as competent.

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***End of Report***
At the invitation of Cliff Dunaway, HM visited Hong Kong Chek Lap Kok Airport 4am in the morning to take a close-up look at a full-scale replica of a Farman MkII bi-plane, the first airplane to fly in Hong Kong. Belgian pilot Charles den Bron took off in Shatin HK on March 18, 1911. The replica is flight worthy and took to the air in 1997 before being suspended inside the huge airport atrium as a permanent exhibit.

At the request of the government, the CERS caving team explored a group of huge “Sink Holes” and natural caves in northeastern Yunnan. Some of these features measure half a kilometer in diameter.

A group of students from Lawrence University in Wisconsin visited CERS Shek O 1939 Exhibit House.

Students and teachers from Yung Yau College of Hong Kong visited CERS Taiwan Alishan site and stayed for one week.

A group of students and teachers from the Hong Kong University Graduate Association School visited CERS Hainan Island project site for one week.

Eve Jardine-Young, principal of Cheltenham Ladies College, visited CERS in Hong Kong.

The YPO Pearl River Delta Chapter made a visit to CERS in Shek O and learned about the history and projects of the organization.

Charlie Brown, an Eton graduate on gap year, joined CERS as intern to the upper Chindwin River in Myanmar visiting Naga villages.

CLOCKWISE FROM TOP: HM with Cliff and Gordon of the HK Historical Aircraft Association. CERS caving team for “Sink Holes” of Yunnan. Students and teachers of Yung Yau College with CERS team at Alishan Taiwan. CERS intern Charlie Brown with Naga children of Myanmar. Students and teachers of HKUGA school with CERS team at Hainan project site. Students and teachers of Lawrence University visit CERS in HK.
CERS IN THE MEDIA AND LECTURES

- Dr Bleisch joined HM in delivering a lecture to students at the HK Canadian International School.
- HM gave his annual lecture at the Royal Geographical Society HK Chapter on “To the Source of the Irrawaddy”. A film was also shown on the subject.
- Two new books, “Nature in my Mind” and “Culture in my Thought”, authored by How Man Wong, were released. This is the 19th and 20th book in the bilingual series.
- HM gave a lecture and showed films at a book launch and signing event at the Eslite Bookstore in Taipei.
- Xavier Lee, CERS filmmaker, added four newly completed short films to our archive, “The Last Fishing Otter”, “Taiwan Alishan Tsou tribe”, “Cave Exploration of Yunnan’s Sink Holes” and “To the Source of the Irrawaddy”.

CURRENT PATRONS

HONG KONG / OVERSEAS
- Gigi Ma Arnoux
- Charles Brown
- Dr Joseph Chan
- Ingrid Ehrenberg & Joe Chan
- Eric Chen
- James Chen
- Choy So Yuk
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CERS’ MISSION:
The mission of the China Exploration and Research Society is to enrich the understanding of our cultural and natural heritage.

A subscription to this newsletter is US$100 for three issues. All proceeds support CERS projects. Please contact us directly if you are interested in signing up. See the bottom of page two for contact details.