

Remembering the 1945 Makran Tsunami

Interviews with Survivors Beside the Arabian Sea



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This booklet in pdf format may be downloaded free of charge at <http://iotic.ioc-unesco.org/1945makrantsunami/1945-makran-tsunami-booklet.pdf>. Also posted there are videos of some of the interviews, supporting information that includes geographic coordinates for many of the interviews, and scans of written records of the 1945 tsunami.

Please send corrections to dr.jak@unesco.org. IOTIC will endeavour to use them online and in any future print additions.

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Interviews with Survivors Beside the Arabian Sea

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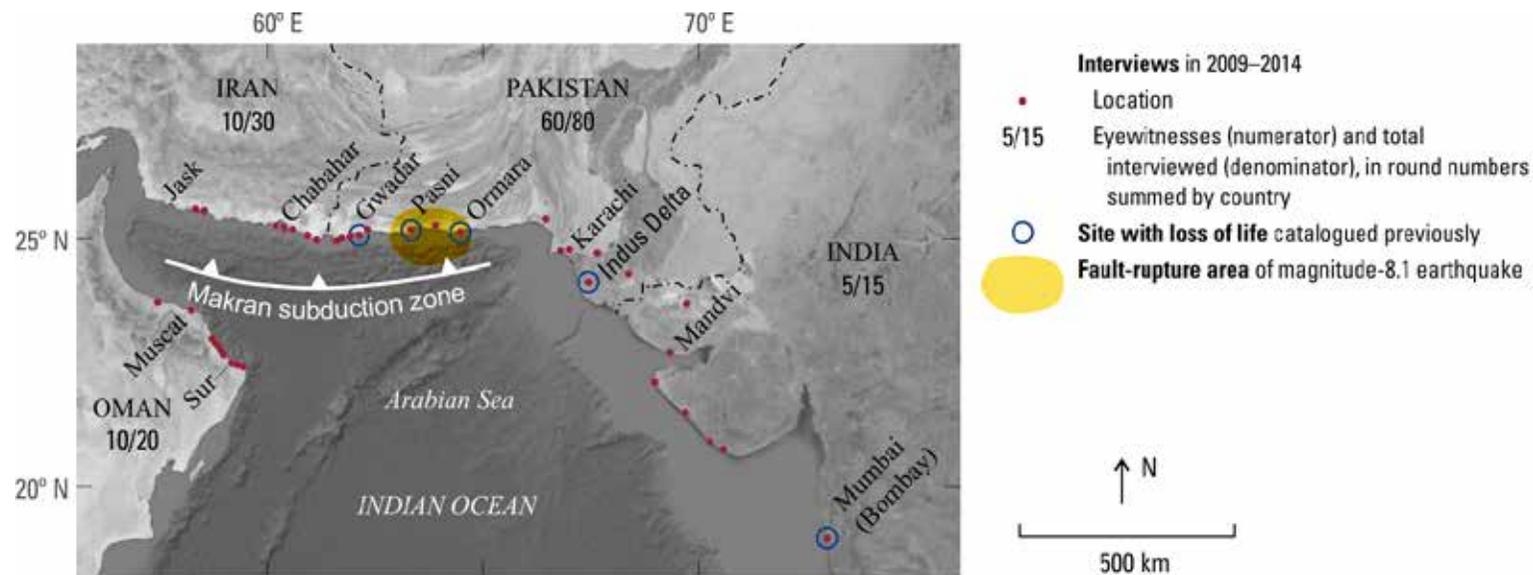
The place names denote localities described in the interviews. The localities are grouped by present day country. The countries are in alphabetical order, as is customary in lists of United Nations Member States. Within each country, the localities are listed from west to east.

INTRODUCTION

Tsunami waves of local origin, which account for most fatalities due to tsunami worldwide²⁴, pose a natural hazard on shores of the Arabian Sea¹⁸. The main source of this hazard is the Makran subduction zone, an active boundary between converging tectonic plates that slants gently northward beneath the Arabian Sea coasts of Iran and Pakistan. Its seaward edge tracks the foot of the continental slope for a distance of 800 kilometres (refer to map below). Were the zone to break along its entire length, the resulting earthquake might be in a range of magnitude 8.7-9.2 (ref 23), and the ensuing tsunami would likely exceed 10 metres in height along most coasts of northern Oman, southeast Iran,

Pakistan, and northwest India⁸.

This worst-case scenario scales up the Makran earthquake and tsunami of 1945. The earthquake, of magnitude 8.1, resulted from fault rupture in an eastern part of the subduction zone along what is now the coast of Pakistan⁵. The rupture started offshore of Pasni and extended beneath Ormara. The ensuing tsunami has been ascribed in part to submarine slides^{5,11,19}, and trapping of its waves on the continental shelf has also been proposed¹⁶. The shaking and flooding in 1945 occurred early on 28 November local time. Thirteen deaths attributed to the tsunami were confirmed in Bombay (Mumbai).



The rest of the previously documented fatalities occurred in what is now Pakistan, along a coast then divided among two Baluchi states, an Omani enclave, and a British province. Damage was reported from Iran and Oman. In earthquake and tsunami catalogues, the total death toll ranges from a few hundred¹ to 4,000 (refs15,20).

Booklet

This booklet sheds new light on Makran tsunami hazards through coastal residents' recollections of the 1945 disaster. Most of the memories were gathered from persons born before 1945. Additional testimony came from younger people who recounted what their elders had told them. Many of the accounts are sketchy and hearsay is common. But some of the accounts contain striking details consistent with “flashbulb memory”, a psychological^{2-4,21} and neurological^{6,22} response to traumatic events.

The interviews were carried out in 2008–2015, chiefly under United Nations projects¹³. Summaries of most of the accounts from Iran^{7,17} and Oman¹¹ have been reported elsewhere, while the accounts from India and Pakistan are printed here for the first time. Most of the accounts pertain to the 1945 tsunami, but testimony is also presented on the 2004 Indian Ocean tsunami and on the small Arabian Sea Tsunami of September 2013 (refs 9,12).

Some of the interviews were recorded by video and all were abstracted in field notes. Video excerpts and interview coordinates have been posted online at <http://iotic.ioc-unesco.org/1945makrantsunami/>. For this booklet, the interviewers' translations into English have been edited for concision and coherence, then paraphrased in the first person.

The interviews are arranged by modern country listed alphabetically, and they are arranged within each country from west to east. In the list of interviewers on the title page, the countries are arranged by the number of eyewitness accounts obtained.

The regional index map on page 1 identifies some of the key localities. Not provided are index maps to all the villages and neighbourhoods mentioned.

However, the booklet produces several period maps of the Arabian Sea shore in what is now Pakistan. Most of these reproductions are from pre-1945 topographic sheets of the Survey of India.

Applications

The booklet presents basic information that may aid in reducing tsunami risk around the Arabian Sea. The interviewers and editors foresee two applications of the eyewitness accounts.

First, the accounts may clarify tsunami hazards. Inundation limits identified by eyewitnesses can be used to improve simulations of tsunami sources and maps of tsunami hazards. In some cases the limits have been surveyed by height and by distance from the shore¹⁷, while in others these measurements have yet to be made.

Second, the accounts may increase tsunami awareness. Tsunami stories handed down from one generation to the next are said to have saved thousands of lives on an Indonesian island hit by the 2004 Indian Ocean tsunami^{10,14,24}. A preparedness campaign in Pakistan in 2009 featured a local eyewitness who broadcast, by radio, his recollections of the 1945 disaster. It is hoped that community-based understanding of tsunami hazards will save lives during the next large tsunami on Arabian Sea shores.

India

▪ Mandvi, Gujarat



Shivaji Bhuda Fofindi

Age when interviewed: 81

I was born 13 August 1933 here in Mandvi. My father was a ship captain. He died when I was six months old. My family could not afford to send me to school, so when I was ten I went to work on my uncle's ship, the *Leelavanthi*. I visited many places, even Mozambique and South Africa, carrying goods from Porbandar port, Gujarat. At the time I never heard the word tsunami, but I survived storms at sea with big waves, heavy rain, lightning, and strong winds. I joined the Mandvi Port staff in 1954 and retired in 1991.

When I was twelve, in the year 1945, I was working on another ship, the *Parasmani*. The captain was Mr. Anathleela Kashta, and the owner was Mr. Papatlal Hiralal. The ship carried passengers from Mandvi to Karachi, and it mainly carried cargo from Karachi back to Mandvi.

One day, after we reached Karachi port and dropped off the passengers from Mandvi, there was a delay in loading cargo for the return trip. The agent said we would have to wait two days. So the captain ordered us to clean the ship.

We moved the ship to a bank of the creek called Bhaba. This was on 28 November 1945. I don't remember the exact time, maybe about 8 a.m. We waited for the tide to fall so we could get down and start cleaning the hull. We completed some of the work, maybe about 11 a.m., and everyone was exhausted. So we decided to take a coffee break. We climbed aboard and headed for the kitchen.

Suddenly we felt that ship floating at a great height. The water had risen around 10 feet. We all thought this must be from an abnormal high tides or a storm. The captain decided to leave Karachi. First he had to hire another boat to pull the ship towards the port. Crews of ships anchored at Karachi told us that the water rose suddenly there.

When we reached Mandvi, we told local people about this experience. They said they saw a high tide during the low tide on 28 November. The water rose suddenly. They thought it was due to some cyclone in the sea. They said there was no damage to property or loss of life. They said the water level rose to 5 or 6 feet without getting as high as *zon* [the highest high tides that occur in daytime in June, and at night in October]. The water did not reach the gate of Mandvi town.

Interviewed 2014, in Gujarati, near the Custom Port Office in Mandvi, by SS and NB.

Iran

▪ Geshmi



Khairi

Age when interviewed: 90+

Around 6 a.m., when my husband was at sea fishing, I saw the water coming. I was worried about my husband so I decided to go to the harbour. But I could not get there when the sea rose up. We were living closer to the shoreline at that time and after that we had to move more inland to the current place because the old town was completely destroyed by the tsunami.

Interviewed in Persian, 13 October 2010 in Geshmi (Sourat) by HMF and FP.

▪ Pozm



Molabaksh Afraz

Age when interviewed: 60

My father told me that there was an unusual storm at Pozm seven years before I was born. He said that two or three big waves hit the coast about 8:30 a.m., and that several *yakdar* [wooden boats] were damaged. He said nobody was killed or injured.

Interviewed in Baluchi, 28 April 2014 in Pozm by MA and HG.

▪ Konarak



Golgozar Khaleghi Rad
Age when interviewed: around 80

At the time I was close to 20 years old. I was in the mosque for morning prayer when sea water entered. The water broke windows and some people were injured but nobody died. A few weeks later I went to Pasni and Ormara, and I saw that those places were destroyed.

Interviewed in Baluchi, 13 October 2010 in Konarak by EAO, MAH, and JG.

The interviewers measured the reported water limit at the mosque as 3.05 m above sea level, 52 m inland from the shore.



Abdollatif Kouhi
Age when interviewed: 77

When I was 6 or 7 and winter was starting, three huge waves struck the coast around 8 a.m. Five *yakdar* [wooden boats] sank in Konarak harbour.

Interviewed in Baluchi, 28 April 2014 in Konarak by MA and HG.

▪ Tiss

Anonymous Woman

Age when interviewed: 62
(born after 1945)

My father saw the water run up the drainage channel of the village Tiss.

Interviewed 10 October 2010 by EAP and MAH.

The interviewers surveyed the water limit as 1.65 m above sea level and 1289 m from the shore.

▪ Chabahar



Rahmat Khodadaian

Age when interviewed: 75

At that time Chabahar was a village. Waves came into the bay at 3:30 a.m. The water reached what is now the location of Bank Melli. My father said that around 200 years ago in India, waves came after an earthquake and many places were flooded.

Interviewed in Baluchi, 11 October 2010 in Chabahar by EAO, MAH, and JG.

The interviewers measured the reported water at the location of Bank Melli as 3.65 m above sea level, 367 m inland from the shore.



Anonymous Woman

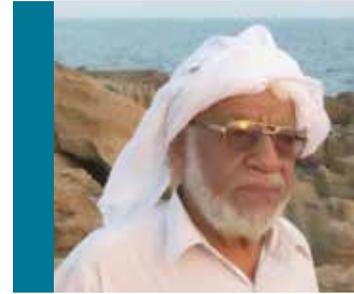
Age when interviewed: 78

I was 13 when huge waves came and destroyed huts near the shore. Some people were washed away and nobody found them.

Interviewed in Baluchi, 11 October 2010 in Chabahar by EAO, MAH, and JG.

This may be the first report of apparent death west of Gwadar from the 1945 tsunami.

▪ **Ramin**



Dadallah Afarin

Age when interviewed: 82

At 8 a.m. the sea dropped quickly in Pasabandar, Beris, Lipar, Ramin, Chabahar, and Tiss. Then the water came back. This happened another three or four times. Beris was completely covered by water. Nobody died.

Interviewed in Baluchi, 29 April 2014 in Ramin by MA and HG.

▪ East of Ramin

Ghalamhossein Dadshahpur
Age when interviewed: 73

I was in my early teens and was living in Pilar [8 km east of Ramin]. Three big waves in the early morning carried boulders from the sea onto a berm at the mouth of the Lipar River. They were later covered by sediment. The water went far up this river, as much as 3 or 4 kilometres. Water from the waves also reached boulders on cliffs east of Ramin. Boulders were already there.

Interviewed 12 and 13 October 2010 in Ramin and Lipar by EAO and MAH.

The interviewers surveyed a tsunami limit at Lipar as 2.80 m above sea level and 540 m inland. At the boulders, which were observed to be imbricated, they estimated that splash from the tsunami reached 7.15 m above sea level. Additional witnesses, present during the interview in Ramin concurred with the testimony about the boulders.



Dadshah Dadshahpour
Age when interviewed: 78

When I was a child, huge waves destroyed 15 *yakdar* [wooden boats], but nobody was killed or hurt.

Interviewed in Baluchi, 29 April 2014 in Ramin by MA and HG.

▪ Beris



Khaled Baluch

Age when interviewed: 80-90

I remember I was about ten years old, and I am now about 80 or 90 years old. I felt a weak earthquake around 1 a.m. Three waves came three or four hours later. Boats in the harbour were moved from their anchorages and were smashed against one another. No such event was experienced by my father or grandfather.

Interviewed in Baluchi, 14 October 2010 in Beris by EAO, MAH, and JG.

Khalil Taherat

Age when interviewed: 82

There were three waves, and the water reached some dwellings and also the front of the mosque beside the beach west of the villages.

Interviewed in Baluchi, 14 October 2010 in Beris by EAO, MAH, and JG.

The interviewers surveyed the front of the mosque as 5.60 m above sea level and 212 m inland.

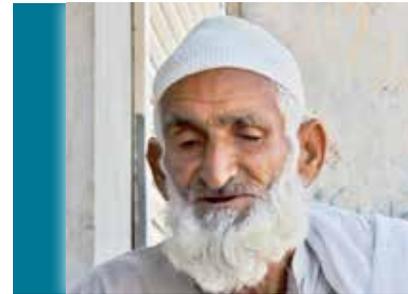
▪ Pasabandar

Adam Baluch

Age when interviewed: 77

I was 12 years old at the time. Nobody in the village felt an earthquake. Three big waves crashed into boats around 4 a.m. The water went halfway up the hill to the village. Northeast of the village near the road to Gowater, the water ran across flats to the base of the hills, maybe 660 metres inland and 10 metres above sea level. The water also went as much as 10 kilometres up a river.

*Interviewed in Baluchi, 14 October 2014 in Pasabandar by EAO, MAH, JG and a driver.
The interviewers measured the reported limit on the hill to the village as 13.9 m above sea level and 61 m from shore.*



Usman

Age when interviewed: 80

(witness to the tsunami of
26 December 2004)

Eight to ten years back we were in big boat near Pasabandar. Suddenly the sea went down and the boat was on the sea bed. After some time the water level rose up again. This happened many times and boats were destroyed by colliding with one another as well as by hitting the sea bed. The sea water retreated around 1.5 kilometres from the normal shoreline. It took an hour at least for the sea to come back to its normal condition. Later we came to know it all happened because of an earthquake and tsunami near Indonesia.

*Interviewed in Balochi 13 March 2014 by GN and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/4>*



Haji Pirbaksh Pasabandari
Age when interviewed: 85

I remember that two big waves 7 or 8 metres high hit the Pasabandar coast at 6 or 7 a.m. Around 10 or 15 *yakdar* [wooden boats] were destroyed, including one belonging to Haji Esmail, who was the village chief. The waves carried many boats around 200 metres inland. I remember that frightened people bled goats, sheep, and cows. There was much damage but nobody was killed or hurt, thank God.

Interviewed in Baluchi, 13 October 2010 in Konarak by EAO, MAH, and JG.



Hadji Saleh Turbo
Age when interviewed: 65
(born after 1945)

My father told me about an event that happened around 70 years ago. He said that three huge waves, each one as tall as a lamp post, hit the rocky shores of Pasabandar harbour. The water splashed into the village but nobody died.

Interviewed in Persian, 23 August 2008 in Pasabandar by ANB.

▪ Henne (Gowater)



Doustmohammad Kalmati

Age when interviewed: 65
(born after 1945)

My relatives in Pishkan (Pishukan, west of Gwadar), Pakistan, have told me that the event was in early morning around Fajr [dawn prayer]. They say that three huge waves came into Gowater Bay, and that the water rose 10 metres. They do not know of any deaths but they remember that many fishing boats were damaged.

Interviewed in Baluchi, 28 April 2014 in Henne by MA and HG.

OMAN

▪ Quriyat



Abdullah bin Sa'eed Al-Sinani
Age when interviewed: 85+

When I was between 8 and 10 years old, a great flood came to us from India. My parents were worried about that and never let me become a sailor, so as to stay far from India as possible. I then proceeded to become a fisherman at the age of 12, only fishing near the coast, but during my travels I had reached Bahrain and Kuwait.

I recall four intense storms during my life: one long before I was married, one after I was married, and one after I had had all my children.

Interviewed in Quriyat 10 April 2012, by NSAB, GH, and AR.

▪ Al-Dhabab



Rashid Nasser
Age when interviewed: 70+

A flood arrived here from India, but did not destroy anything. It reached the height of the house (~3 metres) but retreated after that without causing any damage.

Interviewed in Al-Dhabab 10 April 2012, by NSAB, GH, and AR.

▪ Bammah



Nasser Hamad Khalfan Jum'a Al-Husseini
Age when interviewed: 75+

We travelled by boat from Oman to India and back. Sometimes the winds were strong enough to take us back to Ras al Hadd in six days. Otherwise the return trip could take a month.

My ancestors spoke of a storm about 200 or 300 years ago that was as strong as Gonu¹. In my lifetime there has been no other storm that strong.

There was a great flood that reached Oman from the side of India, a flood that crossed the sea and reached the Omani coast. For 15 days, the seawater and the water of the *wadi* [the channel of a watercourse that is dry except during periods of rainfall] were mixed after the flood reached our shores. For 15 days we could find the seawater fish in the *wadi*.

Interviewed in Bammah 10 April 2012, by NSAB, GH, and AR.

¹ *Cyclone Gonu, 1-7 June 2007, is the strongest tropical cyclone on record in the Arabian Sea*

▪ Fins



Shughail Moosa
Age when interviewed: close to 70

I have a memory of water that entered without a storm. We always brought our boats onshore at night, to avoid losing them in case a storm rose up while we were asleep. We were sleeping in the boats when the seawater rose without any storm or wind. The water went inland. It flooded the graveyard in front of us now and reached where we are sitting [near the coffee shop].

Interviewed in Fins 9 April 2012 by NSAB, GH, and AR.

▪ Shab - Tiwi



**Mohammed bin Ali
bin Sarhan Al-Muqamimi**
Age when interviewed: under 66

When I was born it was probably 1946 or later. My family members were farmers living near the mountain, but I was a fisherman. There are two events that I know of, the first is the “Balushis’ *Wadi* [the channel of a watercourse that is dry except during periods of rainfall]”, the other is the “Wave” event. I did not witness either and all what I recall is from what I heard from the villagers.

The ‘Wave’ event: I believe that this event occurred in the early ‘40s, but I am unsure of the exact date. People described how the water “cut the land”, and how women used to walk to the end of the *wadi* for fresh water but could not do that after this event as the salty water reached deep inwards into the *wadi*. What was also strange is how the women found that the oysters and sardines reached to where the fresh water was.

Interviewed in Shab - Tiwi 6 May 2011, by NSAB, GH, and AR.

▪ Al Feyha



**Sa'eed bin Salim bin
Mesaa'ed Al-Saa'di**
Age when interviewed: 86

I remember the story of the daughter of a just judge, she was either kidnapped or killed in Qalhaat, and thus causing the wrath of God upon the town. God then sent a huge wave that came upon them without a storm. This might have happened around 100 years ago.

Another big wave came without a storm. It reached the village at the foot of the *wadi* [the channel of a watercourse that is dry except during periods of rainfall] behind us. This could have been around 40 or 50 years ago.

Interviewed in Al Feyha 20 January 2012, by NSAB, GH, and AR.

▪ Sur



Said Al Hameed
Age when interviewed: 86

I was 16 years old and living in Sur at the time of the tsunami. For much of my life I worked as a ship captain carrying dates from Oman to Karachi and Bombay.

It may have been the 11th or 12th month of the year. I remember that the tsunami began at 4 o'clock in the morning. First the water went out around 50 or 60 metres. After that there were three waves each half an hour from one another. The waves were up to 2 or 3 metres high.

Small boats floated here to our house, and our houses were submerged up to half a metre. When the first wave retreated, I ran towards the sea, but the situation was very frightening and I ran back to my house, then the next wave came. It was really unusual, something I have never seen before or after. I remember storms that have come to this region every 10 or 15 years.

There were no casualties here in Sur. Qalhat was also affected but not as much as Sur.

Interviewed in Urdu in Muscat, Oman, by DMK and GN.



Subait bin Khamis bin Faraj Al-Alawi
Age when interviewed: close to 75

In Bombay we received a telegram from Sur. It was sent by *Baniyan* [Indian merchants] who were living in Sur. The telegram said that two waves had invaded the land.

Later I learned that a wave came at 2 a.m. when everyone was asleep. The wave woke them up. They ran to the mountains before the second wave. This wave moved medium-size *dhow*s [wooden ships] inland.

I recall the people talking about the sea being dry, and I remember myself how the sea was much farther from land than it is today. There were softer sediments around their house and near the beach where we could sleep on without needing a mat, this had changed since. People back then were able to see very well in “pitch darkness of a 29th Night” [The term ‘29th Night’ refers to the last day of a lunar month when the moon is not visible; a new moon].

I don't recall whether people said there was rain during the waves, but people were living in huts made of palm trees and could tell when a storm was coming. They could see the storm clouds headed even at night, they could also hear the winds early enough to flee with their livestock to the mountains. I find it very strange that the people were still asleep at 2:00 a.m. when the first wave came in, if there was rain, they would have already immediately headed to the mountains for shelter.

Interviewed 6 May 2011, by NSAB, GH, and AR.



Ahmed Musalam Juma Al-Alawi
Age when interviewed: close to 60

I was living in this same house in 1945. The water came during the night, before morning prayer. It rose about 60 centimetres above the floor. There was no wind at all during that night, and nobody felt any tremor.

Interviewed in Arabic 21 May 2008 in Sur by EAO and AAH.

▪ Al-Sheyaa'



Hamad bin Salim bin Musallam Al-Amri
Age when interviewed: close to 60
(born after 1945)

Gonu¹ and Phet² are the only big storms I have felt. But I have heard the story of seawater coming in without any storm. I heard that this water rose gradually, ran far inland, went out eventually, and caused no damage.

¹ *Cyclone Gonu, 1-7 June 2007, is the strongest tropical cyclone on record in the Arabian Sea*

² *Cyclone Phet, 30 May - 7 June 2010, is a damaging tropical cyclone that developed in the Arabian Sea*

Interviewed in Al-Sheyaa' 9 April 2012, by NSAB, GH, and AR.

▪ Ras al Hadd



Ali bin Sa'eed bin Rashid Al-Aamri
Age when interviewed: 60 or more
(born after 1945)

The worst events I have lived to see were cyclones Gonu¹ and Phet². The boats in this area are usually anchored near Khor Grama, and once the boats are there, they are safe from the storms.

I have heard of a time when water came in without a storm and entered one of these houses near us. The old women who were living in the house were frightened, but there was no real damage.

¹ Cyclone Gonu, 1-7 June 2007, is the strongest tropical cyclone on record in the Arabian Sea

² Cyclone Phet, 30 May - 7 June 2010, is a damaging tropical cyclone that developed in the Arabian Sea

Interviewed in Ras al Hadd 9 April 2012, by NSAB, GH, and AR.

PAKISTAN

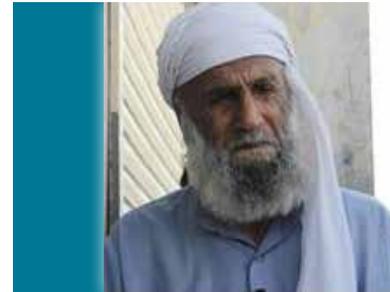
▪ West of Gwadar Jewni

Haider (son of Doshambay)

Age when interviewed: 80

I was young, without a moustache. Here in Jewni the earthquake was not felt, but the sea was unusual. The earthquake was severe in Pasni.

Interviewed in Balochi 13 March 2014 in Jewni by GN and AU.



Haji Abdul Aleem

Age when interviewed: 80-90

I heard about the earthquake and destruction in Pasni but I don't remember any such thing in Jewni.

We felt an earthquake last year [the Awaran earthquake of 24 September 2013]. I heard that an island appeared near Gwadar. Later I saw it myself. It is quite visible from the road.

Interviewed in Balochi 13 March 2014 in Jewni by GN and AU.



Haji Ali

Age when interviewed: 80-90

I might have been less than 20 years old. I was working on a small cargo boat and would return to Jewni after being away for six months or a year. At the time of the event I was near Karachi at Ghas Bander.

I remember that a huge earthquake happened in British times before Pakistan was established. I was on the sea and did not feel the earthquake but saw the sea disturbed. Then the sea went out in a strange way and came forward again three times. Boats collided and were destroyed. It was morning but I don't remember the exact time or duration.

When we heard about the earthquake and waves, we thought that Ganz and Surbander [towns near Jewni] must have been destroyed. So we were surprised to learn that both towns were saved. When I returned here to Jewni I was told about three waves. They didn't reach the town because the land here is high.

I visited Pasni after the earthquake and waves and was surprised by the destruction. Only a mosque survived and the rest of the town was destroyed. People at Pasni told me about deaths but don't remember how many.

Before that event I had never experienced such an earthquake or such waves.

But recently the sea went out and returned in a similar way, in 2004 and 2013. After the earthquake in 2013 the water went out for 2 hours. A local person from Jewni has captured that in his movie camera. We were worried about such unusual behavior of the sea. We could not protect ourselves, but many of us prayed at the mosque that may Allah save us from any destruction.

In 1945 I didn't know what this phenomenon is called but thought it was some unusual kind of sea storm. Three or four years back there was training about tsunamis [under the United Nations Development Programme], so we now can understand the event.

*Interviewed in Balochi 13 March 2014 in Jewni by GN and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/7>*

Ganz



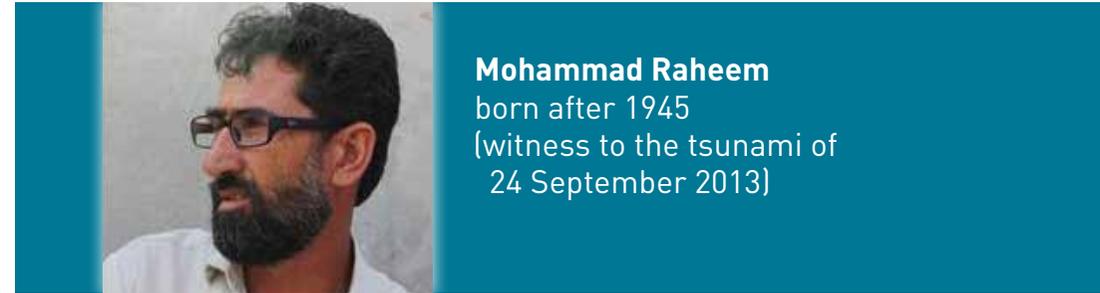
I was around five years old. It was the Khan of Kalat period and Pakistan was not established. Ganz was inland from the shore and there was a fishing *godown* [storage shed] in the place where we are sitting now.

I was sleeping at home and I don't remember the earthquake. When I got up that morning people were saying that that all the boats were destroyed. Some collided with one other and some were washed away.

[I heard that] the sea water went out first, three waves came ashore, and the waves were higher than houses. But the water did not go as far inland as the houses.

[I learned that] Gwadar, Pasni, and other areas were all affected by an earthquake in 1945 and Pasni was the worst hit. People who were at sea said they could not feel any earthquake and were surprised to see the destruction.

Interviewed in Balochi 13 March 2014 in Ganz by GN and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/8>



Three or four months back, during shrimp season, we felt the Awaran earthquake here in Jewni. The sea was calm but four hours later we saw a wave approaching shore. The sea receded and came forward 10 to 12 times.

I suspected it was a tsunami because we received tsunami training by NGOs. I also attended an international training on coastal hazards a few years back. During these workshops we learned that there had been a strong earthquake and tsunami on the Makran coast in 1945.

Interviewed in Balochi 13 March 2014 in Ganz by GN and AU.

Peshukan



Mosa Dad Shah

Age when interviewed: close to 100

At that time I did not have a moustache. I had been working as sailor. The earthquake and storm happened in the British and Muscat period, before Pakistan came into being.

The earthquake happened at the time of *Fajr* [dawn prayer]. I was sleeping with my family at home when someone woke us up. The shaking was very strong.

The sea went out first and then came forward in giant waves.

An island appeared in the sea. I visited it with a friend named Dadre Mann. It had a lot of dead fish on the surface.

I don't remember any relief provided by the government.

Interviewed in Balochi 13 March 2014 in Peshukan by GN and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/10>



Haji Ahmed (son of Khair Mohammad)

Age when interviewed 90

It was the time of the Muscat Sultanate in Peshukan and Gwadar. I was around 16 or 17 years old and was not married. I guess it was summer. There was no rain, wind, or cyclone.

The earthquake happened at *Fajr* [dawn prayer]. After that I saw that the sea had gone out, maybe 200 metres or more. Then waves approached that were different from normal waves. The waves began an hour and a half after the earthquake. There were three big ones. The sea rose and near the shore it rose higher. The waves came one after the other. This went on for at least half an hour.

There was not much damage in Peshukan. Most of the houses were built of wood and matting, and they were on high land. But boats collided with each other and creeks were made by the sea water at the shore.

Interviewed in Balochi 13 March 2014 in Peshukan by GN and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/12>



Khuda Buksh (son of Qadir Buksh)

Age when interviewed: 90

The earthquake and storm happened in the era of the Muscat Sultanate, 12 or 13 years before Gwadar became a part of Pakistan. I guess it was winter.

I was at home and awake when the earthquake happened. It was around *Fajr* [dawn prayer]. I did not go fishing that day. Most of the people were sleeping because it was very early morning, but those of us who were awake felt shaking that made it difficult for us to stand or even sit on the ground. I have felt three or four strong earthquakes in my life but the 1945 event was the strongest.

People who were out fishing saw strange behavior of the sea. There was no rain but a sea storm happened.

Here the sea water went out first, then came forward. This also happened last year [after the Awaran earthquake of 24 September 2013] but in a much smaller way.

The sea storm in 1945 made creeks where we have brought our boats since. Also the water destroyed boats. The water did not reach Peshukan because it is on high land [more than 10 metres above sea level]. The waves were 25 to 30 feet high.

The island that appeared in 1945 was a little smaller than the new one [from the Awaran earthquake]. They were at the same place. I myself visited the island that appeared after the 1945 earthquake. I saw mud and oily soil.

Interviewed in Balochi 13 March 2014 in Peshukan by GN and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/11>

▪ Gwadar



Amina

Age when interviewed: 100+

I was 20 and working in the customs department of the Oman Sultanate. My salary was 4 Indian rupees per month. Gwadar was exporting to Iran and India. The tax was 10 percent on fish and 17 percent on agricultural goods. I was married with three children. One was an infant.

Yes, the ground shook violently. My mother said, “Wake up, it’s an earthquake!” We recited verses from the holy Quran. There was a baby in the cradle and the cradle was moving so much that we could not take the baby out. Once the shaking stopped we took out the baby.

The sea had dried up and everyone was shouting that the sea had dried up. We didn’t know how far it went out. My father was at sea catching fish at that time. The sea was gone, no one knows, Allah hear us. You could drive a car, it was all dry land, and then the water started to come.

Many waves came from this direction [from the east]. All the waves came normally. One of the waves was huge, though it did not enter the city. The nearer it came, the bigger it got. At a time it was even higher than the minaret of the mosque. There was shouting and people started saying to go to higher ground, the sea is coming. As we went, we saw that the water had reached the mosque and there was nowhere to go. There was mud and debris in the water. There was water everywhere. We did not know where to go.

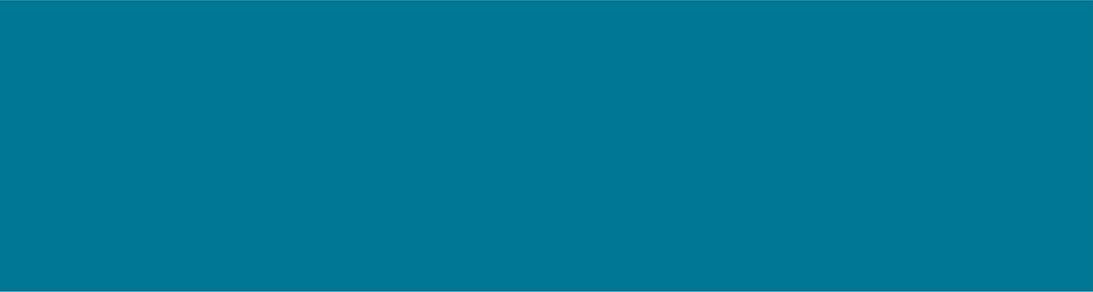
We decided to go to land of the *qazi* [an Islamic judge]. There was a huge sand dune there, though today the ground is flat. The sand was red. Zulaikha brought us her stuff to watch. Her sister’s son was at sea. She went looking for him on the beach. She got stuck between boats that crushed her to death. She was very old.

The roof of the shrine fell because of the earthquake. The sea did not go further than the mosque, Allah stopped it.

There was 7-year-old child squatting by a wall to urinate. The wall fell on her. The water came up to the wall, so the wall fell. The girl and the old lady (Zulaikha) died. The guard of the shrine also was killed by a wall.

The water washed away Kuda’s *ottaq* [a room off his house where people would gather have tea and talk] and covered the place with wood [debris]. The storage area with all the fish was also swept away. Grandfather’s boat, which was on shore, was lifted by the waves and thrown near Gabbi’s hut. It was a big boat but it was not damaged and afterwards he took it.

There was screaming and shouting and some were talking that my father is dead. Obviously when the sea comes, people will die. People were crying for their children, who were in the sea.



Gradually people started coming in from the sea. They were amazed when they saw that nothing remained of the *ottaq* [a room off the house where people would gather have tea and talk] or the fish storage. They brought back big fish that day, but we said we were worried about your safe return and you brought big fish back home. They said we did not feel or see anything. They said it was dawn when we felt the boat move from side to side. And the live fish we carried for bait started making sounds. So we knew there was an earthquake.

The sea had carried big boats and thrown them inland, so you can guess it was big waves. It was water everywhere, Mullah Band, Shadow Band, Ashkhooshi, Chinaali. In front of this mountain, in the Waja Hiader area near Baatil-e-Koh, was all in water.

There was no food; people ate grasshoppers and dates to survive.

There was an island also, which was there for two or three years. People used to fish around it. It was visible from the beach.

I used to talk about these things with my children and grandchildren.

Interviewed in Balochi 21 February 2013 and, by video, 13 March 2014, both times in Gwadar city, District Gwadar by GN, DMK, AU, and AM.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/14>



Master Imam Buksh

Age when interviewed: 72

I was four or five years old and living in Doria, near the shore. My father was a fisherman and had gone out fishing at night as usual. My aunt's family lived nearby.

The disaster happened on 28 November 1945 at 5 a.m. I know this date and time from the records of Dr. Qamar Din, who kept a personal diary and recorded details of the day. Dr. Din was a physician in Gwadar. He died three years ago.

My father told me that when he and other fishermen returned from the sea, they did not know of the earthquake and sea surges. The devastation shocked them. I also learned that the disaster killed a girl in Gwadar.

Afterwards we left Doria and moved to a safe area. Later I taught school in Gwadar.

Interviewed in Urdu 23 February in Gwadar city, District Gwadar by GN, DMK, AU, and AM.



Ashraf Hussain

Age when interviewed: 75

At the time I was 8 years old and living in Gwadar. Later I became a minister in the provincial government of Balochistan. Now I'm 75 and living in Muscat.

When I got up early that morning I was told there had been a strong earthquake, low-lying southern part of Gwadar was flooded by the sea and many houses were damaged. My house was on higher ground.

We had relatives in southern Gwadar and we went there to see them. Most of the people had left their houses and survived in higher places. The water had been as much as 2 metres deep at the houses.

We saw a mountain in the sea. I wondered whether it had fallen from the sky or emerged from the sea floor. It was reddish in colour. It was almost 10 kilometres offshore but was visible from the shore. People used to go there for picnics. It got smaller as time passed, and it vanished after one year.

Interviewed in Urdu in Muscat, Oman by GN and DMK



Hassan Ali Sohail (son of Tawakkal)

Age when interviewed: close to 75

I know about the event from my mother, Begum Hussaini, and my father, Tawakkal. My baby teeth were falling out at the time.

My parents saw the event from the sea. They were returning home from fishing when they heard a noise they thought was an atomic bomb. Soon they were surprised that the sea had pulled away from the shore. They saw boats going out and returning in 20 or 30 minutes. Finally the sea carried all those boats inland to the foot of Koh-e-Baatil.

When the first wave came my aunt and grandfather hurried toward our house to warn us. My mother fled with me and my six-month-old brother. We went back home after a few hours.

My father said that no one could watch the waves to estimate their height but he guessed that they were high because the water rose at least 15 feet at the Jamaat Khana [a two-storey stone building, still standing in Gwadar; in 1945 it was a center for Shia Muslim sect known informally by its Iman's title, the Aga Khan].

I learned that the area of the Aga Khan community and the Wapda house [a modern electric-company office] was flooded, that a little of Koh-e-Baatil fell down, that a mountain appeared in the sea, and that this island was surveyed later on for gas and oil but it sank after some time.

Interviewed in Urdu 23 February 2013 in Gwadar city, District Gwadar by GN, DMK, AU, and AM



Zohra Khanam

Age when interviewed: 83

I was beautiful when I was young.

I remember it was Toba Ki Raat, the night of asking forgiveness. We went Jummat Khana [the Aga Khan religion centre, a two-storey stone structure]. Then we went home.

I remember the earthquake was very strong. We cried and begged to Allah to save our lives. We hurried outside when people shouted that waves are coming. I don't remember the time of day or the number of deaths.

Interviewed in Urdu 23 February 2013 in Gwadar city, District Gwadar by GN, DMK, AU, and AM.



Master Abdul Majeed

Age when interviewed: 76

You can write my name Ustaad [Master] Abdul Majeed Gwadari, as in the sixteen books I have authored.

I was 7 or 8 years old and was living near the market. The month was probably October. Around dawn I heard shouting and woke up.

I ran to the beach and saw that the sea had risen above the usual shoreline. The water went as high as the *dombag* [sand dunes]. There were no waves; the sea just rose up and kept coming to the shore. Water from the east crossed to the other side [of the long north-south tombolo that is now mostly covered by Gwadar city]. The water also went southwards towards the area where the jetty was recently built and continued to the graveyard near Koh-e-Baatil. The water did not reach our house. In Gwadar there was no loss of life but boats were destroyed.

There were reports that a ship had overturned in the bay on the west. Wali, the Omani governor, sent officials to check the wreckage. What they found instead was a new island. They brought pieces of stone from the island. When he put a piece in the fire, the stone ignited and made a crackling sound.

Before the event we had good freshwater sources underground. Afterwards the water level went down and the water became brackish.

I was told that when the earthquake happened, someone in Pasni shouted a warning from the mosque. There were no loudspeakers then. People were warned to get out of their huts right away, in case those houses would fall down. I also heard that many people in Pasni knew that ocean waves were coming. There is a place there called Mastaani Rekh [sand dunes], and people ran towards those dunes.

Interviewed in Urdu 23 February 2013 and 14 March 2014 in Gwadar city, District Gwadar by DMK, GN, AU, and AM.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/17>



Hasan Ali

Age when interviewed: 71

I was four years old in 1945 and living in this same house in Shahi Bazaar. The house was built by my grandfather as a two-story structure of stone, wood, and mud that the family had renovated by that time. The Aga Khan community has been living in Shahi Bazaar since 1905. My father, Ahmad Bhaee, had a shop in this market.

My father used to tell us that waves came from Pedizar [from the east] and turned toward Mulla Band [the northern part of Gwadar]. He said he took me on his shoulder and carried me to Jamaat Khana. People went there because the building was sturdy and tall.

A mountain emerged from the sea, and someone told me of other new islands near Ormara. A merchant ship was destroyed when it struck the new island at Gwadar.

Interviewed in Urdu 23 February 2013 in Gwadar city, District Gwadar by GN, DMK, AU, and AM.



Muhammad Ahmed Iqbal

Age when interviewed: 49
(born after 1945)

Our elders used to count the number of years that had passed since the 1945 disaster. That's how we of the next generation learned that there was a severe earthquake and an ensuing tsunami. We also learned that an island appeared near Gwadar.

My father, Haji Mohamamd Iqbal, was born in 1913 and died in 1981. He used to live in Gwadar. There were 8,000 people living in Gwadar in 1952 so there must have been nearly that many in 1945.

Today I am chief executive officer of VSH News [a Balochi-language television station].

Interviewed in Urdu 26 February 2013 in VSH headquarters, Karachi by GN, DMK, AU, and AM.



Mullah Murad Mohammad

Age when interviewed: 63

(born after 1945)

My father and elders told me about the earthquake and sea flood that occurred here in 1945. At that time, Gwadar had a total population of four to five thousand, and nearly everyone lived in huts of wood and mats. There was one school and a telegraph office. British Government officials and the representative of the Oman Sultanate lived in bigger buildings of stone and mud-lime mortar. Mr. Wyne, the British political agent, resided in what is now the Tehsildar House [local government building]. My father, Mullah Abdullah, lived in one of the huts and raised crops in this neighborhood, Shado Bandd. He died in 1973. I was born here in 1949. Today I chair Gwadar District's Zakat Committee [which distributes Islamic tax as charity].

My father told me that earthquake shocks were felt in early morning before dawn, when people were sleeping and some fishermen were at sea, and that two or three big waves hit Gwadar after the earthquake. The waves came from the east. Fishermen in the deep sea did not notice them. The biggest of the waves in Gwadar was 10-12 feet [3-4 meters] high. A high-water line was visible south of town, at the foot of Koh-e-Batil.

People rushed out of their homes and went to a nearby hill, but two or three persons died and 12 or 13 were injured. Many houses were destroyed, including my father's hut. The Slor Mosque was also inundated. Fishing boats were thrown inland southeast of town.

One or two small islands emerged from the sea west of town.

The first information about damage in other areas, especially Pasni and Ormara, did not arrive by telegraph, which was disabled, but was brought by travellers and fishermen. They reported severe damage in Ormara and Pasni, greater than in Gwadar.

Interviewed in Urdu 21 February 2013 and, by video, 13 March 2014 at Shado Bandd, Gwadar city, District Gwadar by GN, DMK, AU, and AM.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/13>



Syed Mohammad

Age when interviewed: 63
(born after 1945)

Zalzala-Koh [Earthquake Mountains] is a good place to catch fish and prawns. It has that name because of what happened there 70 years ago. At that time, after a huge earthquake, an island appeared. But that island was a little smaller than the new one.

I was offshore fishing near where the new island appeared on 24 September 2013. I did not feel an earthquake, but at 4:10 p.m. I heard a sound and saw land coming out of the water. I went nearer to watch and told people on my cell phone. When I came back to shore people told me that they had felt an earthquake at almost the same time that the island appeared. [The Awaran earthquake of magnitude 7.7 originated 11:29 UTC, equivalent to 4:29 p.m. local time in Gwadar].

Interviewed 14 March 2014 in Gwadar city, District Gwadar by GN, DMK and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/20>

▪ Surbandar



Ashraf Naku

Age when interviewed: 80

I was about 10 years old when a strong earthquake happened around *Fajr* [dawn prayer]. People heard a roaring sound before and after the earthquake.

After the earthquake, around 5 a.m., sea waves attacked the shore one after another. Fortunately this village is on high land.

An island from that time was named for the earthquake, *Zalzala-Koh* [Earthquake Mountains].

Interviewed in Balochi 14 March 2014 by GN and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/22>

▪ Pasni



Shamsi Mai

Age when interviewed: 85

It happened two or three years after I got married. I got married at age 14. An earthquake woke me up before dawn. My father left to check his boats in Wadsar. He found them destroyed and returned to tell us that waves are coming. People went to the sand dunes.

I could not see the water because I was behind the dunes. The water went 2 or 3 kilometres inland but did not reach our houses. People said that the water went over the date palms. You can see such trees today.

Many people died in Wadsar. This is the area of old Pasni town. Now it is the harbour behind the jetty.

Afterwards there was little drinking water. The water in wells had become salty. My father dug a new well near the dunes for people who took refuge there. We received no help from the government.

A child was born the night of the earthquake. He was named Haroon. His mother, uncle, and few others in his family were swept away but he survived. Today everyone knows him as Haroon *Zalzala* [Haroon Earthquake].

I don't know what caused the event. I have often told my children and grandchildren what happened.

Interviewed in Balochi 22 February 2014 in Pasni city, Gwadar District by GN, DMK, and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/23>



Tannako (wife of Sakhi Dad)

Age when interviewed: close to 80

I remember that the sea water rose so high that it reached the area where we are now sitting. My house was 5 or 6 kilometres away from this place.

People escaped from the old Wadsar area. The market was all washed away. The market and town have been moved since.

Interviewed 12 March 2014 with her husband at their home in Pasni city, Gwadar District by GN, DMK, and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/32>



Master Abdul Rasheed

Age when interviewed: 80

I grew up in Pasni and left in 1948 to attend a Christian college in Karachi, where I received a bachelors degree in education. In 1951 I went to Ormara, where I taught middle school. Later I taught in Pasni.

In 1945 I was living in Wadsar, near where the jetty would be built in 1986. Salt used to be produced in this area; in Balochi, *wad* means salt and *sar* means mine. Most of the houses in Pasni were huts made of matting and wood; few were made of mud.

I was 12, a sixth-grader. At the time there was only one school in Pasni. Most of the teachers were from the Makran but two were from Punjab. It was a night school and I used to come home around 1 or 2 a.m.

The night of the earthquake and tsunami I came home at the usual time. I had not yet fallen asleep when the earthquake happened around 3 a.m. The ground moved up and down, left and right. No one could stand.

After the earthquake the sea went out one kilometre. When it returned it rose up as if touching the sky, carried big boats and debris, and went a few kilometres inland.

Before the sea went far onshore I went to the mosque to offer *Fajr* [dawn prayer]. The first wave happened but it was small so we began the prayer. Midway through the prayer we heard a roar and the *imam* [worship leader] stopped speaking. The roar was the second wave, the biggest one. It sounded like 25 airplanes arriving all together. The *imam* asked us to evacuate.

Most of the people in Pasni went to the sand dunes, but those who could not escape in time were drowned. Around 25-30 people died in all, from the earthquake and tsunami. We heard that Kalmat, Ball, and Taaq towns were not destroyed but that Ormara was badly hit. [This hearsay understates the losses in Kalmat (p. 30).]

I saw fire coming out of a [mud] volcano in the sea. We thought it was *Qiamat* [the Day of Judgment]. Later I learned that a small new island had appeared near Sonmiani.

The Khan of Kalat reached Pasni by car 24 hours after the event. He brought relief supplies and wrote a letter to the British government requesting further assistance. After one month a navy ship brought food, biscuits and other relief items to Pasni. The *Tehsildar* [a revenue officer of an administrative division] left the area with his family.

School children in Pasni recently received literature on tsunami. During this campaign, radio broadcasts explained that an earthquake can be followed by sea waves, and that *tsunami* is the word for what we used to call a sea storm.

Interviewed in Urdu on 22 February 2014 and 12 March 2014 in his present home in Pasni city, Gwadar District by GN, DMK, and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/27>



Sakhi Dad

Age when interviewed: 85

I was between 10 and 12 years old at the time, not yet married. I was living near this place [near the home of Shamsi Mai, with whom he was interviewed]. Four or five thousand people were living in Pasni. The main part of town was where the fish harbour is now. Most of the businessmen there were Hindus.

The earthquake woke me up at the time of *Fajr* [dawn prayer]. After the earthquake the water first went out as much as a mile. I think the sea must first go out before it can attack the land.

The first wave came in about 30 minutes after the earthquake. I believe that there were three waves and that the third was the largest. The water reached the top of date palms, 20-25 feet. I can point to the place.

Sand dunes stopped the sea waves. The dunes saved many lives. However, when local people took refuge in the dunes, outsiders stole things from their houses.

The old jetty and the old town sank into the sea, where the harbour is today.

All together around 300 people died here from the earthquake and tsunami and 300 were missing. Some people sleeping in their homes were trapped by the rubble of the houses after the earthquake and could not be rescued. Young and strong people were able to escape drowning more easily than the elderly,

handicapped, and children. Four of the people who died were living near me.

People here called the tsunami a “sea storm.” They first learned “tsunami” from an awareness campaign a few years ago.

I think tsunami are natural events caused by earthquakes. Tsunami must have occurred here even before 1945, and they will happen again in the future.

Interviewed in Balochi 22 February 2014 with his wife, Tannako, at their home in Pasni city, Gwadar District by GN, DMK, and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/24>



Qadir Buksh Kushesh

Age when interviewed: 74

Most people in Pasni were living in the old town at the time. My baby teeth were falling out. I don't remember much of what happened except what my father told me. He died 20 years ago.

The earthquake was in early morning, at *Fajr* [dawn prayer]. It destroyed many houses. Then the sea waves caused more destruction. Many boats floated inland.

Near my house 10-12 people died. Others managed to escape to sand dunes. The water went over huts and was 14 or 15 feet high.

Part of the old town became the harbour behind today's jetty. The area sank during the event.

We received supplies from the Khan of Kalat [the head of the tribal state that included Pasni]. The Khan arrived in a green jeep and the supplies in another green jeep. The second jeep carried food and tents, and the Khan stayed in Pasni for two days. I received *gurr* and *channa* [dried brown cane sugar and dried chickpeas, probably pre-cooked].

Interviewed in Balochi 22 February 2014 at the home of the Tehsildar [official in charge of Pasni Tehsil], Pasni city, Gwadar District by GN, DMK, and AU.



Ajyani Guli

Age when interviewed: 90+

At the time I was living with my parents in Pasni. I was around 11, I guess. Later I moved to Ormara, after my marriage.

I remember that the earthquake happened at the time of *Fajr* [dawn prayer]. The earthquake was strong. I was sleeping and it woke me up. The ground split open even inside our house and blood-red water came out of the cracks. After the earthquake we saw fire coming out of Ras Mallan mountains and then the sea came.

The sea did not wait long. We heard a roaring sound and three giant waves attacked one after the other. The waves were huge like mountains.

The waves destroyed the centre of old Pasni. Now that area is under water and people live in safer places. But the sea shore is coming closer and closer nowadays.

People survived by going to Mastaani Raig [the sand dunes]. I don't remember how many people died in all but there were several group funerals two days after the event. I remember that my two cousins died. They were named Mohammad and Bander. They were trapped under debris of our house, which was made of stone and mud.

The Lasbela State government provided food and tents.

Interviewed in Balochi 12 March 2014 at the Rural Community Development Council office, Ormara city, Gwadar District by GN, DMK, and AU.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/45>



Khudi Dost

Age when interviewed: 80

At that time, I was between 10 and 15 years old and was working. The shaking woke me up early in the morning. In many places the ground split open and blood-red sandy water came out of the cracks.

The first wave was about 30 minutes after the earthquake. I cannot say how high the waves were because I was running away from them to save my life. I could hear the water approaching me from behind. I reached safety on top of the sand dunes.

I remember the names of a few of the victims: Karim Bux and Macco, the brother of my friend, Gahni. I remember 10 to 12 deaths.

After the sea went back it still covered part of the area called “Wadsar”, where the new jetty is. Families from this area are still called Wadis.

Interviewed in Balochi 22 February 2014 at the home of the Tehsildar [official in charge of Pasni Tehsil], Pasni city, Gwadar District by GN, DMK, and AU.



Rabuk (Rabia)

Age when interviewed: 74

I was five or six at the time and used to play with other girls. I remember that people came from Wadsar to this neighborhood [on higher land near the sand dunes; her house in 1945 was near the site of her present house]. Many just escaped here but some stayed in our house for five or six months. They included Mr. Wali Mohammad and his family, who used to live near the shore. My family provided blankets, food, and water.

I’ve heard that there was an earthquake first, then the sea water, and that the water damaged many houses and also the mosque. I don’t remember whether anyone died from the event.

Interviewed in Balochi on 22 February 2014 and 12 March 2014 in her present home in Pasni city, Gwadar District by GN, DMK, and AU.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/28>



Karim Buksh

Age when interviewed: 80+

Ever since this event I have been afraid of the sea. I could not follow my father's profession as a fisherman and became a musician instead. I played *rubab* [a lute]. I performed in Karachi, Lahore, and Islamabad. I played at weddings and other ceremonies, and also for *gawati* [to ward off a ghost or genie].

I was 13 at the time and was living near this place. I felt the earthquake early in the morning, around 4 a.m. There were seven severe shocks. Land cracked and water came out in many places near the present jetty area.

I heard that sea went out first but I could not see this because I was away from the shore. The water came ashore about two hours after the earthquake. There were seven or eight waves. Each had the size of two or three huge waves combined. The sea went back around 8 a.m. but water was still standing for six or seven days.

Around 10 people died. Two of the bodies, along with a few boats, were stranded near the dunes. My father's boat was found on top of the mosque.

This area was not flooded because of a shrine that would not allow the sea to enter.

The Khan of Kalat came and brought food and tents. A British Navy ship also brought relief after 15 days.

Some people blamed the disaster on the *Tehsildar* [a revenue officer of an administrative division; identified by Ganj Buksh as Mohammad Ishaq]. He threw a goat into the sea after local people had sacrificed the animal in Allah's name. This annoyed the sea, and Allah sent the earthquake and sea storm as punishment for that act of the *Tehsildar*.

A baby boy born on that night was nicknamed *Shin* [unfortunate] because his mother, Miyya, and other family members were drowned. His name is Haroon [page 37].

I never heard of such a disaster from my elders, and I often tell my children and grandchildren about this one.

Interviewed in Balochi on 22 February 2014 at his home in Pasni city, Gwadar District by GN, DMK, and AU.



Ganj Buksh

Age when interviewed: 82

It was neither cold nor hot, probably November or October, when the disaster happened. I was 14 or 15 and was fishing in the deep sea that night. We did not have wrist watches then so I did not know the exact time. We heard a roaring sound and saw that fish were unsettled. Our boat started trembling and floated out of our control.

We returned to Pasni around 11 a.m. unaware of what had happened there. We found destroyed houses, boats, and debris nearly as far inland as Paraag [a neighborhood]. The town was flooded with sea water and everyone was on the sand dunes. Many houses and boats were stranded beside Juddi Hill [on the inland side of the Pasni].

My house, in Wadsar, was also destroyed. I did not go fishing for two months because I had to rebuild it. I got the wood by going to the mountains.

Other people noticed fire in the sea and heard roaring from the hills. I myself did not notice these things.

The Khan of Kalat distributed grain and 200 rupees per family among those affected. We did not know what happened elsewhere, in places like Ormara or Kalmat. Camels were used to go such far-away places.

I used to share my experiences with children. I told them it was a *toufan* [storm] but now my educated children tell me it was a tsunami.

Interviewed in Urdu 22 February 2014 by GN, DMK, and AU in Pasni city, Gwadar District.



Abdul Wahid Dil Muraad (son of Hashim)

Age when interviewed: 39
(born after 1945)

My father, who was living in Ormara in 1945, told me of a strong earthquake that caused fire to come out of Millan Mount. He said the sea went out before it came back and entered the town, and that one or two of the waves flooded half the town. Huts of the fishermen were swept away.

Interviewed in 26 February 2014 in Karachi by GN, DMK, and AU.



Haroon (son of Gammi)

Age when interviewed: 70

I was 17 months old when that earthquake happened in 1945. People know me because of my strange story of survival. For much of my life I worked as fisherman. Now in my retirement I share this story with my kids, in much the same way that my uncle, Khuda Dad, told it to me. He died twelve years ago at the age of 62.

The disaster killed 14 members of my family: my mother, Amul; my six brothers and sisters; my father's two sisters, Guru Jan and Khan Bibi; their four kids; and one of my uncles, Mian Dad. Also killed were four other persons in our Wadsar neighborhood.

The earthquake was on a Wednesday around midnight. My father, Gammi, was out at sea, fishing. Khuda Dad grabbed me in his arms and ran out of our house. All the rest of my family was washed away because the house was made of wood and matting.

Khuda Dad told me there were three giant waves and he also noticed a light emerging from sea like the lightning in any thunder storm. He said the first wave was around 60 feet high, or higher; the second approximately 40 feet; and the third around 30 feet.

He also told me that the earthquake was very strong, that severe aftershocks continued for more than 24 hours, and that near present high school area, the ground split open and blood-coloured water came out of the cracks.

The area of our house in Wadsar is now under water. The place where we are now standing is near where my uncle took me.

Interviewed in Urdu on 12 March 2014 in his present home in Pasni city, Gwadar District by GN, DMK, and AU.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/31>

▪ Kalmat



Aadigan (son of Mosa)

Age when interviewed: 70

I was 3 or 4 at the time. I know about the event from my parents and others. We didn't know the word "tsunami"; we used to call it the "storm of the earthquake".

My elders told me that there was an earthquake and three ocean waves. The waves came one after another. They became weaker in mangroves. I do not know about heights but surely the third wave was the biggest.

People escaped to the top of sand dunes. Faqeer Mohammad's old grandmother could not, and she was swept away.

We received no help from the government. The village was rebuilt on higher land farther from shore, and people now live there [on a sandy beach ridge directly facing the Arabian Sea, 0.5 kilometres from the beach]. They still use the old town site for boats and a market but not for houses because it is not safe to live there [beside the inlet to Khor Kalmat, on the tip of a sand spit 3.5 kilometres northeast of the post-1945 village].

Interviewed in Balochi 24 February 2014 by in Kalmat GN, DMK, and AU.



Abdul Hakeem (son of Mulla Ghareeb Bandd)

Age when interviewed: 79

I was 12 years old and used to go for fishing early in the morning. There were 20 or 25 houses near the shore. Now we live on higher land, inland from the place of that old village.

Around *Fajr* [dawn prayer] we felt a very strong earthquake that woke us up. My uncle shouted that water from sea is coming, so we fled.

I remember that the first wave came about half an hour after the earthquake. The waves were 10 or 20 minutes apart. The sea came in again and again. At first two big waves hit the area. The third and last one was the biggest. It went into the creek but stopped by mangrove forest. After that the water was knee deep. It started to go away after dawn.

People were so scared of this storm that they could not take their animals. The animals drowned and heavy boats were thrown inland. One woman named "Peerani" was swept away by the waves. She was very old and could not escape.

My wife's parents said the water went through the mangroves but the trees made the waves weaker.

Interviewed in Balochi 24 February 2014 in Kalmat by GN, DMK, and AU.

▪ Ormara



Dildar Sahab (son of Daad)

Age when interviewed: 79

I was 12 years old in 1945. Houses at that time were farther from shore than they are today.

I felt the earthquake and saw fire coming out of Hingol Mountains. Big cracks opened in the earth and muddy, oily water came out of them where Rural Community Development Council office now stands.

The sea went out after the earthquake. Then three waves came one after another. The water reached the *Dargah* [shrine of Naik Noor Mohammad, a saint] and was four feet deep in that area. Many houses were swept away by the waves. People escaped inland but ten people died.

People started rebuilding after two months. The *Jaam* [head of Lasbela State] provided grain and some money.

Interviewed in Balochi 24 February 2014 and, by video, 12 March 2014 in Ormara by GN, DMK, and AU.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/35>



Miayan Sani Dad

Age when interviewed: 79

I was working as a fisherman with my twin brother, Dildar, and with our father, Sahib Dad.

Yes, most of the houses in Ormara were swept away and many people died.

Interviewed in Balochi 24 February 2014 in Ormara by GN, DMK, and AU.



Ganj Buksh (son of Sharro)
Age when Interviewed: 76

The ground cracked and red water and soil came out of the cracks. The sea went out and then waves arrived, I don't remember how many. People escaped to our area and stayed for two months.

The *Jaam* [head of Lasbela state] Ghulam Mohammad sent three horses loaded with food and other supplies. One horse was black, one was red, and one was white. They arrived the day after the event. The *Jaam* also sent money: 25 rupees for each house made of wood, straw, and mats; and 100 rupees for houses of stone and mud.

Interviewed in Balochi 24 February 2014 in Ormara by GN, DMK, and AU.



Qadir Buksh (son of Adam)
Age when interviewed: 84

There were a few hundred families living in Ormara at that time. There were Baloch, Aga Khanis, and few Hindu families. We thought we could never recover from the disaster. I was 15 or 16 years old. Today I am a boatmaker, *waro* in our Balochi language.

I was sleeping but the earthquake woke me up. This was around 3 a.m. at the time of *Fajr azzam* [call for dawn prayer]. Later I heard people shouting about the sea. The time after that was too short. My family along with many others was caught by the storm.

The storm arrived an hour or one-and-a-half hours after the earthquake. I heard that the sea went out before it came in. We could not count the number of waves because we were in the water. The water went about as far inland as the present high school and it reached the shrine of Naik Noor Mohammad. Heavy boats were brought inland. A child named Adam was caught by rope on his neck. He somehow survived and now called Adam *Zalzala* [Adam Earthquake].

Houses made of stone and mud were destroyed by the earthquake. Houses made of wood and mats were swept away by the water.

The shoreline shifted. Before the event the shore was inland of where it is today.

I have a lot of interest in the history of this area, and I share my recollections with others, especially children.

Interviewed in Balochi 24 February 2014 and, by video, 12 March 2014 in Ormara by DMK, GN, and AU.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/3>



Madni (son of Qadir Buksh)
Age when interviewed: 76

At that time Ormara had roughly 100 Muslim households, 50 Hindu businessmen, and 50 Aga Khan community families, all in the Juna Lane area. I was then 10 or 11 years old. Later I served in the Pakistan Post Office Department and retired after 29 years of service as postmaster of this city.

It was early morning, around 3 a.m., when the earthquake woke me up. An old man, Ustaad Gundi, was trapped in his collapsed house. We neighbours went to rescue him from the rubble. About 30 minutes after the earthquake someone shouted that the sea is coming, and we all fled.

The sea receded before it came into the town. My house was flooded, being near the shore. The water may have reached 14 feet high but it did not get beyond the tomb of Naik Noor Mohammad. A few boats were brought inland and damaged. All together three waves reached Ormara Mountain [site of the present Navy Base] and the water marks are still visible [not checked by interviewers].

Ten or eleven people died in Ormara. The dead included all members of the Mustafa family. You ask whether the 1945 disaster took 4,000 lives in all. In my opinion, that total is much too large.

At the request of Pur Ghulam Qadir, the *nawab* of Jamm [the head of Lasbela State], a British naval ship was sent to assess the damage. The Aga Khanis moved inland and settled on high ground.

Interviewed in Urdu 24 February 2014 in Ormara by GN, DMK, and AU.



Hawwa (daughter of Ghulam Rasool)
Age when interviewed: 72

I was a child in 1945 and living in Ormara. My house was made of mud and stone. It stood where the Fisheries Office is now.

It was night and we all were sleeping when the house was damaged by an earthquake. My grandfather, always scared, used to say, “Do not keep my children in a stone house.”

Fire came out of the sea and finally the sea went into the town. I don’t remember how many waves hit the area, but my husband says there were three, each higher than our house roof.

Those who died included my sister Laigi, who had married five months before. My uncle and two cousins, Qadri and Swali, also died. All were trapped under the rubble of my house.

Interviewed in Balochi 26 February 2014 in Saleh Abad, Karachi by GN, DMK, and AU.



Shamsudin (son of Wajdad)

Age when interviewed: 73

In those days most houses in Ormara were made of wood and matting, but there were few new houses made of mud and stone. Everyone lived in the area of Juna Lane.

I was about six years old at the time. I was asleep when Khaleefa Ashraf shouted that the sea had gone out. He warned us to run, waves are coming. I saw fire coming out of Malan Mountain. The earthquake happened first, fire came out of the mountain next, and finally the tsunami arrived. The sea went out before waves came in.

I reached my grandmother's house before the first wave, which arrived 30 minutes after the earthquake. In this area the water from the first wave was knee deep. The third wave carried away my mother, my Aunt Zarro, and a cousin named Magunj. My mother survived but the other two drowned. The total number of casualties was around 20 or 30.

The tsunami flooded only certain parts of the town; not the whole area was under water.

A big cargo boat, the *Gaali*, was in Ormara to get a load of fish. The boat was destroyed and a Hindu trader died.

A Navy ship brought assistance from British Government and distributed food. A doctor on board provided medical treatment to the injured. The head of Jaampur [Lasbela] state visited the area without providing assistance.

[This detailed account may contain hearsay. Asleep at the time of the earthquake, Mr. Shamsudin learned from others about the earthquake and its timing relative to the fire from the mountain and the first wave.]

First interviewed 2009 under the United Nations Development Programme tsunami-awareness campaign. The account above is based on a second interview, in Urdu, 24 February 2014 in Ormara by GN, DMK, and AU.



Master Fateh Mohammad Baloch (son of Kuada Khuda Buksh)

Age when interviewed: 84

I joined government service in 1945. Ormara's population then included around 400-450 Hindus and 200-250 Aga Khanis. Most of the population was settled near the present Fisheries Office. My father had four wives and 21 children. Our family house had mud brick walls and a bamboo roof. My date of birth is 15 July 1929. I got married on 4 April 1963, and I have three sons and nine daughters. My wife died last July.

The earthquake happened 28 November around the time of the *Fajr azzan* [call for dawn prayer]. I was sleeping in the same room as three of my brothers. My mother used to awaken us for *Fajr* [dawn prayer]. The earthquake happened at 4:30 a.m., after she called us and we had gotten up. The first shock was very strong and the third one was too strong for us to stay on our feet. My youngest sister was sleeping in a cradle swing that broke. The bamboos above us were hitting one another and the house received heavy damage.

Around 5 a.m. we saw fire from East Side Mountain and extraordinarily high waves in the sea. There were three big waves. The first splashed up to 100 feet against Ormara Hill [the hammer head at the south end of the tombolo]. The second wave was bigger and the third was largest. The water reached the *Dargah* [the shrine of Naik Noor Mohammad, a saint].

Brick houses were destroyed by the earthquake and wooden ones were swept away by the water. We could see houses floating toward us. The Jamaat Khana [a building of the Aga Khan sect] was destroyed.

After the third wave my father took us into areas that had been flooded. We found the bodies of two children, of two women named Papun and Gori, and of three men named Hashim, Dayya, and Sakhi Dad. We moved all these bodies to one place. Three more bodies were found that day. Later, wood brought on four camels was used to cremate Hindu victims.

In areas that had been flooded we also gathered fish. They were lying on the land and some were still jumping.

The tsunami destroyed the *Gaali*, a cargo boat from India that could carry 10 tons of fish. Remains of the boat ended up in Dorsurani Stream.

Fishermen who had been on the deep sea said that they noticed an unusual rise in its level.

The shoreline shifted toward the sea, and it is slowly moving farther in that direction.

After the event a new settlement area was selected inland from the places flooded during the 1945 tsunami. The new settlement was divided into *mohallas* [neighborhoods] and wards [administrative units].

First interviewed 2009 under the United Nations Development Programme tsunami-awareness campaign. The account above is based on a second interview, in Urdu, 24 February 2014 in Ormara by GN, DMK, and AU.

Guli

Age when interviewed: 75

I was a child around 8 years old in 1945 and remember the earthquake shaking. The earthquake was so strong that we could not stand or sit on the ground. Hot water came out of the soil at many places.

People saw the sea go out. Someone shouted that the sea is coming. I saw the first wave but not others because I was running away from the shore. My family took refuge at the place that is now the TMO [Tehsil Municipal Office, a government building].

Other people went to the *Dargah* [shrine of Naik Noor Mohammad, a saint]. They pleaded with saint to stop the storm. The water was knee high when a voice came from tomb saying “Stop” three times. The water rose no further.

In my area all houses and many people were swept away, and all boats were brought inland. I saw two dead bodies. One was of Mr. Ganju’s wife, Gundi, married two months before. The other was of an old woman, I don’t remember her name.

The Jaam of Lasbela [head of Lasbela State] brought aid and food for the victims. People rebuilt their houses after two months.

I believe Allah, the Greatest of All, sent this storm with the earthquake. One year later there was another earthquake but no storm. [The largest aftershock, of magnitude 6.8, occurred 5 August 1947, with an epicentre close to that of the 1945 mainshock!.]

Interviewed 24 February 2014 in Ormara by GN, DMK, and AU.



Lari

Age when interviewed: 78

I was 11 years old and living with my family. I got married a few years after at age 14.

At the time of *Fajr* [dawn prayer] I felt the earth moving like a swing. Fire fell from the sky into the ocean. This caused the storm.

The first wave was the biggest, almost as high as a house. It reached the area of today's Fisheries Office [of Balochistan's fisheries department]. The third wave destroyed my house at this place. Water went as far as the *Dargah* [shrine of Naik Noor Mohammad, a saint] and went back 3 or 4 hours after the storm. We went to the area of today's police station.

Some people were crushed under houses of mud and stone that collapsed because of the earthquake. The waves brought boats and a lot of fish.

People resettled inland in safer places. Seven years ago this house was built here.

Interviewed 24 February 2014 in Ormara by GN, DMK, and AU.



Sualeh

Age when interviewed: 87

I was 12-14 years old, with hardly any moustache, and was working as mason. I remember that around 70 years ago, at 3 a.m., a strong earthquake happened and 30 minutes later the sea entered the city.

I was there near Iran Smith [a neighbourhood]. I was living with my parents and sisters. It was a windy day. The houses started shaking like anything. My mother woke me up saying Allah have mercy on us. A few moments later when the earthquake slowed down all of us ran to the graveyard thinking it would be a safe place. Many others had already gathered there, scared of the shaking. From there we went to Chadd.

The earth was cracked. The hill was cut in slices. Water blew out of cracks in the ground. After the earthquake there was a fire from Mallan Koh and just after that the water came.

The waves were so high that we could not see the mountains [along the shore]. A lot of big fish like sharks and whales were brought on shore near the Customs House. Boats were thrown from the beach towards the hills and date palms. There were dead bodies where the Fisheries Office is now. There had been many houses in the town and all were destroyed by the sea.

Many people died but I don't remember the number. After three months we and other fisherman came back, built a mosque, and settled in Islamia.

Interviewed 12 March 2014 in the Rural Community Development Council office, Ormara city, District Gwadar by GN, DMK, and AU.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/44>

▪ Daam (near Sonmiani)



Haji Mohammad Ismaeel (son of Ali Mohammad)

Age when interviewed: 100

I was preparing to go out fishing at my usual hour when I felt the earthquake around 3 a.m. My wife and two kids were at home.

After the earthquake the sea receded. The waves first arrived around two hours after the earthquake. People went to sand dunes. The third wave was largest, and it was high enough to pass over those dunes, so people ran to higher places.

Interviewed with his wife in Balochi 25 February 2013 in Daam by GN, DMK, and AU.



Haji Usman (son of Ali Mohammad)

Age when interviewed: close to 85

I don't remember my age exactly but I must have been a young man [a teenager]. I had a moustache when Pakistan came into being [1947]. I was a fisherman.

The earthquake happened at night and three ocean waves arrived after *Fajr azzan* [call to dawn prayer]. The shaking was strong, and it rattled locks on the doors. We saw fire coming out of mountains.

The sea went out after the earthquake and it came back after an hour. The sea came forward, went back, and came forward again. Each wave lasted five minutes. The water split, half going left and half to the right [where the channel into Sonmiani Bay divides]. The waves ended after two or three hours. There was no wind like we have during another kind of sea storm [cyclone].

My house was where the jetty is today. It was on higher ground so was not damaged by the waves. Most of the houses in low areas were destroyed. They were made of mats and wood.

Interviewed in Balochi 25 February 2014 in Daam by GN, DMK, and AU.



**Mohammad Usman (son of
Mohammad Musa)**

Age when interviewed: 45
(born after 1945)

My parents told me that the water went to the sand dunes but could not reach houses on higher land. They did not say anything about an earthquake.

Interviewed in Balochi 25 February 2014 in Daam by GN, DMK, and AU.

Akbar Akbar

(born after 1945)

My father was a young fisherman at the time. He said that three waves struck the coast at nighttime and that water filled up some of the houses.

Interviewed in Balochi 25 February 2014 in Daam by GN, DMK, and AU.

▪ **Karachi** Abdul Rehman Village, Hawkes Bay



Borr Jan (son of Keecho)

Age when interviewed: 100

I was old enough to work in 1945, maybe between 12 and 15, and I was living in my father's house. I don't remember whether I was married then. We lived in that house even before there was a village here. At the time of the event the village was called Bhullay Gee, and it had 30 families. Today there are five or six thousand people. We used to dry fish at a place that is now in the sea [the shoreline today is armoured and is retreating into houses].

Before *Fajr* [dawn prayer] we felt an earthquake. I was sleeping but got up because people were shouting and crying after the earthquake.

One of my father's uncles, Manda, went for ablutions near the sea. He saw the sea was going out farther and farther. He came back shouting and told others in the village.

The water went out and came forward again and again. It made a loud noise. The waves were so high we could not see stars in the sky. [I think] there were three waves.

Boats were damaged and brought onto the land but nobody died. Another person who had been sleeping in a boat was found in the mangroves. Fish nets were hanging from trees. New creeks formed. Heavy stones were thrown on the shore, even today you can see them. The water went 100 metres inland from the present shore. I can show you the place.

[I heard that] fire came out of mountains near Hingol [between Ormara and Lasbela].

I tell my children and grandchildren about these things.

Interviewed 20 February 2014 in Goth Abdul Rehman by GN, DMK, and AU.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/55>



Qadir Buksh

Age when interviewed: 90

I remember that in the British period there was a sea storm with an earthquake. I was old enough to work and had a moustache. I used to be a fisherman and I have visited countries in Europe. I have been through many storms with strong winds but I never experienced such a sea storm as that one.

Waves came one after the other around one hour after the earthquake. First water went out, then it came back in after 10 or 15 minutes. The water went out in the same way in 2004 [during the Indian Ocean tsunami of 26 December].

Big boulders were brought onto the shore by the waves after the earthquake [in the British period]. I was not at the sea shore when this happened.

*Interviewed 20 February 2014 in Goth Abdul Rehman by GN and DMK.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/57>*



Murad Ali

Age when interviewed: 65+
(born after 1945)

My father used to tell us about the earthquake and storm. My father's name was Doshambay. He died 10 or 12 years ago.

One day my father was about to go for fishing when he noticed a huge wave coming so he came back to tell others about it. The second wave was the highest. He said it did not break like a normal ocean wave. Luckily it did not cause much damage. But afterwards he was surprised to find big boulders from the sea lying on the shore.

My father was also surprised by the kinds of fish that swam close to shore in the first month after the storm and earthquake. He said these fish are usually in deep water, in an area called *Khadda* [deep place].

*Interviewed 20 February 2014 in Goth Abdul Rehman by GN and DMK.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/58>*

Baba Island, Port of Karachi



Yar Mohammad (son of Borr)

Age when interviewed: 58
(born after 1945)

There was strange behavior of the sea at this place from the tsunami that hit Indonesia in 2004. Around 4:30 p.m. the sea went out beyond the low tide line around 4:30 p.m [the tide was already low]. Then water came back in and went out again 10 to 12 times. Boats moved with the water. It was a Sunday and as this is a popular picnic place since the British period, many tourists had gathered and were surprised to see the waves.

I have never seen such strange behavior of the sea at any other time in my life. But I have heard the story of the 1945 tsunami from my father, so I could understand the phenomenon as a tsunami.

Interviewed 20 February 2014 in Goth Abdul Rehman by GN, DMK, and AU.



Haji Ismaeel (son of Yaqub)

Age when interviewed: 90+

I used to work with Field Marshal General Gracey [Commander-in-Chief of the Pakistan Army, 1948-1951].

I have experienced three storms in my life but the biggest one came after an earthquake. The water started rising around 9 a.m. We were swimming when we noticed that the water colour changed. The waves were 6 to 12 feet high and we tried to escape them. We climbed into boats but they were turned over by the waves.

Boats on the shore went inland and there was huge loss of boats, human lives, and houses. [I learned that] Khadda market in Karachi city was also flooded. I don't remember the names of the persons who died but there were so many victims. The British must have recorded this.

Interviewed 20 February 2014 at Baba Island, Karachi by GN, DMK, and AU.



Haji Abdul Rehman (son of Suleman)

Age when interviewed: 86

At Baba Island many people died, including a British officer named Jacob. Among the victims more were women and children.

Around 20 people died on Bhit Island. Sona, Aleema, Aachr, Ghulam Rasool, Gohraam, Mirza, Malik, Asad, Saleh Mohammad, Faiz Mohammad, Lalu, Majna, Deva, and Luccho died at Bhit.

I worked in the civil works section of the Karachi Port Trust. It got a lot of damage. Only a workshop remained after earthquake and waves. Khadda Market was flooded [*khadda* means low place].

My ancestors and relatives belong to Makran, and most of the casualties were there, in Ormara and Pasni. Around 300 of the Makran people who were injured or affected were brought to Karachi. Most of them died here and we buried them in the Meva Shah Graveyard. After that I never went again to that graveyard. Today I could not identify the tombs.

One of the people who died in Ormara was my cousin, Liggi. The earthquake happened a few days after her marriage. She died when her house in Ormara collapsed and she got trapped in the debris. The wall of the house fell on her when she was trying to hide under the *charpoi* [a traditional bed with a wooden frame strung with interlaced jute].

Four non-Muslims [Hindus] died in Ormara. They were on a business trip from India. Dastageer Lane was at the limit of Ormara at that time.

Interviewed in Urdu at his present home in Saleh Abaad by GN, DMK, and AU on 26 February 2014 and by GN and DMK on 11 January 2015.

Qasim

Age when interviewed: 90+

It was not a storm (cyclone or storm surge) but the sea suddenly rose up. We all went to high land. I remember it was day time. There was no damage.

Interviewed 20 February 2014 at Baba Island, Karachi by GN, DMK, and AU,



Mohammad

Age when interviewed: 80

I was young when Pakistan came into being. My elders told me that the sea rose up and entered the island. I don't remember the details.

*Interviewed 20 February 2014 at Baba Island, Karachi by GN and DMK.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/61>*

Haji Ismaeel

Age when interviewed: 70

My grandfather was born at this island and my family has lived here since. In 1945 I was only two years old so I don't remember what happened. But I have heard that the water was two or three feet deep, that mangroves near here were destroyed, and that people fled the water.

Interviewed 20 February 2014 at Baba Island, Karachi by DMK, GN, and AU.

Laal Mohammad (son of Suleman)

Age when interviewed: 78

I was born in 1938 at Bhit Island. Before the British there was an earthquake and a sea storm.

The sea rose and all the coast was flooded. Around 10 a.m. the water entered the Kharadar area [northeast of Kiamari] and even reached the Jamaat Khana of Machicha Colony.

There was not much damage but we found three dead bodies, including a woman in Hindu bridal clothing and jewellery.

Interviewed 26 February 2014 in Karachi by GN, DMK, and AU.

▪ Indus Delta Keti Bunder



Noor Mohammad (son of Siddique)

Age when interviewed: 82

I was employed in Karachi Port Trust and retired in 1991. I might have been 12 or 13 years old in 1945. I was living in the Kiamari area. We felt the earthquake but it was not strong.

Interviewed 26 February 2014 in Karachi by GN, DMK, and AU



Aach Mallah

Age when interviewed: 80

It happened a long time ago so I can't remember the exact year. I was around 12 years old. My family had settled in Ballo Mallah after 1940 and before Pakistan came into being.

I don't remember any earthquake before the waves. I remember that waves came at night but I don't remember the time. I remember that the waves were huge, as if touching the sky. No one could stay standing or count them. I was able to escape because I was a little out of the way of the water.

In this village many people ran away and many people died. People were found dead on the ground and even in trees. I saw the destruction here. If I knew how to read and write I might have recorded the details. My elders used to say that the whole area from Karachi to Keti Bander was destroyed.

Interviewed 17 February 2014 in Village Ballo Mallah, Keti Bander, District Thatta by GN and DMK.



Saeed Mohammad Ronjha

Age when interviewed: 73

I remember when Keti Bander was one of the larger ports. There was plenty fresh water [in the river]. Thousands of fishermen and farmers used to live here. Workers used to come to Keti Bander from other cities, even from Sukkur city, more than 300 kilometres away. Some would stay two months or more and would send money and food to their hometowns. Exporting rice was a big business in Keti Bander at that time. We used to grow rice at the place where you are sitting. Now there is no farming because of the sea water.

My family settled in Keti Bander many generations ago. My father used to run a carriage boat from here to Karachi. Today people say to my sons, “It seems you can’t take care of your father, that’s why he has to work in his old age.” But I enjoy working, especially fishing.

I was a child around 7 or 8 years old when one night a huge wave attacked Keti Bander and others areas, especially along creeks. The sea water rose up with a roaring sound. Surprisingly there was no wind or rain. We have never had such a storm again.

The water caused less destruction in Keti Bander than on the coast. The sea was seven kilometres away from this place so we were not much affected. But

almost all the coastal villages vanished. Many people died, so many that we could not arrange coffins or funerals for the dead. I guess thousands of people died.

I did not share this story with my children and others as no one has enough time to listen to old stories. But my father, who lived more than 120 years, used to share this story with me often and I learned much about the tsunami from him.

*Interviewed 17 February 2014 in Keti Bander, District Thatta by GN and DMK.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/66>*



Jaffer Jablu

Age when interviewed: 104

I was young when the Hindus left this area [1947]. I lived and worked in various places—Keti Bander, Rehri [near Karachi], and along other creeks. I fished and farmed. We used to produce 300-400 *mann* [12-16 metric tonnes] of wheat in this area because there was plenty of fresh water and the land was fertile.

It happened at *Fajr* [dawn prayer] or at *Sehri* [pre-dawn meal that is just before *Fajr*]. I was sleeping in my home. A low wave came. We escaped to sand dunes nearby.

In other places the waves passed over trees and the highest ground. The water came in and went out three times. Along Dhabu [Dabbo] Creek and Punchiyani [Pitiani] Creek, water entered from the sea but hit the people from upstream side.

There was a big earthquake after the waves arrived, but I don't remember if an earthquake also happened before the tsunami.

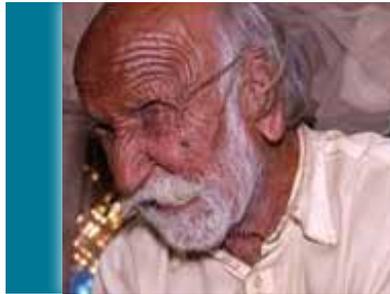
In the morning, dead bodies were on the ground and even in the trees. Where my cousins were living, many people died because there were no sand dunes or high ground. My cousin Ahmed and his wife were killed. People living along

Dhabu Creek were killed, but people along Painchiyani Creek were saved because the place was naturally high. Mangroves were ripped out of the ground but mangrove forests protected people who were living behind them. The Gadda community in Rehri village near Karachi had many casualties.

I buried a few bodies that were in the trees. We brought food for affected people and arranged a few shrouds for the dead.

Interviewed 17 February 2014 in Keti Bander, District Thatta by GN and DMK.

Kharo Chhan



Nathu

Age when interviewed: 105

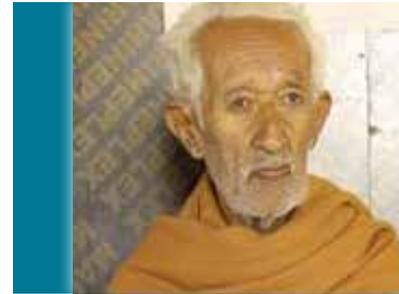
It was in the British period. I was around 25 and was a captain [of cargo boats with sails]. I became blind in 1947. Now I live alone in this hut, and I have no family.

There was no wind or rain, but there was an earthquake before the waves arrived. The sea water came at midnight or later, when people were sleeping. The waves passed over houses. This kind of sea storm has happened only once in my life.

Boats were destroyed, cattle and houses were washed away, and the human losses were greater. Villages near the shoreline were washed away. I remember there were ten main creeks. All was destroyed along the creeks named Dabbu, Patyani, Chahh, Hajamano, Turshamano, Garu, and Sanghri. But Vari, Basta, and Ghaja were not affected much. The damage in Keti Bander was minimal but our boats were destroyed.

[Several of the creeks mentioned by Mr. Nathu can be seen on the 1943 edition of Survey of India map G42-T Karachi, scale 1:253,400. Their names, from north to south, as spelled on that map: Paitiani, Dabbo, Chhan, Hajamro, and Turshian. Hajamro Creek is due west of Keti Bunder (spelled Keti Bandar on the map) and Turshian Creek is the south end of the waterway that connects Keti Bunder to the sea.]

*Interviewed 17 February 2014 in Keti Bander; District Thatta by GN and DMK.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/67>*



Mohammad Juma

Age when interviewed: 80+

I used to be a tailor and might have been between 20 and 25 in 1945. People here used to cultivate rice and wheat, which is not possible today because the water is often salty. The population of this area was much greater than today. Now people have gone to other areas in search of work.

The waves caused a disaster in this area. I remember boats damaged and sunk, cattle washed away, people killed, and even dead bodies in trees.

*Interviewed 18 February 2014 in Kharo Chhan, District Thatta by GN and DMK.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/71>*



Raza Mohammad

Age when interviewed: 80+

This was before the Hindus left. I was between 12 and 14 years old and was taking care of cattle. The cattle were important, along with rice and wheat.

The storm happened at night. I did not see the water myself but my grandmother and other elders used to tell me about the event.

A lot of cattle were washed away between Gharo [nearly as far north as Karachi] and Kharo Chhan [80 kilometres to the south].

The Hindu Jatt tribe was the richest in the area. The women wore heavy nose rings, around 50 or 60 grams. When bodies were brought in by the sea water, people tried to steal gold jewellery of the dead women.

Interviewed 18 February 2014 in Kharo Chhan, District Thatta by GN and DMK.



Mohammad Ramzan Sato

Age when interviewed: 80+

My mother told me of the disaster. She used to recall this event whenever there was any threat of bad weather. She died 20 years ago.

We were in a house made of mud and rough wood. The tsunami happened at night when people were sleeping. The water damaged crops, cattle, boats, houses, and belongings. There was less damage here in Kharo Chhan than in other areas nearby.

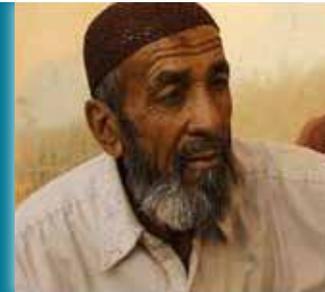
*Interviewed 18 February 2014 in Kharo Chhan, District Thatta by GN and DMK.
<http://iotic.ioc-unesco.org/1945makrantsunami/interview/73>*

Mohammad

Age when interviewed: 80+

I am not sure about the year. I don't remember exactly what happened I but heard a lot of stories from elders. My father, who was a farmer, remembered the event. He talked about losses of people, cattle, houses, and boats.

Interviewed 18 February 2014 in Jogi La Village, Kharo Chhan Tehsil, District Thatta by GN and DMK.



Haji Umer

Age when interviewed: 90+

I did not feel an earthquake but sea water rose up in the river. There was no wind or rain.

In the morning we came to know about the destruction. Hundreds of people died. We could not provide shrouds for all of them and buried many in one grave. I went to help people in Sukhibander.

Interviewed 18 February 2014 in Goth Haji Umer Ottho, Tehsil Kharo Chhan, District Thatta by GN and DMK.

<http://iopic.ioc-unesco.org/1945makrantsunami/interview/75>



Arab

Age when interviewed: 100

I have lived here since my birth. We used to have many farms. The river was far away from this place.

The sea water did not come to this place but people living near the river told me about the destruction. I went to the town of Sukhibander, 4-5 kilometres from here. It was destroyed by the water. We buried dead bodies wherever we found them. The water stayed at least one or two months. Most of the survivors from Sukhibander migrated to India. The remains of the city cannot be found today.

Interviewed 18 February 2014 in Goth Haji Umer Ottho, Tehsil Kharo Chhan, District Thatta by DMK and GN.



Abdullah Baloch

Age when interviewed: 61
(born after 1945)

My grandmother, Dhanna Bibi, used to tell stories of two storms that she remembered. One happened in 1921 or 1922 and the second in 1945. She lived in Shahbander when it was much bigger than it is today. That area was fertile for crops like wheat and rice, before the sea spread across it. Our family moved to Kharo Chhan in 1965.

One day she was playing near her house when she was surprised to find that sea water was entering Shabander. The water carried wood, clothes, and toys. She wanted to catch dolls but her father and took her away on a boat along with other family members. Later the water also brought dead bodies, including Hindu women with jewellery.

My father also remembered the 1945 event and said it happened during day time. He said there were deaths but fewer than in the storm of 1921 or 1922.

Interviewed 18 February 2014 in Village Ali Buksh Marger, Tehsil Kharo Chhan, District Thatta by GN and DMK.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/69>

Jati



Mohammad Usman Patel Dandal

Age when interviewed: 90+

My family was in the fish business but I went for farming. I was still a farmer when the Hindu landlord left for India in 1947. The Thatta area was much more populated and fertile then, even up to Kharo Chhan City. The salt water was farther away then.

I remember it was night and people who had gone out for fishing ran back shouting that the sea was approaching. I remember that the sea went inland much farther than usual, and that there was no wind.

Cattle were washed away when the sea went back but no person died in my village. We moved back to our village a month later.

Interviewed 16 February 2014 in Usman Dandal Village, Union Council Karmalik, Tehsil Jati, District Thatta by GN and DMK.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/78>



Haji Gul Mohammad

Age when interviewed: 80+

I remember it was night and I was 7 or 8 years old. The sea water rose without wind but with a loud noise around 2 a.m.

Water entered the creek up to the place where the Dolhay Darya Khan bridge was built eight years ago. The water went back after some time.

People, cattle, belongings, houses—everything was destroyed in this region by high water and fast currents. Many people died. My family lost so much that we moved to Manora [on the Karachi coast].

The event never repeated in my life, and my elders never told me of any other thing like it.

Interviewed 16 February 2014 in Usman Dandal Village, Union Council Karmalik, Tehsil Jati, District Thatta by GN and DMK.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/63>



Masi Chagi (wife of Aman)

Age when interviewed: 95

At the time I was already married and had two children. I took care of cattle and did household work like grinding wheat and making food for the family [there were several households in the family compound].

It was the time of *Fajr* [dawn prayer] when water entered our houses. The water came from the Ran of Kuchh side, from the south. The water was red and carried lots of fish and debris. Later, when we returned, we found a red line this high [1 metre] above the ground at our house [marking the water depth].

We were able to float away on logs, bamboo, and beds [from the compound and from floating debris]. We did not have boats because our village was far away from sea at that time.

Some people say there was an earthquake before the water came but I did not feel any shaking. However, there was a roaring sound before the water arrived.

We lost cattle and belongings but nobody died in our village. My family stayed at Allah Bachaya's home, which was on a higher place in a nearby village. We came back after three days when the water receded.

Interviewed 16 February 2014 in Goth Baro, Village Ahmed Mallah, Union Council Karmalik, Tehsil Jati, District Thatta by GN and DMK.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/64>

Badin



Suleman (son of Abdullah)

Age when interviewed: 100+

More than 50 years back, maybe 60 or 70 years ago, a strong storm came from the sea. The water came in during the day and went out at night. Some water remained, as deep as 4 or 5 feet.

The water washed away everything. Almost all houses were destroyed except for a few on high land. Many people died. Those who survived went to higher land along with their cattle. There was no dry place to bury dead bodies. We did not have anything to eat.

Interviewed 19 February 2014 in Suleman Poso Village, Union Council Ahmed Raju, District Badin by GN and DMK.

<http://iotic.ioc-unesco.org/1945makrantsunami/interview/79>

Sabel and Amina

Ages when interviewed: 100 and 80+

When Pakistan came into being I was married and had one son.

It happened at night, after midnight. There was an earthquake before the sea came in. I remember our house was destroyed by the storm. We spent that night on the rubble of our home. One of our buffalo drowned. People brought dead bodies here from villages near Jati.

The two women were interviewed together 19 February 2014 in Goth Haji Darya Khan, Union Council Ahmed Raju, District Badin by GN and DMK. The account is from Sabel. Amina said she remembers the event much as Sabel does.

Suleman

Ages when interviewed: 90+

We were living in this village. I was in fourth grade [about 10 years old] when Pakistan came into being. The Hindu teachers in our school went to India.

I don't remember any earthquake and storm in that period. However, there were many cyclones I experienced during my life.

Interviewed 19 February 2014 in Goth Shadman Lund, Union Council Ahmed Raju, District Badin by GN and DMK.



Khadeja (wife of Suleman)
Age when interviewed: 90+

I was married and had children at that time. It was before the sea drowned 26 villages in our area.

I felt an earthquake but don't remember how strong it was. I did not see coming waves as I was inside the house, but when I went out I saw water everywhere. I don't remember the direction that the water came from.

I saw boats brought inland by the storm. I remember my one buffalo and a goat were washed away. Three children of my husband's relative drowned. They were sleeping and the water passed over them.

Interviewed 19 February 2014 in Suleman Poso Village, Union Council Ahmed Raju, District Badin by GN and DMK.



Gullan (son of Mohammad Yousaf)
Age when interviewed: 90+

I was 20 to 25 years old when an earthquake and storm came. I was in another village at that time, around 10 kilometres away from this place.

I remember that the earthquake happened after the storm. Where we are sitting today the water was four feet deep. In the village where I was, the water was higher than a man. I don't remember where the water came from. The water disappeared in three or four months.

Seven people died in my village, including my father. I remember the names of three others: Mohammad Raheem, Maywo, and Foto. We had no cloth for burial shrouds. We had nothing to eat and we had no fuel wood for cooking.

We use the skins of dead animals [for clothing and water containers]. But I remember there were too many dead animals after the storm for us to take off their skins.

After the storm *hohar* [an epidemic] spread in the area and many people died from the disease.

Interviewed 19 February 2014 in Goth Haji Darya Khan, Union Council Ahmed Raju, District Badin by GN and DMK.

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Interviewers' initials

Initials	Interviewer	Interview location(s)
AAH	Abdulrahman Al-Harathi	Oman
AM	Attaullah Menghal	Pakistan
ANB	Abdolmajid Naderi Beni	Iran
AR	Anne Roepert	Oman
AU	Abdullah Usman	Pakistan, Oman
DMK	Din Mohammad Kakar	Pakistan, Oman
EAO	Emile A. Okal	Iran, Oman
FP	Fatemeh Pahlevan	Iran
GH	Gösta Hoffmann	Oman
GN	Ghazala Naeem	Pakistan, Oman
HG	Hamzeh Ghaffari	Iran
HMF	Hermann M. Fritz	Iran
JG	Javad Ghasemzadeh	Iran
MA	Mohammad Afarin	Iran
MAH	Mohammad Ali Hamzeh	Iran
NB	Nilesh Bhat	India
NSAB	Noora S. Al-Balushi	Oman
SS	Seshachalam Srinivasalu	India

* born after 1945

References cited

1. Ambraseys, N.N., and Melville, C.P., 1982, *A history of Persian earthquakes*: Cambridge, Cambridge University Press, 240 p.
2. Bauer, P.J., Tasdemir-Ozdes, A., and Larkina, M., 2014, Adults' reports of their earliest memories: Consistency in events, ages, and narrative characteristics over time: *Consciousness and cognition*, v. 27, p. 76-88, doi:10.1016/j.concog.2014.04.008.
3. Berntsen, D., and Rubin, D., 2006, Flashbulb memories and posttraumatic stress reactions across the life span: Age-related effects of the German occupation of Denmark during World War II: *Psychology and aging*, v. 21, no. 1, p. 127-139, doi:10.1037/0882-7974.21.1.127.
4. Brown, R., and Kulik, J., 1977, Flashbulb memories: *Cognition*, v. 5, no. 1, p. 73-99, doi:10.1016/0010-0277(77)90018-X.
5. Byrne, D.E., Sykes, L.R., and Davis, D.M., 1992, Great thrust earthquakes and aseismic slip along the plate boundary of the Makran subduction zone: *Journal of Geophysical Research*, v. 97, no. B1, p. 449-478.
6. Cahill, L., Haier, R., Fallon, J., Alkire, M., Tang, C., Keator, D., Wu, J., and McGaugh, J., 1996, Amygdala activity at encoding correlated with long-term, free recall of emotional information: *Proceedings of the National Academy of Sciences of the United States of America*, v. 93, no. 15, p. 8016-8021, doi:10.1073/pnas.93.15.8016.
7. Hamzeh, M.A., Okal, E.A., Ghasemzadeh, J., and Beskeleh, G.R., 2013, Study of the effects of the 1945 Pakistan tsunami on the Iranian Makran coast: *Proceedings of the First National Conference on Development of the Makran coast [in Farsi]*, Chabahar, Iran, p. 9.
8. Heidarzadeh, M., Pirooz, M.D., and Zaker, N.H., 2009, Modeling the near-field effects of the worst-case tsunami in the Makran subduction zone: *Ocean Engineering*, v. 36, no. 5, p. 368-376, doi:10.1016/j.oceaneng.2009.01.004.
9. Heidarzadeh, M., and Satake, K., 2014, Possible sources of the tsunami observed in the northwestern Indian Ocean following the 2013 September 24 Mw 7.7 Pakistan inland earthquake: *Geophysical Journal International*, v. 199, p. 752-766, doi:10.1093/gji/ggu297.
10. Herry Yogaswara, and Eko Yulianto, 2006, *Smong, pengetahuan lokal Pulau Simeulue: sejarah dan kesinambungannya [Smong: local knowledge at Simeulue Island; history and its transmission from one generation to the next]*: Jakarta, Lembaga Ilmu Pengetahuan Indonesia; United Nations Educational, Scientific, and Cultural Organization; and International Strategy for Disaster Reduction, 69 p.
11. Hoffmann, G., Rupprechter, M., Al Balushi, N., Grützner, C., and Reicherter, K., 2013, The impact of the 1945 Makran tsunami along the coastlines of the Arabian Sea (Northern Indian Ocean) – a review: *Zeitschrift für Geomorphologie, Supplementary Issue*, v. 57, supplement 4, p. 257-277, doi:10.1127/0372-8854/2013/S-00134.
12. Hoffmann, G., Al-Yahyai, S., Naeem, G., Kociok, M., and Grützner, C., 2014, An Indian Ocean tsunami triggered remotely by an onshore earthquake in Balochistan, Pakistan: *Geology*, v. 42, no. 10, p. 883-886, doi:10.1130/G35756.1.
13. Kakar, D.M., Naeem, G., Usman, A., Hasan, H., Lohdi, H.A., Srinivasalu, S., Andrade, V., Rajendran, C.P., Naderi Beni, A., Hamzeh, M.A., Hoffmann, G., Al Balushi, N., Gale, N., Kodijat, A.M., Fritz, H.M., and Atwater, B.F., in press, Elders recall an earlier tsunami on Indian Ocean shores: *Eos (Transactions, American Geophysical Union)*, v. 95.
14. McAdoo, B.G., Dengler, L., Prasetya, G., and Titov, V., 2006, Smong: How an oral history saved thousands on Indonesia's Simeulue Island during the December 2004 and March 2005 tsunamis: *Earthquake Spectra*, v. 22, p. S661-S669.
15. National Geophysical Data Center / World Data Service (NGDC/WDS), 2014, Global historical tsunami database: doi:10.7289/V5PN93H7, http://www.ngdc.noaa.gov/hazard/tsu_db.shtml, accessed October 2, 2014.
16. Neetu, S., Suresh, I., Shankar, R., Nagarajan, B., Sharma, R., Sheno, S.S.C., Unnikrishnan, A.S., and Sundar, D., 2011, Trapped waves of the 27 November 1945 Makran tsunami: observations and numerical modeling: *Natural Hazards*, v. 59, no. 3, p. 1609-1618, doi:10.1007/s11069-011-9854-0.

17. Okal, E.A., 2010, Report on field workshop Sustan and Beluchistan Province southeastern Iran 09-19 October 2010: 23 p., http://www.earth.northwestern.edu/public/emile/IR_2010.pdf, accessed December 20, 2014.
18. Okal, E.A., and Synolakis, C.E., 2008, Far-field tsunami hazard from megathrust earthquakes in the Indian Ocean: *Geophysical Journal International*, v. 172, no. 3, p. 995-1015, doi:10.1111/j.1365-246X.2007.03674.x.
19. Rajendran, C.P., Ramanamurthy, M.V., Reddy, N.T., and Rajendran, K., 2008, Hazard implications of the late arrival of the 1945 Makran tsunami: *Current science*, v. 95, no. 12, p. 1739-1743.
20. Rastogi, B.K., and Jaiswal, R.K., 2006, A catalog of tsunamis in the Indian Ocean: *Science of Tsunami Hazards*, v. 25, no. 3, p. 128-143.
21. Schelach, L., and Nachson, I., 2001, Memory of Auschwitz survivors: *Applied Cognitive Psychology*, v. 15, no. 2, p. 119-132, doi:10.1002/1099-0720(200103/04)15:2<119::AID-ACP692>3.0.CO;2-N.
22. Sharot, T., Martorella, E.A., Delgado, M.R., and Phelps, E.A., 2007, How personal experience modulates the neural circuitry of memories of September 11: *Proceedings of the National Academy of Sciences of the United States of America*, v. 104, no. 1, p. 389-394, doi:10.1073/pnas.0609230103.
23. Smith, G.L., McNeill, L.C., Wang, K., He, J., and Henstock, T.J., 2013, Thermal structure and megathrust seismogenic potential of the Makran subduction zone: *Geophysical Research Letters*, v. 40, no. 8, p. 1528-1533, doi:10.1002/grl.50374.
24. Yulianto, E., Kusmayanto, F., Supriyatna, N., and Dirhamsyah, M., 2010, Where the first wave arrives in minutes; Indonesian lessons on surviving tsunamis near their sources: *IOC Brochure 2010-4*, 28 p., <http://www.ioc-tsunami.org/http://unesdoc.unesco.org/images/0018/001898/189842e.pdf>, accessed April 3, 2012.

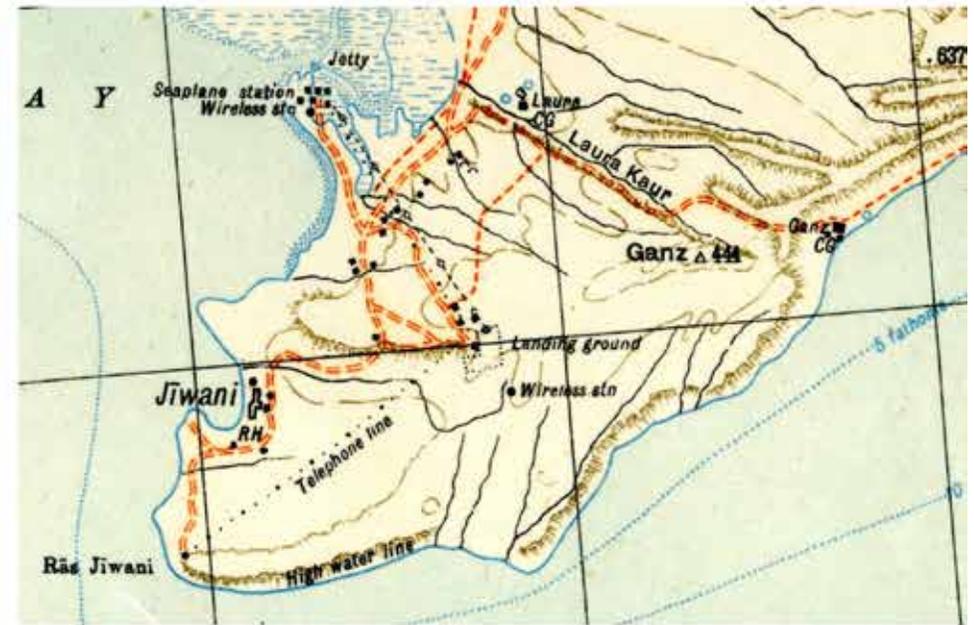
Period Maps

Jiwani and Ganz



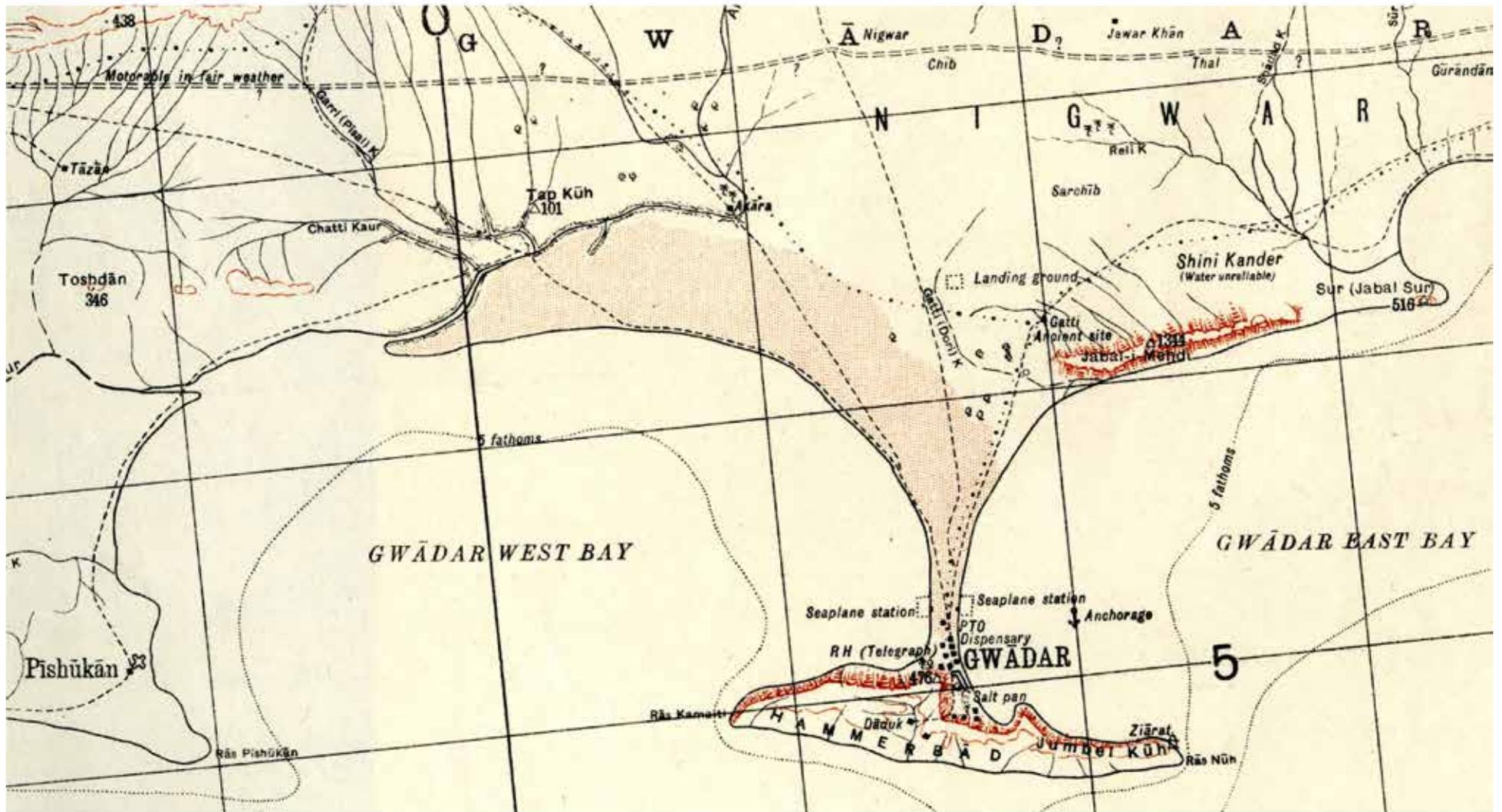
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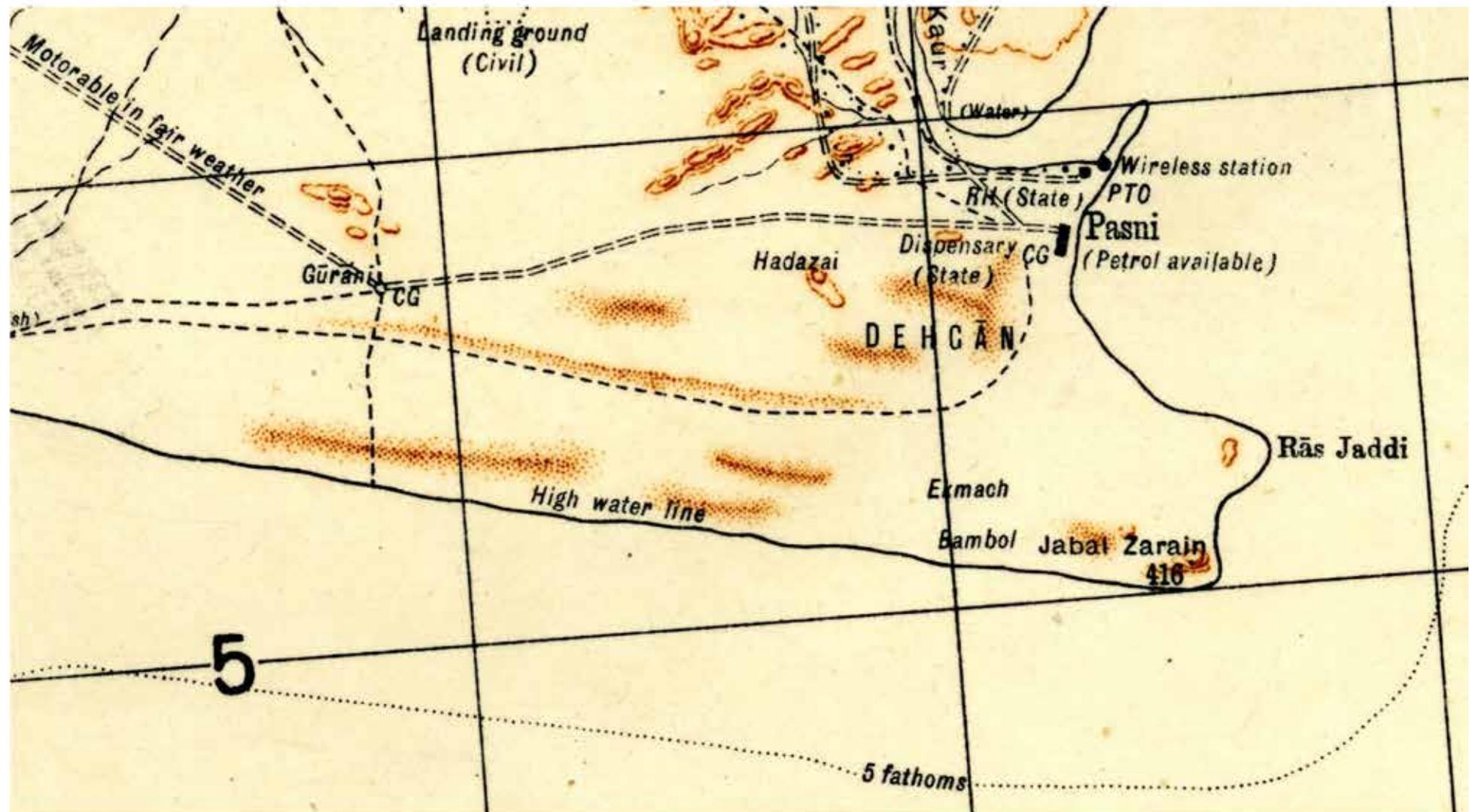
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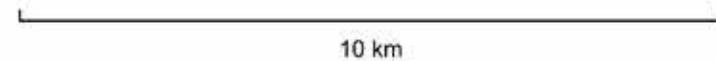


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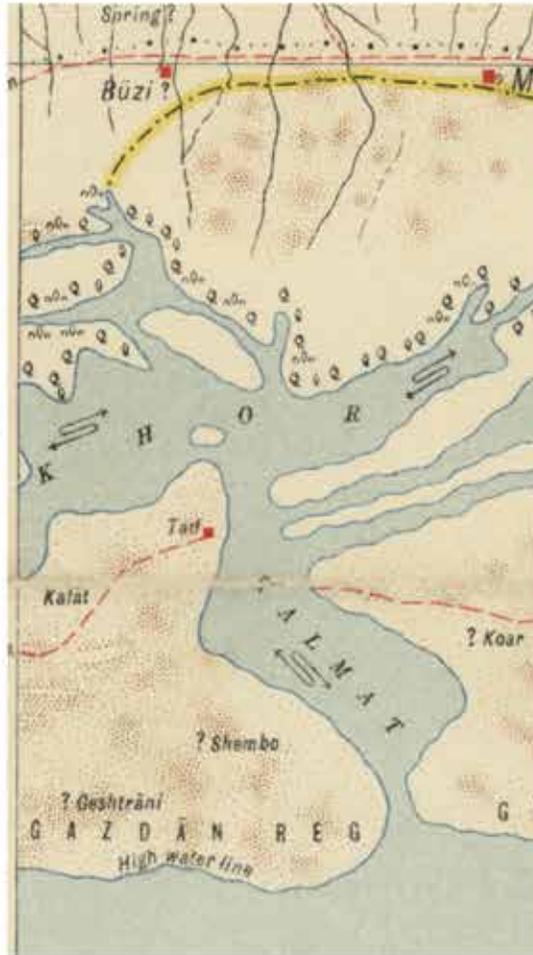
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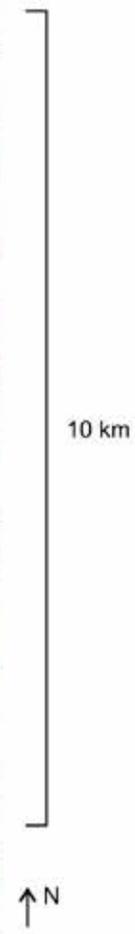
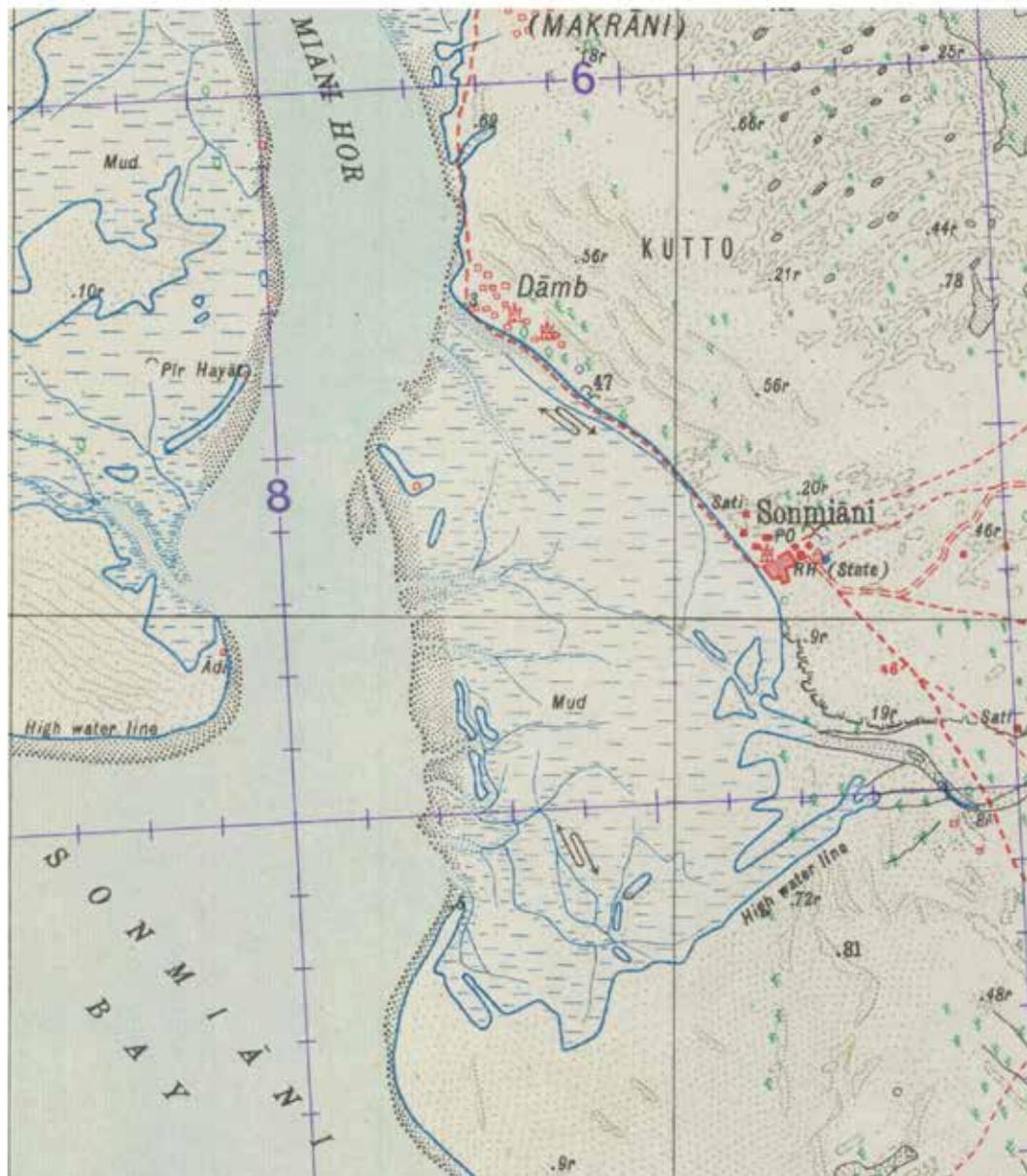


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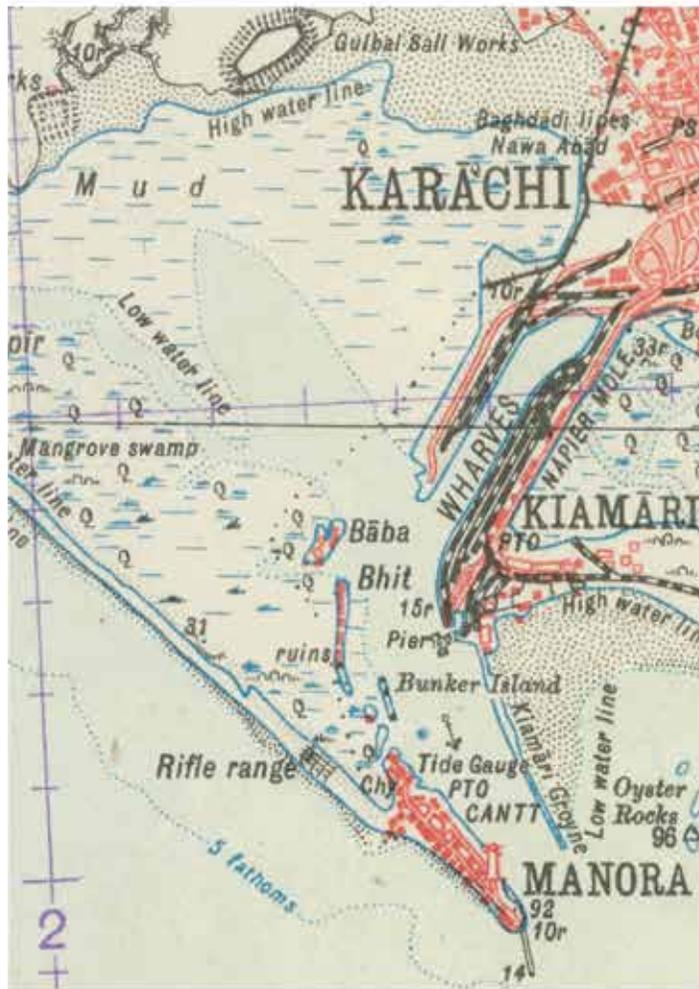
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Daam [Damb] (near Sonmiani)

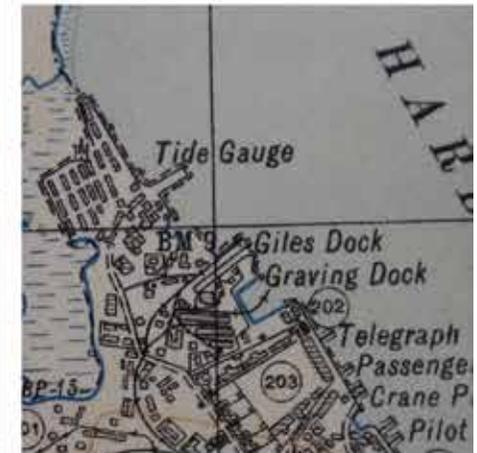


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Baba Island, Port of Karachi

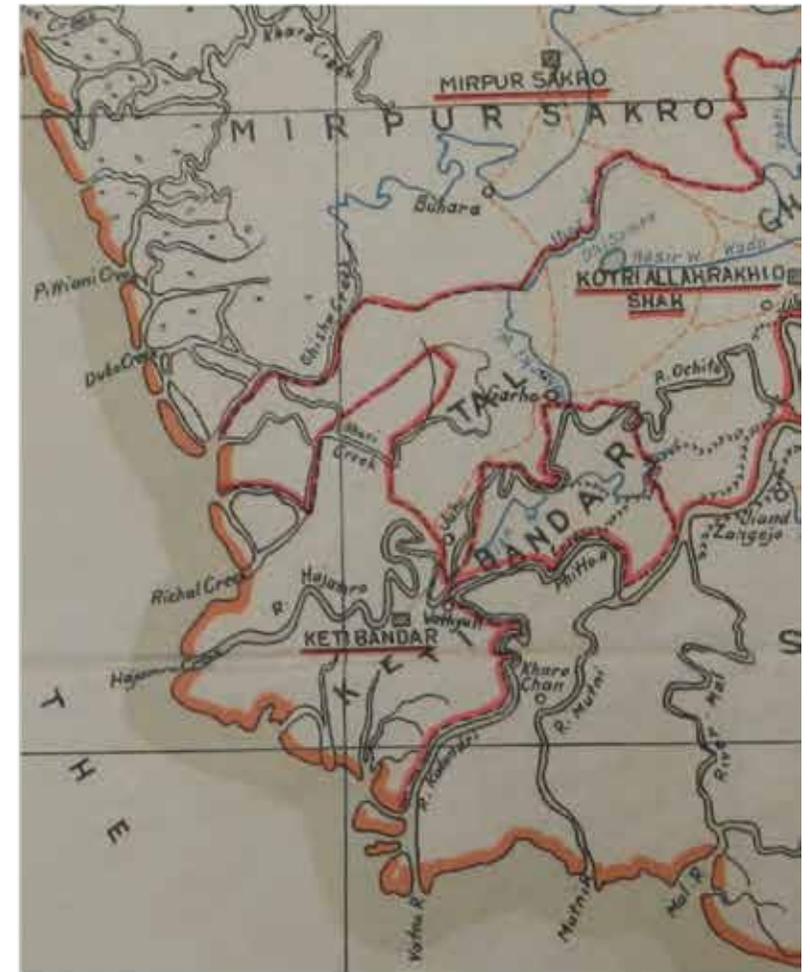
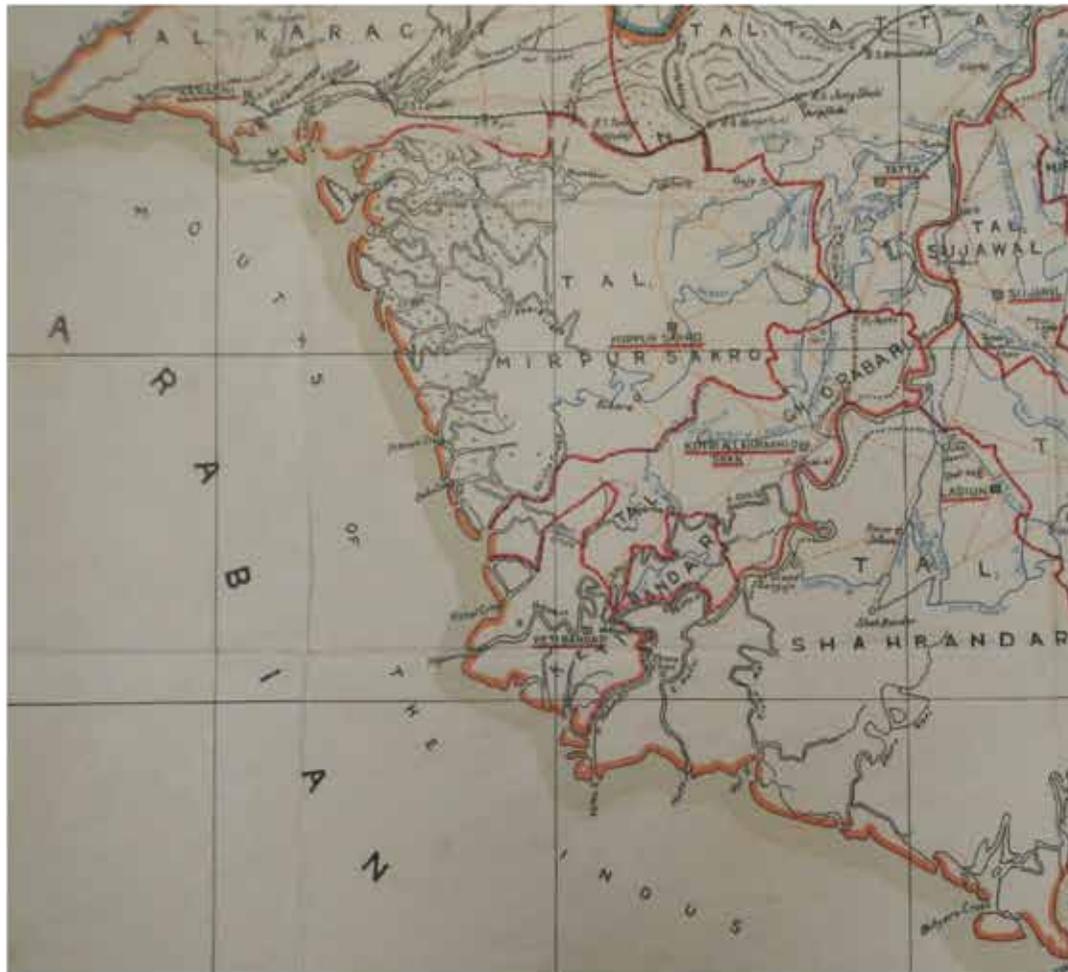


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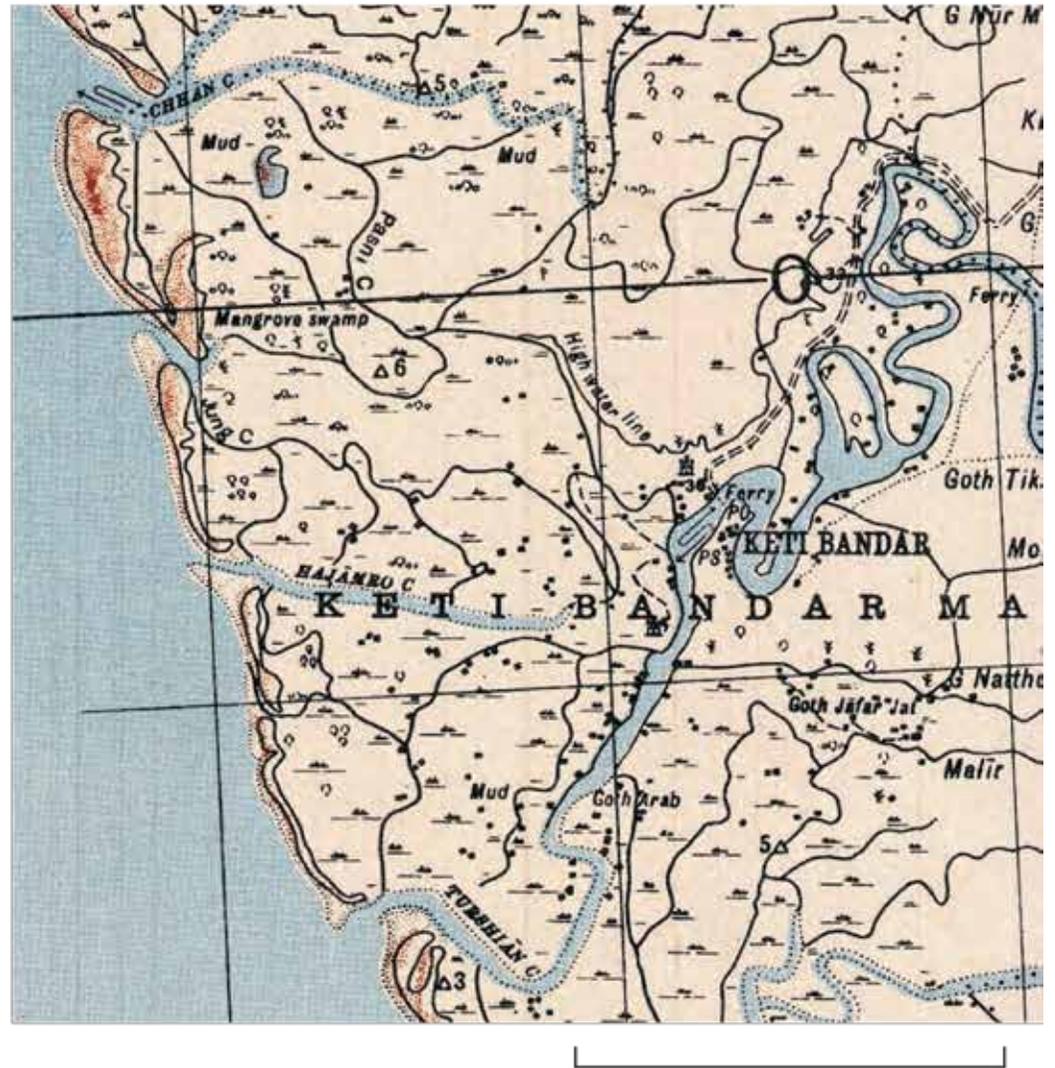
Survey of India, Karachi guide map
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Karachi and Indus Delta; Keti Bunder [Keti Bandar]



Superintendent, land records in Sind, Map of Sind
1933
Original scale 1:506,880
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Survey of India, quarter inch sheet G42-T & F-42B Karachi
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Nearly a lifetime has passed since the northwestern Indian Ocean last produced a devastating tsunami. The disaster took place in November 1945, when record-keeping was hindered by instability from the Second World War and, in British India, by the approach of independence and partition. What has been established about the 1945 tsunami falls short of what's needed today for ground-truthing inundation models, estimating risk to enlarged populations, and anchoring awareness campaigns in local facts.

This booklet aims to increase scientific understanding and public awareness of the 1945 tsunami. It contains testimony from dozens of eyewitnesses to that tsunami, and from younger people who recounted what their elders told them. It is hoped that these collected memories will help save lives during future tsunamis.



Rabia, age 74, flanked by a grandson, tells an interviewer about her childhood memories of the 1945 Makran tsunami (details, page 34). The tsunami originated offshore from her home town of Pasni, Pakistan.

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