

Fourteenth Session of the Intergovernmental Coordination Group
for the Indian Ocean Tsunami Warning and Mitigation System
(ICG/IOTWMS-XIV)

Jakarta, Indonesia, 17-19 November 2024

National Report of Madagascar

Page 1: Overview

Q1 **Confirm by clicking the checkbox**

Consent: I have read the above information and wish to proceed.

Q2 **Madagascar**

Please select your country from the list below:

Page 2: PART I: Basic Information

Q3

TNC Name:

Solofoarisoa RAKOTONIAINA

Q4

Position:

Director

Q5

Organisation:

Institute and Observatory of Geophysics in Antananarivo

Q6

Telephone Number:

Q7

E-mail Address:

solofoarisoa@gmail.com

Q8

Respondent skipped this question

Fax Number:

Q9

Postal Address:

Institute and Observatory of Geophysics in Antananarivo (IOGA)
P.O. Box 3843 - Ambohidempona
101 Antananarivo
Madagascar

Page 3: PART I: Basic Information

Q10

NTWC Agency Name:

Institute and Observatory of Geophysics in Antananarivo (IOGA)

Q11

NTWC URL (web link) for tsunami warnings:

<http://ioga.univ-antananarivo.mg>

Q12

NTWC Agency Contact or Officer in Charge (person):

ANDRIANAIVOARISOA Jean Bernardo

Q13

Position:

NTWC Staff

Q14

Telephone Number:

Q15

E-mail Address:

andrijb08@gmail.com

Q16

Postal Address:

Institute and Observatory of Geophysics in Antananarivo (IOGA)
P.O. Box 3843 - Ambohidempona
101 Antananarivo
Madagascar

Q17

Yes

3a) Is your Tsunami Warning Focal Point (TWFP) the same as your National Tsunami Warning Centre (NTWC) agency? The TWFP is the 24 x 7 point of contact (office, operational unit or position, not a person) officially designated by the NTWC or the government to receive and disseminate tsunami information from an ICG Tsunami Service Provider according to established national Standard Operating Procedures. The TWFP may or not be the NTWC.

Page 4: PART I: Basic Information

Q18

Respondent skipped this question

TWFP Agency Name (if different from the NTWC Agency):

Q19

Respondent skipped this question

Name:

Q20

Respondent skipped this question

Position:

Q21

Respondent skipped this question

Telephone Number:

Q22

Respondent skipped this question

E-mail Address:

Q23

Respondent skipped this question

Postal Address:

Page 5: PART I: Basic Information

Q24

TWFP 24x7 point of contact (office, operational unit or position, not a person):

IOGA

Q25

E-mail Address:

Q26

Telephone Number:

Q27

Cellular Telephone Number:

Q28

Respondent skipped this question

Fax:

Page 6: PART I: Basic Information

Q29

Yes

3d) Has your country appointed a Tsunami Ready Focal Point (TRFP)? The TRFP is a person from the Disaster Management (DMO) or similar institution that:- Acts as a national advocate for national implementation of the Tsunami Ready Recognition Programme (TRRP) or a recognised similar initiative to help make at-risk communities prepared and resilient to any tsunami threat within their Member State.- Actively contributes to the national implementation of TRRP or a recognised similar initiative.- Routinely update UNESCO-IOC ICG/IOTWMS on the status of the national implementation of the TRRP or a recognised similar initiative. - Informs relevant national authorities and organisations involved in the implementation of TRRP or a recognised similar initiative on any information and/or updates provided by UNESCO-IOC on activities related to making at risk communities Tsunami Ready.

Q30

If yes, please provide their details below:Name of the TRFP:

Andriamiranto RAVELOSON

Q31

Position:

NTWC Staff

Q32

Agency:

IOGA

Q33

Telephone Number:

Q34

E-mail Address:

r_raveloson@yahoo.com

Q35

Postal Address:

Institute and Observatory of Geophysics in Antananarivo (IOGA)
P.O. Box 3843 - Ambohidempona
101 Antananarivo
Madagascar

Page 7: PART II: Hazard Assessment

Q36

Yes

4a) Has your country undertaken a hazard assessment?

Page 8: PART II: Hazard Assessment

Q37

Multi-hazard assessment including tsunami

4b) What type of hazard assessment has been carried out?

Page 9: PART II: Hazard Assessment

Q38

4c) What type of multi-hazard assessment has been carried out? (select all that apply)

Drought,
Tsunami,
Flooding,
Landslide,
Cyclone

Page 10: PART II: Hazard Assessment

Q39

4d) Who did the tsunami hazard assessment in your country? (select all that apply)

National Agency,
National / Local University,

Please specify the name(s) of the agencies:

Bureau National de Gestion des Risques et des Catastrophes (BNGRC) - Madagascar, Institute and Observatory of Geophysics in Antananarivo (IOGA) - Madagascar

Q40

4e) At what level was the tsunami hazard assessment carried out? (select all that apply)

National Level

Q41

4f) Which coastal areas have been mapped for tsunami hazard? Please include the names of the Region / City and an approximation of the percentage mapped.

Region Atsinanana / City of Toamasina

Region Fitovinany / City of Manakara

12,5 % mapped (reference: Eastern Coast of Madagascar)

Q42

4g) For each of the data types listed below (in rows), answer the two questions (in columns). Select Yes / No / Don't know from the drop-down menu.

	Was this data used for tsunami hazard assessment?	Is this data publicly available?
Bathymetry	Yes	Yes
Seismo-tectonic model	Yes	Yes
Topography	Yes	Yes
Land Cover	Yes	Yes
Infrastructure details	No	No

Q43

4h) What products do you have from the tsunami hazard assessment? (select all that apply)

- Hazard map,**
- Inundation map,**
- Evacuation map**

Page 11: PART II: Hazard Assessment

Q44

4i) On a scale of 1 (Very poor) to 5 (Very good), please rate your country's capability to undertake tsunami hazard assessment

Capacity to undertake tsunami hazard assessment **Good**

Q45

4j) On a scale of 1 (Not a priority) to 5 (Essential), what is the priority level in your country to improve capacity in the following areas of tsunami hazard assessment?

Probabilistic Tsunami Hazard Assessment (PTHA)	High priority
Deterministic Tsunami Hazard Analysis	High priority
Field Studies on Tsunami Impacts	Essential
Hazard map	Essential
Inundation map	Essential
Evacuation map	Essential

Q46

4k) On a scale of 1 (No capacity) to 5 (Very good), what capacity does your country have to give training and/or consultancy on tsunami hazard assessment to other countries?

Probabilistic Tsunami Hazard Assessment (PTHA)	Moderate
Deterministic Tsunami Hazard Analysis	Moderate
Field Studies on Tsunami Impacts	Good
Hazard map	Good
Inundation map	Good
Evacuation map	Good
Please provide the name(s) and contact detail(s) of any individuals / institutions in your country that could provide this training / consultancy	RANOELIARIVAO Tsiriharina Sitraka RAKOTOMANDRINDRA Pascal Fetra Nirina RAVELOSON Andriamiranto ANDRIANASOLO Ramarolahy Rina ANDRIANAIVOARISOA Jean Bernardo

Page 12: PART II: Risk Assessment

Q47 Yes

5a) Has your country undertaken a tsunami risk assessment?

Page 13: PART II: Risk Assessment

Q48 Single risk assessment on tsunami AND multi-hazard risk assessment including tsunami

5b) What type of risk assessment?

Page 14: PART II: Risk Assessment

Q49 Tsunami,
Drought,
Earthquakes,
Flooding,
Landslide,
Cyclone

5c) What hazards have been considered in your multi-hazard risk assessment? (select all that apply)

Page 15: PART II: Risk Assessment

Q50

5d) Who did the tsunami risk assessment in your country? (select all that apply)

National Agency,

National/local University,

Please specify the name(s) of the agency(ies):

Bureau National de Gestion des Risques et des Catastrophes (BNGRC) - Madagascar, Institute and Observatory of Geophysics in Antananarivo (IOGA) - Madagascar

Q51

5e) At what level was the tsunami risk assessment carried out? (select all that apply)

Village Level,

Community / Neighbourhood Level

Q52

5f) Which coastal areas have been tsunami risk mapped? Please include the names of the Region / City and an approximation of the overall national percentage of risk prone areas mapped.

Region Atsinanana / City of Toamasina

Region Fitovinany / City of Manakara

12,5 % mapped (reference: Eastern Coast of Madagascar)

Q53

5g) How many Cities / Municipalities / Regencies are at risk from tsunami?

25 Cities

Q54

5h) What products do you have from the tsunami risk assessment? (select all that apply)

Risk map,

Evacuation map

Page 16: PART II: Risk Assessment

Q55

5i) On a scale of 1 (Very poor) to 5 (Very good), please rate your country's capability to undertake tsunami risk assessment

Capability to undertake tsunami risk assessment

Poor

Q56

5j) On a scale of 1 (Not a priority) to 5 (Essential), what is the priority level of your country to improve capacity in the following areas of tsunami risk assessment?

Tsunami risk assessment at national level	Essential
Tsunami risk assessment at regional level	High priority
Tsunami risk assessment at city level	High priority
Tsunami risk assessment at village level	High priority
Tsunami risk assessment at community / neighbourhood level	High priority

Q57

5k) On a scale of 1 (No capacity) to 5 (Very good) what capacity does your country have to give training and/or consultancy on tsunami risk assessment to other countries?

Tsunami risk assessment at national level	Poor
Tsunami risk assessment at regional level	Poor
Tsunami risk assessment at city level	Moderate
Tsunami risk assessment at village level	Moderate
Tsunami risk assessment at community / neighbourhood level	Good
Please give the names of any individuals / institutions in your country that could provide this training / consultancy	BNGRC (NDMO) and IOGA (NTWC)

Page 17: PART II: Policies

Q58

6a) Does your country have a national tsunami policy? For each of the four disaster management phases listed below, select standalone policy / multi hazard policy / policy not available. Use the comments box to detail the specific name of the policy (if available).

	In what form is the policy?
Prevention and mitigation	Multi hazard including tsunami
Preparedness	Multi hazard including tsunami
Emergency response	Multi hazard including tsunami
Rehabilitation and reconstruction	Multi hazard including tsunami

What is the name of policy? (if available):

There is no specific policy for tsunami. Tsunami is one of the hazards considered in the Law n°2015-031 related to National Policy for Risk and Disaster Management

Q59

6b) Does your country have local tsunami policies? For each of the disaster management phases listed below, select standalone policy / multi hazard policy / policy not available. Use the comments box to detail the specific name(s) of the policy (if available).

	In what form is the policy?
Prevention and mitigation	Policy is not available
Preparedness	Policy is not available
Emergency response	Policy is not available
Rehabilitation and reconstruction	Policy is not available

Page 18: PART II: Plans

Q60

7a) Does your country have national, local and community level tsunami disaster risk reduction plans? For each of the four disaster management phases listed below, select standalone plan / multi hazard plan / plan not available. Use the comments box to detail the specific name(s) of the plan(s) (if available). Please use the scroll bar to view the entire table.

	National level	Local level	Community level
Prevention and mitigation	Multi hazard including tsunami	Local plan is not available	Community plan is not available
Preparedness	Multi hazard including tsunami	Local plan is not available	Community plan is not available
Emergency response	Multi hazard including tsunami	Local plan is not available	Community plan is not available
Rehabilitation and reconstruction	Multi hazard including tsunami	Local plan is not available	Community plan is not available

Q61

Yes

7b) Are your country's tsunami disaster risk reduction plans based on hazards and risk assessments?

Page 19: PART II: Guidelines

Q62

8a) Does your country have national tsunami DRR guidelines? For each of the four lifecycle phases, select standalone guidelines / multi hazard guidelines / guidelines not available. Use the comments box to detail the specific name of the guidelines (if available).

In what form are the guidelines?

Prevention and mitigation	Multi hazard guidelines including tsunami
Preparedness	Multi hazard guidelines including tsunami
Emergency response	Multi hazard guidelines including tsunami
Rehabilitation and reconstruction	Multi hazard guidelines including tsunami

Q63

8b) Does your country have local tsunami DRR guidelines? For each of the four lifecycle phases, select standalone guidelines / multi-hazard guidelines / guidelines not available. Use the comments box to detail the specific name of the guidelines (if available).

In what form are the guidelines?

Prevention and mitigation	Guidelines not available
Preparedness	Guidelines not available
Emergency response	Guidelines not available
Rehabilitation and reconstruction	Guidelines not available

Page 20: PART III: Detection and Warning

Q64

Yes

9a) Does your country have a national capability to assess and/or receive potential tsunami threat information and advise/warn its coastal communities?

Page 21: PART III: Detection and Warning

Q65

Use TSP data,

9b) Does your country utilise the data provided by the IOTWMS Tsunami Service Providers (TSPs) for the Coastal Forecast Zones (CFZ) of your country's coastline to determine national threats or does it undertake its own threat assessments? (select all that apply)

Use own threat assessments

Q66

9c) Which organisation in your country has the responsibility for assessing and/or receiving potential tsunami threat information? Please provide the name and contact details.

IOGA

Q67

Yes

9d) Does the organisation responsible for assessing and/or receiving potential tsunami threat information operate 24x7?

Q68

9e) What / which infrastructure is available to enable 24x7 operations? (select all that apply)

**Computers,
Internet,
Mobile Phone or Cell Phone,
UPS (Uninterruptable Power Supply),
VSAT**

Q69

9f) Which level of tsunami threat forecast information is produced by the responsible organisation? (select all that apply)

**Ocean-wide,
National**

Q70

Yes, national and international

9g) Does the organisation have access to national and/or international seismic networks? (please select one from the following options)

Page 22

Q71

9h) Is national seismic data shared in real time?

**Some national seismic data is shared in real time,
Please specify which seismic data is shared in real time:
Waveforms and Bulletins**

Page 23: PART III: Detection and Warning

Q72

Yes

9i) Does your organisation have access to GNSS data?

Q73

Yes

9j) Is the list of broadband seismometers operated by your country listed accurately in the IOTWMS seismic database http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20796?

Q74

There are no changes

9k) When compared to the IOTWMS seismic database (http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20796), have you decommissioned or added broadband seismometers operated by your country (Check all that apply and include details in the comments section below)

Page 24: PART III: Detection and Warning

Q75

No

9l) Does the organisation have access to national and/or international sea level networks? (please select one answer from the following options)

Page 25: PART III: Detection and Warning

Q76

Respondent skipped this question

9m) Is national sea level data shared in real time?

Page 26: PART III: Detection and Warning

Q77

Yes

9n) Is the list of sea level stations operated by your country listed accurately in the IOTWMS sea level database (http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20833)?

Q78

There are no changes

9o) When compared to the IOTWMS sea level database (http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20833), have you decommissioned or added sea level stations operated by your country (Check all that apply and include details in the comments section below)

Page 27: PART III: Detection and Warning

Q79

No other observing networks are operated by the country

9p) What other observing networks are operated by your country and used for tsunami early warning?

Q80 Yes Please specify the software tools used:
SeisComp

9q) Does the organisation have the capability of analysing real-time seismic and sea-level data for potential tsunami threat?

Q81 No

9r) Does the organisation have capability for tsunami modelling to support generation of threat forecasts?

Q82 Yes

9s) Does the organisation responsible for identifying a potential tsunami threat also issue national tsunami no threat, watches, advisories, alerts and/or warnings?

Q83

9t) What are the threshold or criteria (for example sea levels, magnitude) for declaring a potential national tsunami emergency, watch, alert, advisory or warning?

Magnitude and hypocenter of the earthquake

Q84

9u) What actions were taken by your country's National Tsunami Warning Centre (NTWC) and/or Tsunami Warning Focal Point (TWFP) in response to earthquake events and messages issued by the IOTWMS TSPs during the inter-session period?

Assess the tsunami risk based on the earthquake information
Send information or/and warning to NDMO
Send feedback to TSP

Q85 Yes (please name the organisation(s) that participated in the additional comments)

9v) Did your country's NTWC and/or TWFP participate in the 6-monthly communications tests conducted by the IOTWMS TSPs?

,
Additional comments:
IOGA

Q86 Yes (please name the exercise(s) and organisation(s) that participated in the additional comments)

9w) Did your country's NTWC and/or TWFP participate in national and/or international Tsunami Exercises (eg. IOWave) conducted in the inter-session period between ICG meetings?

,
Additional comments:
IOGA - BNGRC

Q87

No

9x) After the December 26 2004 tsunami and until now, was your country impacted by any damaging tsunami? If Yes, what was your national response to each event (please comment if warnings were issued by your NTWC in a timely manner to enable communities to respond, if public were evacuated, etc.)

Q88

Yes (please specify the enhancements):
Tsunami warning chain

9y) Since 2018, have there been any enhancements in your national warning SOPs and alerting?

Page 28: PART III: Dissemination

Q89

10a) How is the tsunami information (warning, public safety action, etc) disseminated within country? (select all that apply)

Email,
SMS,
Telephone,
Webpage,
Radio,
WhatsApp / Facebook / Other social media,
Door-to-door,
Sirens,
Television,
Megaphone,
Police/military,
VHF radio

Q90

10b) For each emergency response organisation listed below, which communication methods for emergency response are available? (select all that apply)

National DMOs	Telephone, Email, SMS, Siren
Local DMOs	Telephone, Email, SMS, Siren
General Public	Siren
Coastal Communities	Telephone, SMS, Siren
Media	Telephone

Q91

10c) How is the warning situation terminated?

At least one (01) hour after clearance from TSPs and the last bulletin from the NTWC, the LDMO assesses the local situation and terminate the warning.

To clear the situation, the LDMO uses siren, phone call, color coded flag, local media

Q92

10d) What website is used for display of national threat status during events? Please provide the URL.

<http://ioga.univ-antananarivo.mg>

Q93

No

10e) Does your country's national tsunami warning system utilise the Common Alert Protocol (CAP) for the dissemination of warnings? If yes, please describe how the CAP is integrated into your warning dissemination processes, including any platforms or communication channels that are specifically utilised to broadcast CAP-formatted alerts to the public and relevant stakeholders.

Q94

10f) Who is primarily responsible for the direct dissemination of tsunami alerts to the public in your country, and what is the timeframe for these alerts to achieve effective last-mile responses? Please provide details.

BNGRC (DMOs)

Page 29: PART IV: Standard Operating Procedures

Q95

11a) For each of the (upstream) emergency response issues listed below (in rows), consider the four questions (in columns). Select a yes/no response using the drop-down menus.

	Does your SOP address this aspect of tsunami emergency response?	Is support required to develop/improve this aspect of tsunami emergency response in your SOP?	Is support required to develop Human Resources in this aspect of tsunami emergency response?	Is support required to develop infrastructure for this aspect of tsunami emergency response?
24/7 Emergency Operation Centre (EOC)	Yes	Yes	Yes	Yes
Receiving information from the NTWC	Yes	Yes	Yes	Yes
Response Criteria / decision making	Yes	Yes	Yes	Yes

Q96

11b) For each of the (downstream) emergency response issues listed below (in rows), consider the four questions (in columns). Select a yes/no response using the drop-down menus.

	Does your SOP address this aspect of tsunami emergency response?	Is support required to develop/improve this aspect of tsunami emergency response in your SOP?	Is support required to develop Human Resources in this aspect of tsunami emergency response?	Is support required to develop infrastructure for this aspect of tsunami emergency response?
Warning dissemination	Yes	Yes	Yes	Yes
Evacuation call procedures	Yes	Yes	Yes	Yes
Community evacuation procedures	Yes	Yes	Yes	Yes
Communication with NTWC	Yes	Yes	Yes	Yes
Communication with Local Government	Yes	Yes	Yes	Yes
Media arrangements	Yes	Yes	Yes	Yes
Communication with other stakeholder i.e. Red Cross, Fire Brigade, Search and Rescue, Police, Army, Navy etc.	Yes	Yes	Yes	Yes

Q97

Yes

11c) Would your country be willing to share your SOPs with the IOTIC and other countries?

Q98

12a) Does your country have the following evacuation infrastructure? (select all that apply and detail specific areas). Please use the scroll bar below to view the entire table.

Evacuation shelter Comment:	Yes All the 25 cities mentioned above, 100 % but with limited number of shelters
Vertical evacuation structure	No
Natural or artificial hill for vertical evacuation Comment:	Yes Cities in the Eastern Coast (around 16), approximately 80 % of risk prone areas covered
Evacuation signage	No

Q99

12b) Is your evacuation infrastructure integrated in the evacuation plan?

Yes

Page 31: PART IV: Tsunami Exercises

Q100

12c) Are tsunami exercises incorporated within national policies and guidelines? (select all that apply)

National policy

Q101

12d) At what levels were the exercises conducted during the inter-sessional (between ICG meetings) period? (select all that apply)

**National level,
City level**

Q102

12e) What kind of tsunami exercise activities have been undertaken in your country and how many times during the inter-sessional (between ICG Meetings) period?

Indian Ocean Wave exercise Comment:	Yes 5
Local tsunami drill/exercise Comment:	Yes 1

Page 32: PART IV: Public Awareness

Q103

13a) Who is responsible for tsunami public awareness programmes in your country?

National Disaster Management Office

Q104

Public Evacuation Map

13b) What tsunami related education and awareness materials do you have? (select all that apply)

Q105

Yes

13c) Would your country be willing to share these education and awareness materials with the Indian Ocean Tsunami Information Centre (IOTIC) and other countries?

Q106

13d) Do you undertake the following tsunami awareness activities?

World Tsunami Awareness Day	Yes
Comment:	2
Global Disaster Risk Reduction day	Yes
Comment:	20
Public tsunami preparedness outreach	No
School and/or children awareness	No
Exhibitions	No
Competitions or other ways of highlighting tsunami safety	No
Tsunami Exercise	Yes
Comment:	6

Q107

13e) Use the boxes below to indicate any areas in which you require support from the IOTIC to develop or enhance public awareness in your country. If you do not require support, please leave blank.

- Customisation of general materials to country or community**
- ,
- Development of tsunami awareness programmes, activities or campaigns**
- ,
- Participation/support by international agencies or experts to your country's activities**
- ,
- Provision of general tsunami awareness materials**

Q108

No

13f) Can your country offer support to other Member States to develop or enhance public awareness in their country?

Q109	Yes, we are already participating
14a) Does your country have an interest to participate in the UNESCO-IOC TRRP?	
Q110	No
14b) Aside from UNESCO-IOC TRRP, is your country currently implementing any other tsunami resilience and preparedness related initiatives or programmes?	
Q111	Respondent skipped this question
14c) What number of villages, cities/districts and provinces/state levels in your country are at risk to tsunami?	
Q112	No (if no, is there another existing coordination mechanism that can fulfil this role of NTRB? please specify below)
14d) Does your country have a National Tsunami Ready Board (NTRB)The National Tsunami Ready Board (NTRB) is responsible for guiding the community on the steps for Tsunami Ready recognition and for the review and approval of the community's Tsunami Ready application. It consists of designated representatives of the National Emergency Management Agency or Disaster Mangement Office, NTWC, TNC, the scientific community, and other invited guests.	, Please specify any existing coordination mechanisms that can fulfil this role of NTRB: Not applicable
Q113	
14e) Which institution(s) should be involved in the implementation of TRRP or similar national initiative? (please use a comma between the name of the institutions)	
IOGA, BNGRC	
Q114	No
14f) Are any communities (for example, villages, cities, districts, provinces or states) in your country currently working towards implementing or interested in implementing the UNESCO-IOC TRRP or similar national initiative?	
Q115	No
14g) Have any communities in your country achieved recognition through UNESCO-IOC TRRP or similar national initiative?	

Q116 15a) Is there national capacity to develop tsunami hazard maps?	Yes, it can be easily done through mobilising national experts and funding
Q117 15b) Is there national capacity to train the community on identifying and estimating the number of people that live in the tsunami hazard zone?	Yes, it can be easily done through mobilising national experts and funding
Q118 15c) Is there national capacity to train the community on the inventory of available economic, infrastructural, political, and social resources to reduce tsunami risk at the community level?	Yes, it can be easily done through mobilising national experts and funding
Q119 15d) Is there national capacity to work with the community to develop tsunami evacuation maps, plans and procedures at the community level?	Yes, it can be easily done through mobilising national experts and funding
Q120 15e) Is there national capacity to work with the community to develop a public display of tsunami information?	Yes, it can be easily done through mobilising national experts and funding
Q121 15f) Is there national capacity to work with the community to develop local context outreach and public education materials?	Yes, it can be easily done through mobilising national experts and funding
Q122 15g) Is there national capacity to train and build capacity of community to be able to organise and implement outreach and education activity?	Yes, it can be easily done through mobilising national experts and funding
Q123 15h) Is there national capacity to train and build capacity of community to be able to organise and implement tsunami exercises?	Yes, it can be easily done through mobilising national experts and funding
Q124 15i) Is there national capacity to train and build capacity of communities to be able to develop their community Emergency Operation Plan?	Yes, it can be easily done through mobilising national experts and funding

Q125 Yes, it can be easily done through mobilising national experts and funding

15j) Is there national capacity to train and build capacity of communities to manage 24/7 tsunami emergency response operation?

Q126 Yes, it can be easily done through mobilising national experts and funding

15k) Is there national capacity to train and work with the communities to develop mechanisms (means and procedures) to receive 24/7 warning?

Q127 Yes, it can be easily done through mobilising national experts and funding

15l) Is there national capacity to train and work with the communities to develop mechanisms (means and procedures) to disseminate 24/7 warning to the community?

Page 35: PART V: UNESCO-IOC Tsunami Ready Recognition Programme (TRRP)

Q128 Tsunami is not a high priority hazard in country, Limited resources (for example, champions, leadership, scientific support, social support), Limited support of government (for example, policy, financial), Lack of community interest

15m) Which of the following challenges inhibit the implementation of TRRP or similar national initiatives in your country? (select all that apply)

Page 36: PART VI: Narrative

Q129

16) Please briefly describe any innovations or modifications to national tsunami warning and mitigation procedures or operations since the last reassessment. For example, this might include tsunami related research projects, implementation of new seismic and/or sea level monitoring technologies, tsunami mitigation activities and best practices (especially in preparedness and emergency management), as well as public education programmes or other measures taken to heighten awareness of the tsunami hazard and risk.

N/A

Q130

17) Please provide a brief summary of plans for future tsunami warning and mitigation system improvements

- Implementing an automatic smart warning system based on seismic information (siren, sms, email)
- Hotline dedicated for tsunami warning
- Infrastructure to accommodate tsunami capacity building (e.g. convention center)
- training/exercice to national, regional and local communities especially the disable person and minorities.

Q131

18) Please list areas where your country would like support for targeted capacity development.

Antsiranana

Antalaha

Sambava

Toamasina

Mananjary

Manakara

Fort-Dauphin

Q132

Respondent skipped this question

Upload Documents
