

School Safety Lessons Learnt workshop 15-16 September in Bangkok

Session 5: Good practice of risk assessment on Pillar 1

Ministry of Education and Sports, Lao PDR

Hazards and disaster in Lao PDR

Natural disaster:

- Flood (river flood and flash flood)
- Drought
- Storm
- Landslide
- Epidemic (human, animal disease), including birth flu
- Pest
- Earthquake
- Cold

Man-made disaster:

- UXO
- Fire (forest, houses)
- Accident (land, air, water)



Loss and damage on education from disaster

Types of natural disaster	Number of Provinces	Number of schools	Estimated damage cost
Floods, windstorm and landslide (2013)	4 provinces (North) 3 provinces (Central) 5 provinces (South)	229	4,299,953,000 kip (approximately USD 537,491)
Floods, windstorm and landslide (2014)	4 provinces (North) 2 provinces (Central) 3 Provinces (South)	70 1 TTC 1 PESS 1 DESS	2,816,598,647 kip (approximately USD 352,074)
Windstorms, floods, fire, drowning (2015)	1 province (North) 3 provinces (Central) 3 provinces (South)	21 5 staff injured/4 female 4 students injured/2 female 10 students died/8 female	2,004,197,000 kip (approximately USD 250,524)

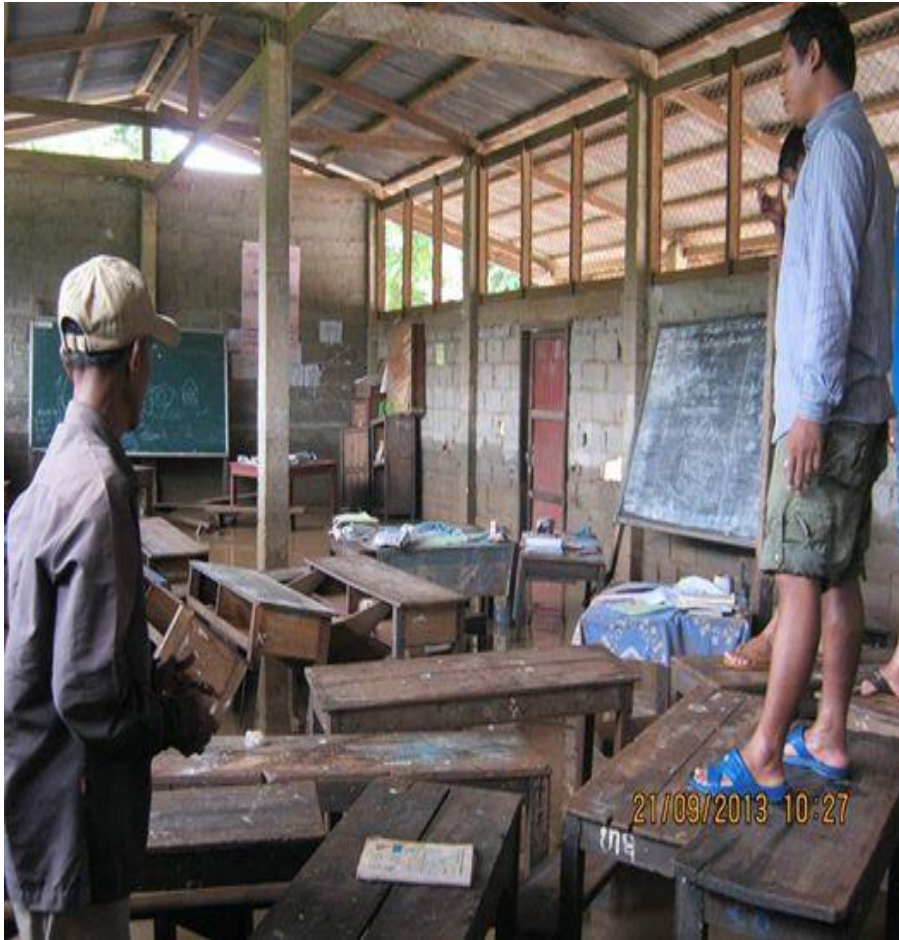
Source: MoES DM focal point reports 2013, 2014 & 2015

Loss and damage on education from disaster

Types of natural disaster	Number of Provinces	Number of schools	Estimated damage cost
windstorm and fire (January to May 2016)	6 provinces (North) 1 provinces (Central) 1 provinces (South)	61 2 Technology Center 2 Student Dormitories 2 Teacher Dormitories	1,653,981,000 kip (approximately USD 130,607)

Source: MoES DM focal point reports 2016

Schools were affected by floods in 2013



Pictured by Somphone Vilaysome, Secondary Education Department (2013)

Mixay secondary school was affected by windstorms in Phoukud district, Xiengkhouang province, 24 May 2014



Nongnok lower secondary school was affected by windstorms in Thateng District, Sekong Province, 4 May 2015



Schools were affected by floods in Xaysomboun Province, August 2015



Student Dormitory were affected by fire in Xayaboury Province, 2 January 2016



Schools were affected by windstorm in Phongsaly Province, 22 April 2016



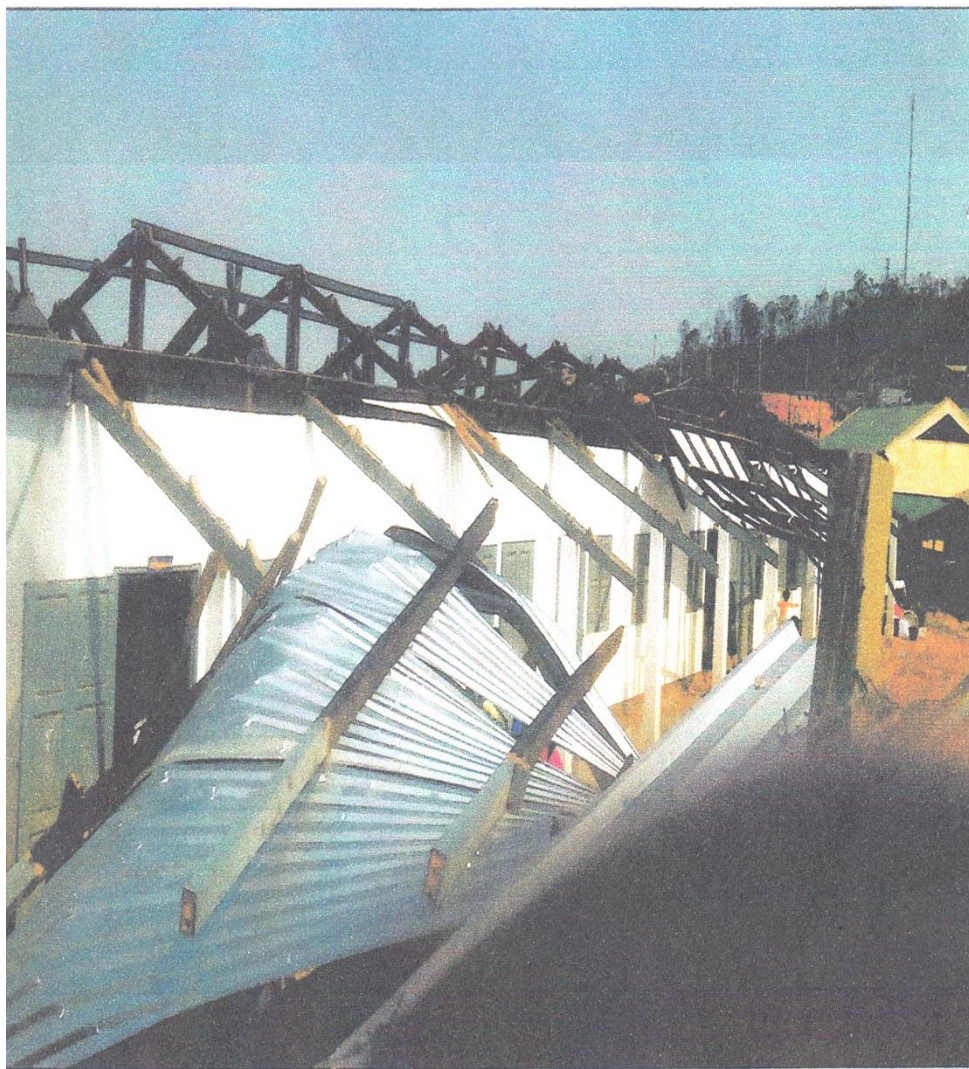
Schools were affected by windstorm in Phongsaly Province, 24 April 2016



Technology Center were affected by windstorm in Phongsaly Province, 14 May 2016



Schools were affected by windstorm in Houaphan Province, 16 April 2016



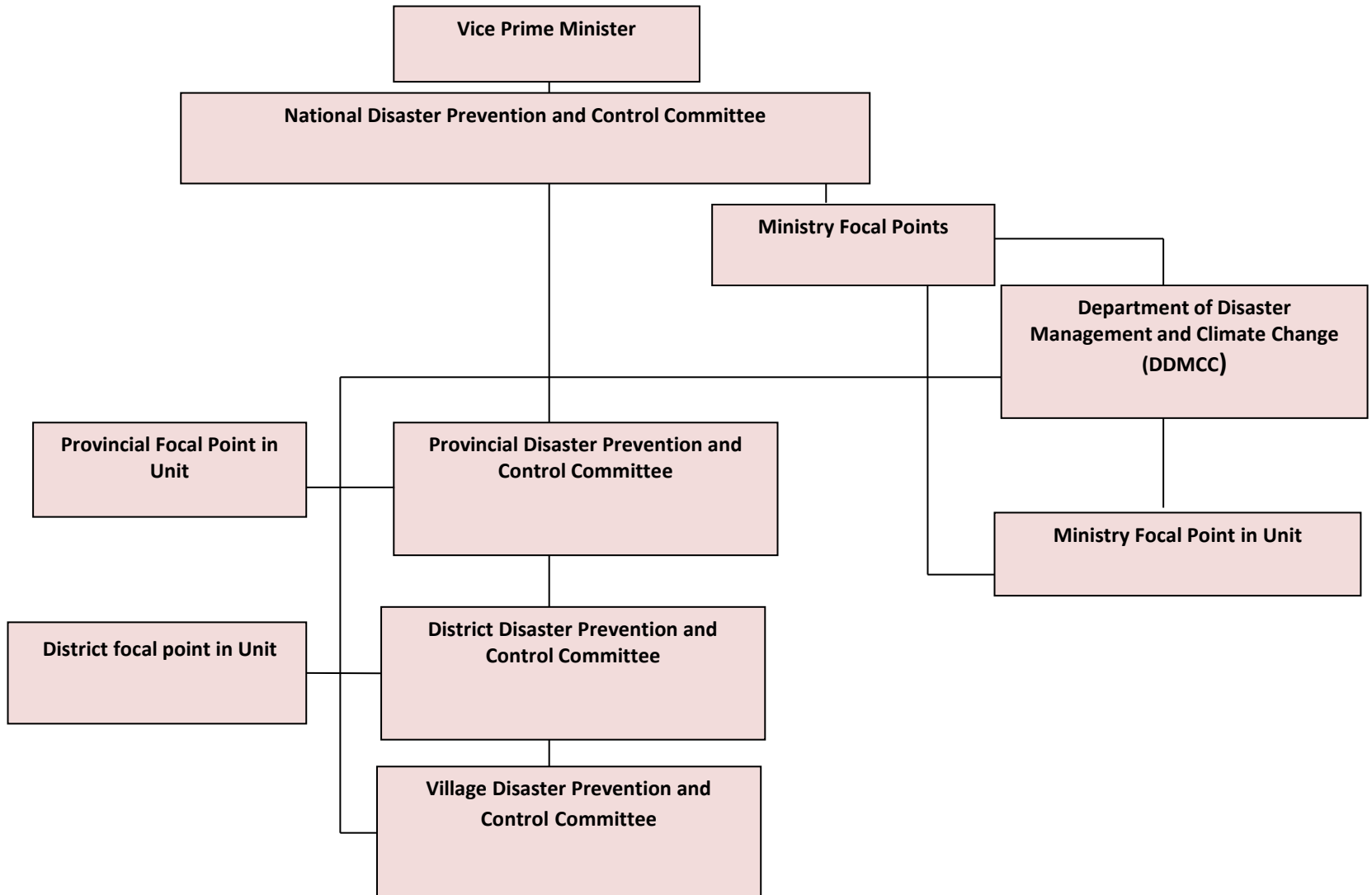
Policies for risk reduction

National	MoES
Law on Environmental Protection issued (2012)	School Construction Guidelines, ECDM, Department of Finance, MoES. (2009).
National Disaster Management Committee established (Prime Minister's decree No 158 dated 23 Aug 1999) chaired by Deputy Prime Minister.	Disaster Risk Management Committee formed (Ministerial decree No.2882/MOE.11 dated 24 Aug 2011) chaired by Deputy Minister
New Prime Minister Decree No 220/PM dated 28/8/2013 on National Disaster Prevention and Management Committee	New Ministerial Decree on Disaster and Climate Prevention and Control Committee and its TOR & members No 8128/MoES dated 30/12/2015
Drafting new TOR of Committee and members	Drafting TOR for each member
Drafting disaster risk management Law	Supporting Comprehensive School Safety

Organizational arrangements & coordination

National	MoES
National Disaster Management Office, Department of Disaster Management and Climate Change, Ministry of Natural Resource and Environment	Appointed two contact persons at MoES & Revising TOR of a focal point unit within MoES Appointed two contact persons in line departments within MOES
Provincial Disaster Prevention and Control Committee	Appointing two contact persons as a focal point in each PESS
District Disaster Prevention and Control Committee	Planning to establish a focal point in DESS
Village Disaster Prevention and Control Committee	Planning to establish a focal point in schools

Disaster Risk Management Structure in Lao PDR



Key activities at Central level

- Workbooks on Disaster and Risk Reduction
- Capacity Development for MOES DM Committee
- Capacity Development for MOES and PESS focal points
- Working with other ASEAN member states
- Study visit
- Disseminate DRR and CSS to Province and District
- Develop a specific school regulation concerning disasters prevention and protection
- Updated guideline for school design, school standard
-
- Annual forum for all donors



➤ *CSS ASSESSMENT SUITE* to indentify SLF

PURPOSE

CSS ASSESSMENT SUITE APPROACH

CSS ASSESSMENT SUITE APPLICATIONS

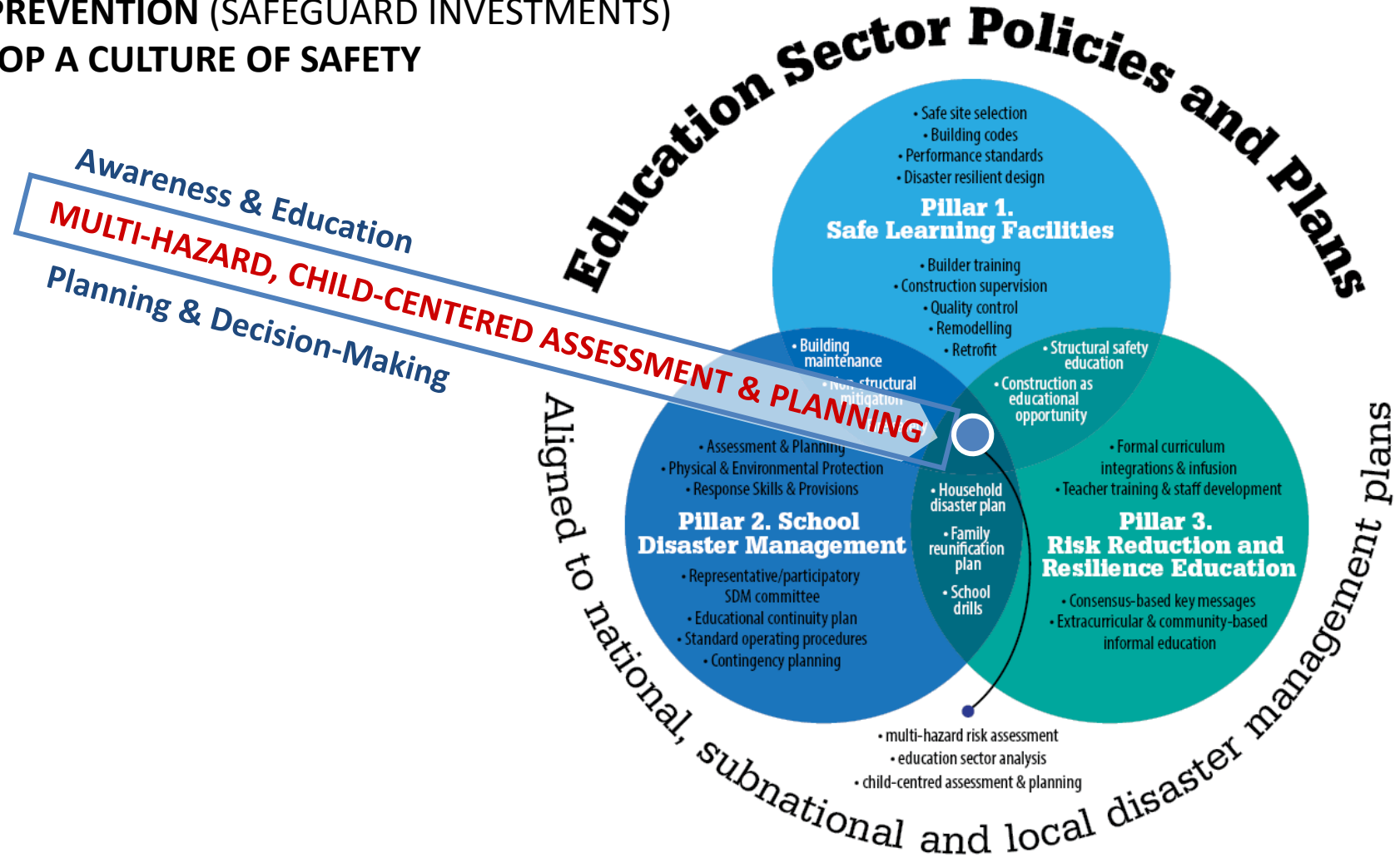
CSS First Step

CSS School Safety Self-Assessment

VISUS CSS

GOALS:

- PREVENTION OF DEATH & INJURY
- EDUCATIONAL CONTINUITY
- LOSS PREVENTION (SAFEGUARD INVESTMENTS)
- DEVELOP A CULTURE OF SAFETY



Designed for:

- **Salience** (relevant to comprehensive school safety)
- **Scalability** (designed for universal application)
- **Sustainability** (with local capacity)
- **Effectiveness** (outputs usable for action-planning)
- **Efficiency** (and affordability)
- **Empowerment** (rather than extractive)



PURPOSE

CSS ASSESSMENT SUITE APPROACH

CSS ASSESSMENT SUITE APPLICATIONS

CSS First Step

CSS School Safety Self-Assessment

VISUS CSS

CSSA – STEERING COMMITTEE

INPUTS

data-approach

- Deep technical investigation
- Quantitative analyses

Steps of Assessment

OUTPUT

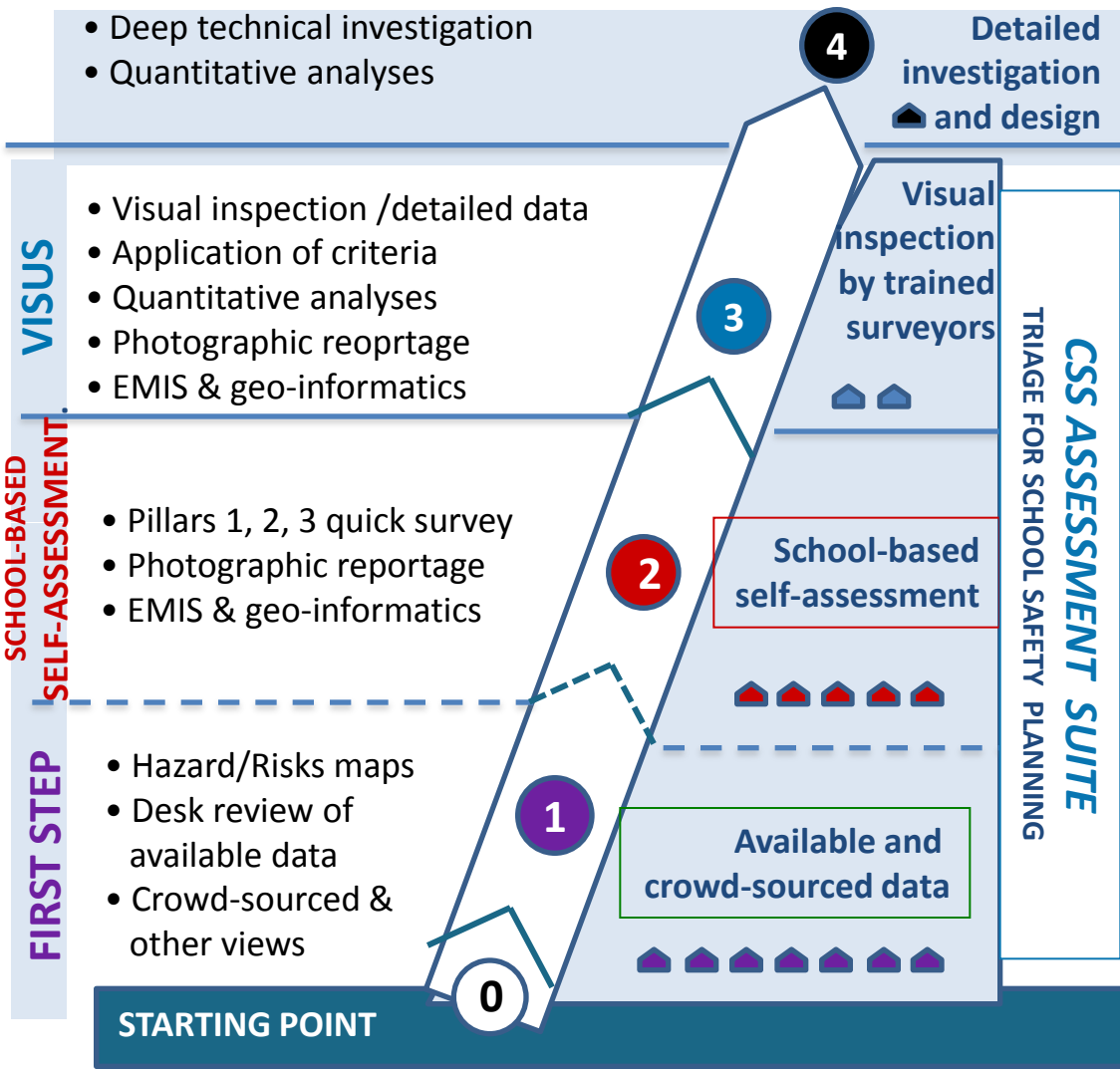
decision making information

In-depth assessment for design and delivery of retrofit or replacement

Characterization & recommendations
 Prioritization for in-depth assessment
 Allocation of funding for improvements
 Multi-criteria intervention strategies
 Cost-estimation and retrofit threshold exceedance

Local intervention suggestions
 Program development and capacity-building guidance
 Flagging for VISUS technical assessment

Local perceptions and interest
 Advocacy support
 Gross hazards exposure
 Prioritization by location, occupancy, construction type, year





TOOLS:	INPUTS FROM:	OUTPUTS:	OUTPUTS FOR:
<p>CSS FIRST STEP Step 1: Student/Community Awareness</p>	<ul style="list-style-type: none"> • students • community members 	<ul style="list-style-type: none"> • e-mail to responder • online visualization 	<ul style="list-style-type: none"> • schools community • local education administrators
<p>CSS SCHOOL-BASED SELF-ASSESSMENT Step 2: Internal Assessment (P.1, 2, 3)</p>	<ul style="list-style-type: none"> • school safety committees • visiting education administrators 	<ul style="list-style-type: none"> • School Report • District Report • online visualization • searchable database 	<ul style="list-style-type: none"> • school management • national & district education admin
<p>VISUS CSS Step 3: External Trained Surveyor Rapid Visual Inspection (P.1)</p>	<ul style="list-style-type: none"> • external technical survey teams 	<ul style="list-style-type: none"> • School Report • District Report • online visualization • searchable database 	<ul style="list-style-type: none"> • school management • national & district education admin



PURPOSE

CSS ASSESSMENT SUITE APPROACH

CSS ASSESSMENT SUITE APPLICATIONS

CSS First Step

CSS School Safety Self-Assessment

VISUS CSS

CSSA – STEERING COMMITTEE



Landing Page



In Lao



SSA Survey (r1) Camera Save Validate First Last Jump To

C.2.3 Potential hazards nearby

* C.2.3.1 Stockbreeding/farming

Yes No Unknown

* C.2.3.2 Swampy area/marsh

Yes No Unknown

* C.2.3.3 River required

Yes No Unknown

* C.2.3.4 Industrial

Yes No Unknown

* C.2.3.5 Minefield

Yes No Unknown

* C.2.3.6 Dam or dike

Yes No Unknown

* C.2.3.7 Main road


Yes No Unknown

Back Next

Single select questions


SSA Survey (r1) Camera Save Validate First Last Jump To

B.4.P School Photos



B.4.P.1 Photo 1: Full school site from a high view point

P1-3 BB01, picture of the school complex 3-14_55_36.jpg



B.4.P.2 Photo 2: Full school site from a high view point

B.4.P.3 School entry

B.4.P.4 Wide view from corner 1 of the school grounds

B.4.P.5 Wide view from corner 2 of the school grounds

Back Next

Photo question



SSA Survey (r1) Camera Save Validate First Last Jump To

B.1 School Contact Person

* B.1.1 Last name

* B.1.2 First name required

* B.1.3 Landline Phone

B.1.4 Mobile Phone

B.1.5 Email address

Back Next

Hey | | The >

1 2 3 4 5 6 7 8 9 0 Del

Q W E R T Y U I O P <X>

A S D F G H J K L Go

↑ * Z X C V B N M , ! . ? ↑

Ctrl Sym ⚙ English(US) < >

Text entry with soft keyboard

SSA Survey (r1) Camera Save Validate First Last Jump To

B.1 School Contact Person

* B.1.1 Last name required

* B.1.2 First name required
This field is required.

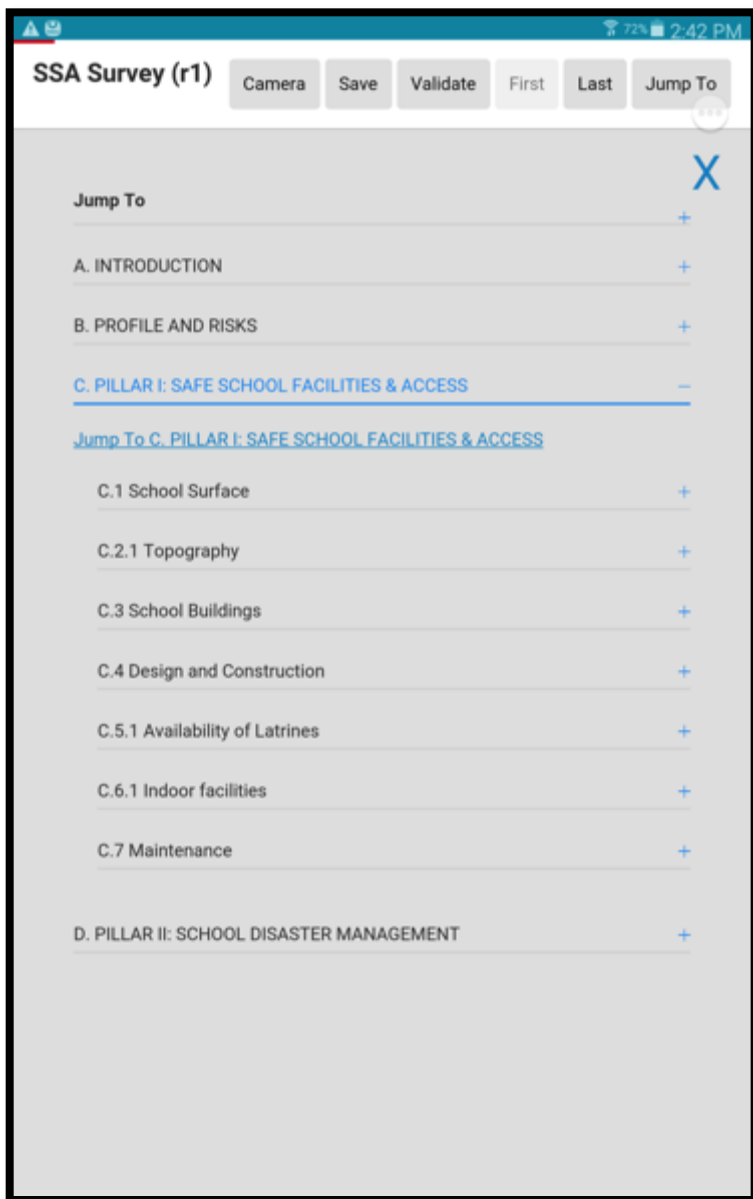
* B.1.3 Landline Phone required
This field is required.

B.1.4 Mobile Phone
Please make sure that this is a valid mobile phone number with 10 digits and no spaces in between (e.g. 020XXXXXXX)

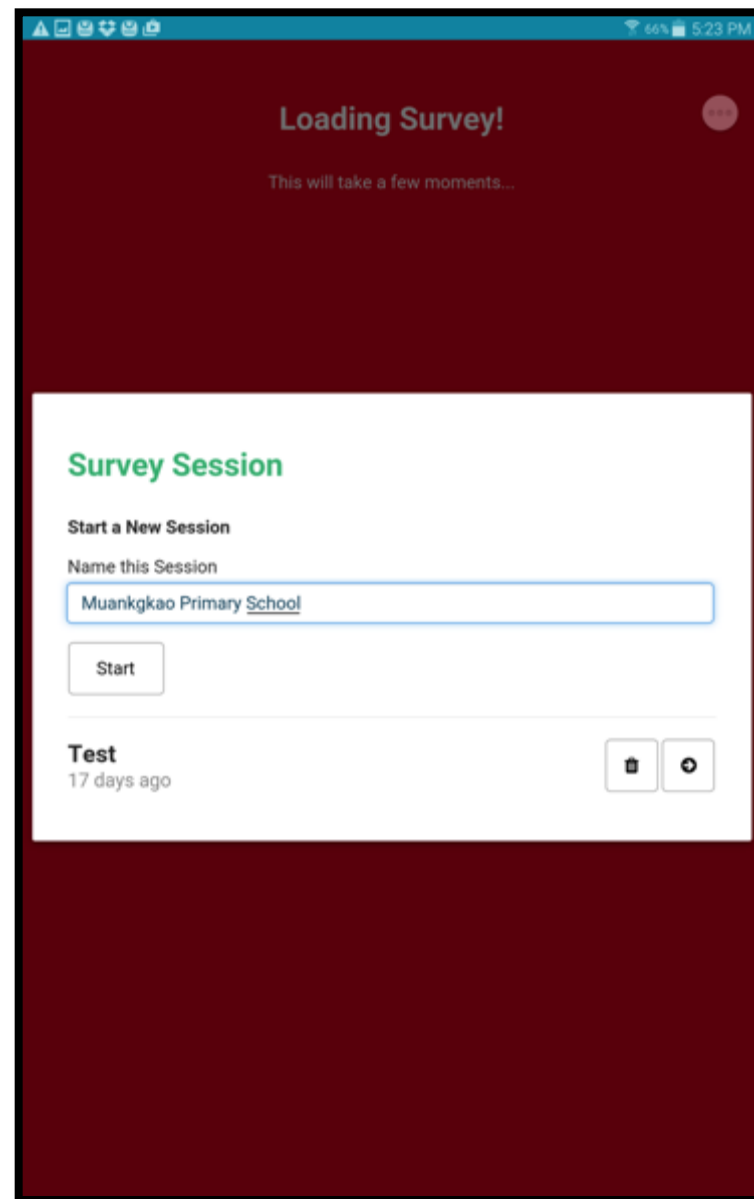
B.1.5 Email address

Back Next

Highlighted missed required answers



Navigation page



Session naming for offline operation



SSA Survey (r1) Camera Save Validate First Last Jump To

F. REVIEW

You are almost finished assessing the safety of this school. To prepare the information you collected for submission to the School Safety Assessment Portal, you need to make sure that all the required questions are completed.

Once you have completed the survey, a School Safety Self Assessment Report will be created and sent to the school contact email(s) that you entered at the beginning of the survey. The district and provincial education offices will also have access to this information. You may add up to two other email addresses to receive the report.

Email 1

Email 2

Click "Next" for the last page of the questionnaire for validation that all required responses are complete.

Back Next

Navigation page

Pending Data Submissions

Upload All

Name	Size	Created At
Muangkao Primary School	21 KB	09/08/2016 12:13

Uploading saved survey sessions



School Safety Self Assessment Portal

ໂຮງຮຽນປອດໄພ ການສໍາຫຼວດປະເມີນດ້ວຍຕົນເອງ

Register

To see safety reports and maps

email address

A temporary password will be sent via email

Register

Login

To start a session.

email address

password

Forgotten password?

Remember me

Login



The screenshot shows the SSA Portal interface. On the left is a dark sidebar menu with the following items: Dashboard, Users, Roles, Schools, Photos, and Map. The main content area has a top navigation bar with the SSA Portal logo, a hamburger menu, and a 'My Account' link. Below the navigation bar is a 'Dashboard' section with a 'Welcome back!' message. The main content area is titled 'Users' and features a '+ Create User' button. Below this is a search bar and a 'Show 10 entries' dropdown. The main part of the page is a table listing users with the following columns: Email, First Name, Last Name, Organization, Role, and Registered At. At the bottom of the table, it says 'Showing 1 to 10 of 11 entries' and has 'Previous' and 'Next' buttons.

Email	First Name	Last Name	Organization	Role	Registered At
aozisik@yahoo.com	Anonymous	1468531939	-	Guest	2016-07-14 21:32:19
christelle.marguerite@savethechildren.org	Christelle	Marguerite	Save the Children	SurveyAdmin	2016-07-15 00:51:05
info@imagins.com	Anonymous	1468520288	-	Guest	2016-07-14 18:18:08
khampaseuth.seneyavong@savethechildren.org	Khampaseuth	Seneyavong	Save the Children	Guest	2016-07-15 00:53:58
marla.petal@savethechildren.org.au	Marla	Petal	Save the Children	SurveyAdmin0	2016-07-15 00:52:45
ozisikahmet@gmail.com	Anonymous	1468449907	-	Guest	2016-07-13 22:45:07
Rebekah.Paci-Green@www.edu	Rebekah	Paci-Green	Risk RED	SurveyAdmin	2016-07-14 22:36:17
sengathit.vangvilachit@savethechildren.org	Sengathit	Vangvilachit	Save the Children	SurveyAdmin0	2016-07-15 00:53:22
soukmalayvanisavet@savethechildren.org	Soukmalay	Vanisavet	Save the Children	Guest	2016-07-15 00:54:45
sulgen@imagins.com	Suha T.	Ülgen	Imagins	SuperAdmin	2016-07-09 14:20:36

List of users and their roles



The screenshot displays the CSS SSA Portal interface. At the top, there is a navigation bar with a 'Schools' icon and a search bar. Below the search bar, there is a 'Photos' section. A modal window titled 'Edit Tags - Xaychaleun primary school' is open, showing a photo of a dirt path and a 'View Original' link. The modal also contains a text input field for 'Photo Tags' and a 'Save changes' button. The background shows a grid of photo thumbnails, each with a 'View Original' link and a 'Close' button. The text 'Photo tagging and viewing' is overlaid on the bottom of the screenshot.

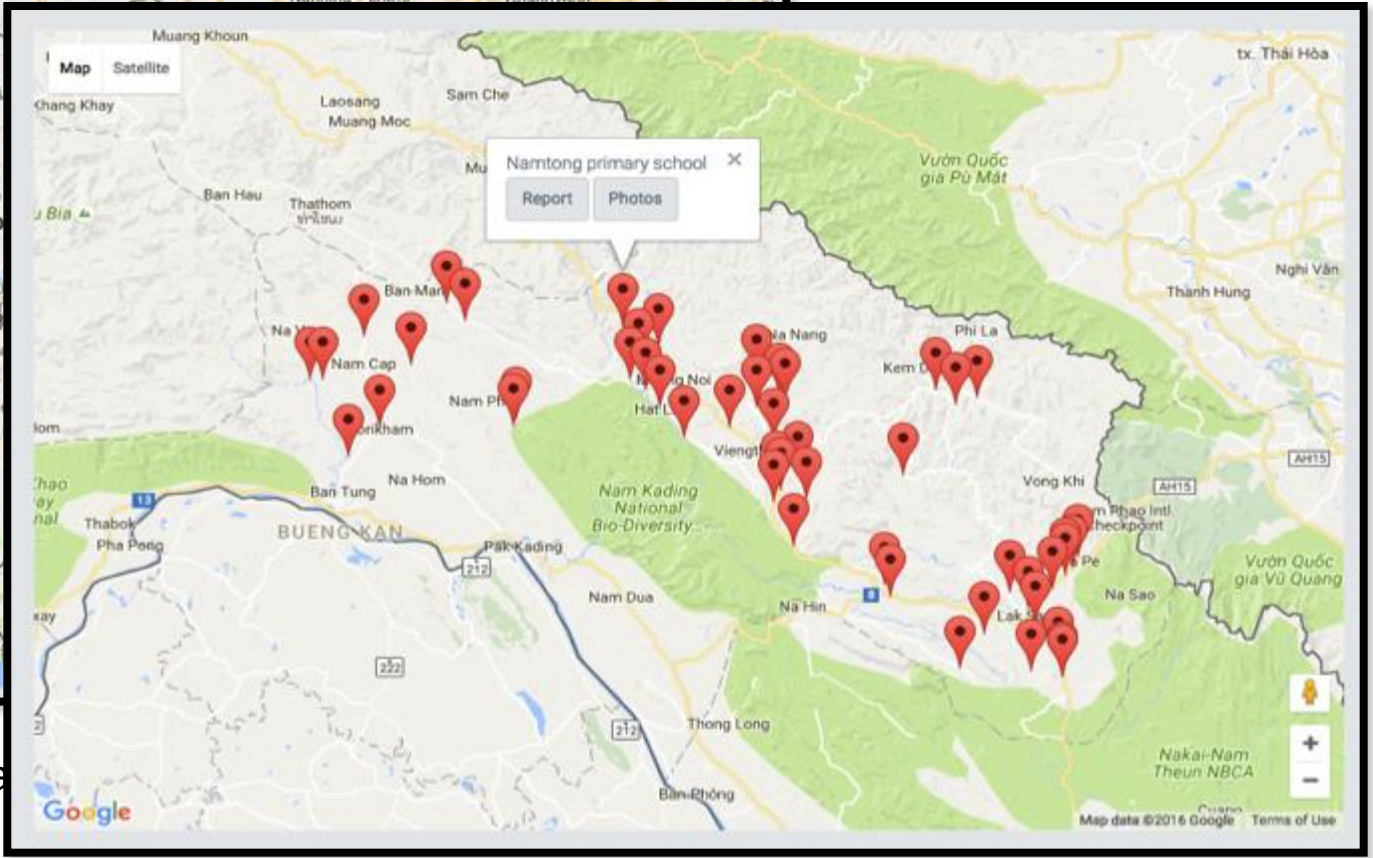
Photo tagging and viewing

Photos



Search

Please select Search terms



Ma

Access to school safety report and photos



Fictitious Primary School
SCHOOL SAFETY

SCHOOL ID: 325523
DATE: 08.12.2015

SITE

Urban Secure Unstable Unsafe access

HAZARDS

Fire Water Wind Earthquake

Average weeks per year school is inaccessible: []
Max height of flood water inside any current: []

HAZARD IMPACTS

Most recent disasters	Type
2012	[Fire] [Landslide]
2003	[Fire] [Earthquake]
1999	[Fire] [Earthquake]

PILLAR 1: SAFE LEARNING FACILITIES

BUILDINGS: 3

BUILDING DETAILS

Name	# Classrooms	# Floors	Structure Type
Bldg A	3	1	[Concrete]
Bldg B	3	1	[Concrete]
Bldg C	3	1	[Concrete]

SCHOOL MAINTENANCE: Frequent

PHOTOS OF DAMAGE, DANGERS OR HAZARDS

PILLAR 2: SCHOOL DISASTER MANAGEMENT

SERVICES

Early warning Fire Suppression Access Playground

WATER AND SANITATION

Boys Toilets 1 Girls Toilets 1

ACTIVITIES FOR ALL HAZARDS

Activity	Rating	Notes
School Disaster Management	[Yellow]	A com...
Risk Assessment and Planning	[Yellow]	Ident...
Risk Reduction and Physical Protection	[Red]	Your r...
Emergency Response Skills and Provision	[Red]	Orga...
Policies and Procedures for Emergencies and Disasters	[Red]	Adopt...

HAZARD-SPECIFIC RISK REDUCTION AND RESILIENCE EDUCATION

Risk	Potential Impact	Possible measures	Measures taken	Hazard-related notes
All Hazards	[Red Triangle]	9	2	Hazard-related notes
Fire	[Yellow Triangle]	1	1	Ensure r...
Wind	[Yellow Triangle]	8	5	Ensure r...
Water	[Red Triangle]	19	12	Monitor...
Earthquake/Landslide	[Red Triangle]	11	8	Fasten...
Heat/Drought	[Yellow Triangle]	11	2	Vaccinat...
Technological	[Yellow Triangle]	4	1	Ensure c...
Conflict	[Red Triangle]	2	2	Safety b...

PILLAR 3: RISK REDUCTION & RESILIENCE EDUCATION

AWARENESS AND ACTION

Actions Taken	Students	Teachers	Procedure	Familiarity	Actions Needed
Aware of hazards	[Yellow]	[Green]	Safe Evacuation	[Yellow]	Find out what students, staff, and parents know about evacuation, shelter, and reunification procedures.
Understanding of DRR & Response Procedures	[Red]	[Green]	Evacuation to Safe Haven	[?]	Correct misunderstandings by explaining procedures to all.
Participation in Risk Reduction & Response Preparedness	[Green]	[Red]	Shelter-in-Place	[Red]	Regularly drill standard procedures for emergencies and disasters and be sure to include students, staff, and parents in these drills.
Inclusive of young children, boys and girls, and children with disabilities	[Yellow]	[Yellow]	Safe Family Reunification	[Green]	Especially consider the needs and safety of young children, girls and boys, and with different functional and communication needs (disabilities) in your plans.

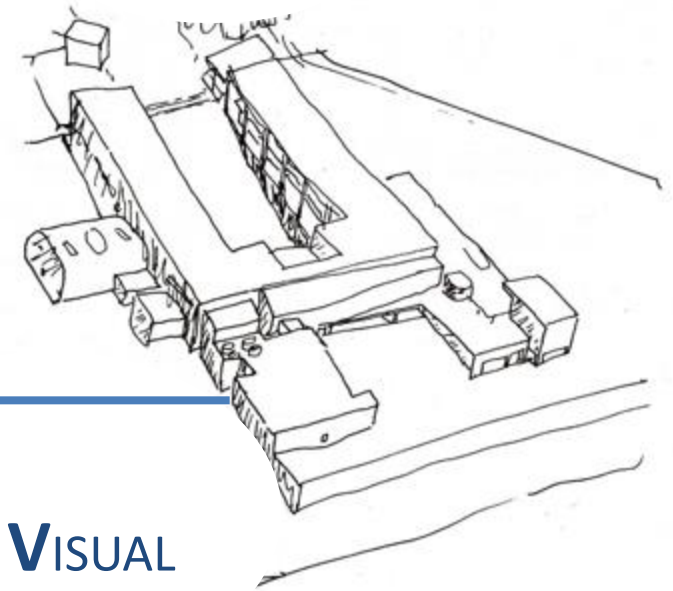
RISK REDUCTION AND RESILIENCE EDUCATION

Learning Settings	Teaching & Learning Material	Actions Needed
Regular curriculum	Natural and man-made hazards and risk awareness	[Green]
Regular curriculum	Risk reduction knowledge, skills and competencies	[Green]
After-school clubs	Response preparedness skills	[Red]
School Assemblies	Learning to live together	[Red]
	Hygiene promotion	[Green]

PHOTOS OF RISK REDUCTION AND RESILIENCE EDUCATION



Tasks	Risk RED	Save the Children	Education Authority
<i>Project Management</i>			
Legal (MoU & ToR)	✓	✓	✓
Technical requirements (hosting, networking, data, etc.)	✓		✓
Administration (project team, roles and responsibilities)	✓	✓	✓
<i>Localization</i> (3 months)			
Translation		✓	(✓)
Quality control and adaptation	✓	✓	✓
Provision of available data			✓
Production of country version	✓		
<i>Implementation and testing</i> (3 months)			
Installation and configuration	✓		✓
Training webinar	✓	✓	✓
On-site training		✓	✓
<i>Operations and support</i> (6 months)			
Outreach and dissemination		✓	✓
Data analysis and decision support		✓	✓
Support and maintenance	✓		
Monitoring and evaluation	✓	✓	✓



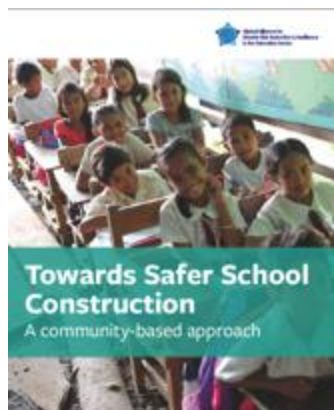
VISUAL
INSPECTION FOR DEFINING
SAFETY
UPGRADING
STRATEGIES





NEW CONSTRUCTION “EVERY NEW SCHOOL A SAFE SCHOOL”

- Building Codes
- School Design & Site Selection Guidelines
- Best Practices in Community-Based Construction



ARUP New York Children's Global Infrastructure

RISK PREVENTION

- Guidance
- Community Engagement
- Oversight & Approvals

≠

EXISTING BUILDINGS LARGE SCALE ASSESSMENT FOR REMEDIATION

ASSESS

ESTIMATE COST

PRIORITIZE INTERVENTION

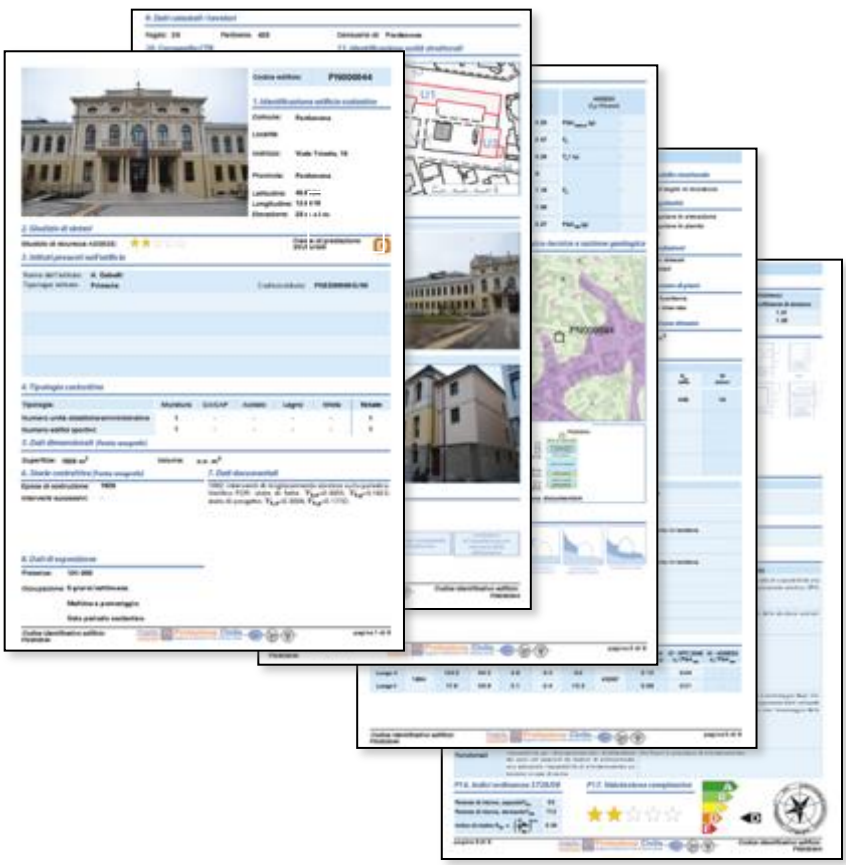
RISK MITIGATION

- Rehabilitation
- Retrofit
- Replacement



ASSESSMENT DOMAINS

SITE	STRUCTURAL RESPONSE	NON-STRUCTURAL ELEMENTS	FUNCTIONAITY
Water Wind, Earth Fire Impacts Site suitability and mitigation	Foundation Frame Columns / Beams Walls Roof Connections <div style="display: flex; justify-content: space-around;"> <div>GLOBAL</div> <div>LOCAL</div> </div>	Doors / Windows Stairs / Ceilings HVAC Equipment Furnishing Haz materials falling, overturning, Sliding, floating flammable destruction	Safe access (ingress/egress) Water & Sanitation



SCHOOL COMPLEX

EVALUATION SUMMARY



BUILDINGS

WARNINGS

WEAKNESSES
INTERVENTION NEEDS



ASSI Project: Creating Awareness on DRR for Children in Bolikhamxay

Bolikhamxay Province	50 Schools
Bolikhan District	10
Khamkert District	17
Viengthong District	19
Saychaphone District	4

SELF-ASSESSMENT
50 SCHOOLS



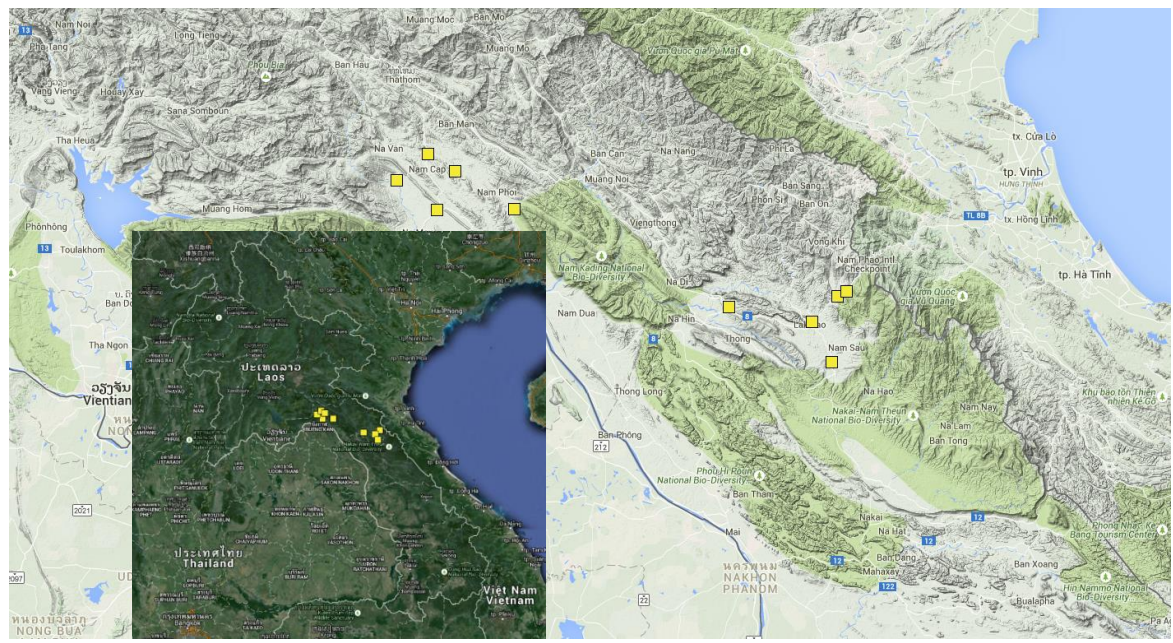
FIRST AND
SECOND STEPS



VISUS ASSESSMENT
8 SCHOOLS



THIRD STEP





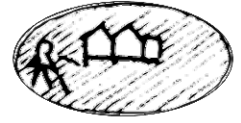
GENERAL INFORMATION



LOCATION SURVEY



COURTYARD SURVEY



BUILDING EXTERNAL SURVEY



BUILDING INTERNAL SURVEY



BUILDING INTERNAL SURVEY



SF 0

"SCHOOL COMPLEX DESCRIPTION" FORM

SCHOOL SKETCH

SF 1

"LOCATION INSPECTION" FORM

SF 2

"COURTYARD INSPECTION" FORM

"PICTURES IDENTIFICATION" FORM

SF 3

"BUILDING EXTERNAL INSPECTION" FORM

SF 4

"BUILDING INTERNAL INSPECTION - A" FORM

SF 5

"BUILDING INTERNAL INSPECTION - B" FORM



Any questions and
comments?

Khobchai lai lai
Thank you very much for
your kind attention

