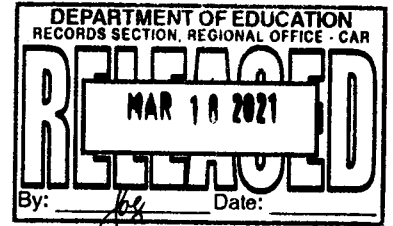




Republic of the Philippines
Department of Education
Cordillera Administrative Region



March 17, 2021

REGIONAL MEMORANDUM

No. **115**, 2021

**ORGANIZATION OF THE REGIONAL POST DISASTER NEEDS
ASSESSMENT (PDNA) TEAM**

To: Assistant Regional Director
Chiefs of Divisions
All concerned

1. To immediately address and provide intervention to schools and personnel affected by hazards and or disasters, the Regional Office through the Education Support Services Division (ESSD) shall organize the Regional Post Disaster Needs Assessment Team as follows:

Consultants - Estela L. Cariño
Florante E. Vergara
Edgar H. Madlaing

Team Leaders

- a. Christopher Hadsan- Infrastructure Assessment
- b. Evangeline Malag- Non-Infrastructure Assessment

Members:

- 1. Angeline Calatan
- 2. Manuel Dangawen
- 3. Diane Joaquin
- 4. May Claire Jimenez
- 5. Cullen Wegiyon
- 6. Jomar Yago-an
- 7. Jennelyn Kitongan
- 8. Fremalyn Paclos
- 9. Randolph Flyn Daculog
- 10. Elizabeth Calbayan
- 11. Georgina Ducayso

2. The regional PDNA shall have 2 clusters, namely the infrastructure cluster which is led by the Regional Engineer and the Non-infrastructure cluster led by the Regional DRRM Coordinator. The Infrastructure cluster shall be in charge of all damage and loss assessment in affected infrastructures while the non-infrastructure cluster shall be in charge of damage and loss assessment of non-infrastructure resources and the Human Recover Needs Assessment (HRNA).



3. Functions of the Regional PDNA Team are as follows:
 - a. Determine the damage and loss caused by a hazard/disaster in the affected schools divisions;
 - b. Compute rehabilitation and/or reconstruction costs;
 - c. Identify interventions needed by affected learners and personnel;
 - d. Submit PDNA Report and Prepare and submit Recovery and Rehabilitation Plan to the Regional Director for submission to the Central Office, complete with Program of Works and Budget needed for recovery, rehabilitation and/or reconstruction

4. The Regional PDNA team adopts the guidelines of the post-disaster assessment initially developed by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC, 2003), as enclosed in this Memorandum. The Regional PDNA Team may however revise and or contextualize the forms as needed to generate the data needed in the needs assessment.

5. During PDNA deployment, the Regional PDNA Team shall be joined by their counterparts in the affected schools divisions in assessing the damages. Necessary logistics needed in the conduct of the assessment shall be provided by the Regional Office prior to deployment.

6. For information and guidance.


ESTELA LEON-CARIÑO EdD, CESO III

Director IV/Regional Director ✓

3/17/2011

Guidance Note for Post-Disaster Assessment of the Education Sector

Government Agencies Responsible for the Education Sector

The government agencies that should be responsible in the post-disaster assessment of the education sector are the:

- Department of Education (DEPED) for elementary and high school;
- Commission on Higher Education (CHED) for colleges and universities; and
- Technical Education and Skills Development Authority (TESDA) for technical and vocational schools/institutes.

Since it makes estimations of destruction of physical assets and of changes in the flow of socio-economic activities, the team should include architects and engineers, sociologists and economists. It should also include other professionals that are well acquainted with the assessment methodology and with the socio-economic conditions of the affected areas.

The assessment report by CHED and TESDA should be submitted to the DEPED for consolidation and integration in the final PDA for the sector. Upon completion of the PDA for the sector, the DEPED should submit the said report to OCD for consolidation and printing. The final PDA, consisting of the damages and losses of all sectors, the potential impacts and the framework and identified programs and projects for recovery and reconstruction, will be presented by the OCD to the NDRRMC, international development partners and other stakeholders.

Damages and Losses in the Education Sector

Damages. Damages are generally the cost of repair of partially damaged assets or the cost of replacement of totally destroyed assets like structures, equipment, machineries, supplies, etc. The following are the assets that can be damaged in the education sector:

- **Structures or buildings.** School buildings, research laboratories, gymnasiums and other structures which are part of a school or university can be damaged by a disaster. They should be assessed in coordination with the school authorities.
- **Equipment, furniture and other machinery.** There are various instruments used for educational purposes like laboratory and workshop equipment, computers, etc. Additionally, there is equipment like installations that are part of the building itself, such as elevators, security equipment, air conditioning, internal communication systems, vehicles, and others. Depending on the level of the facilities, the types of equipment and other assets may also vary from facility to facility, which may have direct implication in estimating the cost of damage in the sector. Therefore, the types of equipment, machinery, furniture and other important assets possessed and damaged in each facility should be considered.
- **Educational materials and supplies.** Buildings used for education normally have stocks such as paper, books, chemicals, etc. Their value can be sufficiently high to warrant individual assessment. Inventories of research, art works and other collections deposited in a given institution must also be included under this heading.

Losses

Losses are generally the foregone revenues and additional expenses due to the disaster expressed in

Table 1. Baseline information of educational facilities in municipalities

Name of Municipality:							
Type of facilities	Number		Total	Average number of students			
	Public	Private		Public		Private	
				Male	Female	Male	Female
Kindergarten/ pre-school							
Primary School							
Secondary School							
University							
Colleges							
Technical/vocational schools							
Others							
Total							

The average replacement and repair costs of the assets in education can be enumerated in the following table.

Table 2. Baseline information of unit cost of educational facilities in a district

Name of Municipality:								
Particulars	Values (in PHP)							
	Pre-school	Primary School		Secondary School		University	Technical Institutes	Others
		Single Floor	Multi-floor	Single Floor	Multi-floor			
Average replacement cost of:								
1. Structures								
2. Roof per square meter								
3. Wall per square meter								
4. Floor per square meter								
5. Desks								
6. Computers								
7. Books								
8. Chalk boards								
9. Other educational materials, equipment and furnishings								
Average repair cost of:								
1. Structures								
2. Roof per square meter								
3. Wall per square meter								
4. Floor per square meter								
5. Desks								
6. Computers								
7. Books								
8. Chalk boards								
9. Other educational materials, equipment and furnishings								
Average fee/s per student per month								
Aver. revenue / day or month								
Average construction period								
Average repair period								

Table 3. Damage and loss assessment of a government educational facility in a city or municipality

Name of City or Municipality						
Type of educational facility:						
Estimated Damages						
Damaged Assets	Totally Destroyed		Partially Damaged		Total	Average Time to Repair
	Quantity	Total (PhP)	Quantity	Total (PhP)	(PhP)	Days
	A	B	C	D	E	F
Buildings/structures						
Desks						
Books						
Boards						
Computers						
Furniture						
Appliances						
Others						
TOTAL						
Estimated Losses						
	Disaster Year	Year 1	Year 2	Year 3	Total (PhP)	
a. Foregone income						
b. Cleaning up of debris						
c. Higher operating costs						
d. Other unexpected expenses						
TOTAL						

Notes in filling out Table 3.

- There is a possibility that totally destroyed and partially damaged structures may occur in a certain school.
- The values in the baseline information should be used in estimating damages. For example, if 20 square meters of the roof are damaged, the repair cost will be the cost of roofing per square meter multiplied by 20 square meters. On the other hand, if the whole classroom is totally destroyed, the value of damage will be its replacement cost at post-disaster prices.
- The total for the totally destroyed (or partially damaged) assets will be the total number multiplied by the replacement cost (or average repair cost). The average replacement and repair costs are in the baseline information.
 - Column B = (Column A) x replacement cost
 - Column D = (Column C) x repair cost
- In formula, 'Total damages' Column E will be: = (Column B) + (Column D)
- The average time to repair refers to the time to restore the affected structures to their pre-disaster levels. This will give an indication on the number of days before normal services will be restored.
- Years 1 to 3 are the years after the disaster.

Step 2.3. Summarize the damages and losses in a city or municipality

Based on the assessment of the government assets and the survey of the private education sector, the damages and losses can be summarized in the following table.

Table 5. Summary of damages and losses in the education sector in a municipality or city

Name of Municipality or City:									
Types of Assets	Types of Damages						Total Damages (PhP)		
	Totally destroyed			Partially damaged					
	Public	Private	Total (PhP)	Public	Private	Total (PhP)			
	A	B	C	D	E	F		G	
Structures									
a. Primary schools									
b. Secondary schools									
c. Vocational schools									
d. Colleges									
e. Universities									
f. Others (enumerate)									
Total									
Equipment									
a. Desks									
b. Books									
c. Computers									
d. Furniture									
e. Supplies									
a. Furniture									
b. Others (enumerate)									
Total									
Losses									
Type of Losses	Losses (in PhP)								
	Within disaster year		Year 1		Year 2		Year 3		Total
	Public	Private	Public	Private	Public	Private	Public	Private	
Foregone income									
Cleaning up of debris									
Higher operating costs									
Other unexpected expenses									
TOTAL LOSSES									

Step 2.6. Summarize Damages and Losses of Firms Nationwide

The table below summarizes the information at the national level. This is to be filled out after the field assessment is over.

Table 8. Summary of Damages and Losses Nationwide

Nationwide:										
Regions	Within the Disaster Year				Losses Beyond Disaster Year					
	Damages		Losses		Year 1		Year 2		Year 3	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Region 1										
Region 2										
Region n										
TOTAL										

Step 3. Validate the information on damages and losses

In order to ensure the integrity of the data collected and that there is no double counting across the sectors, a meeting among the various sectoral assessment teams should be conducted. The meeting or workshop can be a one-day event where all the assessment teams can share their collected data, issues and experiences in the field, among others. At the end of this meeting/workshop, all assessments teams must have validated and reconciled their data collected from the field.

Step 4. Analyze the impacts of the damages and losses to affected population.

The assessment team of the education sector must be able to analyze potential impacts of the damages and losses to school buildings and educational materials in relation to, among others:

- The future education of the youth especially the girls. This will provide an indication on the potential vulnerability of the youth, especially girls, who may end up uneducated and/or be forced to seek lower levels of employment outside their own villages.
- The additional costs to families if classes will be extended beyond the normal school year.
- The potential increase in school drop outs.
- Possible losses of teaching jobs (in the private sector) if school buildings are totally destroyed.

The national targets on the millennium development goals (MDGs) can be used as indicators for analysis of impacts in the education sector.

Step 5. Forward the impact assessment to the appropriate agency for aggregate analysis

The impact assessment of the education sector will be part of an aggregate social impact assessment (SIA) which should be consolidated by the DSWD. As such, the assessment team must provide DSWD with their impact assessment of the education sector. Gender impacts (such as double burden on women, increased vulnerability in evacuation centers, health and nutrition of lactating mothers, etc.) should be included in the SIA.

- More intensive utilization of undamaged education facilities, by establishing several daily "shifts" instead of normal ones;
- Rental of alternative premises which can be used as school buildings; and
- Setting up temporary classrooms, by using tents, containers or other similar facilities.
- Repair of schools used as temporary shelter and that may have sustained damage due to overuse.
- Replacement of education materials and minimum vital equipment which cannot wait until reconstruction begins
- Accelerated training of teachers if a large number of teachers died in the disaster.

The cost of each of the above mentioned activities would have been estimated as part of loss assessment.

Step 6.3. Estimate reconstruction needs

Reconstruction needs are generally long-term in nature (3 years and more) and are intended to 'build back better' from the ruins of a disaster. It is to be noted that reconstruction activities should include both public as well as private educational facilities and may require different types of financing strategy. Some possible reconstruction related activities in the education sector can include the following.

- Reconstruction of public schools under a building-back-better strategy to ensure future disaster resilience through the adoption and enforcement of improved construction standards;
- Soft-term credit for reconstruction of private schools. Such schemes can be accompanied by technical assistance for improved disaster resilient standards of construction;
- Cost of replacing furniture and equipment that were destroyed may be included within the needs for reconstruction, unless they have been covered under the recovery needs to provide temporary education services for the affected area;
- Structural retro-fitting of undamaged or partially damaged schools so that they are not affected by disaster event in the future; and
- Relocation of schools to safe and the additional costs involved like land acquisition, and basic services provision (water, sanitation, electricity, etc)

Step 8. Analyze financing options

The assessment must be able to initially suggest the possible sources of financing for the post-disaster needs, especially the recovery needs. This assessment can include such possible sources as the quick response fund (QRF); National DRRM Fund; existing funds which can be re-directed to the present needs; grants from international development partners; the private sector; etc. The final determination for financing options will be done at the NDRRMC level with substantial inputs from NEDA and DBM, among other agencies.

Step 9. Draft the implementation plan of the identified programs and projects

The identified needs should have a rough schedule of implementation outlining at the very least the activities, timing and budget required for all the programs and projects. The following techniques can be considered:

1. Identify the specific projects according to their relative urgency or priority in relation to recovery.
2. Plot the timeline of activities of all the projects, with the urgent ones on top, in a Gantt chart with the corresponding funding requirement on an annual basis. This will assist the NEDA in programming the necessary funds over a certain time period, like on a quarterly or annual basis.
3. Identify and include in the list of projects that need further feasibility studies which may be funded by foreign grants.
4. To the extent possible, a logical framework (logframe) should be created for each of the project proposed for inclusion in the recovery plan. Logframes are normally enough for foreign donors to consider project proposals.

The recovery and reconstruction needs of the sector can be summarized in the table below showing the financing requirements over the years. Reconstruction needs mostly require long-term implementation periods. They normally require three or more years to complete.

Step 10. Draft the post-disaster damages, losses and needs (DaLA/PDA) of the sector

With all the information gathered using the previous steps, a PDA for the education sector should be drafted by DEPED integrating the reports of CHED and TESDA. This PDA can be considered as the recovery plan for the education sector. The PDA report should highlight the contents enumerated in this guidance notes with emphasis on the justifications for inclusion of the identified needs as priorities in the national recovery plan. The following format may be considered:

1. Brief description of the education sector in the disaster-affected areas.
2. Damages in the education sector by areas and by types of educational facility (pre-school, primary school, colleges, university, technical schools and others).
3. Losses in the education sector emphasizing the losses in income, increase in expenditures, estimated period before normalcy will be attained, etc.
4. Impact on the economy, individual households and the consequences to the greater community if no assistance will be provided.
5. Proposed strategies for recovery and reconstruction of education sector.
6. Needs of the sector, by priority, and the draft schedule of implementation with the estimated funds required for each project.

The draft report of the education sector should be submitted to the OCD for consolidation and inclusion in the overall PDA and the disaster recovery plan.

Annex 1.

Technical Note:

According to the GFDRR Guidelines, the amount of reconstruction needs of the education sector can be estimated by the following formula:

*Education Reconstruction Needs = E * Education facility Damage value,*

Wherein

- *E* is a disaster-resilience coefficient whose value may usually range from 1.10 to 1.50. The actual value to be adopted would depend on the improved degree of construction standards or norms required. Civil engineers or architects familiar with disaster-resilient construction standards would be able to define those coefficients.
- The formula must be applied separately to each type of school that may have been destroyed, and the corresponding disaster-resilience coefficient may vary from school type to school type.

It should be noted that the above formula is not to be used directly as stated but as a guide in the estimation of reconstruction needs. The coefficient *E* should be based on the evaluation of qualified engineers and other professionals.