



Climate Change Initiatives in Basic Education



This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.



ENHANCED BASIC EDUCATION INFORMATION SYSTEM

DRRM/CCAM/PEACEBUILDING INTEGRATION



43,994

(93%)

**SCHOOLS THAT
EXPERIENCED
NATURAL
HAZARDS**



47,188

**TOTAL NUMBER
OF SCHOOLS**



23,125

(49%)

**SCHOOLS THAT
EXPERIENCED
HUMAN-INDUCED
HAZARDS**

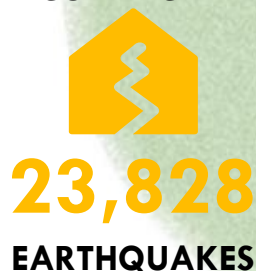
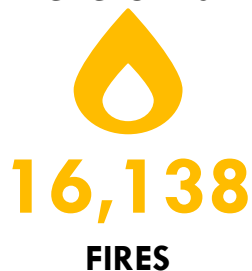
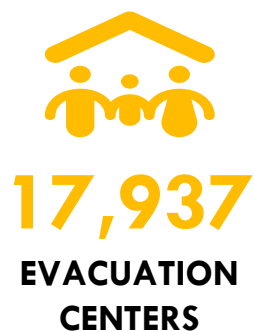
**VULNERABILITY OF
THE EDUCATION
SECTOR**



ENHANCED BASIC EDUCATION INFORMATION SYSTEM

DRRM/CCAM/PEACEBUILDING INTEGRATION

VULNERABILITY OF THE EDUCATION SECTOR



*Number of Schools that Experienced Natural or Human-Induced Hazard at least once

**Violent Incidents, Including Armed Conflict

***Includes Drought, Health Threats, Structural Collapse, Oil Spill, etc.

SOURCE: Enhanced Basic Education Information System Hazard Exposure Data from SY 2009-2010 to SY 2018-2019

Outcome: Learners are resilient and enjoy and exercise their rights to be safe and protected.



DRRMS Results-based Planning Framework

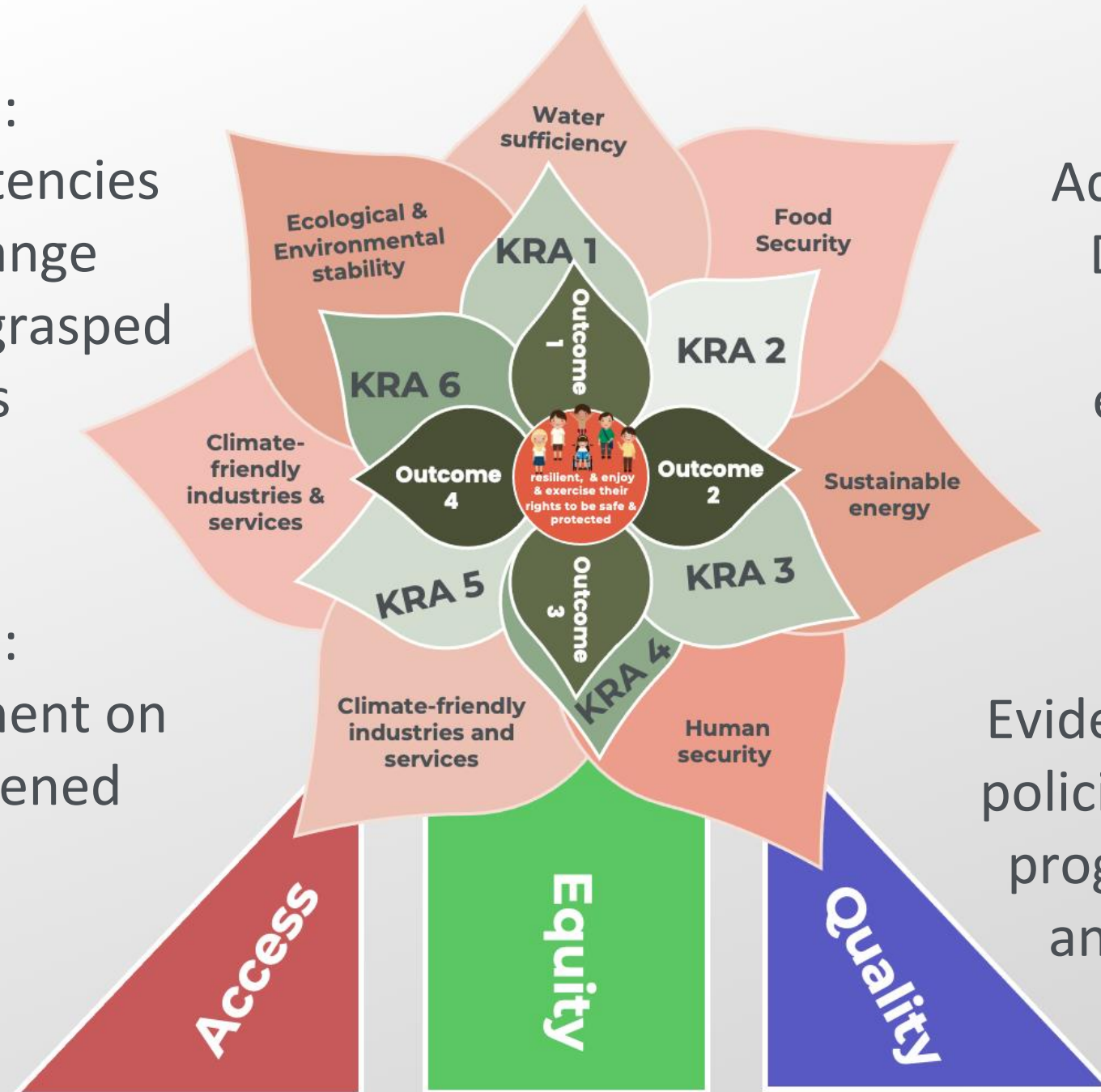


Outcome 1:
Essential competencies
of Climate Change
Education (CCE) grasped
by learners

Outcome 2:
Learner engagement on
CCAM strengthened

Outcome 3:
Adaptive capacities of
DepEd schools and
offices on CCAM
enhanced towards
climate resilience

Outcome 4:
Evidence-based CCAM
policies, standards and
programs developed
and/or enhanced



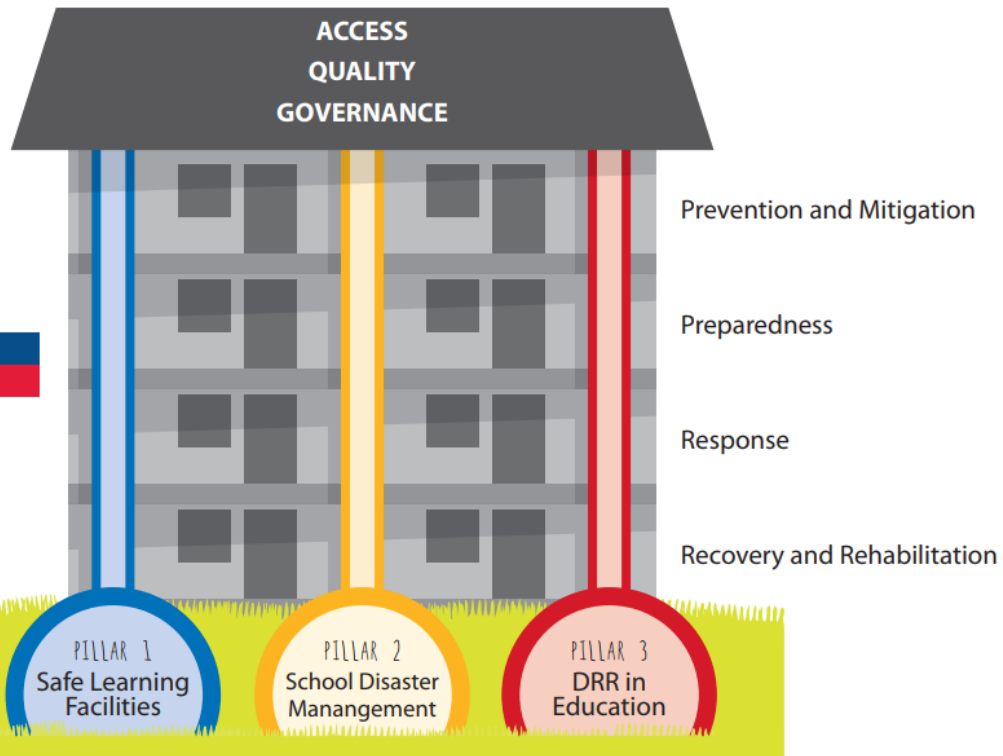
Policies on Climate Change Education





POLICIES

D.O. 37, s. 2015 - The Comprehensive DRRM in Basic Education Framework



Pillar 1 – Safe Learning Facilities

Undertakes safe site selection, design, construction, and maintenance of school structures and ensure safe and continuous access to the facility

Pillar 2 – School Disaster Management

Establishes systems, processes and standards to operationalize the four (4) thematic in all governance levels (central, region, division, and school)

Pillar 3 – DRR in Education

Builds the capacity and skills of learners and personnel, particularly teachers through the integration of DRRM in the school curricula and in co-curricular activities.



POLICIES

On Environmental Consciousness

2019



D.O. 21, s. 2019 – K-12 Policy Guidelines

Develops productive citizens who contribute to the building of a progressive, just, and humane society, ensure environmental sustainability, and cultivate global partnerships for development.





POLICIES

- Implementation and Monitoring of the Mandamus on Manila Bay Rehabilitation (on-going project)
 - Intensify integration of environmental education in the K to 12 Basic Education Curriculum across all levels
 - Define responsibilities of concerned DepEd offices in the implementation and monitoring of the Mandamus on Manila Bay Rehabilitation.





POLICIES

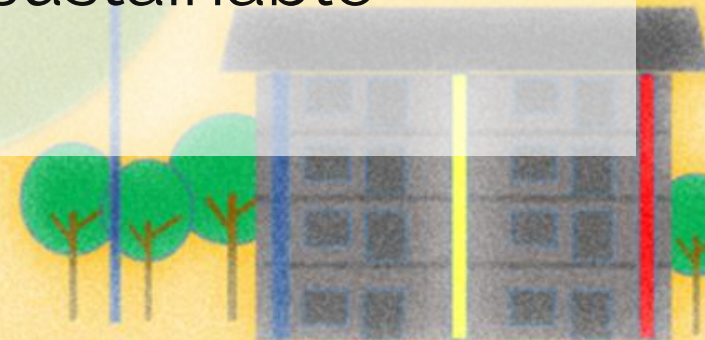
- Institutionalizing Climate Change Expenditure Tagging (CCET) at the Department of Education (on-going project)
 - Covers guidelines in the preparation of CCET documents, specifically the tagging of climate-related expenditures
 - All concerned central, regional, division, and school offices, bureaus, services, and centers of the Department



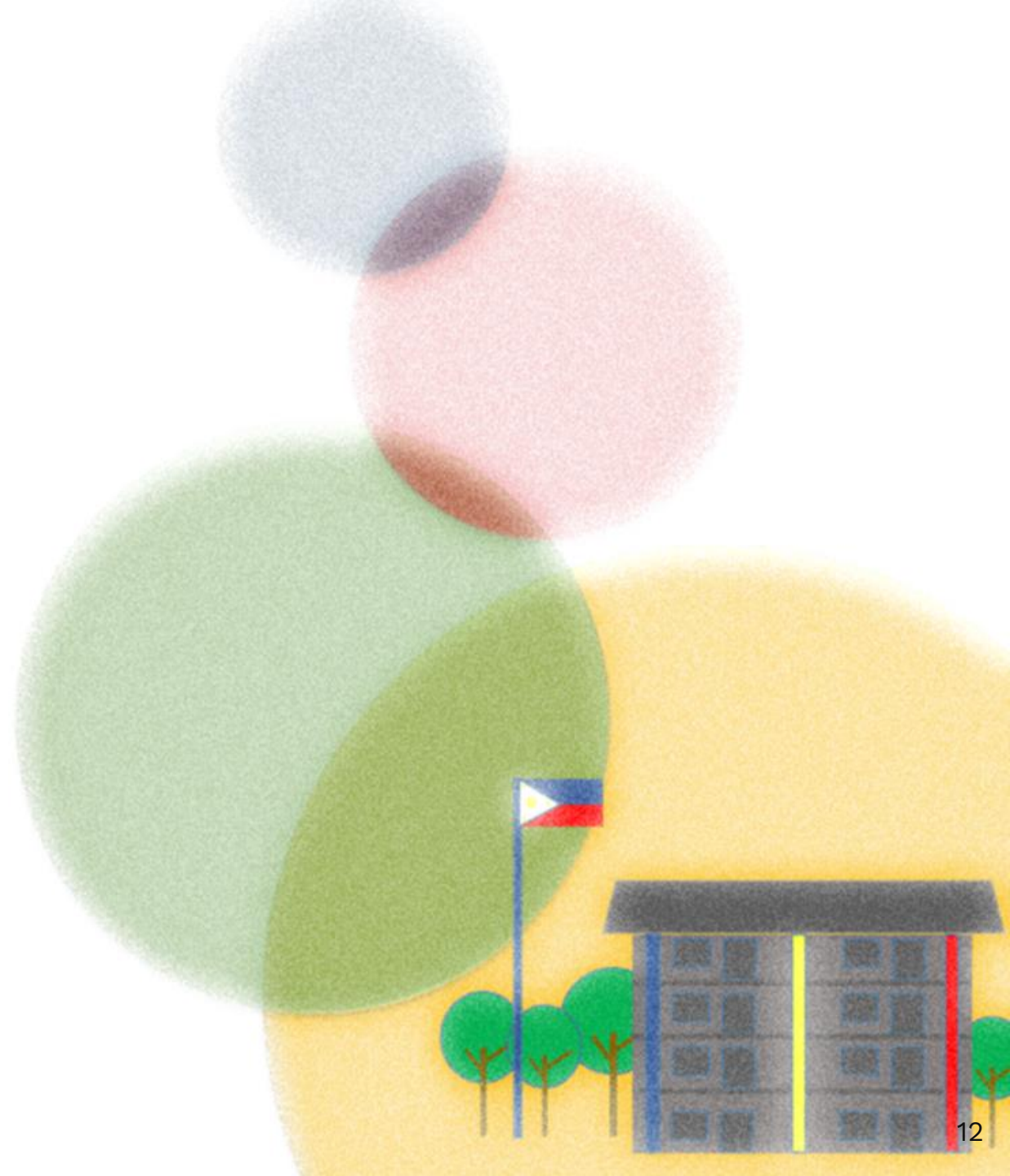


POLICIES

- Strengthening Climate Change Resilient and Sustainable Schools (on-going project)
 - Feature best practices of various schools across the country
 - Educate, inspire, and empower educators to implement practices towards creating a climate change resilient and sustainable schools



Research





RESEARCH

- Research on the Adaptation Strategies of Schools Experiencing Sea Level Rise and Extreme Flooding (on-going project)
 - Existing adaptation strategies of various schools experiencing floods and sea level rise
 - Basis for recommending policy and intervention at the school, division, regional, and national level





RESEARCH

- Development of DRRM-CCAM Basic Education Research Agenda (on-going project)
 - Build on DepEd's initiatives and ensure the judicious use of its resources relative to climate change adaptation and mitigation investments
 - Cover PPAs on integration of CCAM/DRRM in:
 - learning materials, in curricular and co-curricular activities
 - capacity building and training for learners and personnel
 - conduct of related research
 - activities that directly mitigate climate change
 - activities focused on empowering education sector's stakeholders to take climate action





RESEARCH

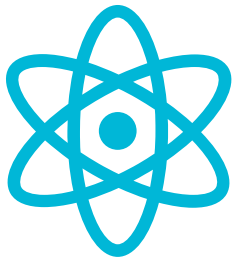
- Regional Study for Children's Awareness, Opportunities, and Challenges for Child Participation in Climate Action
(on-going project)
- SCP, in partnership with DepEd's DRRMS and BLSS-YFD, is conducting a study to understand their awareness, opportunities, and challenges in participating in climate action

Integrating Climate Change in the K-12 Curriculum



Integrating Climate Change in the K-12 Curriculum

Kindergarten to Senior High School
Based on the K-12 Curriculum Guide



Science



Health



*Araling
Panlipunan*



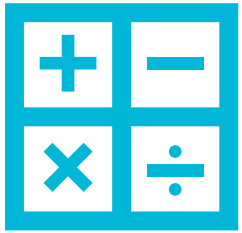
*Edukasyon sa
Pagpapakatao*



Integrating Climate Change in the K-12 Curriculum

Kindergarten to Senior High School

May also be integrated in other subjects based on the practice of teachers.



Math



*English &
Filipino*



*EPP and
TLE*



*Music, Arts,
and P.E.*



Capacity-Building for Personnel





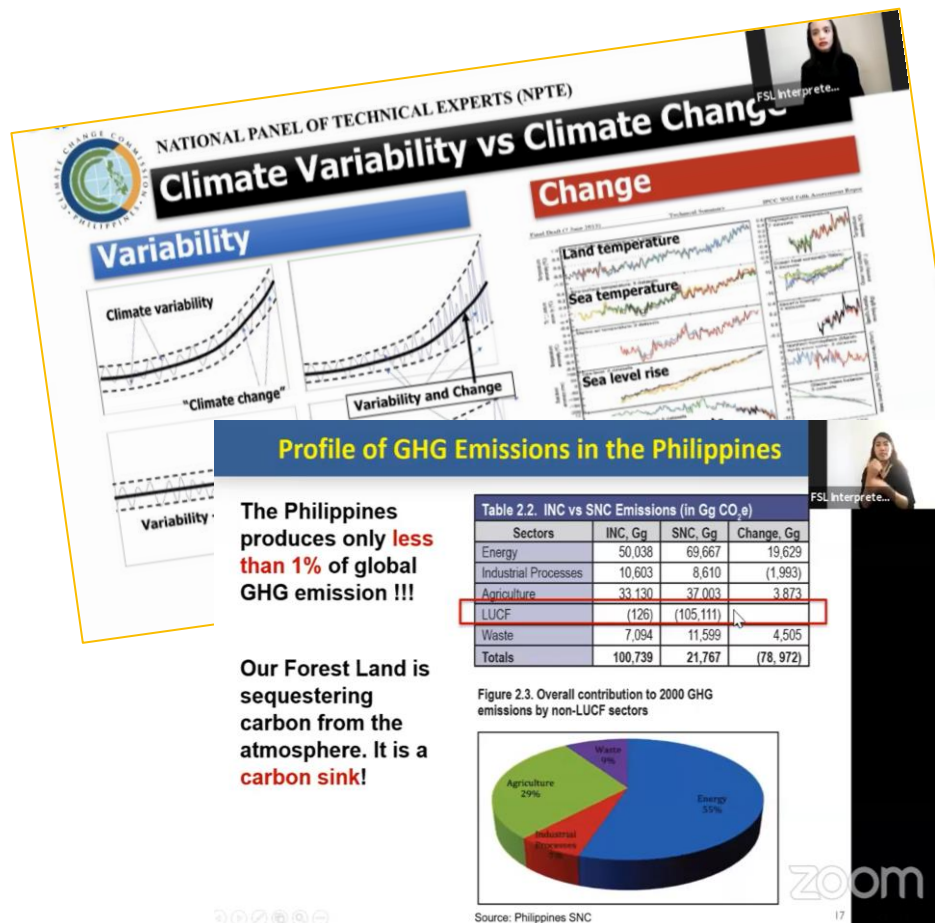
BUILDING CAPACITIES OF PERSONNEL

Climate Change Capacity-Building

Climate Science Master Class

Conducted on November 11, 2020 as part of the 4th National Climate Change Conference in celebration of the Global Warming and Climate Change Consciousness Week

- Partnered with the Climate Change Commission (CCC)
- Included lectures from members of CCC's National Panel of Technical Experts
- Topics covered: Climate System and its Changes, Impacts of Climate Change in the Philippines, Climate Change Mitigation, and Climate Change Adaptation and Health Nexus
- Reached 869 teaching personnel and 96 non-teaching personnel based on the evaluation results and zoom log-in details





BUILDING CAPACITIES OF PERSONNEL

Climate Change Capacity-Building

YSEALI Climate Changemakers

On-going project

- With U.S. Embassy of Manila and the Young Southeast Asian Leaders Initiative (YSEALI)
- Online training course to increase the competence of teachers in teaching climate change concepts and encouraging learners to act on climate
 - Core subject: Introduction to Climate Change
 - Specialized subject: Teaching climate change
 - supplemental course for the online learning facilitators



Development of Learning Resources





BUILDING CAPACITIES OF EDUCATORS AND TRAINERS

Development of Knowledge Materials

Microsite on Curated Resources for Teaching Climate Change

Released but continuously updated

- Contains references and learning materials (videos, lesson plans, and interactive online activities)
- Provides a background on CCE in the Philippines
- Partnered with the ICTS and PAS



SCAN ME

<https://bit.ly/DepEdCCE>



BUILDING CAPACITIES OF EDUCATORS AND TRAINERS

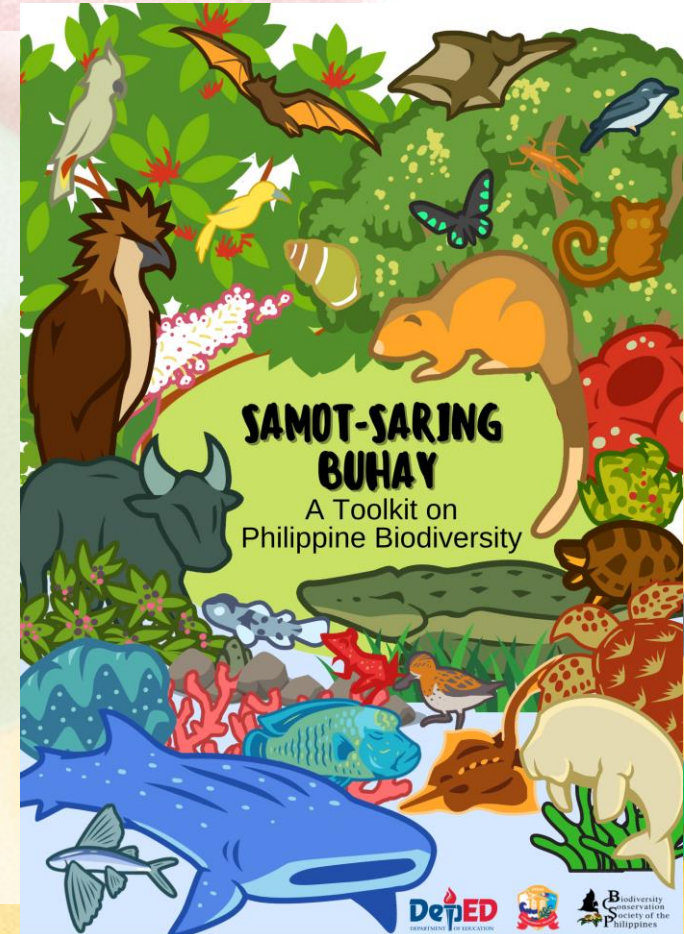
Development of Knowledge Materials

Samot-Saring Buhay: A Toolkit on Philippine Biodiversity

On-going development

Topics: Philippine biodiversity, threats (especially climate change), conservation efforts, and sample activities for teaching biodiversity

- In support of the United Nations Decade on Ecosystem Restoration (2021-2030)
- Partnered with the Biodiversity Conservation Society of the Philippines (BCSP) and biodiversity photographers
- Reviewers: BCD, BLD, DENR-Climate Change Service (CCS) and Biodiversity Management Bureau (BMB), CCC, and Office of Deputy Speaker Legarda (ODSL)





BUILDING CAPACITIES OF EDUCATORS AND TRAINERS

Development of Knowledge Materials

Handbook for Teaching Climate Change

On-going development

Includes the most frequently asked questions by students and the most challenging questions encountered by the teachers on climate change

SLMs with DRRM and CCAM Integration

On-going finalization of partnership

In partnership with Plan International and DepEd Region VIII

- Covers selected competencies from Grades 3 to 9 in Araling Panlipunan, Science, Math, Edukasyon sa Pagpapakatao, and English

Capacity-Building for Learners to Lead and Participate in Climate Change Adaptation and Mitigation



Enabling Children and Youth through Co-curricular Activities



Students of Quilo Quilo Elementary School



Teachers of Echague South Central School

- Establishment of Youth for Environment in Schools Organization (YES-O) (D.O. 93, s. 2011)
- Gulayan Sa Paaralan, Solid Waste Management and Tree Planting Under the National Greening Program (NGP) (D.O. 5, s. 2014).



Enabling Voices and Participation of Children and Youth



National Climate Change Conference

Enabling Voices and Participation of Children and Youth



Youth Climate Strike



Climate Change Advocacy Show



Enabling Voices and Participation of Children and Youth



3RD SYNCHRONOUS SESSION
OCTOBER 17, 2020

A screenshot of a video conference session. On the left, a presentation slide titled "THE THREAT OF CLIMATE CHANGE" is displayed. The slide includes a diagram of a community and text about environmental scanning. On the right, a video feed shows a participant, Julianne Marchela Parin, speaking. The interface includes a "Unpin Video" button and a "green beat INITIATIVE" logo at the top.

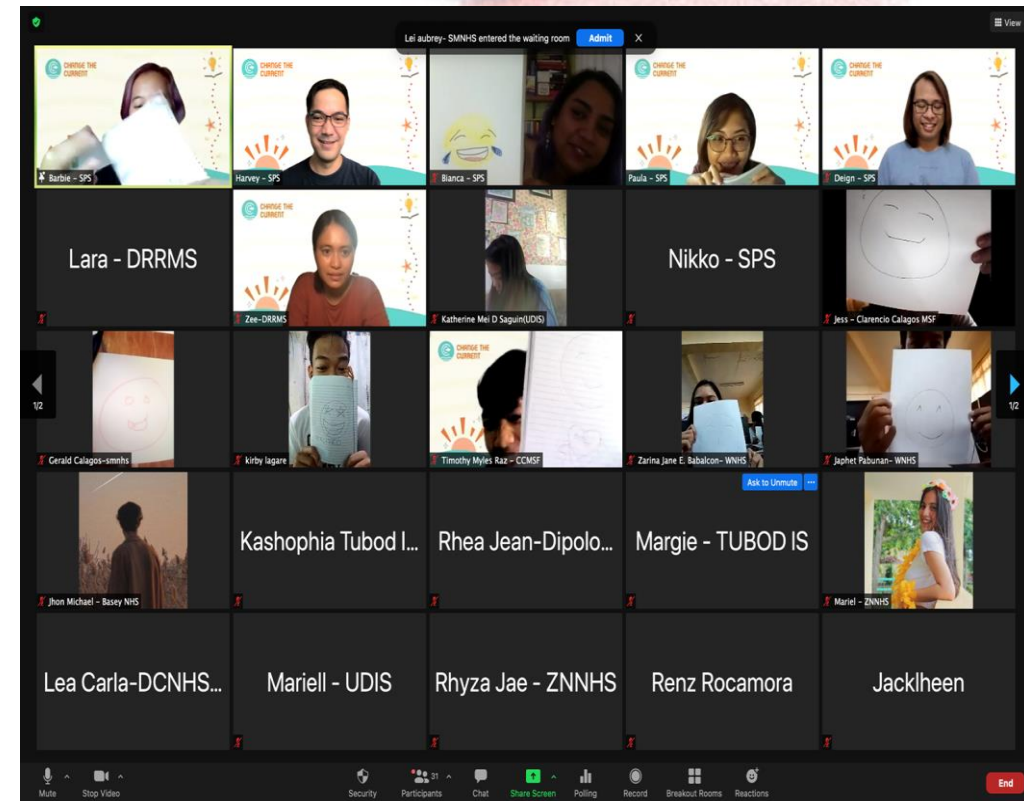
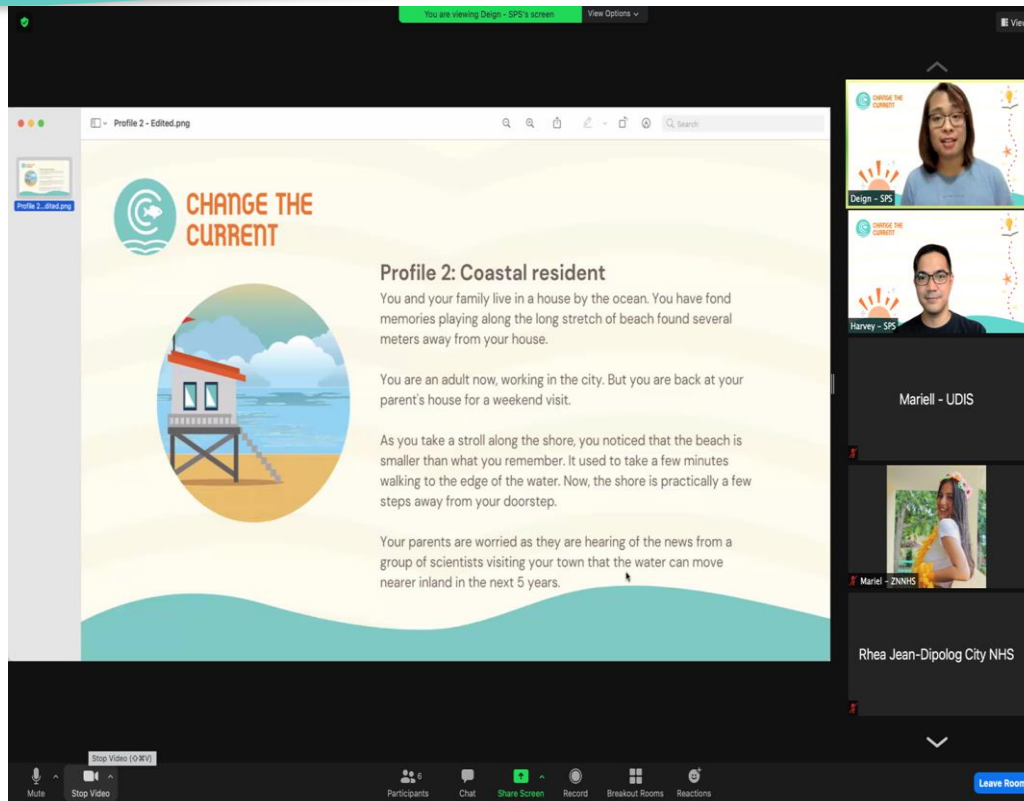


4TH SYNCHRONOUS SESSION
OCTOBER 24, 2020



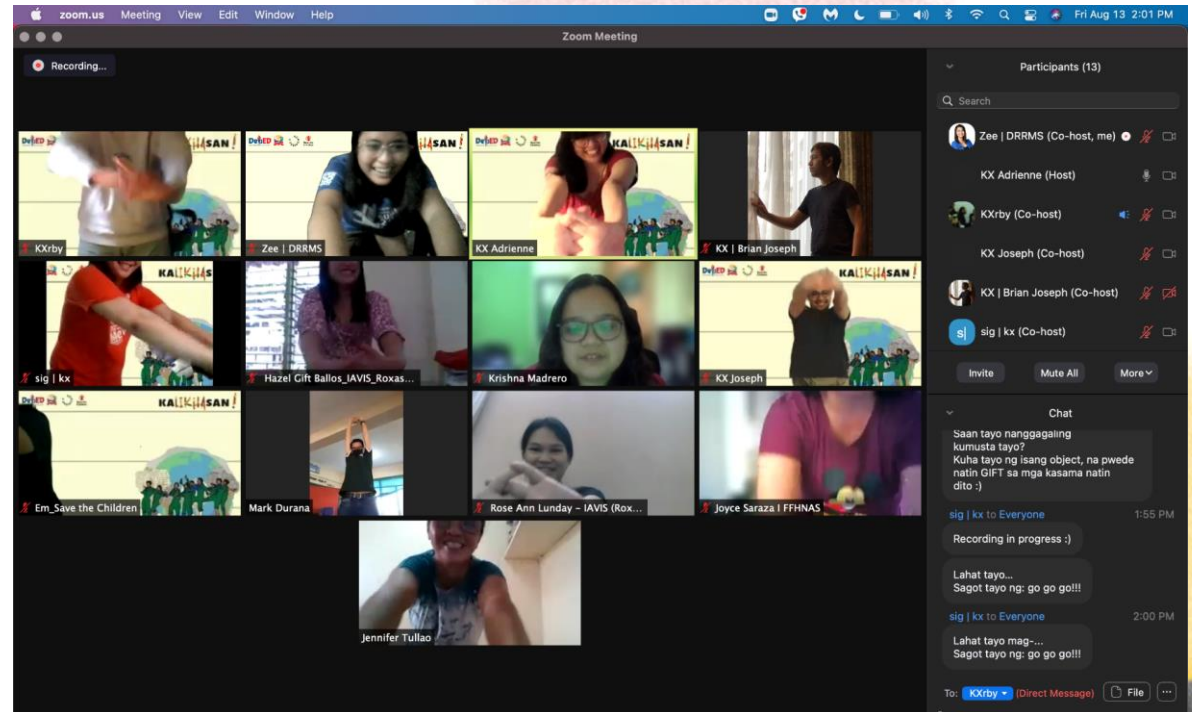
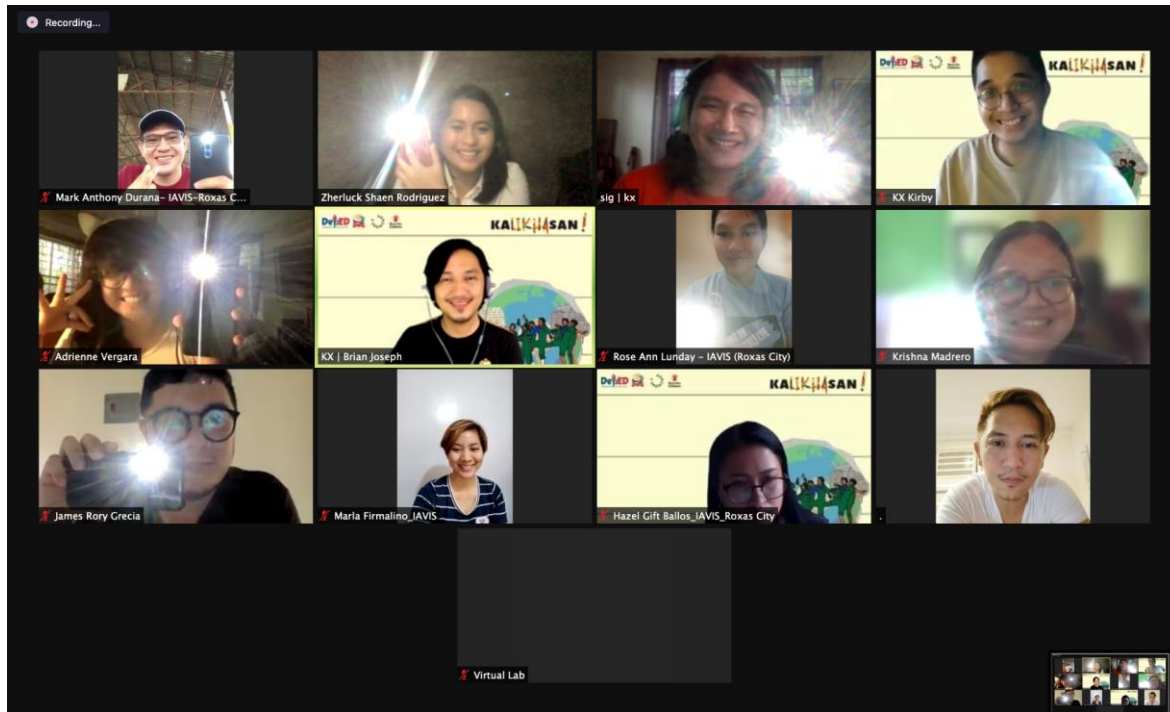
The Green Beat Initiative: An Online Environmental Journalism Training

Enabling Voices and Participation of Children and Youth



Change the Current: A Climate Action Online Training for Adolescents

Enabling Voices and Participation of Children and Youth



KaLiKHAsan! Online Training for High School Learners and Teachers



ClimateScience Olympiad



On-going project

- Supporting the ClimateScience International Community in the conduct of an Olympiad

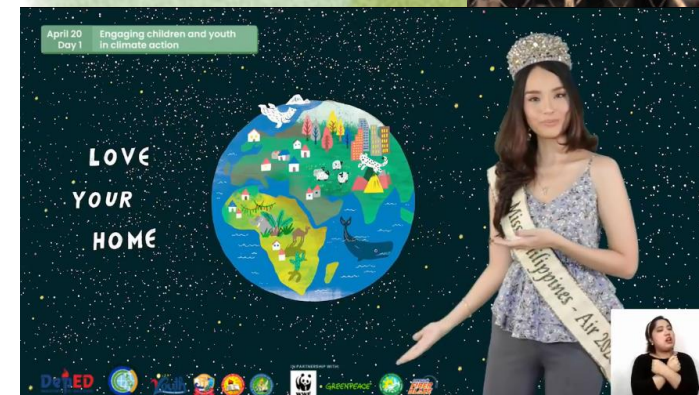
bit.ly/CSPHOlympiad2021



IEC AND ADVOCACY



Earth Day Celebration & Earth Day Jam



National Climate Change Conference



Stories for a Better Normal

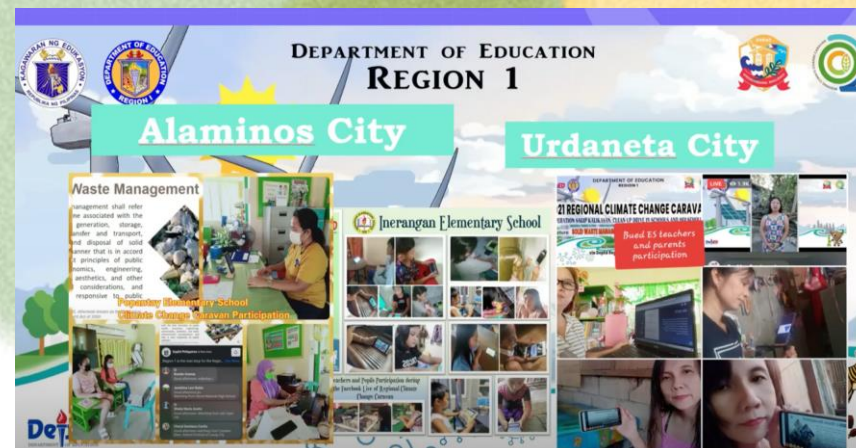
As an online discussion to promote health, environmental consciousness, and climate-adaptive practices, "Stories for a Better Normal" aims to change the mindset of individuals, families, and communities by demonstrating ways in which a 'better normal' can be realized within our communities. This online discussion is organized in partnership between the Office of Deputy Speaker Legarda and the Climate Change Commission, with support from the Department of Education, Philippine Information Agency, Institute for Climate and Sustainable Cities, The Climate Reality Project-Philippines and Mother Earth Foundation.



Regional Climate Change Caravan

On-going project

- Increase awareness on the importance of climate change adaptation and mitigation to the different education stakeholders
- Showcase good practices on climate change adaptation and mitigation in the basic education sector
- Provide a platform for learners to encourage climate action



Procurement of printing service for CCAM poster

WHAT IS CLIMATE CHANGE?

climate change (n.)

Climate change refers to a change in climate that can be identified by changes in the mean and/or variability of its properties and that persists for an extended period typically decades or longer, whether due to natural variability or as a result of human activity.

THE SYMPTOMS OF CLIMATE CHANGE: HOW DO WE KNOW IT'S REAL?

The evidence for rapid climate change can be seen through:



In the Philippines, a total of 28 million Filipinos directly suffered from five super typhoons in 10 years.

THE PHILIPPINES IS HIGHLY VULNERABLE TO THE EFFECTS OF CLIMATE CHANGE.

This is due to its high exposure to **natural hazards** (cyclones, landslides, floods, droughts), dependence on climate-sensitive natural resources, and vast coastlines where all of its major cities and the majority of the population reside.



RESPONDING TO CLIMATE ACTION IN THE PHILIPPINES.

In 2009, **Republic Act No. 9279** was passed into law, creating the Climate Change Commission (CCC) as the principal climate policymaking body of the government. This ensures the mainstreaming of climate change in synergy with disaster risk reduction into the national, sectoral, and local development plans and programs.



WHAT CAN WE DO TO MAKE CLIMATE COOL AGAIN?

Responding to climate change involves two approaches:

CLIMATE MITIGATION
involves actions that reduce the emissions that contribute to climate change

Example:



CLIMATE ADAPTATION
involves actions that minimize or prevent the negative impacts of climate change

Example:



YOUTH CAN DO IT TOO!



WASTE MANAGEMENT
Princess Franchesca A. Petalver, a grade six student and president of the Youth For Environment in Schools Organization (YES-OS) club of Dr. Jose P. Rizal Elementary School in the City Schools Division of Damarinas, DepEd CALABARZON started the #TurnBottleChallenge in her school to eliminate plastic bottles and encourage water refilling in her school.



URBAN GARDENING
Raina P. Hinay from Catalina Vda. De Jalon Memorial School of Zamboanga City founded **Kids Who Farm**, a movement to empower the youth as food producers and assist in attaining food security.



PROMOTING RENEWABLE ENERGY
Joshua O. Villalobos, a graduate of La Consolacion College-Bacolod, is one of the youth leaders behind the **Coal-Free Negros Campaign**. The provincial government released an executive order banning the construction of coal-fire powered plant in Negros Occidental.

YOUTH can
lead climate
action!



SCAN ME



For more information, please visit the Microsite on Curated Resources for Teaching Climate Change at:
www.bit.ly/DepEdCCE or e-mail drmo-ccam@deped.gov.ph.

Youth in Climate Actions: Communications for Development

Ongoing development

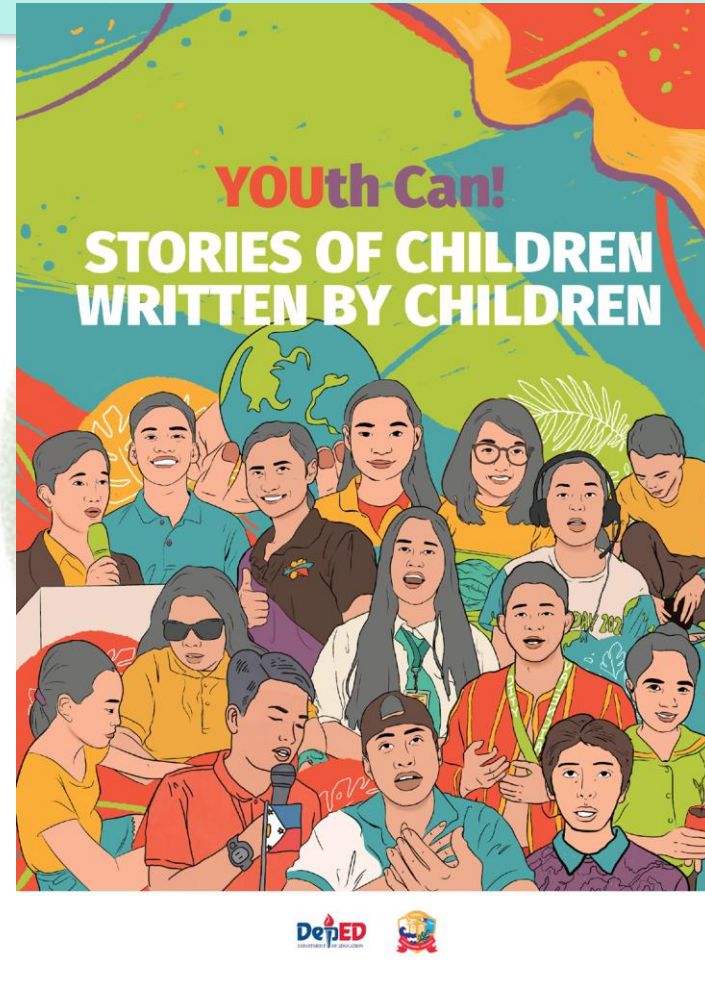
- Develop a common communication for development (C4D) strategy to strengthen the efforts of the government in implementing climate action initiatives
- Engage young people to adopt climate-smart and resilient lifestyle through behavior change communication, community mobilization, and policy advocacy
- Led by the Youth in Climate Action Steering Committee: Department of Education (DepEd), Department of Environment and Natural Resources (DENR), National Youth Commission (NYC), Climate Change Committee (CCC), Office of Civil Defense (OCD), and United Nations Children's Fund (UNICEF)
- Pilot NCR – Valenzuela, RVIII- Western Samar, RVIII – Calbayog



Booklet for Climate Action Stories of Children written by Children

Ongoing development

- Showcase inspiring stories of the Filipino learners who are advocating for climate action
- Written by student journalists who completed The Green Beat Initiative: An Online Environmental Journalism Training



Experts Explain Series

Five-part video series of experts discussing climate change and sustainability concepts in three levels of difficulty (basic for elementary, intermediate for high school, and advanced for college)

- Climate Change 101 by Deputy Speaker Loren Legarda
- Ocean Acidification by Ms. Lourdes Tibig
- Renewable Energy by Atty. Angela Consuelo Ibay
- Green Climate Fund by Ms. Nazrin Cammille Castro
- Circular Economy by Mr. Carlo Delantar

Captioning for CAAS 2019

English translation to the Climate Action Advocacy Show 2019



POSSIBLE AREAS OF COOPERATION WITH ADB

Funding

1. Climate Change Caravan for regions and divisions
2. Advocacy
3. Supplemental learning materials for learners

Policy

1. Advice based on research and analytics
2. Sharing of experiences across Asia Pacific

Capacity Building

1. Training of DepEd leaders
2. Expansion of training of teachers and learners

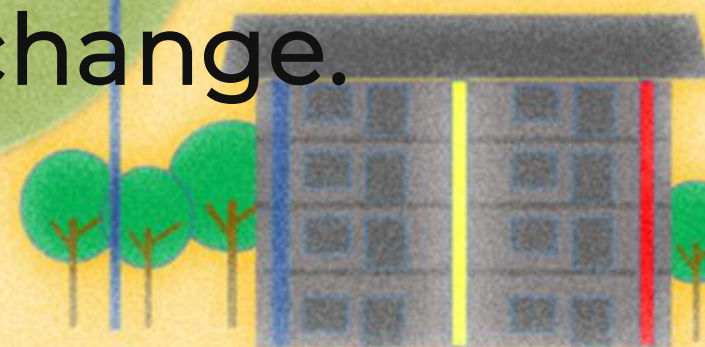


Question

What is ADB's direction and target on climate change in basic education?

Challenge

We need to invest in education now, because the youth today, who will be the leaders tomorrow, will be the ones to deal with the long-term impacts of climate change.



Thank you!

Ronilda Co



Director IV, DepEd-DRRMS



drmo+ccam@deped.gov.ph

(02) 8-637-7933

