

Climate Change Education for Sustainable Development in Asia and the Pacific

Report and Recommendations



UNESCO Experts Meeting on Climate Change Education for
Sustainable Development in Asia and the Pacific
10–12 February 2014
Edsa Shangri-la, Manila, Philippines

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Abbreviations

APA	
ACSS	Asian Coalition for School Safety
ADM	Alternative Delivery Mode
BERT	“Batang” Emergency Response Team
CCA DRR	Child-Centred Approach and Disaster Risk Reduction
CCE	Climate Change Education
CCESD	Climate Change Education for Sustainable Development
CES	Commonwealth Elementary School
CO ₂	Carbon dioxide
CSR	Corporate Social Responsibility
DESD	United Nations Decade on Education for Sustainable Development
DRR	Disaster Risk Reduction
DDRMC	Disaster Risk Reduction Management Council
DRRM	Disaster Risk Reduction Management
EAPRO	UNICEF East Asia & Pacific Regional Office
EHELP	Education Health, Livelihood and Peace Programme
EiE	Education in Emergencies
ESC	Education for Sustainable Consumption
ESD	Education for Sustainable Development
JFIT	Japanese Funds-in-Trust
IK	Indigenous Knowledge
MC	Miriam College
MDG	Millennium Development Goal
MEXT	Ministry of Education, Culture, Sports, Science and Technology
NCCAP	National Climate Change Action Plan
NGO	Non-governmental organization
PATLEPAM	Philippine Association of Tertiary Level Education Institutions in Environmental Protection and Management
PEACE	Public Education and Awareness Campaign for the Environment
PPP	Public-private partnerships
RCE	
SEAMEO INNOTECH	Southeast Asian Ministers of Education Organization, Regional Center for Educational Innovation and Technology
TVET	Technical and Vocational Education and Training
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

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Introduction

UNESCO is the lead UN agency in responding to climate change through education within the framework of the UN Decade of Education for Sustainable Development (DESD). The Climate Change Education for Sustainable Development (CCESD) programme at UNESCO aims to make climate change education (CCE) a more central and visible part of the international response to climate change. The programme helps people understand the impact of global warming today and increase 'climate literacy' among young people. CCESD further prepares children and young people to adapt to the changes that climate change will bring.

In recognition of the important role of education for sustainable development, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan has contributed to supporting UNESCO since 2005 via the Japanese Funds-in-Trust (JFIT). The purpose of JFIT is to strengthen UNESCO activities in the field of education for sustainable development (ESD). It seeks to promote and ensure UNESCO's leadership of the DESD while recognizing the need for education to be reoriented – within the framework of UNESCO ideals – to meet the challenges of life in the 21st century.

The projects under the fund aim to support UNESCO's actions in the implementation of DESD, in particular through its work of leading, supporting and coordinating the efforts of partners at the national, regional and international levels. These projects also contribute to the implementation of the DESD. Through intersectoral activities, capacities of Member States and partners are strengthened to play their role in achieving the objectives of the decade.

UNESCO, with the support from JFIT and in collaboration with Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH), organized a three-day meeting of CCESD in the Asia and the Pacific region held at Edsa Shangri-La, Manila, Philippines, from 10–12 February 2014, represented by experts from multidisciplinary fields and a diverse group of stakeholders.

This experts meeting provided a platform to stage UNESCO's action and support for the remaining years of the United Nations Decade on Education for Sustainable Development (DESD). The meeting discussed recommendations and plans of action to promote education as an important means to enhance adaptation to climate change in the context of sustainable development in the Asia and the Pacific region. The said recommendations would serve as a contribution to the UNESCO World Conference on Education for Sustainable Development in 2014 to be held in Nagoya, Japan, and as inclusion to previous events such as the Experts Meeting on Climate Change Education for Sustainable Development in Small Island Developing States, held in the Bahamas in 2011, and the Experts Meeting on Climate Change Education for Sustainable Development and Adaptation in Africa, held in Mauritius in March 2013. It will also support the work of Asia and the Pacific (APA) countries on Article 6 of the UN Framework Convention on Climate Change (UNFCCC) which addresses education, training and public awareness and access to information in relation to climate change.

Background

The Asia and the Pacific region is highly subject to natural hazards that pose additional risks to the vulnerable communities that are currently combating poverty and achieving sustainable development. The region's exposure to the extreme climate conditions and changing weather patterns heightens its vulnerability to the collective and adverse impact of climate change.

The Asia and the Pacific region accounted for 91 per cent of the world's total deaths and 49 per cent of the world's total damage from natural disasters in the last century. Moreover, climate change poses a serious and additional threat to the estimated 500 million rural poor farmers who live in remote and marginal areas with limited communication and transportation networks and weaker institutions.

Climate change adaptation and mitigation programmes are essential in building resilient communities. There is also rich indigenous knowledge (IK) based on cultural and natural heritage, which can strengthen the capacity of individuals to make informed decisions, empower people and prepare communities for natural disasters.

In order for education to strengthen the adaptation and mitigation capacity, educational structures including school communities must be prepared to ensure the presence of a climate-safe and climate-friendly school environment. Education for mitigation should be supported by a sustainable school and campus that serves as a learning laboratory for students to demonstrate and further deepen stakeholders' understanding of the principles learned in the classrooms. Educational strategies and reform programmes are essential in responding to the new migration streams caused by climate change impacts – and to new skills requirements due to a changing environment.

The experts meeting

The three-day experts meeting took place from 10–12 February 2014 at Edsa Shangri-La, Manila, Mandaluyong City, Philippines. It brought together approximately 100 participants primarily from the Asia and the Pacific region, representing a multidisciplinary and diverse group of stakeholders. Participants included national education representatives, curriculum development experts, representatives of school and education networks, scientists, climate change experts, and representatives of multilateral agencies, research organizations, training institutions and civil society.

The experts meeting identified the main challenges that climate change poses to education systems in the Asia and the Pacific region and explored the role that education can play in adaptation and mitigation to climate change, with particular objectives:

- promote the important contribution education can make to climate change adaptation and mitigation in the Asia and the Pacific countries;
- further the effective integration of climate change issues and disaster risk reduction (DRR) into education programmes and school curricula in Asia and the Pacific countries;
- identify climate change adaptation and mitigation needs and responses for education systems and education institutions, including infrastructure, management and resourcing;
- identify strategies to contribute to building community resilience;
- enhance the exchange of experiences and good practices on CCE among ministries, teachers, practitioners and young people; and
- identify opportunities for partnerships among schools, non-governmental organizations (NGOs), UN agencies and UNESCO networks to enhance formal and non-formal education programmes on climate change.

Opening sessions

Welcoming remarks



Dr Ramon C. Bacani
Director, SEAMEO INNOTECH

'This meeting provides the opportunity to discuss various aspects of climate change education, adaptation and mitigation and various roles of multiple stakeholders ...'

Dr Ramon C. Bacani, Director of SEAMEO INNOTECH, chaired the opening session. Dr Bacani welcomed all the participants and expressed the willingness of the centre to support the activities of UNESCO specifically on reaching the targets of the DESD (2005–14). He highlighted ESD as one of the focus thrusts under SEAMEO INNOTECH's current Five-Year Development Plan. He also shared the various discussions on ESD, CCE, adaption and mitigation, cultural and environmental aspects, and various roles of stakeholders within the SEAMEO member countries.



Dr. Hubert Gijzen
Director, UNESCO office, Jakarta

'... climate change and sustainable development requires changing mindsets and attitudes ... developing a climate-literate citizen equipped with knowledge and skills, for building a culture of resilience and preparedness ...'

Dr Hubert J. Gijzen, Director for the UNESCO office in Jakarta, Indonesia, first thanked the Government of Japan for the financial support for the meeting and expressed his sympathy to the people of the Philippines for the recent devastation of Typhoon Haiyan. He highlighted the importance and significance of this experts meeting on CCESD, citing the current Haiyan disaster as a tragic manifestation of climate change. Dr Gijzen recognized the high impact of climate change to developing countries in the Asia and the Pacific region, specifically the low-income countries that are vulnerable to climate risk and have limited means to adapt and mitigate the effects of climate change.

Dr Gijzen highlighted the critical stage of CCE that is shaping the post-2015 development goals and addressing poverty eradication and sustainable development. He said that the transition towards a 'green economy' requires changing mindsets and attitudes and rethinking sustainable consumption and productive patterns, so education plays an essential role in fostering changes in values, attitudes and behaviours in developing climate-literate citizens. The smart CCE intervention reduces the vulnerability of communities to improve the capacity in adapting to the uncertain future and to changes in their social, economic and ecological environment.

Dr Gijzen cited UNESCO as lead agency for the DESD, which formulated the CCE framework in order to build a culture of resiliency and mitigation through participatory teaching and learning methods that empower learners to think critically, understand risks and complexity to think and act in an interdisciplinary manner, and collaborate in decision-making and show solidarity.

In the closing part of his message, Director Gijzen highlighted UNESCO's commitment in synergizing the knowledge, approaches, principles and skills of CCE and ESD in achieving plans of action on the strategic role of education in adaptation to and mitigation of the challenges posed by climate change.

Opening remarks

Secretary Mary Ann Lucille Sering
Vice Chairperson, Climate Change Commission,
Philippines

'Education is important in addressing climate change, and education must facilitate action. ... Knowledge ignored is a useless knowledge ...'



Secretary Mary Ann Lucille Sering, Vice Chairperson of the Climate Change Commission, Philippines, welcomed all the delegates to the country and shared her views on how important environmental education is to the vulnerable countries in the Asia and the Pacific region. She informed the body that the Philippines may be considered as a 'mega vulnerable' country to disasters, such as typhoons, flash floods, storm surge and the like. She said that these disasters could also be converted from 'risk to opportunity' utilizing the CCESD framework. Disasters teach everyone hard lessons in life that we can learn from, even in the most painful ways.

Secretary Sering highlighted the importance of education in addressing climate change citing education as a pathway to facilitate action. She shared the concrete action taken by the Philippine government in addressing the cross-sectoral implication of climate change, initiated through the legislation of the Climate Change Act of 2009, and the constitutional provision to afford full protection and advancement of the right of the people to a balanced and healthful ecology and the fulfilment of human needs while maintaining quality of the natural environment for current and future generations.

The Philippines subsequently passed the Republic Act 10121, otherwise known as the Philippine Disaster Risk Reduction and Management Act of 2010. The passing of the law aimed to mainstream climate change and disaster risk management issues and plans using proactive and reactive approaches. In April 2010, the Philippines adopted the National Framework Strategy on Climate Change as the country's road map for a climate-risk-resilient country and developed the National Climate Change Action Plan (NCCAP) in order to address the urgent and immediate needs of the country relative to the adverse effects of climate change.

Secretary Sering also highlighted the importance of the country's vulnerability to the impact of climate change in formulating a national framework and action plans, identifying seven thematic areas:

- 1) food security;
- 2) water sufficiency;
- 3) ecosystem and environmental stability;
- 4) human security;
- 5) climate-smart industries and services;
- 6) sustainable energy; and
- 7) knowledge and capacity development.

A simple mindset advocacy approach in educating people on CCE and ESD enjoins people to be more receptive to change and be able to integrate climate change themes in everyday life. She also highlighted the role of academic institutions in spearheading research, generating knowledge and leading capacity development programmes on CCE, adaptation, and mitigation. She emphasized the importance of developing partnerships with academic institutions as a primary resource to replicate and escalate CCESD to be able to reach far-flung areas and provinces. Secretary Sering also mentioned the significance of identifying the vulnerable places in the country and the different factors that expose the country to potential risks and hazards. The Philippines, aside from being in a geographically vulnerable location, has somewhat weak infrastructure. The importance of disseminating proper information about the science of climate change and environmental education could limit the exposure of people to potential risk and hazard. On a positive note, Secretary Sering said that the current network of academic institutions such as the Philippine Association of Tertiary Level Education Institutions in Environmental Protection and Management (PATLEPAM) could facilitate actions, promote ESD and reduce human risk brought by hazards. She also mentioned the efforts of the Department of Education in developing CCESD modules integrating CCE in curriculum through the initiatives of the World Bank and the Philippine Climate Change Adaptation Project.

In closing, Secretary Sering said that CCESD is important because it facilitates action, and as she mentioned 'knowledge ignored is a useless knowledge'. Currently, classrooms are used as evacuation centres; however, the assessment on classroom structures revealed that these are also not safe from disasters. Thus, these classrooms and other physical infrastructure used during emergency situations should be protected and disaster-safe. It is high time to use top resources as a way to address climate change and respect sustainable development. She mentioned that education, teaching and sharing of good practices in the Asia and the Pacific region are avenues to influence action and decisions of national policy-makers.

Mr Mario Deriquito

Undersecretary for External Linkages

Department of Education, Philippines

'Climate change education starting at a young age is essential in equipping the youth and the communities to effectively respond to the current and even future challenges posed by climate change. ... Education in all levels in both formal and informal settings instilling climate change awareness and understanding during the student's formative years is ultimately the best way to change their behaviour and attitude towards environmental issues.'



Undersecretary Mario Deriquito thanked everyone who provided relief and rehabilitation efforts in the provinces damaged by Typhoon Haiyan, on behalf of Filipino children. He said that major global economic challenges and the climate change phenomena are the top global concerns in this decade. He illustrated that climate change has brought extreme weather conditions that greatly threatened the lives, well-beings and livelihoods of the people, especially the marginalized and vulnerable sector of the society, and its effects on economic conditions in developing countries. He outlined the magnitude of change and impact of climate change that required mandatory participation of the global community in reducing the risk of climate change.

Mr Deriquito reiterated the importance of CCE at a young age and essentials of equipping youth and communities to effectively respond to the current and future challenges posed by climate change. On the other hand, education at all levels is needed in instilling climate change awareness and understanding at the formative years, which will establish the mindset of their behaviour and attitude towards environmental issues. This will enable them to take part actively and meaningfully in climate change mitigation and DRR.

Undersecretary Deriquito mentioned the Philippines' vulnerability to climate change and recognized the country's initiatives in addressing climate change through policies, programmes and institutional mechanisms. He reiterated the vital role of education in climate change adaptation and DRR in shaping peoples' knowledge and behaviour towards a culture of resilience and adaptability.

He shared the Philippine Department of Education's role in institutionalizing schools' responsibility in climate change adaptation and disaster risk management through the integration of disaster risk management in the school curricula, covering the six dimensions in science of climate change: impacts and effects, science and mechanism hazards, learning and practicing safety measures and procedures, responding to a call of action, and stewardship roles. Furthermore, DRR programmes and activities include training of teachers, employees and staff.

Undersecretary Deriquito also highlighted the role of public-private partnerships (PPPs) in addressing more complex situations brought by rapidly changing globalization. PPPs continuously

produce opportunities for collaboration, especially in extreme climate change disasters and situations.

He wished everyone a successful, stimulating and fruitful discussion that would result in concrete action for stronger collaboration between and among countries in the Asia and the Pacific region in addressing the needs of climate change adaption and DRR.

Introduction to thematic sessions

The experts meeting's presentations and discussions were organized in a series of thematic sessions, intended to focus on identifying a series of recommendations and plans of action in promoting education as an important means of enhancing adaptation to climate change in the context of sustainable development in the Asia and the Pacific countries. In turn, concrete recommendations were formulated to inform and underpin work plans, strategies and educational programmes at global, regional, national and local levels.

The following themes were designed to capture and reflect on the work of Asia and the Pacific countries on Article 6 of the UNFCCC, which addresses education, training, public awareness and access to information in relation to climate change:

Part I: **Engage with youth and communities** through education to enhance knowledge and skills in raising awareness on weather-dependent livelihoods among vulnerable groups of society. Educating girls and women has a major impact on the capacity of the community in climate change adaptation because of their strong social network within their communities and their vital role in the collective management of risk and vulnerability and change. Changing mindsets and professional behaviour of the **youth** is the key to successfully confronting the adverse effects of climate change such as scarce resources, conflict, disasters, migration and changing labour markets.

Part II: **Develop partnerships for climate change education**, which has gained support in different areas of social development. A strong partnership between schools and communities is the foundation of a whole-school approach to ESD and quality education. A partnership approach reinforces the key elements and characteristics of quality teaching and learning such as the school environment, the physical set-up of the school, the social aspect, the linkages of the school with its community, and intercultural approaches. Networks and partnerships with civil society, communities, media, the private sector and other stakeholders in the area of ESD and CCE are important to refine the concept and application of ESD/CCE, in building competence synergy, ensuring implementation and demonstrating commitment. Interministerial partnerships are also important to link the national climate change knowledge and action with education contents.

Part III: **The role of culture, indigenous knowledge and values in climate change education.** Local and IK is a key resource for communities in understanding the environment, sustainably using its resources, assessing climate change impacts and adapting to them. This knowledge should be recognized and reflected in educational programmes and curricula for local, realistic and affordable solutions on adaptation. Cultural expression and lived culture also have an important role to play in the teaching of sustainable development that can be an effective means to engage populations on climate change issues.

Part IV: **Prepare for disasters.** ESD can be instrumental in building local capacity to prepare for and cope with disasters; moreover, it provides life-saving and life-sustaining information and skills that protect children and young people during and after emergencies. Life skills knowledge and education on DRR increase the level of resilience and preparedness in disaster-prone

communities and represent a key educational response to climate change. Safe school construction, disaster prevention education in schools and non-formal settings, and the integration of DRR into policy and planning are three main components of the educational contribution to preparing communities for disasters.

Part V: **Building green societies through green job training** must be strengthened to develop innovative green solutions to address climate change challenges in sustainable development. Technical and vocational education and training (TVET) prepares learners for the fields of work and business heavily implicated in the consumption of energy, raw materials and water and the utilization of secondary resources. TVET can provide skills needed for adaptive and innovative responses to the different challenges of sustainable development. The process of greening existing jobs in the region calls for a massive effort to revise existing TVET curricula, qualification standards and programmes at all levels.

Part VI: **Building green societies through responsible consumers.** On a global scale, our day-to-day life and choices may seem like a drop in the ocean, especially when it comes to confronting challenges that have far-reaching environmental, social and economic implications. But scientists have shown that small variations can affect giant systems – the way in which we live impacts not only ourselves but also our natural environments and societies worldwide. Education for mitigation must therefore not only teach the global problems linked to climate change, but also local solutions currently emerging everywhere. Local solutions to reducing carbon dioxide (CO₂) emissions such as public transportation or collaborative consumption examples such as community gardens are but two of the resources that can empower practitioners and educators and their audiences. Schools can lead by example by strengthening mitigation programmes (e.g. reuse, reduce, recycle) or by integrating new programmes (e.g. school gardens).

Presentations

Part I: Engage with youth and communities

Summary of presentations

The first panel of speakers stressed the impressive role of youth and children in advocating CCE and ESD. Youths' creative minds provide great impact on their awareness on environmental issues, expressed through art, such as dance and song competition and paintings. The session discussed a youth-model approach in shaping an environmental-friendly attitude of the youth. Public officials, the elders in the community, and parents can have great influence in developing environmental consciousness of youth. Academic institutions' programmes and advocacy, plans, research and decisions also help shape the learning attitudes of the students and the community as a whole. Institutional projects and programmes such as leadership training programmes and athletic activities encourage students to further increase their learning and give them the ability to be active youth leaders of CCE and DRR advocates.

Educational technologies have set the platform for youths to actively participate in the science of climate change. The use of computer-related technologies and mobile applications also forms part of the DRR education, and the use of social networking increases awareness and appreciation on current issues of environmental degradation.



Ms Caroline Borchard

'Train children to become trainers themselves. The language they express makes more sense to other children ...'

Ms Lisepa Paeniu

'There's a lot of information out there, there's a lot of funding, and the problem is that we, the youth, don't have enough initiative to raise awareness and be educated on how we can adapt on climate change ...'

Ms Madhavi Joshi

'Education does not transform the world, it changes the people. People are the ones who transform the world. That's why education plays a big role.'

Discussions

In the discussions, challenges to the implementation of CCE projects were brought up, including the sustainability of the projects and programmes involving the national government. There should be provisions for government ownership in order to have project sustainability and project enrichment.

The communication gap in giving instructions, conveying messages and educating the local community was being addressed through the involvement of local teachers and/or local volunteers. Furthermore, the use of visual materials helps stimulate helpful discussions on climate change. In addition, translated materials using local dialects and English language are beneficial for a clearer understanding of both the educator and learner.

Having a project's success indicator as part of the overall design of the process assures some measurable impact. It also ensures improvement of the project implementation. In the case of Plan International based in the Philippines, they are currently using qualitative and quantitative indicators in measuring the gained knowledge, progress achieved towards actions of the learners, and the progressive participation of the government and other stakeholders, specifically the mainstreaming of a Disaster Risk Reduction Management Council (DDRMC) on the local plan agenda of the community. Hands-on monitoring and evaluation activities were implemented to evaluate DRR effects and how the project affects children.

One participant also called for intensive awareness and attention on CCE in the Asia and the Pacific countries considering that the region experiences the direct impact of climate change. Education on climate change should be given to all members of society, especially the government officials who plan for the country's resiliency.

Recommendations

- **Youth-friendly approach in integrating technical aspects and science of climate change in the curriculum.** There should be research conducted on the effective methods in teaching CCE, ESD and DRR to address the gap among learners and teachers. The introduction on the use of advanced/modern technology in the education curriculum for more appreciation of climate science and disaster risk should be explored. Other methodologies of teaching such as showing documentaries and youth-inspired movies can stimulate interest of the youth and community.
- **Acceptance of youths' impressive role in CCESD.** Recognize the valued contributions of youths' initiatives and participation so that it will boost their confidence and encourage them to be more active advocates and role models to their peers and the community.
- **Use of family-oriented activities to promote CCESD.** Family plays a big role in promoting CCESD as it encourages bonding and togetherness of the youth and parents. This can also be a venue on educating parents on CCE, ESD and disaster risk reduction management (DRRM), furthermore encouraging parents to be role models in practising CCE and ESD.

Part II: Develop partnerships for climate change education

Summary of presentations

The session speakers presented various forms of CCESD partnerships and alliances to further tighten collaborative efforts and cooperation in the area of climate change. The UN Alliance on Climate Change Education Training and Public Awareness has set systematic approaches and holistic collaboration among UN member organizations in order to maximize synergies and coherence of activities, and utilize expertise and resources. The collaboration and cooperation of regional intergovernmental organizations on DRR and education in emergencies (EiE) such as SEAMEO are useful in carrying out mutual response in addressing environmental degradation, climate change mitigation and DRRM in the region. Treaties and agreements will accelerate the development of national policies on environmental protection and climate change among the member countries. The discussions opened the platform for accessible exchange of activities and programmes, sharing of good practices, adoption of possible policies and strategies, sharing of instructional materials/publications, and discussions of issues at regional and international level on environmental and climate change mitigation. They also established international and regional commitments, set common goals, and provided mutual assistance in addressing climate change and ESD. Interregional partnerships allow harmony of initiatives and exploration of potential partnerships and provides an avenue for convergence of efforts and resources among the international and regional organizations and stakeholders.

One of the speakers brought up an interesting topic on the possibility of establishing a regional partnership through liberalization of access to higher education institutions in the Asia and the Pacific region. The liberalization would diversify the diaspora's social mobility and the exchange of both traditional and non-traditional knowledge, increase capacity on mitigation and adaptation of the origin and host culture, enrich skills to build resilience in CCE and ESD. Likewise SEAMEO initiatives on DRR, such as the 10 Projects to Reach the Unreached, were presented as a model for regional CCESD initiatives.



Ms Lora Vaioleti
'There are social cultural values like Tauhi Va (the practice of maintaining social relationships) which could be leverage for effective sustainable solutions including but not limited to a new Asia Pacific regionalism based on higher education partnership ...'



Mr Moritz Weigel
'... there is growing number of UN organizations that work with government and stakeholders around the world on building climate resilient societies through climate change education training and public awareness ...'



Dr Ethel Agnes P. Valenzuela
'... climate change disasters affected and disrupt the school pattern of children in the region ...'

Discussions

Developing strategic partnerships and networks to address the global challenges in climate change could be prompted in different settings and opportunities. SEAMEO INNOTECH promotes collaborative partnerships among countries in Southeast Asia to advocate awareness on climate change through mutual cooperation of all Ministries of Education. Efforts of collaboration through policy recommendations and research persuade education officials and curriculum developers to integrate DRRM and CCE in school or alternative delivery mode (ADM) curricula.

There are also suggestions of developing partnerships among countries in Asia and the Pacific region, which both are the front-line regions regarding the impact of climate change. Organizing thematic conferences and workshops could provide a platform for exchange of discussions, sharing of practices, and even reaching concerted efforts and common solutions in dealing with the changing environment.

Recommendations

- Setting a common goal in establishing a sustainable partnership. Partnerships strengthen CCESD through active involvement of stakeholders, and they speed up the process and reduce bureaucracy especially for government-related projects.
- Forging successful partnerships collaboratively could fund DRR, EiE and CCESD programmes; provide technical expertise and capacity-building support; and develop resources that are beneficial to the affected and vulnerable communities.

Part III: The role of culture, indigenous knowledge and values in climate change education

Summary of presentations

The potential of IK or local knowledge for informing observation and leading responses to climate change is the third session theme. Indigenous communities have long been recognized as being particularly vulnerable to the impacts of climate change due to their dependency on the environment through their livelihoods, culture and indigenous knowledge. The traditional or IK demonstrates the in-depth understanding of nature and environment from a keen observation and excellent interpretation of the changing sky, sea and land. The curriculum integration of IK requires parallel respect and understanding of their beliefs, culture and identity. Moreover, IK preserves community identities, values and beliefs and further reaffirms its importance to the students and the youth. This kept knowledge was presented in different modalities such as tales, epics, songs, folk plays, rituals and hunting. Climate change is not just bringing catastrophic impact, but it has a diverse effect on the culture of indigenous people; for example, the reliability of the 'elders' in forecasting the weather may cause uncertainty to the community. Climate change may cause confusion for the elders in forecasting weather that can threaten the lives of the community and undermine elders' authority and reputation.

Local people have IK and skills that already adapted in the changing environment, which can contribute to developing diverse adaptation and mitigation responses. IK practices also provide solutions in responding to climate change without adverse effect on the environment. This knowledge tradition has been the basis for indigenous elders' establishing rules of law in protecting the environment as well peace in tribal societies. Likewise, this becomes a reference in the drafting of modern laws.

Accurate interpretation of their language and documentation of IK should be given much attention to appropriately integrate in the curriculum and pass on to next generation for sustainability. Furthermore, indigenous knowledge documents contain substantial information that ensures understanding of the phenomena of the changing environment.



Ms Sandra Lee Morrison

'Education for sustainable development is education for cultural survival and continuity ...'

Ms Gail Townsend

'The changes that we see were so fast that people don't have time to reflect on them and think about it ...'

Ms Buyandelger Ulziisaikhan

'Train children to become trainers themselves. The language they express makes more sense to other children ...'

Discussions

Everyone plays an important role in protecting indigenous and traditional knowledge, and especially the taboo traditional knowledge. The enabling policies of the government in protecting IK and their rights pave the way in preserving and respecting them. On the other hand, learning institutions provide accessibility and proper guidance on how the knowledge should be taught and how the family and elders keep and pass this knowledge to the next generation.

Educating indigenous people on the physical science aspects of CCE introduces multidimensional impacts such as resistance and confusion. In such a scenario, an interdisciplinary approach is necessary to have harmony of learning and to contextualize CCE to allow the people to reflect on climate change issues as observed in their own community/culture.

Recommendations

- Conducting substantial documentation and establishing a 'memory bank' to consolidate validated records of existing IK. This will facilitate the collection of instructional resources for teachers to effectively teach IK to their students. The 'memory bank' can provide a reference guide for experts in doing studies and research on environmental and climate change. An in-depth study of IK to evaluate and assess its relevance to climate change and DRR and science-based theory should be undertaken.
- Accelerating indigenous training on the community risk assessment for adaptation and mitigation using IK. Training programmes will help indigenous people to understand climate change and enable them to respond to the changing climate conditions and disaster risk.
- Involvement of indigenous people in developing and designing indigenous educational materials. Indigenous people's participation in developing materials will help provide accurate and relevant information in advocating IK for CCESD.
- Giving indigenous people more freedom to express their opinion on policy reforms and research study. Being respected for having their own understanding of the environment and their culture, indigenous people must have the right to officiate in any form of consultation and discussion on environmental topics. Organizing an intercultural dialogue for policy reforms on adaptation and mitigation on climate change and DRR.
- Advocating IK to increase its relevance to DRR/climate change. IK is now a powerful tool for informing observations of and responses to climate change. IK advocacy should be increased as a strategy for forecasting seasonal information.

Part IV: Prepare for disasters

Summary of presentations

The speakers presented various approaches in educating children on DRR and climate change. The Asia and the Pacific region is highly affected by natural hazards due to extreme conditions of climate change. Disaster risk also has its effects on livelihoods, and fatality rates are increasing due to the vulnerability of the region. Climate change has a major impact on food security and causes major diseases and other adverse impacts that affect children disproportionately and disrupt their schooling. Because the Asia and the Pacific population is young, climate change derailed the initiatives and undertakings to achieve the Millennium Development Goals (MDGs). Today's young individuals are potentially active agents of change and effective advocates of CCE. There were different holistic approaches developed in educating and empowering children on climate change and DRRM.

UNICEF, as lead international advocate for protecting and empowering children, has developed a child-centred DRR strategy that focuses specifically on the risks faced by children and their involvement in DRR efforts and initiatives. A child-centred DRR holistic approach integrates disaster risk analysis and DRR measurements in education sector development policy, planning and financial allocation. This approach also includes the promotion of DRR in teaching and learning, promotion of safe school environments, and promotion of school safety disaster management. The child-centred DRR holistic approach ensures the integration of disaster preparedness, assessment, immediate intervention and long-term recovery of the children and all stakeholders.



Ms Teija Vallandingham
'We really need to focus on specific risk faced by the children and need to involve them ...'

Ms Che-Che Olayvar
*'...ensuring that the affected children will go back to learning ...'
'Learning activities are the best way to recover from trauma'*

Some other DRR advocates also use participatory and learner-centred approaches that empower youth to lead activities such as engaging parents in livelihood-recycle projects, participating in action research, conducting school drills, and other school activities such as poster-making, essay writing, declamation, singing and dancing performance, etc. Moreover, a school's CCESD approach requires an innovative instructional design and use of educational technology, enhances the learning capacity and accelerates the learning process of the students. This instructional design and technology application builds student's creative minds to better appreciate the science of climate change. Teaching strategy such as the use of digital technology captures the interest of the e-generation. The intervention of computers, simulation technology, video showing, mobile applications and other digital devices stimulates classroom interaction and holds the attention of e-generation students.



Ms Lorna Victoria
'Children and education are investments on our common future ...'

Ms Rossukhon Makaramani
'You have to see the connection of the things in the world ...'

Discussions

DRR is increasingly important because climate change has escalated and resulted in more frequent and severe hazards. In the current assessment of the devastation of Typhoon Haiyan in the Philippines, it highlighted the need for school improvement planning as an indicator for integrating a child-centred approach and DRR (CCA DRR). This includes the assessment of the school and community vulnerability, and specific disaster-risk action plans and resiliency programmes.

Recommendations

- Conduct disaster preparedness activities such as multihazard drills for earthquakes, fire, floods and other hazards experienced by the people. Drills provide a collective response to the disasters in coordination with involved institutions or stakeholders. This will highlight the preparedness of the institutions and other agencies in responding to disasters.
- Develop a comprehensive communication framework. A communication framework will help systematize the social networking facilities of institutions so that stakeholders can provide a quick response team in case of emergencies and hazards.
- Mobilize the role of government in providing technology, improving forecasting capabilities of weather and earthquakes, and continuously disseminating information on the policies and regulations on climate change and ESD. Public awareness will encourage communities to actively participate in DRR activities and acknowledge the government's backup plans in the event of calamities and disasters. It further promotes coordination and institutionalization of DRR initiatives and programmes.
- Integrate CCE as part of ESD for non-formal and lifelong learning curricula. CCE may be integrated in ESD advocacy materials as well as schools' learning materials. Improving the integration of curriculum and mainstreaming safe schools and DRR.
- Provide continuous training and capacity building for teachers and school officials on DRR and climate change. DRR and CCESD training will provide school officials with the current technologies, tools and methods in educating the students and provide them effective disaster preparation.
- Use of an intercultural education approach on DRRM. An intercultural education approach will promote alternative courses of action for indigenous people in responding to disasters.

Part V: Building green societies through green job training

Summary of presentations

The session speakers presented various initiatives in transforming TVET into Green TVET. TVET has made economic progression from the last century, unfortunately neglecting the aspect of environmental sustainability. Education plays an important role in transforming TVET from economic growth to green growth, and it changes the way people think and act. TVET produces a skilled society that can provide a systematic approach to identifying, assessing and reducing the risk of disaster. In order to transform TVET into Green TVET, a three-tier approach was developed to integrate the concepts of sustainable development. The three-tier approach includes: 1) *Institutional level*, which is a transformation of the whole institution, strengthening and enabling its development; 2) *National level*, this level includes the creation of a national framework and the creation of more coherent and coordinated policies, and development of partnerships, and; 3) *Global level*, the establishment of interagency cooperation. This level opens an active sharing of evidence-based policies and best practices throughout the world.

The integration of green qualifications in the competency component of TVET is one initiative that promotes awareness on environmental protection. Such activities are the use of solar-powered systems, promoting agri-ecological pest management, and higher competency on prevention of pollution from ships to protect the marine environment. Aside from curriculum integration of environmental issues and CCE, greener qualifications also enhance the competencies of the trainers on environmental-related knowledge, skills and attitudes including an environmental framework in their training programme.

The political role of the national government plays a strong pillar in advocating green society through its national framework and policies. Cooperative partnership between government and stakeholders supports a common goal of promoting green technology and uplifts the lives of the poor. The initiative of Green TVET is to educate the industry on environmental principles and advocate conservation. The partnership with industry and stakeholders provides a better venue for collaboration; exchange of knowledge and technology; advocacy; and creates job and livelihood.



Ms Dagmar Winzier
'... it is necessary that we ourselves have a transforming attitude towards education and towards understanding of a sustainable future ...'



Director Felicidad B. Zurbano
'Public-private partnerships (PPPs) advocate green growth TVET. ... Partnerships aim to fast track the development of competency standards, assessment tools and competency-based curriculum to support the use of alternative technologies ...'



Ms Elenita Basug
'... school search programmes recognized school-initiated environmental friendly programmes and climate change resilience initiatives in various areas of instruction, research, extension and administrative services ...'

Discussions

TVET programmes and activities address the formal schools, non-formal education and the marginalized sector. Training programmes and activities are already in place in order to address ESD of the marginalized sector in partnership with other supporting institutions and NGOs. Partnership with industries provides environmental awareness and advocates environmental practice and sharing of green-technology innovations.

Recommendations

- Strengthen the role of government in creating national policies in promoting green industry and green competencies. This includes a framework on creating competencies for green jobs and intensive research collaboration with stakeholders in developing sustainable solutions for green society.
- Conduct awareness campaigns around green jobs and green opportunities.
- Attract investors and related industries to engage on green technology to encourage vocational students to engage and develop green technology.
- Establish industry–TVET partnership that accelerates the research and development of green technology and creates green jobs.

Part VI: Building green societies through responsible consumers

Summary of presentations

The session on building green societies through responsible consumers highlighted the consumer level of awareness and their active role in building a green society. The concept of education for sustainable consumption (ESC) is an ESD component that is framed after solution-oriented responses in the transformation to a green society. ESC responds to the need for new educational models that can foster a new generation of citizens who integrate sustainability in their personal and professional decisions. In transforming a green society, it requires individuals to realise their responsibility and take an active role in the process of transformation. Educational institutions must create an effective learning environment for experience-based learning and a community learning hub for sustainable practice. ESC also provides cooperative and participatory learning opportunities for collaborative action using relevant curricula and skills-based learning.

The youth are powerful advocates who have an impact on the consumption pattern of products. Education empowers the youth to decide to choose sustainable lifestyles and ESD awareness in building a green society.



Mr Robert Didham

'... as efforts towards sustainability transition increased, it becomes necessary to create social spaces where current lifestyle and patterns are critically examined; collective deliberation supports redefined concepts and active experimentation helps deliver new solutions for sustainable lifestyle. ...'



Mr Golam Kibrea

'... good governance and transparency for environmental protection ...'



Ms Livleen Kahlon

'... make your own list of questions to determine the intensity of a particular product. Is it that you cannot live without it? Is it that you want to buy because your friends have it?'

Discussions

To be able to achieve the promotion of responsible consumers, manufacturing companies or industries play an important role in measuring the needs and wants of consumers. There should be regulations on the marketing strategy of industries to influence the purchasing capacity of the consumers from necessity to luxury.

Recommendations

- Develop policies and regulations on sustainable consumption such as greening the market, having polices on sustainable procurement and production, etc.
- Create awareness and understanding of a sustainable lifestyle through celebrity endorsers and community leaders and advocating behavioural change of the youth and consumers.
- Provide incentives for active schools and other participating institutions supporting sustainability teaching and learning.
- Provide rebates on green products and subsidize green practices of the industry.

School visit

The school visit to Commonwealth Elementary School (CES) and Miriam College (MC) provided concrete practices on the capacity and role of schools in empowering students and community in DRRM and addressing CCE and ESD. Educational programmes of schools further incorporate IK and promoting sustainable lifestyle and development. School communities – including local education authorities, administrative staff, teachers and parents – were also educated and involved in providing a climate-safe and climate-friendly school environment. The schools visited serve as a learning laboratory for students to demonstrate and further deepen their understanding of the principles learned on CCESD in the classroom.

The study visit took place on the second day of the meeting. The participants divided into two groups, with Group 1 observing DRR and EiE practices of CES and Group 2 observing the ESD practices of MC in Quezon City.

A. CES, located along Commonwealth Avenue, Diliman, Quezon City, in the National Capital Region, is a public elementary school with 9,650 pupils. CES received a 'Gawad Kalasag National Champion' award for promoting disaster preparedness in the Philippines. CES has been conducting a series of systematic earthquake and fire drills since 2008.

The CES earthquake drills condition the minds of the students and school community in responding to earthquakes, particularly in identifying locations for evacuation. They also raise awareness on the importance of bringing disaster risk materials, which include whistles and flashlights. The drills also present rules and responsibilities of the



assigned personnel in responding to emergency incidents such as applying first-aid treatment. They also highlight the active participation of the community and involved government institutions in responding to disasters.

The following are the innovations on disaster preparedness developed by CES:

- Use of hard caps and reflectorized vests for teachers. Extra hard caps are also available.
- Improvised headgear for pupils made of indigenous materials.
- *Handang Bata* (Always Ready Kid) kit consisting of water, whistle, flashlight, food and medicine.
- *Ligtassa Sakuna* (Safe from Disaster) primer for pupils, parents and teachers containing the guidelines on what to do during disaster.
- An emergency plan posted at the school entrance and in every room.
- Installed signage, 98 fire extinguishers and 24-hour CCTV surveillance.

- DRR group called *Batang* Emergency Response Team (BERT) composed of pupils trained to assist fellow students in times of emergency.
- Evaluation plan and response team in case the school is used as shelter during emergencies.
- Earthquake drill and fire drill accompanied by instructions to explain the reason for the exercise.
- Climate change mitigation and adaptation eco-friendly campaign such as planning and rainwater filtration, among others that were recognized through a regional award on ESD.
- Service to the community through assistance to disaster victims.



B. MC is a private Catholic educational institution that offers programmes for students at basic, tertiary and postgraduate levels, and offers an adult education programme. The school received a Dark Green School citation from the Environmental Network of the Philippines, Garbology Master gold certificate, and Likas Yaman and 2013 Sustainable Eco-Friendly School awards from the Department of Environment and Natural Resources.

MC, as a Green School and an active player in the Philippine environmental movement, employs a whole-school approach in environmental education. Environmental advocacy is incorporated in institutional policies, campus practices, curriculum, research, and outreach or extension services.



Curriculum integration of seven environmental principles started in the early 1990s when Miriam Public Education and Awareness Campaign for the Environment (PEACE) developed a pedagogy that involves the integration of the seven environmental principles in all subject areas and at all levels of formal education curriculum. Miriam-PEACE curriculum integration has been developed and shared with various education groups through teacher training to facilitate the integration. The seven environmental principles are:

- 1) Nature knows best.
- 2) All forms of life are important.
- 3) Everything is connected.
- 4) Everything changes.
- 5) Everything goes somewhere.
- 6) Ours is a finite earth.
- 7) Nature is beautiful and we are stewards of God's creation.

The Green Campus programme develops ecological integrity and environmental care. The school practices ecological solid waste management, green architecture, energy and water conservation and campus greening, and uses solar panels for street lighting.

A green outreach and extension programme provides a direct impact on society and the biophysical environment. MC strategies include public education through the use of media, urban environmental management through research and training, community-based education and resource management such as community-based forest conservation, and capacity building for the community on reforestation, agro-forestry, ecotourism, etc.

MC also practices a culture of safety in relation to DRRM. This is also to establish a culture of partnership, shared responsibility and proactive approach to ensure safety and security in the MC community. The school established an Emergency Management Board to have a systematic, effective and efficient DRR programme. The board formulates the safety management plans, develops education and communication strategies, manages the financial aspect and conducts evaluation. Furthermore, MC has also upscaled its DRRM by developing the Miriam College Institutional Disaster Response Framework. The framework, called Acute-Recovery-Rehabilitation, created a quick response team, established a communication flow chart and fund management

system. The framework developed resource mobilization – volunteers and reliefs, a tracking system for affected students and employees, psychosocial support, and relief and rehabilitation efforts.



Final recommendations

These recommendations are the outcomes of the Experts Meeting on Climate Change Education for Sustainable Development in Asia and the Pacific that UNESCO organized in cooperation with SEAMEO-INNOTECH, with financial support from the Government of Japan.

They were adopted by 95 participants from 28 countries and are addressed to UNESCO and its Member States as well as all relevant stakeholders including education planners, researchers and practitioners.

1. **Recognize the diversity of children and youth** and ensure that CCE programmes targeting children and youth are **inclusive. Include youth in an authentic manner** and not as a homogenous group in all stages of the process through participatory **planning, decision-making, implementation and valuing their contributions.**
2. **Sensitize and empower children and youth to drive child- and youth-led activities/actions promoting children and youth as ‘agents of change’** (‘let them go’). Empower young people to gain knowledge through leadership training and technologies including social media, TV, radio, storytelling, festivals, etc. The use of local language is important.
3. **Promote whole-school approaches and community engagement.** Involve all stakeholders into activity planning of CCE and DRR from the beginning. Link school, community and government and involve children and youth as equal partners in these activities. This can help relate climate change to the personal lives of children, youth, families and communities and create ownership of climate change issues.
4. **Learn through intergenerational dialogue** for designing and implementing smart CCE with and for children and youth. Promote better communication and establish connections within and between generations. Particularly exchanges between children/youth and the elderly may add value. Cultural identities have to be taken into account. Engage local indigenous experts in defining socially and culturally appropriate approaches.
5. **Integrate CCE into the curriculum across all levels (from early childhood to higher education) and subjects and make use of participatory teaching and learning pedagogies** such as peer-to-peer teaching and learning, team teaching and experimental hands-on learning (e.g. play, demonstrating flooding, flash flooding, cutting trees and plants and its negative impact on landslides and flooding) to facilitate the transition from school learning to community action. Non-formal CCE is important. Educational material should be age-appropriate, context-specific and written in local languages, and should be visual.
6. **Build teachers’ and educators’ capacities** to facilitate learning of climate change, disaster preparedness and sustainable development, relating scientific knowledge to IK, promoting critical thinking, problem solving and taking action on climate change adaptation and mitigation.

7. **Promote participatory research and knowledge management for CCE**, for example through documenting children's stories after disaster (photo, video, drawings), and knowledge, attitude and practice surveys.
8. **Link the global and local perspective.** Teaching and learning that responds to the global and local dimension of climate change creates an understanding of its causes and ethical dimensions, including recognizing the value of and learning from local knowledge. This helps learners to contextualize and observe the local impact of climate change. It makes education more relevant to communities and individuals and empowers learners to take action on climate change causes and impacts.
9. **Develop partnerships for CCE** that are sustainable, that are based on participation, that focus on collaboration and that are inclusive of several stakeholders – 'Walk the walk'. Such partnerships can expand CCE programmes in scope – beyond formal education and outreach – bring the message to communities and draw from complementary competencies of partners, 'leveraging each stakeholder's strengths'.¹
10. **Learn from and respect different knowledge sources such as local and IK.** Educational programmes should be built upon an in-depth understanding of the learners' knowledge, on accurate science and on contributions from local and IK systems. Examples include making use of traditional weather forecasting, religious beliefs, mountain observation, guidance from the stars (for voyaging and navigation), calendars for planting and fishing (food security), and keeping history and local language alive through music (dance and oratory).
11. **Coordinate and mainstream DRR in education** through a comprehensive school safety framework (infrastructure/facilities, management and learning/teaching). Strengthen the coordination between community preparedness and school preparedness and support connecting action from the **national level to the local level, to school level.**
12. **Increase the effectiveness of DRR education programmes through a child-centred approach**, involve children and youth in the assessment and planning of DRR programmes, and **enrich CCE and DRR teaching through the use of cultural practices** such as folk songs, music and children's stories/folk tales that are familiar to children.
13. **Design technical, general and non-formal education programmes that support the development of green and blue skills** to address and cope with sustainability challenges such as climate change. Greening existing jobs in the region calls for efforts to revise existing curricula, qualification standards and programmes at all levels to prepare learners to support the changes in fields of work and business that are heavily implicated in the consumption of energy, raw materials and water and the utilization of secondary resources.

¹Partnerships include PPPs; corporate social responsibility (CSR) programmes; subregional networks such as the Tripartite Environmental Network (Japan, Korea, China); university-schools and community partnerships such as the United Nations University's Regional Centres of Expertise (RCE) and the Education Health, Livelihood and Peace Programme (EHELP); global and regional alliances such as the Asian Coalition for School Safety (ACSS) and the Global Alliance for DRR in the education sector, UN partnerships with youth such as TUNZA and YouthXchange; youth-community partnerships such as the Village Association of Children.

14. **Strengthen the development of green skills through 1) partnerships** among learning institutions, government, academic, corporate/private sector and communities to stimulate green entrepreneurship training and work-based training, etc.; **2) policies on green growth** and industries; and **3) research on sustainable business solutions**, taking into consideration social equity.

15. **Promote a solutions-oriented, values-based – formal and non-formal – education for sustainable consumption at all levels.** Promote sustainable lifestyles that are attractive and fashionable to (young) consumers ('make it cool') in order to change mindsets and counterbalance peer pressure and consumerism. To help address the 'value–action gap', foster innovations for sustainable lifestyles; work with youth ambassadors, 'influential' celebrities and community leaders; engage the media; create school awards for sustainability teaching and learning; devise internship schemes; hold film festivals; etc.

The participants of the experts meeting further commit to strengthening their efforts in promoting CCESD as a contribution to the Global Action Programme on ESD.

Edsa Shangri-la, Mandaluyong, 12 February 2014

Annex I : Agenda

Experts Meeting on Climate Change Education for Sustainable Development in Asia and the Pacific

10–12 February 2014

Edsa Shangri-La, Manila, Mandaluyong City, Philippines

Day 1 – 10 February 2014		Venue: Palawan 1 and 2
7.00–8.30	Breakfast	Venue: Boracay
09.00–10.00	Registration/Tea/Coffee	
10.00–12.00	<ul style="list-style-type: none"> • Welcoming remarks <i>by Ramon C. Bacani, Centre Director, SEAMEO INNOTECH, Philippines</i> • Welcoming remarks – <i>by Hubert J. Gijzen, Director, UNESCO Office in Jakarta, Indonesia</i> • Opening remarks <i>by Hon Mary Ann Lucille Sering, Vice Chairperson, Climate Change Commission, Philippines</i> • Opening remarks <i>by Mario Deriquito, Undersecretary for External Linkages, Department of Education, Philippines</i> <p>Group photo</p>	
12.00–13.00	Lunch	Venue: Boracay
13.00–14.15	<p>Part I: Engage with youth and communities Chair: Ralf Panse, GIZ/SEAMEO INNOTECH</p> <ul style="list-style-type: none"> • Engaging children as climate change adaptation advocates: Interactive learning methods <i>by Caroline Borchard, Plan International, Thailand</i> • Pacific youth action or inaction <i>by LisePaeniu, Small Island Developing States youth representative, Tuvalu</i> • Youth and climate change: The role of education <i>by Madhavi Joshi, Centre for Environment Education, India</i> <p>UNESCO video: <i>Learning to Address Climate Change</i></p> <p>Q&A</p>	

14.15–15.00	<p>Part II: Develop partnerships for CCE Chair: Elodie Guillon, World Society for the Protection of Animals, Thailand</p> <ul style="list-style-type: none"> • Tauhiva and the Pacific diaspora: Towards a new Asia-Pacific island educational regionalism <i>by Lora Vaioloti, Indigenous Maori and Pacific Adult Education Charitable Trust, New Zealand</i> • The United Nations Alliance on Climate Change Education, Training and Public Awareness <i>by Moritz Weigel, UNFCCC, Germany</i> • Climate change and disaster risk reduction integration in the Southeast Asian curriculum <i>by Ethel Agnes P. Valenzuela, SEAMEO INNOTECH, Philippines</i> <p>Video on eco schools Q&A</p>	
15.00–15.30	Tea/Coffee break	
15.30–17.00	Group work	Venue: Group 1 – Sulu Room Group 2 – Dapitan Room Group 3 – Bohol Room
17.00–18.00	Feedback working groups on Parts I and II	Venue: Palawan 1 and 2
19.00	Reception and dinner	Venue: Mactan

Day 2 – 11 February 2014		Venue: Palawan 1 and 2
7.00–8.30	Breakfast	Venue: Boracay
09.30–10.10	<p>Part III: The role of culture, indigenous knowledge and values in CCE Chair: Filomena Dayagbil, Cebu Normal University, Philippines</p> <ul style="list-style-type: none"> • A pedagogical approach to the inclusion of indigenous values and culture in climate change education <i>by Sandra Morrison, Waikato University, New Zealand</i> • Indigenous knowledge and climate change in the Cook Islands <i>by Gail Townsend, Ministry of Education, Cook Islands</i> • Mongolian traditional knowledge related to environment and environmental change <i>by Buyandelger Ulziisaikhan, Ministry of Environment and Green Development, Mongolia</i> <p>Q&A</p>	

10.10–10.45	<p>Part IV: Prepare for disaster Chair: Julia Heiss, UNESCO, France</p> <p>Video: <i>Education for Disaster Preparedness</i></p> <ul style="list-style-type: none"> • Child-centred DRR education in East Asia Pacific <i>by Teija Vallandingham, UNICEF East Asia & Pacific Regional Office (EAPRO), Thailand, and Maria Lourdes de Vera, UNICEF, Philippines</i> • Training and education for disaster risk reduction: Center for Disaster Preparedness experience <i>by Lorna Victoria, Center for Disaster Preparedness, Philippines</i> • Instructional design and technology application for effective disaster learning <i>by Rose Makaramani, Suan Sunandha Rajabhat University, Thailand</i> <p>Q&A</p>	
10.45–11.15	Tea/Coffee break	
11.15–13.00	Group work	Venue: Group 1 – Sulu Room Group 2 – Dapitan Room Group 3 – Bohol Room
13.00–14.00	Lunch	Venue: Boracay
14.00–xxx	Excursion	Group 1: Commonwealth Elementary School Group 2: Miriam College
19.00	Dinner	Venue: Boracay

Day 3 – February 12, 2014		Venue: Mactan
7.00–8.30	Breakfast	Venue: Batanes
09.00–10.00	Feedback working groups on Parts III and IV	
10.00–10.40	<p>Part V: Building green societies through green job training Chair: Pierangelo B. Alejo, SEAMEO INNOTECH</p> <ul style="list-style-type: none"> • Building green societies through greening technical vocational education and training (GTNET) <i>by Dagmar Winzier, UNESCO-UNEVOC, International Centre, Bonn, Germany</i> • Thematic presentation 2 <i>by Felicidad B. Zurbano, National Institute for Technical Education and Skills Development, TESDA, Philippines</i> • Building green societies <i>By Elenida Basug, Environmental Management Bureau, Department of Environment and Natural Resources</i> 	

	Q&A	
10.40–11.15	<p>Part VI: Building green societies through responsible consumers Chair: Amor de Torres, Capitol University, Cagayan de Oro City, Philippines</p> <ul style="list-style-type: none"> • Creating cooperative communities for building green societies: Translating education for responsible consumption into practices for sustainable lifestyles <i>by Robert J. Didham, Institute for Global Environmental Strategies, Japan</i> • Youth organizations and their roles to promote climate change education: A case study on Bangladesh <i>by Golam Kibrea, National Youth Advisor, Bangladesh</i> • Responsible consumerism: Differentiating between needs and wants!! <i>by Livleen K. Kahlon, The Energy and Resources Institute, India</i> <p>Q&A</p>	
11.15–11.45	Tea/Coffee break	
11.45–13.00	Group work	Venue: Group 1 – Sulu Room Group 2 – Dapitan Room Group 3 – Bohol Room
13.00–14.30	Lunch	Venue: Batanes
14.30–15.30	Feedback working groups on Parts V and VI	Venue: Palawan 1 and 2
15.30–16.30	<p>Part VII: Venue: Mactan</p> <p>The Global Action Programme on Education for Sustainable Development <i>by UNESCO</i></p> <p>Wrap-up and the way forward <i>by Julia Heiss, UNESCO, France</i></p> <p>Closing session</p>	
19.00	Farewell dinner	Venue: Batanes

Annex II: List of participants

Experts Meeting on Climate Change Education for Sustainable Development in Asia and the Pacific

10–12 February 2014 • Edsa Shangri-la, Manila,
Mandaluyong City, Philippines

Ms Niña ABOGADO

Consortium Monitoring and Evaluation Officer Plan
International, Inc.
4/F Bloomingdale Bldg., Salcedo St., Legaspi Village
Makati City
Philippines
E-mail: Nina.Abogado@plan-international.org

Mr Kelvin Steven ANTHONY

Pacific Coordinator
Nektarina Non Profit – Education for Sustainability
Project and 350.org Pacific
Suva
Fiji
E-mail: kelvin@350.org

Mr Thura AUNG

Director of Programme
RadanarAyar Rural Development Association
40-Bogyoke AungSann Road
Ward-5, Bogalay 10231
Myanmar
E-mail: thuraaung@radanarayar.org

Mr Ninoy BALGOS

Program Head
Research, Knowledge Exchange and Management
Center for Disaster Preparedness Foundation, Inc.
CSWCD Bldg., University of the Philippines
Diliman, Quezon City
Philippines
E-mail: ninoybalgos@gmail.com

Mr Tibendra Raj BANSKOTA

Project Coordinator
Plan Nepal
Sunsari Program Unit
Itahrai, Sunsari
Nepal
E-mail: Tibendraraj.banskota@plan-
international.org, tbanskota@gmail.com

Mr Julito ALIGAEN

Education Research Specialist
SEAMEO RECSAM
Penang
Malaysia
E-mail: juli_aligaen@recsam.edu.my,
juli_aligaen@yahoo.com.

Assistant Prof. Athapol ANUNTHAVORASAKUL

Asst. Dean and Director
Research and Development Center on ESD
Faculty of Education
Chulalongkorn University
Phayathai Rd. Pathumwan Rd.
Bangkok 10330
Thailand
E-mail: anun_atha@yahoo.com

Mr William AZUCENA

Program Manager
LVPO CCCBA Project - Aurora
Save the Children
2F Midland Bldg. 1040 EDSA
Magallanes Village 1232
Makati City
Philippines
E-mail: William.Azucena@savethechildren.org

Mrs Tungalag BALJIR

ESD Program Coordinator
Mongolian State University of Education
BagaToiruu 14
Ulaanbaatar 210648
Mongolia
E-mail: tungabaljir@yahoo.com

Ms Caroline BORCHARD

Regional Climate Change Coordinator
Plan International
Asia Regional Office
14th Floor, 253 Building (Asoke)
Sukhumvit 21 Road
KlongtoeyNua, Wattana
Bangkok 10110
Thailand
E-mail: Caroline.borchard@plan-international.org

Prof. Jessica P. CAMPANO

Administrative Assistant to the Dean
Capitol University
Corrales Extension
Cagayan de Oro City 9000
Philippines
E-mail: jpcampano09@gmail.com

Dr Filomena DAYAGBIL

Dean
College of Education
Cebu Normal University
Osmena Boulevard Cebu City
Philippines
E-mail: ftdayagbil@yahoo.com

Dr Amor DE TORRES

Dean
College of Education
Capitol University
Cagayan de Oro City
Philippines
E-mail: amordetorres2@gmail.com

Dr Robert J. DIDHAM

Senior Coordinator for Capacity Development &
Knowledge Management
Institute for Global Environmental Strategies (IGES)
2108-11 Kamiyamaguchi, Hayama
Kanagawa
240-0115 Japan
E-mail: didham@iges.or.jp

Mrs Elodie GUILLON

Education Programme Manager, Asia Pacific
External Affairs, Research and Learning (EARL)
World Society for the Protection of Animals
7th Floor, Olympia Thai Plaza,
444 Ratchadapisek Rd, Samsennok,
Huay Kwang
Bangkok 10310
Thailand
E-mail: ElodieGuillon@wspa-asiapacific.org

Dr Ir HENDARMAN

Senior Researcher
Centre for Policy Research
Board of Research and Development
Ministry of Education and Culture
Gedung E Lantai 19,
KompleksKementerianPendidikandanKebudayaan
JalanSudirman,Senayan – Jakarta
Republic of Indonesia
E-mail: hendarmananwar@gmail.com

Mr Ian Phil CANLAS

Instructor
Leyte Normal University
Paterno St.
Tacloban City
Philippines
E-mail: lordphil2003@gmail.com

Ms Lilian C. DE LA PEÑA

Museum in-charge and Publications Officer
Capitol University
Corrales/Osmeña Extension
Cagayan de Oro City
Philippines
E-mail: liliandelapena@gmail.com

Ms Elenida DEL ROSARIO-BASUG

Chief
Environmental Education and Information Division
Environmental Management Bureau-DENR
2nd Floor, HRD Building, DENR Compound
Visayas Avenue, Diliman
Quezon City 1116
Philippines
E-mail: elenemb2002@gmail.com;
elenidabasug@yahoo.com

Mr Ven Paolo B. VALENZUELA

Center for Disaster Preparedness
CSWCD Bldg. Ramon, Magsaysay Ave.
University of the Philippines
Diliman, Quezon City
Philippines
E-mail: cdp@info.com.ph; cdp.phil@gmail.com

Ms Ruth S. GUZMAN

Professor, Rizal Technological University
Board Chairperson, Philippine Association of Tertiary
Level Institutions in Environmental Protection and
Management (PATLEPAM)
Boni Avenue, Mandaluyong City
Philippines
Email: ruthsguzman@gmail.com

Prof. Tomonori ICHINOSE

Professor
Miyagi University of Education
149 Aoba-kuAramakiAzaAoba, Sendai
Miyagi
Japan
E-mail: ichinose@staff.miyakyo-u.ac.jp

Mrs Maya IGARASHI-WOOD

Emergency Officer
East Asia & Pacific Regional Office (EAPRO) UNICEF
19 Phra Atit Road
Bangkok 10200
Thailand
E-mail: migarashiwood@unicef.org

Ms Livleen Kaur KAHLON

Fellow
The Energy and Resources Institute (TERI)
Darbari Seth Block, India Habitat Centre
Lodhi Road
New Delhi – 110003
India
E-mail: kahlonl@teri.res.in

Mr Golam KIBREA

Regional President, National Coordinator
Kairos Society Bangladesh (KSB), Rio+20GYMC
Project, International Network for Environment
(INE)
Symphony Tower (6th Floor), Road-142, Plot-SE(F)-
9
Dhaka-1212
Bangladesh
E-mail: golam@glocha.info

Ms Paimma LHAKDEN

Deputy Secretary
Bhutan National Commission for UNESCO
Ministry of Education
Thimphu
Bhutan
E-mail: Paimma@yahoo.com

Mr Daniel LIN

Senior Research and Policy Specialist
Pacific Resources for Education and Learning (PREL)
900 Fort Street Mall, Suite 1300
Honolulu, Hawaii 96813
USA
E-mail: lind@prel.org

Ms Rossukhon MAKARAMANI

Associate Professor
Faculty of Education
Suan Sunandha Rajabhat University
1 U-TONG NOK ST., DUSIT
Bangkok
Thailand 10300
E-mail: makaramani@yahoo.com,
rossukhon.ma@ssru.ac.th

Mrs Madhavi Sanjay JOSHI

Programme Director
DESD, Youth Programmes and Waste Management
Centre for Environment Education
Thaltej Tekra
Ahmedabad 380054
India
E-mail: madhavi.joshi@ceeindia.org

Dr Mageswary KARPUDEWAN

Senior Lecturer
School of Educational Studies
Universiti Sains Malaysia
Penang
Malaysia
E-mail: kmageswary@usm.my

Mr Seakly KUNG

Chief Officer
Department of Environmental Education and
Communications
Ministry of Environment
48 Samdech Preah Sihanouk, Tonle Basak
Chamkarmorn, Phnom Penh
Cambodia
E-mail: sklee00@cje.ac.kr, seakly.eeto@gmail.com

Ms Sun-Kyung LEE

Professor
Cheongju National University of Education
2065 Cheongnam-ro, Heungdok-gu, Cheongju,
Chungbuk 361-712
Republic of Korea
E-mail: sklee00@chol.com

Ms Cheche OLAYVAR

Education Specialist
UNICEF Philippines
31st Floor Yuchengco Tower, RCBC Plaza
6819 Ayala Avenue, 1200 Makati City, Philippines
E-mail: pvolayvar@unicef.org

Mrs Naing Yee MAR

Senior Advisor
Myanmar-Germany Technical Vocational
Education and Training
Deutsche Gesellschaft für
International Zusammenarbeit (GIZ) GmbH
No 38/C Pyi Htaung Su Road
Bahan Township
Yangon
Myanmar
E-mail: naing.mar@giz.de

Mr Erbai Xavier MATSUTARO

Associate Climate Change Coordinator
The Office of Environmental Response and
Coordination
P.O. Box 6051
Republic of Palau 96940
E-mail: erbai.oerc@palaugov.org

Prof. Noor Endah MOCHTAR

ESD National Coordinator
Indonesian National Commission for UNESCO
Ministry of Education and Culture
Jl. Jenderal Sudirman
Senayan
Jakarta
Indonesia
E-mail: noor_endah@ce.its.ac.id

Ms Sandra Lee MORRISON

Associate Dean
School of Maori and Pacific Development
University of Waikato
Hilcrest Rd
Hamilton 3210
New Zealand
E-mail: samorr@waikato.ac.nz

Ms Rachel R. NUESTRO

Plan International, Inc.
4/F Bloomingdale Bldg., Salcedo Street
Legaspi Village
Makati City
Philippines
Tel: (+632) 813 0030

Dr Ralf PANSE

Project Consultant
SEAMEO INNOTECH
Commonwealth Avenue, U.P. Diliman Quezon City,
Metro Manila 1101
Philippines
E-mail: ralf@seameo-innotech.org

Mrs Thi Bich Nga PHAM

Climate Change Education Programme Manager
Live and Learn for Environment and Community
No.24, Lang Kientrucphongcanh, Lane 45A, Vong Thi
street, Tay Ho district
Hanoi
Vietnam

Prof. Sary MEAKH

Professor, Researcher, Head
Education Science Department
Institute of Humanities and Social Science
Royal Academy of Cambodia
Cambodian National ESD Focal Point
House #316, Chamka-Ovlekvillage, Kakap commune,
Posenchey District
Phnom Penh
Cambodia
E-mail: smeakhrac@yahoo.com

Ms Fatima Gay J. MOLINA

Senior Research Associate
Research, Knowledge Exchange and Management
Program
Center for Disaster Preparedness
CSWCD Bldg. R. Magsaysay Avenue
University of the Philippines Campus
Diliman, 1101 Quezon City
Philippines
E-mail: fatimagaymolina@gmail.com

Ms Ida DewaAyulstri NGURAH

Climate Change Adaptation Supervisor
Plan International Indonesia
Menara Duta building
Rasuna Said Kuningan Jakarta
Indonesia
E-mail: ida.ngurah@plan-international.org

Ms Lisepa PAENIU

Legal Intern
Ministry of Justice
Yaren, Republic of Nauru
E-mail: fianta91star@gmail.com

Ms Jennifer PAÑO

Faculty
College of Teacher Education
Cebu Normal University
Osmena Blvd
Cebu City
Philippines

Ms Liberty PASCUA

Research Associate
National Institute of Education
NIE7-03-01, 1 Nanyang Walk
Singapore 637616
E-mail: liberty.pascua@nie.edu.sg

E-mail: Nga.phambich@livelearn.org

Ms Vilasa (Audrey) PHONGSATHORN

Education Consultant (Peacebuilding
Emergencies)

UNICEF EAPRO

19 Phra Atit Road

Bangkok 10200

Thailand

E-mail: vphongsathorn@unicef.org

Ms Ratchanin PONGUDOM

Programme Officer/Foreign Relations Officer

Thai National Commission for UNESCO

Ministry of Education

Bureau of International Cooperation

Ministry of Education

Ratchadamnoen-Nok Avenue, Dusit

Bangkok 10300

Thailand

E-mail: ratchanin@yahoo.com

Ms Doris Emily RAVAI

Regional Director-Pacific

Live & Learn Environmental Education

52 Imthurn Road, Domain

Suva

Fiji

E-mail: doris.susau@livelearn.org,

doris.susau@gmail.com

Mr Muhammad Zeeshan SHAHID

PhD Atmospheric Student

Institute of Atmospheric Physics

Chinese Academy of sciences

Beijing

Peoples Republic of China

Email: mzeeshanshahid@lasg.iap.ac.cn

Prof. Guiwu SU

Professor

Institute of Geology

China Earthquake Administration (CEA)

A1, HuaYanLi, QiJiaHuoZi

De Wai Avenue, ChaoYang District

P.O.Box 9803

Beijing, 100029

People's Republic of China

E-mail: suguiwu@iesc.cn

Mrs Valisi TOVIA

Senior Curriculum Officer

Education Department

Funafuti

Tuvalu

E-mail: valisitovia@gmail.co

and

Ms Atchara POMSAGUN

Project Coordinator, Disaster Risk Reduction
Plan International Inc.

14/F 253 Bldg. Sukhumvit, 21 Road

Klongtoey Nua, Wattana

Bangkok

Thailand

E-mail: atchara_pom@hotmail.com

Mr Julius QUILLOPAS

Head Teacher

Banacon Elementary School

Banacon, Getafe

Bohol

Philippines

E-mail: qjuliad4379@yahoo.com

Mr Masahisa SATO

Associate Professor

Tokyo City University

3-3-1, Ushikubo-nishi, Tsuzuki-ku

Yokohama, 224-0015

Japan

E-mail: m-sato@tcu.ac.jp

Dr Ali SHAREEF

Deputy Vice Chancellor Academic Affairs

The Maldives National University

RahdhebaiHingun

Male

Maldives

E-mail: a.shareef@mnu.edu.mv

Ms Gail TOWNSEND

Executive Director

Education Commissioner

Cook Islands Ministry of Education

PO Box 97

Rarotonga

Cook Islands

E-mail: gail@education.gov.ck

Mr Marciano TRAVERO

Head Teacher

San Jose Elementary School

San Jose

Getafe

Bohol

E-mail: qjuliad4379@yahoo.com

Mr Jose T. TRAVERO

Associate Professor
Bohol Island State University
Bohol
Philippines 6317
E-mail: jose_travero@yahoo.com

Ms Lora VAIOLETI

Research Fellow
Indigenous Maori and Pacific Adult Education
Charitable Trust
276 Tramway Rd
Hamilton
New Zealand
E-mail: lora.vaioleti@gmail.com

Ms Inangaro VAKAAFI

Coordinator & Vice Chairperson
350 Niue & Pacific Youth Council
Fatamanu, Mutalau, Niue Island
P.O Box 173, Alofi
Niue
E-mail: niugro@niue.nu

Ms Teija VALLANDINGHAM

Regional Education Specialist (Emergencies
& Peacebuilding)
UNICEF EAPRO
19 Phra Atit Road
Bangkok 10200
Thailand
E-mail: tvallandingham@unicef.org

Ms Teresita VIRGO

Health and Nutrition Center
Department of Education
Deped Complex, Meralco Avenue
Pasig City
Philippines
Telephone No: (+632) 687-2520

Mr Moritz WEIGEL

Associate Programme Officer
United Nations Framework Convention on Climate
Change
UN Campus
Platz der Vereinten Nationen 1
53113 Bonn
Germany
E-mail: mweigel@unfccc.int

Ms Buyandelger ULZIISAIKHAN

Senior Officer
Sustainable Development Green Development
Policy & Planning Dept.
Ministry of Environment and Green Development
PO Box 46/363
Ulaanbaatar 14201
Mongolia
E-mail: buyan_u@yahoo.com,
buyandelger@mne.gov.mn

Mr Mikaele VAKASILIMIRATU

Senior Education Officer
Curriculum Development Unit
Ministry of Education, National Heritage, Culture
and Arts
Private Mail Box
Government Building
Suva
Fiji Islands
E-mail: mvakasilimiratu@govnet.gov.fj

Ms Lorna VICTORIA

Advisor
Center for Disaster Preparedness
CSWCD Bldg. R. Magsaysay Avenue, University of
the Philippines Campus, Diliman, 1101 Quezon City
Philippines
E-mail: oyvictoria@yahoo.com,
oyvictoria@gmail.com

Ms Dagmar WINZIER

Programme Expert
UN Campus
Platz der Vereinten Nationen 1
53113 Bonn
Germany
E-mail: d.winzier@unesco.org

Mrs Carol Margaret YOUNG

Education Consultant
20 Eccles Ave
Te Kauwhata
New Zealand 3710
E-mail: carolmyoung@xtra.co.nz

UNESCO Office in Jakarta

Dr Hubert GIJZEN

Director
UNESCO Office in Jakarta
Regional Bureau for Sciences in Asia and the Pacific
Galuh II no 5, KebayoranBaru
Jakarta
Indonesia
DKI Jakarta 12110
E-mail: h.gijzen@unesco.org

UNESCO Paris

Ms Julia HEISS

Programme Specialist
Section of Education for Sustainable Development
UNESCO
7, Place de Fontenoy
75352 Paris 07 SP
France
E-mail: j.heiss@unesco.org

Department of Education, Philippines

Hon. Mario DERIQUITO

Undersecretary for External Linkages
Department of Education
DepEd Complex
Pasig City
Tel. No. (+632) 631-8493

Climate Change Commission, Philippines

Secretary Mary Ann Lucille SERING

Vice Chairperson and Commissioner
Climate Change Commission
Rm 238 Mabini Hall
Malacañang Compound
San Miguel, Manila
Telephone No. (+632) 735-3144

Commonwealth Elementary School

Mr Rodolfo B. MODELO

Principal
Commonwealth Avenue
Commonwealth Elementary School
Quezon City
Philippines
Office No. +632 427 5231

UNESCO Office in Beijing

Ms Miki NOZAWA

Programme Specialist for Education
UNESCO Beijing Office
Wajiaogongyu 5-15-3
Jianguomenwai Compound
Beijing 100600
People's Republic of China
E-mail: m.nozawa@unesco.org

Ms Julia VIEHOFER

Associate Expert
Section of Education for Sustainable Development
UNESCO
7, Place de Fontenoy
75352 Paris 07 SP
France
E-mail: j.viehofer@unesco.org

Technical Education and Skill Development Authority, Philippines

Dr Felicidad B. ZURBANO

Director IV
National Institute for Technical Education & Skills
Development
TESDA, Taguig City
Philippines
E-mail: fel.zur@gmail.com

Climate Change Commission, Philippines

Hon. Heherson ALVARES

Commissioner
Climate Change Commission
Rm 238 Mabini Hall
Malacañang Compound
San Miguel, Manila
E-mail: alvarezheherson@yahoo.com

Miriam College

SEAMEO-INNOTECH

Dr Ramon C. BACANI

Centre Director
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 921-0224
E-mail: rcbacani@seameo-innotech.org

Dr Ethel Agnes P. VALENZUELA

Senior Specialist/ Head
Research Studies Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
E-mail: ethel@seameo-innotech.org

Ms Elaissa Marina E. MENDOZA

Senior Associate
Research Studies Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
Email: lai@seameo-innotech.org

Ms Rhea Christina U. RABIN

Senior Research Consultant
Research Studies Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
Email: rhea@seameo-innotech.org

Ms Merjielyn M. CALIMAG

Research Assistant
Research Studies Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
Email: merj@seameo-innotech.org

Mr Philip J. PURNELL

Manager, Educational Research and Innovation
Office
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City, Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 928-7692
E-mail: philip@seameo-innotech.org

Mr Pierangelo B. ALEJO

Senior Specialist
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 928-7913
E-mail: pierre@seameo-innotech.org

Ms Cristina V. MORENO

Senior Associate
Research Studies Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
E-mail: tina@seameo-innotech.org

Ms Lauren Nerisse BAUTISTA

Senior Associate
Solution Evaluation and Adaptation Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax No.: +632 351-7147
E-mail: lbautistal@seameo-innotech.org

Ms Cecilia A. ANDRES

Research Assistant
Research Studies Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
Email: candres@seameo-innotech.org

Mr Mark John ANTIDO

Technical Associate
Educational Media Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
E-mail: mark@seameo-innotech.org

Ms Camile ALBARRACIN

Facilities Management Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Email: camile@seameo-innotech.org

Mr Ermann MONTEALTO

Video Consultant
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84

Ms May Ann V. GARAY

Research Assistant
Research Studies Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
Email: ann@seameo-innotech.org

Ms Rozlyn PUNO

Facilities Management Unit
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Email: jowee@seameo-innotech.org

Dr. David CATANYAG

Fellow
SEAMEO INNOTECH
Commonwealth Avenue, Diliman
Quezon City
Philippines
Office Phone No.: +632 924-7681 to 84
Fax no.: +632 926-1554
Email: dcantanyag@yahoo.com

Annex III: Abstract of presentations

Part I: Engage with youth and communities

Engaging children as climate change adaptation advocates: Interactive learning methods

By Caroline Borchard, Plan International, Thailand, and/or Rachele Nuestro, Plan International, Philippines

Plan International is currently implementing a number of child-centred climate change adaptation programmes across the region, including in the Philippines, Vietnam, Indonesia, Thailand, Lao PDR, Myanmar, Bangladesh and Nepal as well as in the Pacific. The projects aim to build the awareness of children and their communities about climate change and to empower them to be active participants in adaptation efforts. This involves the three components of knowledge, action and advocacy.

Knowledge: To raise awareness, interactive and fun learning material on climate change has been developed in collaboration with Ministries of Education and teachers. The teaching materials include teacher toolkits, games, animation, cartoons and science experiments, etc. Using locally appropriate methods, children and young people are then supported in becoming peer educators and trainers in their community on climate change and DRR. For example, they conduct their own research, develop radio shows, film documentaries, perform drama shows, conduct competitions, run learning camps, etc.

Action: Through a participatory process, Plan International works with communities and children to analyse how climate-related disasters and other effects of climate change impact children, youth and their communities and encourages them to identify appropriate solution. Youth clubs, schools and communities can apply for small grants to realize their own small projects ranging from reforestation campaigns to teaching farmers how to make organic fertilizer.

Advocacy: As a result children and young people are becoming powerful advocates and leaders on climate change adaptation in their communities and regions. This is supported through a peer-to-peer advocacy approach, exchange visits and connecting children with the decision-makers at national and regional levels.

Pacific youth action or inaction

By Lisepa Paeniu, Tuvalu

In Tuvalu, youth are usually aligned with a specific denomination and in essence faith-based. This means that they only exist because the elders have created this organized group for the development and strengthening of that faith. Youths are usually very dependent on decisions made by elders, but that is only in the case of Tuvalu. In urban areas in Fiji, Samoa and Vanuatu, and in some cases Nauru and Tokelau, this is not the case as youth groups are always innovative and autonomous. This presentation will cover these countries as I have lived there, therefore I can easily relate to the youth work we've done in these countries in relation to climate change awareness, and of course some recommendations or proposals of what could be done to further the activities or inactiveness of the youth in the respective countries. The Pacific region, being diverse in culture, traditions, linguistics and mentalities, is a major challenge, but this presentation will be an eye-opening experience to how this challenge can be turned into an opportunity.

Youth and climate change: The role of education

By Madhavi Joshi, Director, DESD and Youth Programmes, Centre for Environment Education, India

In the context of the growing concern over the impact of climate change and the need for preparedness, youth are an important stakeholder. Addressing climate change requires involvement and action at the local level, as well as the regional and global levels. Education has a central role to play in understanding, mitigating and adapting to climate change. The United Nations DESD highlighted climate change as an important area that would require focused ESD effort. The post-2014 Global Action Plan of the decade also flags education for climate change adaptation and mitigation as an important area for ESD to focus attention.

To enhance and support youth involvement in climate change, education helps sensitize youth and create capacity for fostering 'change' towards sustainability. This calls for a paradigm shift for education from 'teaching' to 'learning' and 'action' with a need for inculcating critical thinking for informed decision-making for sustainable lifestyles. Youth, educators and practitioners engaging with youth can learn from various initiatives that illustrate the way youth are engaged in ESD with a special focus on climate change.

Part II: Develop partnerships for CCE

Tauhiva and the Pacific diaspora: Towards a new Asia-Pacific Island educational regionalism

By Lora Vaioleti, Indigenous Maori and Pacific Adult Education Charitable Trust, New Zealand

The Pacific Islands require regional educational partnerships for climate change resilience. Social risks from existing developmental challenges will be exacerbated by the progressive effects of climate change. For those in the Pacific Islands, migration for education abroad in New Zealand, Australia and the United States has allowed the diffusion of social and economic risk via a robust Pacific diaspora. Importantly, practices of *tauhiva* – maintaining harmony in social space – will continue to underpin this diaspora's longevity. In light of anticipated climate change effects, access to higher education for Pacific people in Asia will diversify the diaspora's access to social and financial capital, and help fill technical capacity gaps to build resilience and developmental capacity. As opposed to low-skill labour migration, migration for education allows the opportunity for further social mobility and the increased capacity to contribute both to origin and host populations in the long-term. This presentation highlights the central role of *tauhiva* for the Pacific diaspora's developmental potential, and with this understanding, proposes a liberalization of access to higher education in Asia as a means for Pacific Island climate resilience. A focus on Asia-Pacific Island higher education institutional partnerships is recommended as a possible starting point for a new higher educational approach to long-term regional climate resilience.

The United Nations Alliance on Climate Change Education, Training and Public Awareness

By Moritz Weigel, UNFCCC, Germany

The presentation will provide an overview on the work of the United Nations Alliance on Climate Change Education, Training and Public Awareness and its member organizations. The objective of the alliance is to maximize synergies and coherence of activities, avoid duplication of effort and utilize available expertise and resources in an efficient manner through enhanced coordination

among United Nations entities. The alliance aims to support parties to the UNFCCC in their efforts to design, initiate and undertake activities related to climate change education, training, public awareness, public participation and public access to information and has established a clear link between the work of the member organizations and the intergovernmental climate change process.

Climate change education and disaster risk reduction management integration in the primary education curriculum of Southeast Asian countries

By Ethel Agnes P. Valenzuela, SEAMEO INNOTECH, Philippines

The presentation shares a collection of notable practices on CCE and DRRM in seven countries of South-East Asia (Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines and Singapore). The importance of CCE and DRR were stressed in the Hyogo Framework for Action (2005–15): Building resilience of nations and communities to disasters as stated in its expected outcome towards the substantial reduction of disaster in lives, and in the social, economic and environmental assets of communities and countries. One of the agendas set by SEAMEO member countries in response to this framework is Project 10, to ensure that DRR is a priority of the region and integrated in the curriculum for implementation. The paper shares the policies, notable practices and remaining challenges in the implementation of CCE and DRRM in the seven South-East Asia countries. Recommendations on how to mainstream CCE and DRRM in seven SEAMEO member countries will also be shared alongside the strategies for capacity-building programmes and instructional materials development goals.

Part III: The role of culture, indigenous knowledge and values in CCE

A pedagogical approach to the inclusion of indigenous values and culture in CCE

By Sandra Morrison, Waikato University, New Zealand

The relationship between indigenous peoples and their lands and oceans is already well documented, with human identity regarded as an extension of the environment. Indigenous peoples have their own concept of that particular relationship. For Māori, the concept of *kaitiakitanga* is defined as being guardian of the environment and is integral to Māori identity and culture and being. Its desired outcome is for the sustainability of the people, their identity and their culture as well as the sustainability of the environmental resource. Scientists interrogated and used Manulua, an ancient motif of the proto Polynesia that captures an indigenous ideal for a balanced self, harmony and coexistence with others, with nature and with the ancestral spirits or with one's god/s. Within both these concepts lies a depth of integrated, connected traditional knowledge and practice that has been transmitted and tested over many generations and underpinned by spirituality. These knowledge systems have been challenged by contemporary problems such as climate change, which has caused these cultural constants to adapt to the social and environmental interventions. This presentation examines the authors' works with two indigenous communities that incorporated indigenous values into CCE in order to preserve indigenous narratives and knowledge and as a challenge to the increasing paradigm that views education as a commodity. Indigenous cultural frameworks have provided significant potential and considerable depth and possibility for theorising new ways of attaining environmental and human well-being in the complicated world of now.

Indigenous knowledge and climate change in the Cook Islands

By Jane Metua Kue-Taurarii, Ministry of Education, Cook Islands

The language, culture and IK of the Cook Islands plays a significant role in our education system, and it is articulated in our Education Master Plan 2008–23 – *Taku Ipukareakia Rangatira*. The integration of these important aspects in CCE do not only enhance identity, values and beliefs of our Cook Islands people, but also instils and reaffirms their importance in our students, youth and the community as a whole.

The Cook Islands, in acknowledging both the local and global bodies of knowledge, also endorses their complementary roles in determining local and global citizenships. This inclusive approach will encourage the schools and the community to work together to critically evaluate the problems and issues facing the vulnerability of our small nation as a result of climate change. It also encourages the development of culturally responsive and sustainable approaches to yield positive environmental benefits. Students will then be the agent for change through engagement in management and decision-making that promotes sustainable development.

Mongolian folk traditions and cultures related to nature conservation

By Buyandelger Ulziisaikhan, Ministry of Environment and Green Development, Mongolia

Not everybody ought to be a nature researcher, but every human being is a part of nature, so caring for the nature from which they emerge must be their innate nature (from ancestors' word).

Nature protection and cognition were brought to young generations through mainly folksy modes such as tales, epics, proverbs, songs, blessings and plays; these coaching ways are actually interconnected with one another wisely. It differs from locale to locale. This contains a lot of valuable cognitions of Mother Nature and environment that we ought to know today. An example: 'if you harm crane by any manner then your steel treadle will crack up'. Cranes are one of the wild natures when sightseeing in Mongolia.

Mongolians consider the sky as their father and the earth as their mother. They incredibly adore them and they are accustomed to offering the first bit of milk and tea every morning. During the offering they pray and offer good wishes for nature and life.

Mongolians have lived a nomadic way of life for centuries, a people very much dependent on nature in comparison to settled civilizations. Nowadays, one-third of the people are nomads. In short, nomadic life is ruled by interacting with nature. Many elements are the values of today's green development principles that we want to set.

The 'Great Nation' law (1206), which is the father law of all Mongolian written laws, contains a chapter on nature and environment protection. A small note from that law reads: if somebody urinate to waters, if someone makes holes in the earth during vegetation period, if somebody causes a fire by accident – grassland fire, then this person was under sentence of death. This law and many younger laws based on this one comprise diverse aspects on nature, environment and lifestyle and how to relate on sustainability.

Part IV: Prepare for disaster

Child-centred DRR education in UNICEF East Asia Pacific

By Teija Vallandingham, UNICEF EAPRO, Thailand, and Maria Lourdes de Vera, UNICEF Philippines

Children are often disproportionately affected by climate change, disaster risk and conflict and by the associated and sometimes interrelated shocks and stresses. In response, UNICEF is increasingly approaching disaster risk management in a holistic manner by promoting the integration of child-centred DRR, climate change adaptation and peace building across sectors, including education. Globally, UNICEF's Strategic Plan 2014–17 places an emphasis on the alignment of development and humanitarian interventions to better address vulnerabilities and cross-sectoral programming in order to enhance resilience and provide positive change for the most marginalized and disadvantaged children.

The presentation aims to provide an overview of UNICEF's approach to DRR in education in East Asia and the Pacific. The panel will present a review of the current challenges and UNICEF's efforts to mainstream DRR in education, including in education sector planning, policies and curriculum development. The panel will outline UNICEF's Child-Friendly School Framework and the Inter-agency Comprehensive School Safety Framework.

In line with the above frameworks, UNICEF has identified the following key areas for targeted interventions: 1) ensuring a robust risk assessment; 2) accelerating education for climate change adaptation and disaster prevention, mitigation and preparedness; 3) provision of safe education facilities; 4) making education sector disaster management risk-informed; and 5) incorporating DRR in education sector development planning.

Training and education for disaster risk reduction: Center for Disaster Preparedness experience

By Lorna Victoria, Center for Disaster Preparedness, Philippines

This presentation chronicles the experience of Center for Disaster Preparedness, a resource centre based in the Philippines focusing on local and community-based DRRM. With capability building as its core competency, it has contributed to the enabling of communities and service providers from NGOs and the government sector in various areas of community-based DRRM. Through training, interactive forums, consultancies, research and publication, networking, and advocacy, the centre has contributed to the mainstreaming of community-based DRRM, specifically the proactive measures of preparedness, mitigation and prevention, in the agenda and operations of local, national and international groups. Its research focus on new themes in community-based DRRM for most vulnerable groups, especially children, to participate in and enjoy the gains of safety, resilience and development. This research includes engagements with international NGOs on children such as Plan International for its child-centred DRR, Save the Children for its child-led DRR and World Vision for its child-focused DRR.

Instructional design and technology application for effective disasters learning

By Rossukhon Makaramani, Faculty of Education, Suan Sunandha Rajabhat University, Bangkok, Thailand

This presentation will describe the importance of basic education curriculum/programmes relating knowledge on natural disasters, and innovative application of instructional design and educational technology to enhance teaching and learning process about natural disasters for grades K-12 in

order to reduce risk when hazards occur. Focusing on tsunamis, selected examples of curriculum/programmes, practical teacher resources, instructional materials and interactive media from various sources will be introduced.

Part V: Building green societies through green job training

Building green societies through greening technical vocational education and training (GTVET)

By Dagmar Winzier, UNESCO-UNEVOC, International Centre, Bonn, Germany

Climate change is caused to a large extent by human activities, and this process is largely irreversible. Therefore a common effort is necessary to slow the process of global warming. Changes have to be undertaken in policy, economy, research and society to develop a sustainable future and support the path towards a green economy.

This transformation calls for a holistic approach taking into regard global, national and institutional levels. At the global level, international cooperation is needed to share good practices, provide international assistance and enhance the collaboration for green growth. At the national level, regulations and frameworks should be established to initiate and support the greening process, and at the institutional level, activities and measures have to be undertaken to implement the green growth strategy in order to build a green society. But individual consumption and lifestyles also have to be reflected and altered.

To reach the goal of green societies, education and training will play a vital role. The presentation will exemplify how TVET will contribute to the transition towards sustainability.

Building green societies

By Elenida Basug, Environmental Management Bureau, Department of Environment and Natural Resources

This presentation talks about the National Environmental Awareness and Education Act of 2008 (Republic Act No. 9512), and will highlight four greening programmes in different key sectors of the Philippines' Environmental Management Bureau that seek to contribute to the greening of society. These four programmes are greening schools, greening communities, greening government offices and greening industries.

Started in 2009 as an every-two-year programme, there is a National Search for Sustainable and Eco-friendly Schools for elementary, high school and college levels in the Philippines. This programme aims to encourage schools and academic institutions to be more actively involved in environmental issues at a practical and local level. For greening communities, the Environmental Management Bureau's programme on the adopt-an-estero/water body programme will be cited; since 2010, it has pursued the active engagement of the private sector, with the local government and communities, for the rehabilitation of esteros and water bodies nationwide.

For the greening of government offices, to be discussed will be a programme started in 2011, and to be followed up in 2014 for the Recognition Awards for Eco-friendly Government Offices at the national level. This programme seeks to encourage the implementation of 'the 4Ps' (Policy, People, Promotion of Awareness, Practice) in environmental management programmes for national government agencies, and government-owned and controlled corporations at the national level. Finally, the paper will talk about the Philippine Environment Partnership Program, which annually

recognizes selected industries for their superior environmental performance.

The paper will wrap up with greening key Philippine sectors, at the school, community, government office and industry levels, in the overall aim to build up green societies.

Part VI: Building green societies through responsible consumers

Creating cooperative communities for building green societies: Translating education for responsible consumption into practices for sustainable lifestyles

By Robert J. Didham, Senior Coordinator for Capacity Development & Knowledge Management, Institute for Global Environmental Strategies (IGES), Japan

Pro-environmental attitudes are essential for achieving transitions to sustainable societies and are especially critical when addressing how we organise daily life practices and consumption choices at the level of individual, community and society. Several recent studies on individual change towards sustainable consumption conclude that dependence on behaviour change theory alone is deficient in explaining the lack of uptake of individual practices for sustainability. In light of this 'value-action gap', there is a need for greater application of educational mechanisms aimed at strengthening citizens' ability to respond as competent actors in building a greener, more sustainable society.

As efforts towards sustainability transitions increase, it becomes necessary to create social spaces where current lifestyle patterns are critically examined; collective deliberation supports redefining concepts such as quality of life and well-being; and active experimentation helps deliver new solutions for sustainable lifestyles. This can create a transformative learning process for sustainability, but requires an appreciation of educational approaches that extend beyond the narrow approach of individual awareness-raising on sustainability to achieve consumer behaviour change. Citizen engagement and participation can be facilitated to create 'communities of practice' where an action-reflection approach enables 'experiential learning' as a precursor to transformative social change.

Youth organizations and their roles to promote climate change education: A case study on Bangladesh

By Golam Kibrea, National Youth Advisor, Bangladesh

Bangladesh has always been considered a country where the impacts of climate change seem ever cruel, consistently severe and intense from all aspects of livelihood. This is, in fact, a very small country with an immense population base of up to 162 million. The challenges and risks of any kind of environmental issues look drastically hazardous here, and especially the extent of climate impacts on the human livelihood still remain an eternal debate since the last decade.

Though multiple stakeholders including local UN missions, relevant government departments, public and private organizations, civil society organizations, local NGOs and international NGOs are exceedingly getting involved with the climate change movements alongside a mitigation and adaptation processes, young people and youth-led organizations are still the biggest groups who have been working from the very grass roots. Youth are the biggest portion of the population in Bangladesh and they solely comprise around 45 per cent (about 70 million) of the total population.

Youth participation is still partial and immeasurable despite the government's and other stakeholders' initiatives in involving the youth in the process of creating environmental policy. This scenario looks even worse in remote areas of the country where most people don't know anything

about climate change; and what kind of possible risks it carries for their lives. Still most of the rural youth are less educated and so their actual capacities to realize the overall climate impacts remain vague. Interestingly, the scenarios of urban youth are comparatively different as they have the options to build up their capacities through easy and instant access to reliable, accurate and concrete environmental database and information sources. Mainstream local and international Media are continuously helping them a lot to realize the direct and reverse impacts of climate vulnerabilities and conceptual intellects. Therefore, urban youth and youth-led organizations have eventually been taking diversified projects, advocacy campaigns and micro-level local initiatives on climate change which includes awareness-raising, educational programs, planting trees, promoting the use of renewable energy, adopting energy saving appliances, practices community capacity building and so on. In addition, a number of urban youth organizations are already heading to build up partnerships with the government, local and international donor sources, and international organizations to support micro level climate change projects. As the urban youth cluster has become the actual representative portion of entire youth populations, so it's high time to take urgent initiatives for rural youth communities to build up their capacity through equal, absolute and impartial climate education. As young people are considered an important stakeholder group in the United Nations system, so it's time to speed up the involvements of youth organizations and make sure their diversified contributions for every single goals of the sustainable development.

Responsible Consumerism- differentiating between needs and wants!!

By Livleen K. Kahlon, The Energy and Resources Institute (TERI), India

Peer group pressure goes a long way in defining the societal wants. And in this pursuit of wants, which are insatiable; people lose the focus on the immediate needs. This is where Education aspires to make a key impact- change the way people think and help them decide their own paths of sustainability. The need of the hour is to follow the 3 basic Rs- reduce, reuse, and recycle.

Consumerism has its own set of environmental impacts – the markets are flooded with an increased range of products, there is rapid changes in taste and fashion and lifestyle; market goods have a shorter lifetime – hence generating more waste; and procurement of goods because their value represent 'our social status'!

Education helps in molding the way we think- because it is finally the 'way we think, is the way we live. It helps us in differentiating between consumption, over consumption and consumerism. Environmental and social impacts of consumerism are a fall out of production, processing, and over consumption. The processes linked with this are indiscriminate extraction of natural resources, production of toxic by -products, and direct creation of pollution and waste.

Youth needs to lead the movement of green consumerism by purchasing products that are environmentally-friendly or eco-friendly. The dimensions of sustainability- ecological, economic, social, and cultural are all to be considered when we aim at a life governed by the principles of green consumerism.

ANNEX IV: Photo Highlights



ANNEX V: Expert's Meeting Evaluation

Background

The Experts Meeting on "Climate Change Education for Sustainable Development in Asia and the Pacific" was organized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in collaboration with the Southeast Asian Ministers of Education organization, Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH). It was held on 10-12 February 2014 at the EDSA Shangri-La Manila, located in Mandaluyong City, Philippines. With the aim to constantly improve the quality, relevance and efficiency of meetings and workshops, UNESCO's Section of Education for Sustainable Development prepared an evaluation survey and the SEAMEO INNOTECH Research Studies Unit (RSU) Team was tasked to disseminate this evaluation survey to the participants of the said experts meeting and summarize the evaluation survey results.

Evaluation Instrument Used

The Evaluation Survey is composed of four sections. Section 1 is about information on the participants. Section 2 is all about the content of the meeting with fourteen (14) questions comprise this section. The first 12 questions are rated using a five-point rating scale, and for questions 13 and 14, the participants were asked on the most useful and least useful elements of the meeting, respectively. Section 3 is about the organization of the meeting. Section 4 is about the participant's additional comments and suggestions to further strengthen the management of future similar meetings like this.

Summary of the Evaluation Results

Section 1: Participants Information

Majority of the participant respondents or 35.6 percent were from network partners and 33.9 percent from non-government organizations and 8.5 percent of the participants belong to organizer UNESCO staff/UN staff members while others (13 or 22.0%) do not belong to these three categories.

The target participant of the experts meeting primarily from Asia and Pacific Region with 96.6 percent and small portion or 3.4 percent work in Europe/North America.

The majority of the participants or 61.0 percent were male and the rest were females or 39.0 percent.

Section 2: Content of the Experts Meeting

On the overall content of the experts meeting, participants gave a positive rating of 4.47 percent or "below high but above medium" in qualitative interpretation. The importance and timely organization of the meeting, working structure, learning sessions, relevance and contribution to the participants' organization possible partnerships, poses a median rate of 5 percent or "high" in qualitative interpretation. On the other hand, the quality of presentations and discussions got score of 4 percent in Median range or 4.19 percent and 4.30 percent respectively. Most of the useful elements of the meeting is developing partnership, linkages and networking, while the least useful

is time management. The following are the participants' comments on the least and most useful elements of the meeting:

Most useful:

- Networking, linking and developing partnerships.
- Provide different perspectives and additional knowledge from Pacific/cultural and traditional knowledge application.
- Sharing of ideas, experiences, learning, common goals and best practices.
- Identification of challenges, issues and problems in promoting CCESD.
- Presentations and breakout sessions and group discussions.
- Rich experience, diverse examples.
- The approaches to integrate concept of CCE, ESD and DRR and child friendly schools (CFS).
- The different contexts of CCESD.
- The discussions confirmed what we are doing in school along the ESD concepts.
- The idea on information about climate change and its impact on our daily lives.
- Clear instructions, good presentations, conducive meeting venue.
- Discussions and excursions/study tour.
- Identifying common challenges among different organizations/nations/communities – inspiration.
- Good selection of thematic coverage.
- Role of young people in CCESD and the statement.
- The group discussions formulate recommendations even during meals.
- The working groups were very good to ensure all had good understanding of the topics and sharing of experiences.
- The workshops facilitated the exchange of ideas and beyond the discussions/structure of the conference.
- Apart from the informative presentations and group discussions, the field trip was very useful especially the DRR school programme.
- Parts III and IV main presentations were relevant and highly important.
- The excursion to CES was very inspirational and really demonstrated how the initiatives on CCA DRR can really be inculcated even with young children.
- Communicating with colleagues from other regions including Pacific countries.
- Discussion of strategies, feeling of making a difference and sharing solutions and examples to others.
- Experiences from other participants, challenges, best practices and points of view.
- Global understanding of cultural and current timeline.
- Discussion of mutual understanding.
- Ongoing trends in CCE and ESD in the region.
- Practices and concepts for promoting ESD including CCESD and DRR.

Least useful:

- Time management and time constraints in plenary discussions.
- Different way for group feedback during workshops to avoid repetitions.
- Opening sessions took half day.
- Too many questions for working group sessions, two topics could be covered into subgroups.
- Some presentations were not relevant.

- Reporting back all group work sessions, this was too long and repetitive/redundant. Should have been summarized points only or added points not mentioned by others.
- The questions that were discussed during group works were the same for all three groups, therefore there are many redundancies during the report back sessions.
- Presentations were too lengthy, it was difficult to internalize the information.
- More sessions on teaching and learning strategies.

Section 3: Organization of the meeting

The overall organization of the meeting got 4.55 per cent of 'high' in qualitative interpretation; this included the working relations and responsiveness of the organizer during the meeting as well as the overall logistical arrangement of the meeting. The evaluation also inquired about the participants' preferences for language translation during sessions. Most of the participants answered 'no' with 75.0 per cent, and 11.7 per cent 'yes', and 10.0 per cent 'maybe' answers.

Section 4: Additional comments and suggestions

Most of the comments and suggestions were more thankful comments and congratulatory; on the other hand, there were also suggestions on time management. The following participants' other comments and suggestions:

Thank you and congratulatory comments:

- Good harmony and successful.
- Huge thanks for wonderful organization of the meeting.
- No comments at all but just to say that from the bottom of my heart, THANK YOU VERY MUCH!
- Thank you and congratulations for the excellent organization of this meeting and substantive outputs.
- Thank you so much! Very relevant meeting.
- Thanks for considering us from the field.
- The meeting ran smoothly and was well organized and implemented. The staff were friendly and the organizers were approachable.
- Superb event!
- Well-organized meeting!
- Well done!
- A good meeting and a lot accomplished. Look forward to more such interactions.
- Good meeting harmony and successful.
- Many thanks for the invitation and privilege to participate in this experts meeting.
- Mixing up groups from one session to another. I enjoyed the meeting and learned a lot and met lots of people relevant to my work.
- Thanks to the Philippines for the hospitality during the programme.
- Well organized in all aspects. Excellent work UNESCO and SEAMEO INNOTECH.

Time management comments and suggestions:

- Breakout sessions should be given a little bit of structure.

- For future meetings like this, there should be more time for group discussions.
- It's all about the topic to be given more time to explain so that the speaker will not be in hurry to explain the topic.
- Longer time must have been given in group discussion. Discussion questions must have been given ahead of time for all the participants to be able to synthesize practices in their respective countries.
- Should provide some sessions that divide participants by sector to make collaboration. Discussion time is limited and some groups had more than 40 participants, so it might be that some have less involvement.
- Thank you for the well-organized meeting. I would have wished DepEd Bureau of Education, Alternative Learning Systems, and other slots for DENR were represented. Thank you for your preparation and coordination.
- Better time management next time.
- Consider promoting sustainable diets by offering less meat options during lunches and dinners.
- More time for group discussions/plenary groups.
- Overly tight scheduling, allocation for questions and answers at presentations could have been longer to avoid presentation overrun. More time and better reporting format for work groups may have been useful.
- Please set time limits to keep presentations on track and focused.
- Tighter timekeeping from the beginning would have been useful. One opportunity for discussions in different groups could have built new alliances.

Other comments:

- Climate change adaptation was not discussed thoroughly, which should be at the heart of climate change education.
- Include short training sessions on any useful tool for CCE.
- It's about CCE, so let's start by reducing energy consumption such as less light and turn off the aircon.
- Such type of meeting should be organized regularly.
- Stronger chairing of presentations or feedback to maintain time/schedule and motivation.
- Focus discussions also on the need to build a culture of 'risk resilient' communities and allowing for this to be considered at curriculum and through systemic approach.
- Additional task force or protocol should be formed by UNESCO with experts for sustainable movement on climate change.



**Experts Meeting on Climate Change Education
for Sustainable Development in Asia and the Pacific**

In collaboration with:



**EDSA Shangri-la Manila, Philippines
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