



DISASTER RISK REDUCTION AND EDUCATION

Outcomes for children as a result of DRR activities
supported by the EEPCT programme

Case study B: DRR outcomes for children in Peru

June 2012

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Cover photo: © Coutrney Cabot Venton, 2012. Girl in charge of First Aid box during earthquake evacuation drill, Ventanillas, Peru.

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1 INTRODUCTION

1.1 Overview of the case study

This summary describes the findings from the Peru case study. It follows the methodology outlined in the main report. The main aim of the work was to investigate the outcomes for children as a result of the EEPCT-funded programme in Peru, as well as lessons for integrating disaster risk reduction (DRR) and education for children.

Fieldwork was undertaken between 3 October and 7 October 2011 in Peru. The majority of the time was spent with key stakeholders and partners in Lima, as well as two visits to beneficiary schools in high-risk locations. The Annex includes a detailed list of the meetings, but broadly speaking, meetings were held with the relevant departments from the Ministry of Education (MINEDU), the National Institute for Civil Defence (INDECI), UNICEF staff, as well as partners such as CARE and Practical Action. Stakeholders were interviewed using the questions detailed in the Inception Report.

It is important to note that, in the case of Peru, the Dutch funds provided under the EEPCT programme were used to co-finance the Disaster Preparedness 'European Commission's Humanitarian aid and Civil Protection Directorate General' DIPECHO VI programme (started in May 2009). Further, specific partner activities would often be co-funded by DIPECHO, but were clearly linked with other funds and activities under the overall umbrella of the partner organization's activities. Hence it was rarely possible to identify an activity that was solely attributed to Dutch funds. Having said this, the situation was also indicative of a highly integrated and coordinated approach, and as such demonstrated that partners were working together to pool funds. It was also mentioned several times that the DIPECHO funding has to be co-funded, and hence the Dutch funds played an important part in leveraging this funding.

The remainder of this section provides a brief overview of disaster risk in Peru, and the current situation on disasters and education, followed by a brief description of the activities funded under the EEPCT/DIPECHO VI programme. Section 2 describes the findings from the fieldwork and Section 3 presents conclusions from the research.

1.2 Disaster risk in Peru¹

Peru comprises a wide range of geographical characteristics – while it sits in a tropical region, the presence of the Andes Mountains and cold-water ocean current (Peruvian or Humboldt current) results in great diversity. The western fringe of the Pacific coast is desert, with a temperate climate and no significant rainfall throughout the year. At the eastern end there is a natural forest, which physically occupies most of the territory but is the least populated. The central region is located in the mountains, with a steep terrain.

Peru has 28 of the 32 types of weather in the world and 84 of the 103 life zones of the planet. Peru's geography offers a diversity of resources, but at the same time, there are many limitations for its management and sustainable use. Due to the rugged topography, areas of arable land are reduced (for example, lands suitable for agriculture and livestock are scarce and comprise only 7 per cent of the country). Road communication can be difficult in much of the country, which affects the location of settlements. Population pressure is increasing the population of urban areas – more than 75 per cent of Peru's 28 million inhabitants live in urban population centres. In 2009, the National Statistics Institute estimated poverty at 34.8 per cent, a decrease of 1.4 per cent compared with 2008. Extreme poverty in 2009 affected 11.5 per cent of the population. Some 66 per cent of children 3–5 years old were registered in early education in 2010, and this figure is significantly higher in urban areas. The primary net enrolment rate averages above 90 per cent, although there is a lot of repetition of years, and again the urban rates are significantly higher than the rural. Enrolment for ages 12–17 is estimated at 77 per cent and 45 per cent of indigenous people are in grades below their age profile.²

Peru's diverse geography is characterized by a high potential for natural dynamics to become hazards: seismicity and active volcanoes, hydro-meteorological conditions and climate variability, steep slopes and unstable soils are combined with rains to generate landslides, and extreme events of water shortages become droughts. Frost, hail, fires, snowstorms and bitter cold are also prevalent. Climate change has also become a particular danger for Peru, as the increase in temperature and precipitation is affecting areas of high ecological vulnerability.

The two major threats addressed in the area of study for this work were earthquakes and tsunami. Clearly, Peru is affected by a great many additional threats, such as landslides, floods, drought and El Niño.

Earthquakes: The entire Pacific Ocean coastline of Peru sits on a high seismic zone (the meeting of the South America and the Nazca plates), and this is also where Peru's major cities and economic centres are located. The central and south coasts have experienced the highest magnitude earthquakes (for example, the earthquake in Pisco in August 2007 and the earthquake in Arequipa in 2001). Some 62 provinces are rated very high/high for seismic risk, accounting for 72 per cent of the population.

¹ This section is adapted from 'Documento País Peru 2010', developed for the DIPECHO IV Plan of Action.

² UNICEF 2010 Annual Report for Peru.

Tsunami: Peru's coastline is located on the Pacific Coast, in an area also known as the Pacific Ring of Fire because of its highly active tectonic belt. The Pacific Ocean has the highest risk of occurrence of seismic sea waves, also known as tsunami, and much of Peru's population is located in coastal areas that are vulnerable to these events.

1.3 Education and risk management

Disaster risk management is treated as a high priority at the national level, in large part due to the high visibility and economic impact of recent disasters. For example, the Pisco earthquake in 2007 and the Chile earthquake in 2010 have highlighted the significant risk and economic consequences of such events. A recent study was cited that estimated that El Niño will cost 8 per cent of Peru's gross national product. The Pisco earthquake destroyed much housing, incurring a high reconstruction and rehabilitation cost for the Government, and future earthquakes in Peru are likely to affect the country's most economically strong regions.

Following the Yokohama Strategy and Plan of Action for a Safer World,³ INDECI seconded someone to work in MINEDU to examine integrating disasters into education – this led to the formation of DIECA, the community and environmental education department within MINEDU. In 2004, MINEDU established the Strategic Plan for Prevention and Disaster Relief with a horizon of 10 years, and in 2006 DIECA was created with responsibility for the design of policies and standards to address the issue of DRR. The core curriculum that is used by schools includes a theme on environmental education, which is underpinned by three topics – eco-efficiency, health and risk management.

The institutional structure for education on risk management is made complex due to a lack of clear coordination between these institutions. INDECI has a long history of providing education on disaster management, although due to MINEDU's focus on civil defence, this education is concentrated on earthquake and tsunami response and is implemented separately from the school curriculum. By contrast, the MINEDU/DIECA work on education integrates risk as one part of an environmental curriculum, using a rights-based approach, and as such is focused on the whole range of risks that may face a community (such as environmental, safety and natural disasters), using a much more integrated approach. EEPCT/DIPECHO funding has been key in supporting the development of tools and training in both of these ministries.

To add to the complexity, the Government changed hands in July 2011. Alongside the resulting changes in staff (and high levels of uncertainty for the government staff that remain), new mandates and laws have been issued, and it was clear that most institutions are still trying to navigate and understand these changes and their consequences for institutional responsibility in education and disasters.

³ The Yokohama Strategy was developed in 1994 as the output of the World Conference on Natural Disaster Reduction. It provides guidelines for natural disaster prevention, preparedness and mitigation.

1.4 EEPCT in Peru

The Dutch funds designated under the EEPCT programme have been used under the umbrella of a much broader regional programme of work, with funds in Peru specifically designated to co-finance the DIPECHO VI programme of work. While it was not possible to clearly designate those activities that were ‘Dutch funded’, due to the integration of activities under DIPECHO, a summary of the activities that were funded under DIPECHO VI in Peru is presented below.

The overall goal of the DIPECHO work is: “Strengthening alliances to ensure education in emergency situations and to promote a culture of prevention in the most vulnerable communities in South America.” This is underpinned by four results – the activities undertaken in Peru are summarized for each results area below.

Result 1: *There is increased coordination between the Ministries of Education, national DRR systems, regional institutions and NGOs working on DRR.*

This area has included activities such as UNICEF regional meetings (across multiple countries) to facilitate coordination and exchange of information, reproduction and distribution of guiding documents such as ‘Risklandia’ (a board game on risk management developed at a global level by the International Strategy on Disaster Reduction (ISDR) and UNICEF), and workshops on the Inter-agency Network for Education in Emergencies (INEE) minimum standards for education in emergency situations. Peru was part of all of these activities. In Peru, these meetings have been used to teach relevant stakeholders about the Children’s Rights-Based Approach to Emergencies. Further, as a result of the INEE trainings, the United Nations Development Programme (UNDP) in Peru included the INEE guide in their EEPCT/DIPECHO project-related trainings about early warnings in communities.

Result 2: *The Ministries of Education in the three focal countries (one of which is Peru) are supported in the elaboration and implementation of sector policies on DRR.*

Aims under this results area include: development of national level plans/policies on DRR in education; annual work plans on DRR activities in schools; capacity development of relevant stakeholders; document technical issues related to DRR; and sharing of best practice, experiences and tools.

A wide range of activities and outcomes have taken place in Peru in support of this activity. For example:

- The project managed to push for a process of elaboration, approval and printing of a National Emergency Response Plan.
- Technical meetings between different departments of the MINEDU have been carried out in order to develop an Integrated Work Plan in DRR and Disaster Prevention (DP) for the education sector, at preschool, primary and secondary levels. This was done in

consultation with DIPECHO partners, NGOs and representatives of the national civil defence.

- A wide variety of trainings have been undertaken to build capacities, including national-level INEE training, participation in regional training on INEE, training of trainers on DRR in Ayacucho, training on how to implement an environmental focus in teaching, meeting of an environmental education congress, etc.
- Elaboration of guides on technical issues including: How to Develop a DRR Plan in the Education Sector; a national manual for 'Teaching with an Environmental Education Focus'; a 'National Education Sector Emergency Operation Plan'; and guidance on 'Implementation of Simulations in Schools'. Documents have been distributed in different ways depending on the audience (through trainings, directly to local municipalities, etc.).

Result 3: *Schools and communities in the focal countries where DIPECHO partners are working benefit from exchange of knowledge, technical assistance/guidance and materials that have been developed during the project.*

Peru initiated a variety of activities that contributed towards this result. Materials such as INEE guidance, simulation guidelines and the 'Risklandia' game were distributed to EEPCT/DIPECHO partners (other donors and NGOs working at a community level). Importantly, all of the materials were distributed in connection with training and monitoring visits to regions where DIPECHO partners work, and were supported with technical assistance through meetings and training.

Activities were also focused on the two target regions – Ayacucho and Callao. In Peru, UNICEF organized workshops, such as 'The Use of Basic Tools in Emergencies in the Education Sector' in Ayacucho (participants were local education authorities in Ayacucho region). The project organized 'Risklandia' game competitions between schools in Ventanillas (in Callao) and Ayacucho. UNICEF/MINEDU also organized exchanges between the two intervention areas, to increase capacity for DRR and DP in schools (by teachers and students).

Result 4: *A communication strategy for DRR in the education sector is developed to raise awareness and to mobilize resources on DRR issues.*

Many of these activities were undertaken with a regional perspective, and Peru has already started at a national level with its own campaigns and contests. At a country level, the work is based on the same vision as the regional communication strategy, which on the one hand assures the participation of students and on the other hand emphasizes advocacy of special themes concerning DRR in the education sector.

2 FINDINGS

2.1 Introduction to findings

The primary focus of the fieldwork was to document outcomes for children associated with programme activities. However, there are a number of other 'lenses' that can be used to assess outcomes, particularly given that such a wide range of activities have been implemented at a national, sub-national and community level. Therefore, the results framework includes the following categories, each of which is discussed in turn below:

- **Outcomes for children** – how have children benefited from the programme? These are described in terms of physical, educational, economic and psychosocial outcomes.
- **Contribution to the Hyogo Framework for Action (HFA)** – How has the programme contributed more widely to the priority actions identified under UNICEF's four DRR goals (which have been adapted from the HFA)?
- **Cross-cutting factors** – How has the programme of work contributed to four cross-cutting themes, namely, leverage, innovation, scaling and evidence (as identified in the 2010 Progress Review Seminar).

It is important to note that the EEPCT/DIPECHO funds largely supported capacity development, trainings and tool development, as part of a much wider body of work on curricula for environment and risk management. As such, the direct contribution to each of these categories is not always immediately apparent, although it was always clear that the EEPCT/DIPECHO funds had played a key role, alongside other players, in allowing this curriculum to become more institutionalized and to gain a greater foothold at the school level.

2.2 Outcomes for children

DRR can lead to a wide range of positive outcomes for children. In order to structure the findings, outcomes were investigated in relation to the following four categories: physical, educational, economic and psychosocial.

In the case of Peru, there have not been any disaster situations since the EEPCT/DIPECHO programme was initiated, and hence it was not possible to definitively identify the outcomes for children as a result of these activities. However, it was certainly clear that the programme had some important impacts, and it is possible to deduce the potential outcomes in the case of an emergency, which are documented below.

The programme's main focus was to support the curriculum on DRR at the national level, through activities such as trainings, workshops and information exchanges between countries and within regions in Peru. Work at a local level, where the outcomes for children are most evident, consisted primarily of the work in specific schools in Ayacucho and Callao Region. The main outcome for children in targeted schools relates to their ability to understand and respond

to a disaster, as a result of improved education on risks such as natural hazards, as well as other threats such as traffic. It was clear that children in beneficiary schools are much more organized in terms of activities such as evacuation drills, and therefore it is highly likely that the main outcome in an event will be a decrease in loss of life and injuries, to the extent possible.



Girl in charge of first-aid box during earthquake evacuation drill, Ventanillas, Peru. © Courtenay Cabot Venton 2012

There is the potential to reduce other negative impacts as well. For example, in the Pisco earthquake (2007), the documented impacts on children included loss of education, psychosocial stress, increased incidence of abuse, and health problems as children were involved in helping to clean up debris. The EEPCT/DIPECHO programme has specifically targeted activities aimed at reducing psychosocial stress, and the implementation of the education curriculum has resulted in schools addressing issues such as abuse and environmental threats such as trash in the two target regions.

Table 1 documents the full range of possible outcomes identified in the two target districts. The curriculum is very flexible, encompassing a wide range of risks and incorporating risk management within the wider theme of environment. Hence it is possible to envisage a wide range of outcomes depending on how schools choose to interpret and apply the curriculum. Only those potential outcomes observed during the fieldwork are documented here. Importantly, this work at the school

level is being scaled up from two to six districts in the next DIPECHO programme, and as a result, a wider range of outcomes may be evident.

Table 1: Potential outcomes for children of risk management curriculum

Category of impact	Outcomes
Physical	<ul style="list-style-type: none"> • In the event of an emergency, children are well prepared for evacuation, panic should be minimized as a result of repeated drills, and hence loss of life and injuries will be minimized to the extent possible. • This also extends to other everyday risks such as fire and traffic. For example, children from the beneficiary school were noted for the fact that they will no longer cross the main road in their town, and now instruct others to cross using the bridge.
Educational	<ul style="list-style-type: none"> • Children have a much more comprehensive understanding of risk – and this includes earthquakes and tsunamis, as well as nutrition, traffic and safety.
Economic	<ul style="list-style-type: none"> • N/A
Psychosocial	<ul style="list-style-type: none"> • Children have a much greater sense of confidence and safety, and panic should be minimized in an event (to the extent possible). • The INDECI guidance on psychosocial support should also help teachers to manage a whole range of disaster-related and everyday issues facing the children. • Abuse has been specifically targeted as a theme in the school in Ventanillas, through a centre dedicated to identifying and addressing issues associated with abuse.

2.3 Contribution to the HFA

The main focus of the EEPCT/DIPECHO programme in Peru is targeted towards strengthening and building the capacity around the national-level framework for DRR and education. Many of the activities have been targeted at this level, and have primarily focused on trainings, development of tools and other support to build the institutional framework necessary for furthering DRR and education. While the immediate impacts for children are not necessarily evident, it is clear that this structure will provide the national-level ‘infrastructure’ needed to roll out and support an effective curriculum across the country.

The HFA describes five priorities for action that are necessary to achieve disaster resilience, and these have been consolidated into four priorities for UNICEF. The contribution of the EEPCT/DIPECHO programme in Peru to each of these areas is documented within these priorities.

Priority 1: DRR for children and women is a national and local priority

DRR was already a high priority due to the very high risk profile in Peru and the recent events (earthquake and El Niño) that have had significant economic impacts on the country. While there is still progress to be made, it is clear that the high level of risk has facilitated a national platform for DRR and awareness.

At a national level, the EEPCT/DIPECHO work seems to be supporting the Government in this momentum by strengthening capacities and providing for the development of tools necessary to support the institutional structure. Hence, ensuring that DRR is a national and local priority within the educational framework has been a primary area of focus.

It is also evident that the programme has resulted in DRR becoming more of a local priority. For example, in Ventanillas, the DIPECHO funds have been used to support an education model that was created by a partnership of local schools, named 'Escuelas Felices e Integrales' (EFI) – Happy and Comprehensive Schools. This model is based on a 'Rights of the Child' approach, and was borne out of the same network of schools that is integrating the national level DRR curriculum into its school. The EFI has been integrated as an educational model into the local development plan by the municipality, and the aim is to target 100 per cent of schools throughout the next seven years with this model. It was also cited that MINEDU now has stronger linkages with district-level education departments (UGELs) as a result of promoting the new curriculum.

Priority 2: Different risks faced by girls, boys and women are identified and addressed

Identification of risk was clearly used as part of the process of project development, closely aligned with a process of consultation. Importantly, while high-risk areas were targeted, it was also very important to identify areas where teachers and other stakeholders were engaged in this issue. It was not clear that risks specific to children were identified, but clearly, given the nature of the hazard risk (tsunami and earthquakes, primarily), children in schools are logically a high-risk category, especially given that the areas visited were consistently described as some of the poorest 'suburbs' of Lima.

Within Ventanillas, schools are chosen by school network (the government system groups schools into networks – in the case of Ventanillas, there are 17 schools in the network where the EEPCT/DIPECHO funding was targeted). The intention is to use a model whereby capacities are strengthened and coordinated through the network coordinator, as this is found to be more efficient. It also facilitates scaling up of activities, as schools that are more advanced provide cross training with other schools in the same network.

It is also important to note that the understanding of risk is holistic. The government curriculum uses three components to its module on environment – health, eco-efficiency and risk management. Further, it was clear that the curriculum and related tools and trainings supported by EEPCT/DIPECHO encourage a flexible approach to understanding risk. Specifically, schools are encouraged to understand risk as it pertains to their community, and this can include disaster risk as well as issues such as traffic and nutrition. The preschool in Ventanillas not only focused on these issues, but also had established a defence centre for identifying children at risk of child abuse, as a result of the curriculum and trainings.



The school in Callao – Heroínas Toledo – also provided strong examples of how students were encouraged to identify and address risk. The school is located very close to the sea and is at very high risk of tsunami. It takes 25 minutes to evacuate to the nearest safe zone. As a result of integrating the curriculum on risk management, the students identified a school with special-needs students across the street from them as a school that would also benefit from having contingency planning in place, and initiated a dialogue to share their learning. The

students also identified that the evacuation route was along a major road with a lot of traffic and electricity wires, and successfully proposed to the local government to have the route changed. They also identified that their evacuation took them past the ambulance entrance to the hospital, such that the entrance was blocked. While they have proposed a change to the local government, there has not yet been a response.

Priority 3: Safer and more resilient conditions for girls, boys and women

The EEPCT/DIPECHO programme has fostered safer and more resilient conditions for children (and their families and communities), primarily by supporting a curriculum that allows a flexible approach to understanding risk, and as a result has been able to help communities to build resilience.

For example, the EEPCT/DIPECHO programme was directly responsible for ensuring that a section on risk management was integrated into one of the leading teaching guides on environmental education produced by MINEDU. And it was clear in the school visits that the interpretation of risk is very much encouraged to be applicable to the local context. Hence issues such as traffic safety and nutrition were seen as part of risk management. According to MINEDU, the curriculum is built around the conceptual framework 'sentir-pensar-actuar' (sense – think – act) with the aim of helping children to identify risks and make decisions themselves, hence creating a culture of resilience.

COOPI – the Italian International Cooperation – which is also a partner of DIPECHO (and hence COOPI received some funding through the EEPCT) – described communities where the people are now approaching the municipality to successfully demand that better houses are built, and

for budgets specifically targeted for prevention, because of their greater understanding and awareness of risk and resilience.

Priority 4: Strengthened humanitarian preparedness, response and early recovery

The educational system in Peru already includes important components on preparedness and response, and it was consistently cited that the national-level INEE trainings were a key factor in raising awareness and buy-in to the need for preparedness. For example, evacuation drills are mandatory on a regular basis throughout the country (although this is not always observed in practice). At a local level, the schools that have been supported by the EEPCT/DIPECHO programme are very dedicated to implementing drills on a regular basis. They have also done workshops with parents, for example in Ventanillas, to help parents identify which parts of the house are more vulnerable and how to pack a backpack for evacuation, and also distributing to families a list of things that should be done.



2.4 Cross-cutting factors

The 2010 EEPCT review interpreted results using a cross-cutting analytical framework of four focus areas – leverage, innovation, scale and evidence. The activities in Peru have had a particularly strong contribution to the areas of innovation and scale, as follows:

Innovation: The EFI school model described above is a strong example of an innovation in traditional schooling, which was generated at a local level, and is now being scaled up throughout the municipality, by the municipality, with a

target of 100 per cent adoption of the model throughout the next seven years. While it is not clear whether this model would have come about regardless, it is clear that the participation and sharing of ideas that have been brought about through the EEPCT/DIPECHO-supported trainings have helped to facilitate this process.

Scale: Educating children is resulting in education of the wider community, and the EEPCT/DIPECHO-supported work contains elements that specifically focus on scaling up activities, such as including awareness raising for parents. The programme is also fostering organic growth – working through school networks, schools that are more advanced in the new curriculum are initiating workshops with schools that are less advanced to share lessons, raise awareness on the benefits of the curriculum, and effectively train the next generation of schools using this model. The programme will also be taken from two to six regions in the next DIPECHO.

2.5 Lessons learned

The field investigations helped to identify a wide range of lessons learned, with a particular focus on integrating DRR into education. Many of the lessons that came out of the Peru study identified key entry points for integrating DRR into education, as well as some of the ingredients that are necessary for building a culture of resilience.

Key entry points for introducing education on disasters included training on INEE standards and the concept of human and child rights. INEE standards and the rights of children were used as the starting points for introducing education on emergencies and DRR in Peru. The training on INEE standards was often referred to at a national level as a key trigger, and at a local level, NGOs explained that teachers were often very receptive to education on DRR when they were introduced first to the concepts of human rights and the rights of a child.

Climate change can be an effective entry point for introducing concepts on disaster risk with local communities and school personnel. CARE, one of UNICEF's partners in-country, specifically raised this point in relation to the community-based work that it has been undertaking. The organization found that using disasters as an entry point in communities that had not recently been affected by disasters was not as effective – community members did not relate to the theme. However, in many of these communities the impacts of climate change are already being felt, and hence discussions around change in the natural environment facilitated a wider discussion about disaster risk, and resulted in communities being more receptive to the topic of DRR.

Education on DRR is most effective when it is promoted through a wide range of formats and media. Numerous stakeholders cited the need to think of education as a process that takes place in a variety of locations and formats. Children don't just learn in the classroom; they like variety and are impacted by a range of media. Examples of effective education media included banners that have disaster risk messages at sports matches, games such as 'Risklandia', and contests based around the theme of DRR.

Current elements of the formal curriculum should mainstream DRR, rather than add it as an additional module. Everything gets pushed through schools because they are an effective means of disseminating information. As a result, schools are overloaded with new initiatives, and there is a resistance to deviate from the formal curriculum. In order to facilitate the actual uptake of curriculum on disaster management, modules need to be integrated into curriculum, using obvious entry points such as geography, natural sciences, languages or art, for example. In Peru, there are numerous tools and modules related to disaster risk management, and while these are very helpful and well thought out, teachers can be overwhelmed by the amount of additional information. They can sometimes be presented in a technical language, creating a barrier to implementation. By contrast, the EEPCT/DIPECHO programme was instrumental in ensuring that a chapter on natural hazards was integrated into one of the key MINEDU guides on environmental curriculum, and this was cited as the best path forward, as DRR was integrated into an already well-used and understood text on environment.

DRR curriculum is most effective when targeted at a preschool or primary age group.

Several stakeholders in Peru noted that the DRR curriculum was most effectively integrated at younger ages, where classes are typically overseen by one homeroom teacher who covers most subjects, and therefore can more easily integrate this theme within the existing curriculum. At the secondary level, each subject is taught by a separate teacher, and therefore integration requires the buy-in of more people. The pressures on teachers at a secondary level were also cited as a barrier; secondary teachers will often be paid by the hour and pick up additional jobs outside of school, and so their capacity to take on board another theme is limited. Finally, several stakeholders also mentioned that integration of these issues at an early age fosters learning that stays with children throughout their lives, and hence was felt to have a greater long-term impact.

Educating children results in education of the wider community. In addition to integrating DRR into their curriculum, the school in Ventanillas was holding seminars for parents related to risk, and distributing leaflets on what to prepare in a backpack for a quick evacuation during an earthquake. They described that parents would now wait in an orderly fashion for their children after evacuation drills. There were several examples from the school to reinforce this point. For example, one child went home and began marking safe zones in her family's apartment (in relation to seismic risk). The family lived on an upper floor, and as a result of the daughter's activities, the parents approached the school to ask for more information about the best way to exit the building from an upper floor in case of an emergency. There were also examples of the children telling other members of the community that they were not allowed to cross the main road (the Pan-American Highway), but rather had to use the crossing bridges.

A strong advocator for integrating DRR into education was consistently cited as a key catalyst for change. The degree to which schools were integrating the DRR curriculum varied substantially. The pilot schools were clearly well advanced, whereas numerous regions have no interest in the curriculum. A variety of factors were cited, including level of awareness of risk, and the capacity of teachers to take on a 'new' subject. A key ingredient for success that was consistently cited was the presence of a strong advocator. In some cases, this was a principal of a school who prioritized the subject for the school. In other cases, it was a teacher who advocated strongly with the principal (as was the case in Heroínas Toledo). The municipality in Ventanillas highlighted that the director of the school network was very straightforward and proactive on the subject, and hence had pushed along the implementation. These advocators were enlightened by trainings, considered it a high priority because of their location in a high-risk location, or simply had a strong passion for the subject.

3 CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

The DIPECHO VI programme in Peru, co-funded by EEPCT funds, has perhaps most significantly helped to support and foster the enabling environment for the DRR curriculum at a national level, while also supporting its specific implementation in two regions. One of the questions explored during the fieldwork was whether this was the 'right' way to use the funding. For example, would funds be better spent on retrofitting schools? Should they be more targeted to the local level? There was a clear consensus that the United Nations has a key role in providing capacity building and technical assistance, complementing the roles and responsibilities of the Government, NGOs and other stakeholders. From this perspective, it was felt that the EEPCT/DIPECHO funds were well placed and were helping to facilitate more concrete work at a local level.

Due to the nature of the activities undertaken – many of which were soft resilience measures aimed at strengthening the enabling environment for education on risk – it was not possible to specifically document outcomes for children, although it was clearly evident that the activities have fostered an environment that is safer and more resilient, as children in target schools were clearly more aware of the risks, and importantly, what they could do about them.

A key conclusion coming out of the research is that effective integration of DRR into education requires multiple entry points – training on INEE standards, child rights and climate change were all cited as effective ways to raise awareness on DRR and education, and its implementation requires integration with existing curriculum, as well as creativity regarding the use of multiple forms of media (games, contests, etc.) to spread knowledge.

It was also clear that, while there are multiple catalysts and factors for successfully integrating DRR into education, building a culture of prevention is a process. Such a culture requires a shift in thinking that takes time, and to some degree needs to grow organically.

3.2 Recommendations

A number of concrete recommendations came out of the research for Peru, including:

1. There is a lack of coordination at a national level between INDECI and MINEDU. UNICEF may be able to facilitate greater coordination between these two organizations, such as by supporting the process to rationalize the variety of tools coming out of these two ministries, and perhaps through facilitating a dialogue as the new laws and mandates are interpreted and applied.
2. It was clear that the myriad of existing tools and guides for education on disaster risk overlap, and there was concern that this may be overwhelming for teachers. The integration of a disaster chapter into the MINEDU guidance on environmental education was highlighted as a more effective approach, where the EEPCT/DIPECHO programme

played a key role. UNICEF could support greater rationalization and integration of tools into existing guidance.

3. Outcomes for children could not be measured in pilot schools because no disasters had occurred, and hence it was not possible to demonstrate in concrete terms the programme's impact. Given that the pilot regions are being scaled up from two to six in the next DIPECHO, a strong monitoring and evaluation framework, supported by a strong data collection system, will be important in order to measure and document the reduction in disaster impact and increase in resilience.

ANNEX

Mission Agenda – Peru

3-7 October 2011

Date/ Place	Activity
3 October	Introductory meeting with UNICEF staff
Lima	Meetings with INDECI and Care
4 October	Meetings with Ministry of Education
Lima	Meeting with COOPI
5 October	School visit
Ventanilla	Meetings with Ventanilla education department
6 October	Meeting with Practical Action
Lima	Meeting with key actors advising government – specialist on formulation of national disaster plan, ex director of DIECA, etc.
7 October	School visit
Callao/Lima	Meeting with UNDP/UNESCO
	Debrief with team

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