

PROJECT FINAL REPORT

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4.1 Final publishable summary report

4.1.1 Executive summary

Natural disasters and civil conflict are the common causes of acute crises around the world. Earthquakes, floods, and civil violence cause death, injuries and loss of livelihoods and long-term effects such as migration, chronic instability, and famines. The project addresses key issues for a smooth transition from emergency phase to stabilization and development. The objectives of the project were: 1. To improve policies for transitional situations at global and regional levels and to identify the compatibilities and contradictions in relief to development policies; 2. To better understand the role of health and education, as drivers of pacification and social stabilization in post crises settings; 3. To adapt and apply existing European technologies to improve the efficiency of relief to development actions in post crisis settings by meeting gaps in rapid data transfer, pathogen detection and disease transmission control.

CAERUS progress is in line with the Description of Work (DoW) of the project for the first 15 months and achieved the objectives for this period. The kick-off meeting was attended by partner teams, members of the Ethical Advisory Board, Data Protection expert, the EC-REA project officer. Discussions on data exchange took place together with the Data Security expert and ethical challenges related to the future work in the field (D7.1). The teams produced two literature review papers currently in preparation for scientific publication (D2.1, D3.1). A Policy Learning paper (D1.1) on the role of education and health in post crises settings was discussed at the first external consultation workshop (D1.3) held in Brussels with EC and other participants which was also meant as a consultative event with stakeholders, ahead of the field visits.

The CAERUS Data Services Platform (CDSP) was developed using a system of checks and balances including code review, compliance testing (D5.1). The internal policy workshop (Nov. 2014) framed the health and education policy component of the overall research, inter-sectoral synergies, political and institutional issues and participatory analyses in field sites (D.1.2. part I). A review on Non-State-Armed-Groups (NSAG) in health service delivery is also available (D2.2) and it served as a background paper for a workshop with NSAG leaders in Geneva. The deliverables related to Project Ethical guidelines (D7.7, D7.12, D7.13, D7.14, D7.16) were circulated to the EAB and Data protection expert.

The preparation of the field studies started near the end of 2014. The final sites were the Philippines (typhoon), India (river erosion; civil unrest), Myanmar, Nepal, Mali, DR Congo, Madagascar (post-conflict), Liberia (post conflict, post-Ebola). Field arrangements were finalized for India, Myanmar and Philippines in preparation for the second year of the project. As one of the partners of CAERUS was in India, progress was fast and the team identified study indicators, sampling frame and GPS protocol for household selection (D3.5). Logistical arrangements were made such as office rental, lodging for field staff and transport needs. Team missions were undertaken to Philippines and Myanmar where meetings were held with EC-delegations, hospital and school directors as well as NSAG contacts. In addition, these preparatory field trips resulted in identification and negotiation with partners in the field, preparation of logistic conditions and study design.

The Technical Review meeting has held in Brussels in March 19 2015 when the REA-EU project officer where the Consortium presented its progress. This was followed by the Annual meeting held in March 20 2015.

4.1.2 Project context and objectives

CAERUS addresses key critical questions that determine a smooth transition from emergency type activities to structural long term development activities. For example, after the tsunami in Aceh (Indonesia, 2005), nearly two million dollars were spent setting up a surveillance system that did not correspond to the structure of the national system. Therefore, at the end of the relief phase, neither the data nor the investment in the system could be handed over to the Ministry of health. In the education sector, for example, the cohorts of children who have not received any schooling for several years due to conflict present a high potential for renewed instability. Transition policies to address these during or just after the relief phase are essential. As drought and floods are increasing significantly, disaster related migration is a common phenomenon especially in Asia, and often feeds

into social tensions in urban slums. There is also a need to undertake specific research on ways to integrate these population groups within the local social structure and establish realistic policies building on the research. Finally, institutional mechanisms that formalise relief to development cooperation between organisations such as OCHA and UNDP would be a critical component to ensure progress in this area.

All of the above requires, on one hand, an in depth understanding at field level of the social dynamics and, on the other hand, greater knowledge of how research can inform the nexus between humanitarian and development aid. A simple conceptual diagram summarising these ideas is presented below.

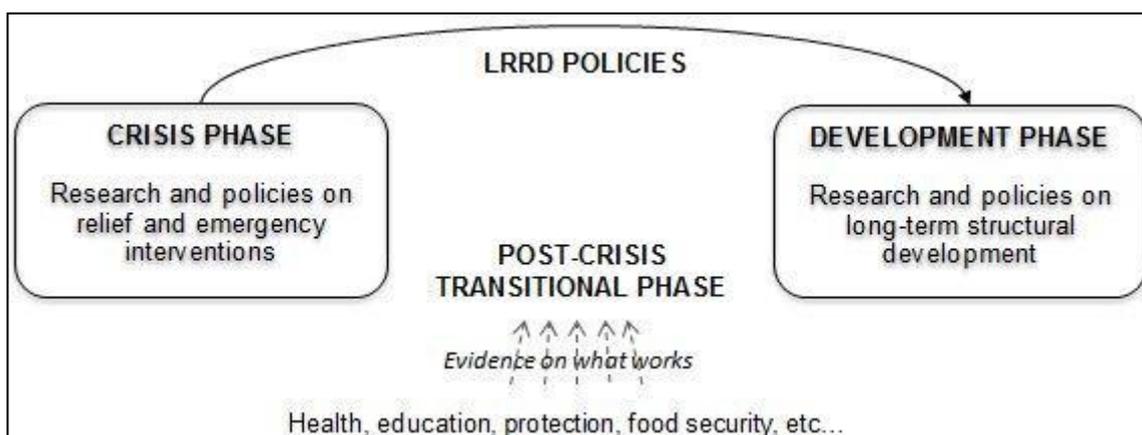


Figure 1. Bridging the gap

Finally, LRRD is a widely recognised and approved concept by most donor governments and affected countries. It is a central issue in the discussion of the Good Humanitarian Donorship forum and has been the subject of several white papers, both in the EC, US and major donor countries. What is lacking, however, is translational research for concrete policies that are ground-truthed and evidence-based.

The CAERUS project aims:

1. **To improve policies for transitional situations at global and regional levels**, as well as strengthen operational policies in the field; to identify the compatibilities and contradictions in relief to development policies in UN, EU (including European MS) and other key actors such as US, Japan and regional inter-governmental bodies and propose reforms. The effectiveness of aid policies in post emergency settings especially in post conflict is badly understood. Relief actions can contradict the subsequent development policies, leading to waste of resources involved in the re-orienting the process. We will analyse existing policies to highlight such contradictions and propose policy reform;
2. **To better understand the role of health and education**, with special emphasis on adolescents and young adults as drivers of pacification and social stabilisations in post crises settings and recommend future policy from lessons learnt. We are increasingly faced with large youth communities in fragile states who have been deprived of education and direction during the past war years. These groups are highly vulnerable in many ways. Their susceptibility to many adverse health outcomes (for example related to reproductive health) can be high. Their potential as destabilizing forces in societies without an adequate educational framework is significant. We plan to undertake case studies among conflict-affected youth population, identify risk factors and propose targeted policies;
3. **To adapt and apply existing European technologies to improve the efficiency of relief to development actions** in post crisis settings by meeting gaps in rapid data transfer, pathogen detection and disease transmission control. In this third and last objective, we plan to test the European technologies either

developed within the Consortium or already available in the Union. We will assess their performance and reliability for data gathering, transfer and sharing processes in different settings. We also plan to evaluate the feasibility of using European technology for detection of pathogens in zones without easy access to laboratory facilities.

Major **natural disasters** have toppled governments and provided openings for uprisings in nondemocratic and oppressive regimes. Earthquakes in Nicaragua and Iran, cyclone in Bangladesh and famine in Ethiopia triggered popular dissent that eventually led to a fall of the Government. These issues are priority items on the agendas of important institutions that influence or set policies. Meetings in the UK Royal Institute of International Affairs (Chatham House) discussed the effects of acute climate events and security. The Asian Development Bank's research arm (ADB) has initiated a study on the development impact of natural disasters in the short and long term. The Foresight Project of the UK Government Office for Science has released a study ("Improving future disaster anticipation and resilience") in November 2012 which examines data and evidence for better measuring the real impact on communities. Broader issues related to business continuity in an increasingly globalized world are also of rising concern. For example, the floods in Thailand in 2011 had major economic impact, paralysing production in the automotive and computer sectors in certain countries, including in Europe.

With regard to **civil conflict**, experience has shown that political accords are often unable to bring about lasting peace, collapsing within a matter of years or even months. According to a report by the researchers from the Uppsala Conflict Data Programme (Wallensteen et al, 2011) the number of civil conflicts has peaked in 2011, increasing by 20% over the previous year. In addition, only one peace accord was signed in 2011 that did not last. In general, in post crisis situations lawlessness continues to be a way of life in the absence of a return to systemic normalcy. Governments that are legitimately elected eventually lose authority and credibility, as they are unable to provide basic services to their people. In addition, inequities in the provision of basic services can motivate conflict among different groups. In contrast, equity in services can generate confidence in the government and therefore stability.

Many conflict-affected regions are characterized by their remoteness where health, food security, nutrition and basic education systems have broken down. In insecure settings, epidemics tend to be recognised well beyond their peak as surveillance systems do not function. For example, in Uige, Angola international response came in nearly 3 months after the start of the epidemic of the highly virulent Marburg hemorrhagic fever outbreak, only when nearly 300 children had died in the pediatric hospital. Identification of rare diseases still remains a major challenge in most conflict-affected regions where adequate laboratory services are unavailable.

These crises pose a moral imperative on the global community to provide help through humanitarian aid. They also require effective action to stabilize the affected population, both in their own interests and that of global security. In fact, local conflicts can potentially evolve into regional ones, and in poorly governed states, become a breeding ground for terrorist groups.

Linking humanitarian and development aid is recognized by policy makers in Europe and elsewhere and indisputably there has been progress on larger policy frameworks, but challenges remain at the operational level.

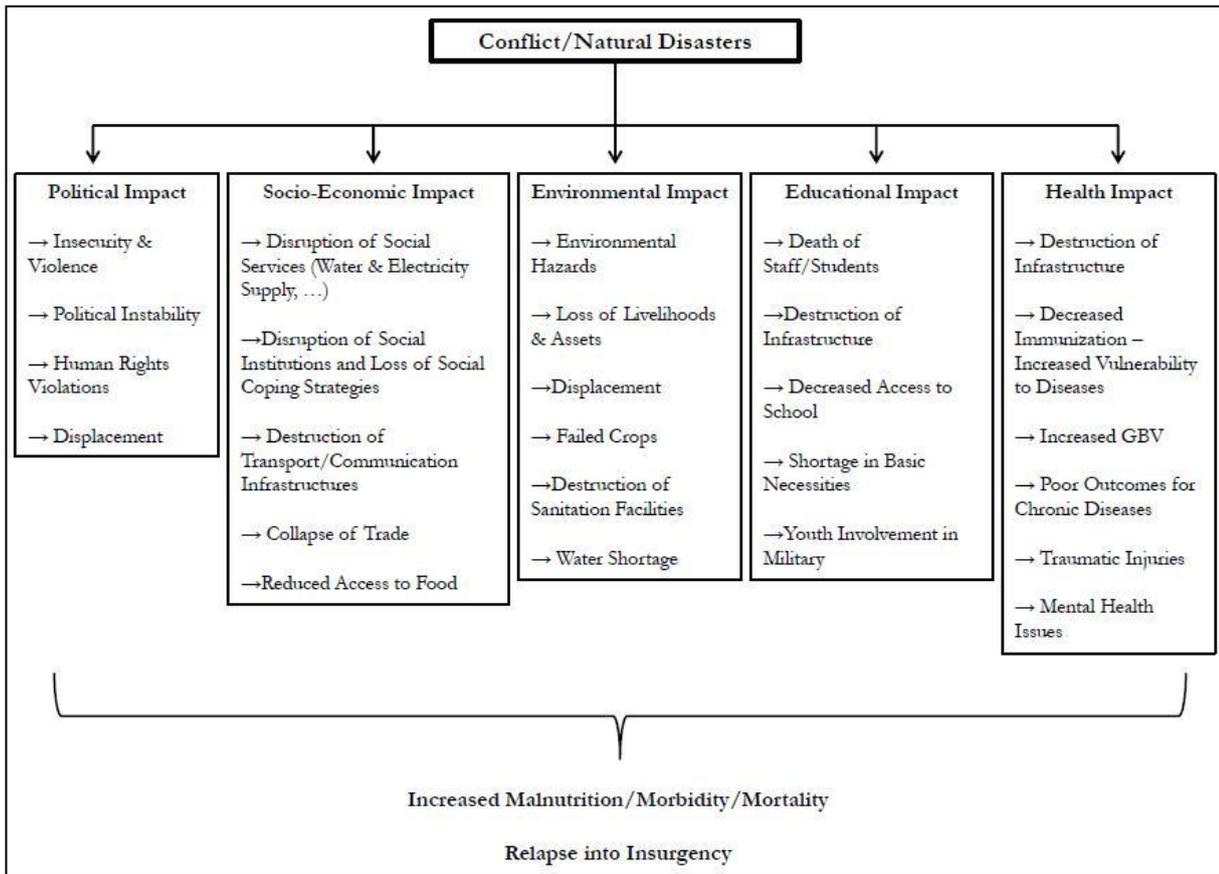


Figure 2. Impact of conflicts and natural disasters



Figure 3. CAERUS consortium - Kick-off meeting, Brussels April 14-16, 2014

4.1.3 Main scientific and technical results/foregrounds

Introduction

CAERUS progress has been in line with the Description of Work (DOW) of the project for the first year. Our activities achieved the expected objectives for this period and the deliverables were submitted in time according to the DOW. The project started with the kick-off meeting in April 14-16 2014 with the seven partner teams attending (23 people), two members of the Ethical Advisory Board (EAB) (including the Data Protection expert), two members of the Project Relevance Monitoring board and the EC-REA project officer and stagiare. Additional side meetings were conducted in order to establish the concrete steps to be undertaken in the following six months. In addition, detailed discussion on data exchange and storage took place together with the Data Security expert and a special session on foreseen ethical challenges was also held in particular to the future work in the field (D7.1).

We started to work on the literature reviews on health and education in post-crises settings by work package members which involved the search and analysis of relevant literature, selection and drafting of summaries with repeated feedback cycles to ensure inputs from all work package partners. These activities produced two review papers currently in preparation for scientific publication (D2.1, D3.1) and informed a review in the Lancet on conflict, disaster and health security. Concurrently the partner specialized in policy (ECDPM) together with the partners in WP1 interviewed EC officers, other relevant international partners as well as analyzed the recent policy documents for post-conflict settings in Europe and elsewhere. The Policy Learning paper (D1.1) was presented at the first external policy event held in Brussels. The both meant as a consultative event with stakeholders, ahead of the field visits.

Guidelines and tools to be applied were also developed in the first year of the project. For instance the workflow presented and described in D3.5 provides a generic method to assess threats and relates to Participatory Rural Appraisal (PRA) approaches which are widely applied in the context of action research in developing countries.

The CAERUS Data Services Platform (CDSP) was developed using a system of checks and balances including code review, test driven development and various levels of compliance testing and review (D5.1). The technical meetings ensured that the product was on track regarding the expectations and needs of the Consortium, as well as being designed and built in such a manner as to ensure both longevity and scalability. The product developed in the first year of the project was a solid design using cutting edge technology as well as a fully functional prototype of the CDSP and developed with strong inputs from UCL IT specialist.

The EAB and a Data Protection Expert were appointed and monitored the discussion of the policies, guidelines (D7.10). The deliverables related to Ethical guidelines (D7.7, D7.12, D7.13, D7.14, D7.16) were circulated to the EAB and Data protection expert. Their comments and inputs were incorporated before submission.

An internal policy workshop was then held in Maastricht (November 25-27 2014) with five partners attending, which was primarily to frame the policy component of the overall research, and discuss with CAERUS partners, especially the health and education teams (RIIA, UCL and FAFO), how to work together and build synergies between their sector-specific studies with the ECDPM study on macro level political and institutional issues. Additionally, the workshop aimed to discuss the work of PLUS and how this component of CAERUS could be linked to the work of other Consortium partners (D.1.2.).

A detailed analysis of the existing literature on Non-State-Armed-Groups (NSAG) with comments from other CAERUS partners was undertaken and published on the website (D2.2) and has resulted in a review paper that has been submitted for scientific publication. In addition, a workshop with CAERUS partners, invited NSAG and other relevant partners (e.g. ICRC) was held with success in Geneva in March 2015 and the report is available [online](#). This roundtable drew on the literature review on NSAG and healthcare and was complemented by ICRC exposing the pre-publication paper on the same subject. Subsequently, at the request of the Norwegian Red

Cross the literature review was presented at the formal launch of ICRC and Norwegian Red Cross studies on NSAGs. The work continues to be used and, for example, is being used to inform a part of the meeting at the Munich Security Conference in February 2016.

The preparation of the field studies started after the literature reviews had been conducted. During October, November and December 2014 the teams for WP2, 3 and 4 analyzed the security situation in the study sites presented at the kick-off meeting. The final sites which were sent for approval to EC-REA were the Philippines (Leyte region – post-Haiyan typhoon), India (West Bengal – river bank erosion; Tripura – post-civil unrest), Myanmar (Kayin state – post-conflict), Nepal (post-conflict), Mali (post-conflict), Liberia (post conflict and post-Ebola emergency), Democratic Republic of Congo (Katanga region – post conflict) and Madagascar (post-civil unrest).

The teams analyzed these sites, taking contact with local partners, discussing with EC delegations and preparing the field work, including the national administrative and legal requirements. These tasks were accomplished while researchers were in Europe and in preparation for the field work. Once the preliminary arrangements were cleared, joint exploratory missions were undertaken to India, Myanmar and Philippines in order to finalize the arrangements for the second year of the project (which didn't take place). Missions to the selected African project sites were planned but didn't take place due to suspension of the project. Exploratory missions to Thailand and Nepal were also undertaken but funded from outside the CAERUS Project. In India, joint work in areas affected by river bank erosion and related migration patterns, made significant progress (D3.5) where field work was undertaken to get a better understanding of local migration patterns and to design adequate sampling strategies for a survey foreseen. The study was discussed with the local authorities, established the recruitment procedures for the field work, worked on the sampling frame and the GPS preparatory study protocol for household selection (D3.5). The team also identified the study indicators and prepared the questionnaire. Local logistical arrangements were made such as office rental, lodging for field staff and transport needs.

In the Philippines and Myanmar, FAFO, UCL and RIIA worked together, sharing tasks for the logistics missions. The teams met with the local authorities, including EC-delegation, INGOS such as Save the Children, MSF, local public health and education authorities, local hospital and school directors. In addition, the project interest in NSAG also led to meetings with appropriate contacts. In addition, the preparatory field trips in Myanmar and the Philippines resulted in identification and negotiation with partners in the field, preparation of logistic conditions and study design. Work with Nepal led to the identification of an academic partner who continues to work with RIIA and is included in a Wellcome Trust seed grant award arising out of the CAERUS work on NSAG.

In March 2015, the Technical Review meeting has held in Brussels where the Consortium members presented their work. The Technical Review was followed by the Annual meeting held on 20 March 2015.

Workshop, training, dissemination

Meeting	Venue	Date	Partner represented
Kick-off meeting	BIP, Brussels, Belgium.	14-16 April 2014	All
WP 5 technical meeting	NILU, Oslo, Norway	26 June 2014	NILU, PLUS, UCL
FAFO-UCL technical meeting	FAFO, Oslo, Norway	25 June 2014	FAFO, UCL
RIIA – UCL meeting	RIIA, London, UK	October 2014	RIIA - UCL

First Internal Policy workshop	ECDPM, Maastricht, The Netherlands	25-27 November 2014	ECDPM, RIIA, UCL, FAFO, PLUS and virtual contribution from the other partners
Join WP4 meeting	Calcutta, India	December 2014	JU, UCL, PLUS
Technical Review	REA, Brussels, Belgium	19 March 2015	All
First annual meeting	UCL, Brussels, Belgium	20 March 2015	All
WP 5 technical meeting	PLUS, Salzburg, Austria	24 March 2015	NILU, PLUS
Dissemination	Venue	Date	Partner represented
First external consultation event	Brussels, Belgium	18 March 2015	All
Roundtable event on the role of Non-State Armed Groups in healthcare provision	Geneva, Switzerland	25-26 March 2015	RIIA, ECDPM
“Impact of Environmental Changes on Infectious Diseases (IECID)” - Conference	Sitges, Spain	23-26 March 2015	PLUS
Resilience, security and critical infrastructure – how to measure impact and progress – Workshop	Bonn, Germany	20-22 May 2014	PLUS

Table 1. Meetings - Workshops – Conferences

WP1 – DECIDE: Relief and development policies towards stability

Work package objectives:

1. To identify EU policies, instruments and institutional factors that might foster, or that might impede effective actions in linking relief, rehabilitation and development (LRRD) in the areas of health and education.
2. To identify LRRD policy coherence issues, with a focus on health and education, between EU policies and the policies of major EU Member States active on LRRD, as well as the UN, regional intergovernmental organisations and key non-EU bilateral actors.
3. To contribute to the European policy discussion on how to improve policies on LRRD in relation to health and education by formulating recommendations and options for improved action and channeling this information into relevant policy dialogue events and networks, and to policy makers.

Summary of progress towards objectives and details for each task

WP1 had a number of deliverables and milestones, which needed to be realized during the first year. ECDPM, as policy expert in the Consortium, had a principal role in realizing these results. Other Consortium partners contributed to WP1 through their participation in the internal policy workshop (D1.2), the first external consultation (D1.3) and through their commenting on the draft policy framework paper (MS1) and the policy learning paper (D1.1).

Task 1.1 (Develop the policy framework): Work on the policy framework started as of April 2014, including conceptual work and desk research for the study culminating in D1.1 (“Policy learning paper on LRRD policies and instruments”). The report contains a “Methodology Paper on Bridging Research and Policy” (Annex 3 of D1.1) which was drafted during the first six months as a guidance for CAERUS partners to take into account relevant policy questions during their field work.

Task 1.2 (Organise two internal policy workshop – Task 1.2.1): The first internal policy workshop was organized by ECDPM and took place from 25 to 27 November 2014 in Maastricht (the Netherlands), at the ECDPM premises. Colleagues from UCL, PLUS, RIIA, FAFO and ECDPM were present. The focus of this first workshop was on the framing of the policy component of the overall research. A workshop report was produced and submitted to REA.

Task 1.3 (Organise one external consultation): The first external consultation event was organised on 18 March 2015 after completing the first year of research and ahead of starting the fieldwork phase. It brought together stakeholders from policy, research and practice to review the results of the policy related research and to identify issues that needed to be taken into account during the field visits’ research. Ethical Advisors and the Data Protection Expert were invited but could not participate. A workshop report summarizing the results of the event was produced and submitted in line with the DOW.

Significant results

The work under this workpackage produced the following deliverables and milestones:

D1.1: Policy learning paper on LRRD policies and instruments – The focus of WP1 is on the extent to which policies aimed at human development and stability in fragile, post-disaster and post-conflict situations take into account health and education as catalysers for transition, and whether policies on health and education and the use of data are geared towards the transition from fragility to development. The document helps to shape a base and wider understanding of the policy context against which the various CAERUS research work packages are undertaken. Based on an extensive desk study, it maps different policy frameworks to address LRRD (Linking Relief, Rehabilitation and Development) related problems and, based on an analysis of these frameworks and the extent to which they have been translated into practice (including donor funding flows), it brings out messages which need to be taken into account in the context of further policy discussions on LRRD frameworks, research and their implementation. It also led to the collaborative authorship of a Lancet article on *Conflict, disaster, and health security*.

D1.2: Report of the first internal policy workshop – The first internal policy workshop was organized by ECDPM and took place from 25 to 27 November 2014 in Maastricht (the Netherlands), at the ECDPM premises. UCL, PLUS, RIIA, FAFO and ECDPM were represented. The main objective of the internal workshop was to frame the policy component of the overall research, and discuss with CAERUS partners, especially the health and education teams (RIIA, UCL and FAFO), how to work together and build synergies between their sector-specific studies with the ECDPM study on macro level political and institutional issues. The workshop discussed also the work of PLUS and how this component of CAERUS can be linked to the work of other Consortium partners. In addition, the workshop provided an opportunity to inform and exchange on the work of the partners, including the fieldwork planned for year 2 of the project and the work of PLUS on a risk tool, ahead of the first CAERUS external policy event planned for month 12 of the CAERUS project. – This deliverable was only due in Month 28

of the CAERUS project though we published Part 1 already in January 2015 as the document was meant to provide guidance for the further work of the CAERUS project.

D1.3: First external consultation report - This report summarized the results from the first external consultation event which was organised by the CAERUS Consortium on 18 March 2015 after completing the first year of research and ahead of starting the fieldwork phase. The workshop brought together a range of stakeholders from policy, research and practice, including representatives from the European Commission, the European External Action Service (EEAS), UN agencies, civil society and the academic world concerned with transitions from crisis and conflict to stability to discuss the work of CAERUS and its wider relevance for bridging policy and practice. The event had both an informative and a consultative objective. First, it aimed to introduce the project, present preliminary results of desk research and outline future plans for fieldwork to stakeholders. Second, it aimed to consult policy officers and experts from a wide range of fields and organisations for feedback on the first results and further research plans, including the fieldwork. This event was the first of two consultation events to be organised during the course of this three-year project. It was linked in time and content-wise to a roundtable event on the role of Non-State Armed Groups (NSAGs) in healthcare provision, organised by RIIA on 25 and 26 March 2015 in Geneva, as part of CAERUS.

MS1: Draft policy framework paper circulated to Consortium members – As stated in the DOW, one of the main objectives of CAERUS is to document lessons learned and provide recommendations to policy makers on ways to build coherence between the delivery of short-term relief (humanitarian and post-crisis recovery assistance) and longer-term stability objectives. With this CAERUS purpose in mind, ECDPM produced a draft policy framework paper, which proposes two main over-arching policy questions to be addressed during the course of CAERUS research studies. – The first draft of this document was sent to Consortium partners for comments in June 2014 and sent to Consortium members as a second draft ahead of the internal policy workshop. It was published as Annex 3 in D1.1 “Policy learning paper on LRRD policies and instruments”, entitled: *Methodology-paper on Bridging Research and Policy*.

MS2: Preparation of first internal policy workshop finalized – These preparations took place between September and November 2014. An agenda, a background note, the 1st draft of the Policy working learning paper on LRRD (D1.1) and 2nd draft of the draft policy framework paper (MS1) were sent to Consortium partners.

MS3: Preparation of external consultation finalized: background note circulated – Preparations took place between September 2014 and March 2015. Finding and inviting the right mix of participants and speakers was very laborious. An agenda and a background note was formulated ahead of the event and sent to participations. D1.1 plus deliverables from other Consortium partners were printed and displayed for information during the event.

WP2 – SURVIVE: health, nutrition and rare diseases

Work package objectives:

1. To compile the evidence base from existing research on health in the context of relief and development;
2. To understand how health contributes to stabilization, recovery and reconstruction from conflict and disasters, with a focus on the crucial role health plays in linking relief to longer-term development;
3. To finalise study design and instruments for health related field studies in WP4;
4. To establish guidelines for effective deployment of Lifi-Lab.

Summary of progress towards objectives and details for each task

The work produced throughout the project so far has met the objectives of the SURVIVE work package for this period. The two literature reviews are robust stand-alone pieces of work and, together with the field study protocols, have built a strong foundation for the field research planned in WP4. The partners have simultaneously engaged several key stakeholders that shape international policy around health and healthcare in conflict.

The health review presented the rationale and literature review of the three analyzed areas, namely health equity, decision making in health service provision and causes of mortality and morbidity. Based on that, it defined specific methodologies to address these aspects in order to assess how the health sector plays a role in the transition process in post-crisis settings. The health review also presented the country studies where the field research was planned.

Moreover, the roundtable on non-state armed groups, health, and healthcare yielded many significant points of action, and generated considerable interest among the participants, who represented different key organizations in this area (e.g., UNHCR, WHO, ICRC, individual NSAGs or their representatives). The project has also brought attention to the lack of a strong research base on non-state armed groups and health/healthcare and given exposure to the project's works and its broader research objectives. It has also provided the foundation for development of a broader project, for which a seed grant has been obtained from the Wellcome Trust and is informing input into the Munich Security Conference, which will be attended by heads of state, foreign and defence ministers and diplomats.

Significant results

The completed project work has produced many noteworthy results.

D2.1: Conceptual framework and systematic review on key public health and nutrition aspects in post crisis settings – The health review summarized major public health issues in transition settings. We described the existing evidence, methodological challenges for field work, and how we projected our studies to contribute to fill in evidence gaps. Based on the assumption that responding to the needs of the affected population can foster stability, we focused our work on health equity, decision making in health service provision, and causes of mortality and morbidity. The facts presented under the health review defined the gap in knowledge and the objectives of the field work as the drivers of inequalities, causes of death and diseases, as well as the role of various actors in the provision of health services. We presented the methodologies and country studies served as a basis for the field mission part of the WP4.

D2.2: Dynamics of provision of health services by violent actors – In the field of healthcare and non-state armed groups, we have researched, written, and submitted a literature review on healthcare and non-state armed groups, and developed the protocol and obtained ethical clearance for the Nepal protocol. The literature review on the dynamics of provision of health services by non-state armed groups helped fill a gap in the literature on non-state actors and healthcare, provided a strong conceptual basis for refining the research protocols, and offered a conceptual and historical foundation for the field studies. Literature reviews on the individual case studies of Nepal and Myanmar provided context-specific research ahead of the planned field research in these countries.

RIIA also organized a roundtable in Geneva in March 2015 that focused on non-state armed groups, health and healthcare, supported by the International Committee of the Red Cross (ICRC) and Geneva Call, where the Consortium policy members attended. This roundtable drew on the literature review on Healthcare and NSAGs and was complemented by ICRC exposing the pre-publication paper on the same subject. This allowed us to bring together many senior leaders of international organizations and NGOs with NSAGs on the topic of non-state armed group-provided healthcare and the barriers to providing healthcare to populations in conflict-affected areas. The roundtable involved 5 academics, 3 consultations, 7 members of/associated with/work or worked with NSAGs, 4 members of international organizations, 5 members of NGOs, and 3 members of non-

health policy units. A meeting note of the roundtable can be found [online](#). The work has led to a successful bid for a seed fund to explore further the 'healthcare anatomy of conflict, which looks at different providers of healthcare in conflict-affected areas'.

WP3 – LEARN: Schooling, employment and life aspirations of youths

Work package objectives:

1. To compile the evidence base from existing research on education, youth and crises;
2. To understand how education contributes to stabilization, recovery and reconstruction from conflict and disasters, with a focus on the crucial role education plays in linking relief to longer-term development;
3. To develop study design and instruments for WP4
4. Analyse data and prepare scientific publications

Summary of progress towards objectives and details for each task

The purpose of this work package is to compile evidence base from existing research on education, youth and crises; understanding how education contributes to stabilization, recovery and reconstruction from conflict and disasters, with a focus on the crucial role education plays in linking relief to longer-term development; developing study design and instruments for WP 4: TOUCHSTONES; analyze data and prepare scientific publications.

In the first implementation year, progress has been made in laying the foundation for the research activities. These include participation in three consortium meetings, developing outputs referring to one concrete deliverable (D3.1), conducting project activities with clear milestones (MS9, MS10 and MS11), and visiting one of the study countries: Myanmar.

In addition, Task 3.7 of WP3 aims to carry out participatory mapping and ranking exercises focusing on health and education in relation to vulnerability, security and conflict within the local case study settings of CAERUS. The workflow presented and described in D3.5 provides a generic method to assess threats and relates to Participatory Rural Appraisal (PRA) approaches which are widely applied in the context of action research in developing countries. D3.5 is based on the 'toolbox' developed within the PhD research of the author in Mozambique in the context of floods and the assessment of social vulnerability at the very local level and was adapted to the context of CAERUS. The adapted toolbox aims to provide generic but accurate guidelines for the implementation of participatory methods on various fields concerned by at-risk and also specifically post-disaster situations. Within the CAERUS research framework, PLUS provided an adaptation and an expansion of this toolbox to a post-conflict situation, with notably a focus on health and educational issues in relation to vulnerability and security of affected communities. The guidelines and related methods are planned to be applied in task 3.7 to gather additional data and insights through participatory approaches, which will then be analyzed and provide the research outputs (to be delivered in D3.6 and implemented as per task D3.7). Deliverable 3.5 was also part of the research preparation process and preceded the actual research. The research planned for year 2 would then apply quantitative and qualitative methods in task 3.7 leading to D3.6.

Significant results

A number of key achievements have been made with clear reference to the DoW of the CAERUS project. The main results include:

1. A comprehensive bibliographic search completed used for conducting a literature review on the role of education in transition from relief to development. The search is established in a database form that serves as a background material for the literature review.

2. A policy brief has been developed on “The role of education in the transition from relief to development: A review of existing knowledge and suggested way forward”. This is deliverable D3.1 anticipated in the DoW.
3. A milestone (MS10) has been achieved in developing a draft conceptual framework and linkages of education, unemployment and life aspirations.
4. A milestone (MS11) has been reached by developing a draft design for quantitative field studies relevant for selected study countries: Myanmar and Mali. This includes selection of specific field sites relevant for the purpose of the study, determination of sample size and sampling design, development of a draft questionnaire for the purpose of the studies.
5. A field visit to Myanmar has been carried out by FAFO in February 2015 to conduct field implementing arrangements including exploring access to the selected field site (Karen state in Myanmar), determining general logistics and identifying training arrangement for field workers.
6. Submission of deliverable 3.5 “Guidelines for field work on participatory mapping and data” was conducted in month 8 of the first year of program implementation.

WP4 – TOUCHSTONES

Work package objectives:

1. Collect quantitative and qualitative data according to study designs developed in WP2 and WP3
2. Organise and ensure field logistics in four field sites
3. Recruitment and training of field staff for data collection
4. Data validation and entry

Summary of progress towards objectives and details for each task

In the first year, major progress was made on the case studies. This served as stated at the DOW, as a preparation for the main WP4 work load planned during the second year of CAERUS.

As a conclusion of the health review in WP2, the area of causes of morbidity after natural disasters would be investigated with a case study in the Philippines region affected by the typhoon Haiyan. Progress was done with a preparatory field mission to selected affected areas of the Typhoon in 27.01.2015-07.02.2015 by UCL, where main partners involved in the response were met and the specific study objectives and methods were defined. The hospitals most affected and still functioning after the typhoon were selected. Individual data on hospitalization registries was planned to be collected in order to estimate the pattern of diseases of hospital consultations before and after the occurrence of typhoon Haiyan. Secondary data from hospitals based on the International Classification of Diseases 10 (ICD-10) is to be used.

In preparation for the field work, a systematic review of literature was carried out separately on socioeconomic consequences (including education and health) due to river bank erosion (natural disaster) and ethnic conflict. Two reports were prepared and disseminated through two publications in peer reviewed journals and research network (ResearchGate and SSRN) with due acknowledgement to EU funding.

Two areas in India were identified for further study: (1) Malda district in West Bengal State for household survey of IDPs due to river bank erosion, and (2) Kanchanpur Sub-division in Tripura State (Northeast India). Meetings took place between JU, UCL and PLUS in Salzburg, Austria and Kolkata, India to discuss about the issues to be addressed in field studies. Draft questionnaire was prepared based on the discussion between members.

Blocks and villages in Malda district and one relief camp in Kanchanpur sub-division were selected based on secondary data and information from Panchayets and government offices. A survey was conducted with complete enumeration for listing of households and collection of basic information in Kanchanpur sub-division, Tripura. Using the list of households, samples will be selected using random sampling technique for household survey in the second year of CAERUS. Socioeconomic survey is planned to be conducted by JU and health survey will be conducted by UCL.

For the previous study locations, further progress resulted in a protocol for the research study “Estimation of Multidimensional Deprivation Index and Policy Formulation for Post Crisis Stability in Vulnerable Regions in Malda (of West Bengal) and (North Tripura) of Tripura”. The protocol was developed in meetings in Salzburg in Austria (16 – 17.10.2014; with JU and UCL via skype) and through the field visits in Kolkata and Malda, India (29.11 – 6.12.2014; with JU and UCL). After this first Indian field trip the study protocol was finalized and adapted to the specific circumstances of the study site. One requirement was to have a GPS preparatory study for the sampling procedure. It aimed to collect information that was not available but necessary for the household survey, such as delineation of villages, patterns of displacement, proportion and the location of the displaced and non-displaced households per village, proportion of children with a child under the age of 5, distance to infrastructure and social services. This study was implemented – after having received ethical clearance from JU – on March 1st 2015. This was accompanied with a one-week training of enumerators which was carried out from 23.02 – 27.02.2015 in Malda and led by PLUS with the support of JU. The enumeration was carried out with the support of the Indian company ‘C_GIS – Centre for Geoinformatics’.

Significant results

With regard to the Philippines case study, the preparatory mission resulted in a concise research question and the related methodology to collect quantitative and qualitative data. The field logistics, namely data availability, data collection, human resources required were agreed as a continuation of the field mission.

As far as the Malda and Tripura case studies (India) are concerned, the publication on river bank erosion revealed that displaced people are having difficulties to spend money for purposes other than essential items like food and shelter due to loss of occupation. This happened even if medical and education facilities exist in their new occupied places. Results are poor health and illiteracy of their children. But quantitative information on socio-economic consequences of river bank erosion (viz., loss of occupation, loss of property, impact on health and education, etc.) for all the cases is not available unlike at other natural disasters.

Also on the same case study, the publication on ethnical conflicts showed that conflicts often destroy and damage social infrastructure like schools and hospitals. Health services and educational institutions are often explicit targets of conflicting groups. Afflicted people lack sufficient food to maintain good health and are unable to afford essential medicines even when they can access health services. Some studies revealed that malnutrition is a serious problem in conflict-affected countries. It was observed that external or internal relief aids do not always improve the situation because of security concerns, remoteness of communities, conditions of physical infrastructure, etc.

The third highlight of this case study was the development of study protocol for the “Estimation of Multidimensional Deprivation Index and Policy Formulation for Post Crisis Stability in Vulnerable Regions in Malda (of WB) and (North Tripura) of Tripura” where the GPS preparatory study for the sampling procedure was finalized.

WP5 – INTEGRATE

Work package objectives:

1. Provide an architecture, design and implement the CAERUS Data Services Platform (CDSP) for the support and delivery of Linked Data services for variable geo-temporal resolution data, including crowd sourcing, citizens' observatory and volunteered geographic information (CO-VGI), heterogeneous data sources from existing providers, and data resulting from research in the four case study sites. The data from the case study sites will be in the form of questionnaires, which will be used to obtain information on a variety of different topics. These data will be then analysed via various applications, such as non-parametric statistics and risk analysis tool. WP 1 - 4 will produce reports, guidelines, documents, and generate data from questionnaires used in the field, which will partially form the basis of the CDSP. All this data will be enhanced through semantic enrichment in order to enable the easier discovery and linking of data. Metadata provides opportunity to filter results according to various parameters, such as sex, age, location, etc. This enables the fine tuning of the aggregated data. Further, WP5 will liaise with users and stakeholders to define analytical needs for decision making during the response towards the recovery and development stages, in order to provide the necessity tools/interfaces.
2. Provide a conceptual framework and indicator framework for the representation of underlying conditions, which covers the different stages (relief, response, recovery) in the domains of hazards and conflicts/security. It will furthermore develop methods for integrated analysis and representation following the defined conceptual framework for application at the different scale levels that will support decision-making in the different phases towards improved development activities.

Summary of progress towards objectives and details for each task

Task 5.1 CAERUS Data Services Platform – The main objective for Task 5.1 and its sub-tasks, was the development of the CAERUS DATA SERVICES PLATFORM, or CDSP.

NILU developed the CDSP using a very sound system of checks and balances including code review, test driven development and various levels of compliance testing and review. There were technical meetings which ensured that the product was on track regarding the expectations and needs of the Consortium, as well as being designed and built in such a manner as to ensure both longevity and scalability. Far from being a product with an almost guaranteed obsolescence built in, the CDSP was expected to become a legacy application. One that would be used by many people in the future, for many years to come.

The product developed in the first year of the project was both a solid design, using cutting edge technology, as well as a fully functional prototype of the CDSP. Although highly complex, it worked. By the time of the first Technical Review, NILU had created a system that united four different data sources, all with various data formats, into a unified system that enabled the user to select an area, or multiple areas, as well as data type, or types, and merge/contrast the data, for any period where data was available.

This sounds, on the face of it, both simple and logical. However, the underlying codebase required clever, indeed cutting edge, functionality to ensure that the boundary areas selected by the users (nothing was predefined, so the user could select any area, large or small, in any part of the world) returned data only for that specific, user defined area.

This is a remarkable feature, and is certainly something that would set this application apart from any other. It would enable researchers to obtain data for highly specific areas, which they define.

And best of all, the data would be exportable in csv format as well as in charts enabling instant overview, contrasting, comparisons, etc.

Key results:

- CDSP Architecture Design
- CDSP Database Design
- CDSP Interface Design
- CDSP Database Implementation
- CDSP Interface Implementation
- Integration of External Data Sources to CDSP
- Testing and Demonstration of the CDSP Toolset
- Development of the Consolidated risk, vulnerability and conflict related framework

Task 5.2 Integrative Analysis Services – PLUS and NILU worked closely on this task. Joint meetings were held in Oslo (26.6.2014) and Salzburg (24.3.2015). These meetings especially focused on the linkage between the establishment of the CAERUS data platform within tasks 5.1.x and the task 5.2.4: “Development of analytical tools for the visualization and exploration of the integrated spatial indicators”.

Major effort went into the *deliverable 5.4 “Consolidated risk, vulnerability and conflict related framework for CAERUS”* and its related task 5.2.1. The related milestone (MS18) was presented and submitted to relevant partners during the Maastricht internal policy meeting from 25.11-28.11.2014. The conceptual development of an integrated risk-vulnerability framework for post-crisis stabilization was developed in the D5.4. The CAERUS context results in the nexus between the thinking of disaster community with the school of thought on conflict and geopolitics. After a review of the literature, an original approach on the risk of a new (or recurrent) crisis was proposed. The goal of building this risk- vulnerability framework was to provide a tool to the decision makers which analyses the post-crisis situation of a community, a region or a country and identify the gaps to be filled in order to move the process towards the development phase. In this context, education and health appear as the cornerstones of a long-term structural development. Based on this framework, the operational research and policies would be improved and be matched with the different types of post-crisis situations (post-disaster, post conflict or disaster-conflict interface contexts). It has been planned to apply this framework, in the subsequent tasks, to achieve a spatial assessment of this risk and vulnerability framework in selected case studies of CAERUS.

Additional effort went into the task 5.2.4: «Development of analytical tools for the visualization and exploration of the integrated spatial indicators». The aim was to build on a risk and vulnerability atlas, which was initially developed in the FP7 research project HEALTHY FUTURES. This HEALTHY FUTURES Atlas provided already a set of tools also suitable to be applied in the context of CAERUS. This was jointly discussed with project partners at the meetings in Salzburg and Oslo and the project meetings in Brussels. Additionally, work was already carried out to further develop the HEALTHY FUTURES Atlas, through the transfer of core functionalities to newer versions of the Open Source Framework.

Significant communication, review and discussion was maintained with UCL during the entire development process. This ensured that the import of data from the UCL database systems was performed flawlessly, as well as ensuring that the design of the CDSP user tools met with the Consortium needs, as UCL acted in the capacity of an end user as well as data provider.

Significant results

Within year one, NILU had developed a fully functional prototype of the CDSP that married data from multiple sources, ensured that the data was compatible, and created a GUI toolset that enabled users to perform complex, multi geo-temporal searches, anywhere in the world.

This prototype formed the backbone of the CDSP, and required extensive design, programming and testing.

D5.1 Specifications for the CAERUS Data Platform Services - This document outlined our initial ideas on how to develop the CDSP, with specific focus on architecture, database, testing methodologies and other necessary technical aspects related to the development of a software system. It should be noted that the ideas presented here were executed during the development phase, resulting in a working prototype.

D5.2 Specifications for CO-VGI Platform - This deliverable outlined the ideas for the CO-VGI platform. However, these were only included because the DOW specified this particular feature. It should be noted, however, that at the last technical meeting held in Salzburg, the Consortium decided to remove the CO-VGI feature, as there was concerns over the security of those who might contribute. Even though it was decided to request an amendment to the DoW at the first review meeting, the project office decided that it was best to conform to the DoW in the short term, even if we intended to scrap this particular feature. Consequently, although this feature was documented, it was not given the same level of attention as other development features, since we knew it was not going to be developed. In the end, no amendment was requested, due to the suspension of the project, however, it should go on record that it was intended.

D5.4 Consolidated risk, vulnerability and conflict related framework for CAERUS - The conceptual development of an integrated risk-vulnerability framework for post-crisis stabilization was developed in the D5.4. "Consolidated risk, vulnerability and conflict related framework for CAERUS". The goal of building this risk-vulnerability framework was to provide a tool to the decision makers which analyses the post-crisis situation of a community, a region or a country and identify the gaps to be filled in order to move the process towards the development phase. The related milestone (MS18) was presented and submitted to relevant partners during the Maastricht internal policy meeting from 25.11-28.11.2014.

WP6 – SHARE

Work package objectives:

This work package aims to provide both a viable exploitation strategy and an effective dissemination and liaison methodology towards relevant target audiences. This requires considerable participation from all project partners as well as utilisation of various existing media outlets. The main objectives of this WP are:

- Ensure the effective dissemination of the project results to relevant target audience, including research communities as well as potential public and private end users of CAERUS solutions using various tools and channels. Inform, educate and assist in decision making by making data available in both a timely and appropriate fashion.
- Prepare a sound and realistic exploitation plan aiming at the exploitation of the CAERUS project outcomes in a global scale.
- Define viable business models for the exploitation of the project's main results, where appropriate.

Summary of progress towards objectives and details for each task

All partners were involved in this WP. Involvement was largely participatory, with plenum discussions regarding the direction of the design for the portal, logo, etc.

More specifically, ECDPM contributed to the co- co-development with NILU of the CAERUS exploitation strategy. This last item was developed during a series of telcos and email exchanges, resulting in knowledge transfer, with ECDPM providing strategic input on the long term planning of the project's dissemination approach.

UCL reviewed and discussed by regular telcos the web portal, reviewed the dissemination strategy and project logo, branding, etc.

PLUS has contributed through comments and feedback, as well as dissemination activities.

D6.2: Dissemination report – RIIA published in the premier medical journal, The Lancet. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)60858-3/fulltext#cesec150](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60858-3/fulltext#cesec150).

JU also produced scientific papers. These were published in line with the projects publication strategy:

- River Bank Erosion Induced Human Displacement and Its Consequences: <http://lrlr.landscapeonline.de/Articles/lrlr-2014-3/download/lrlr-2014-3Color.pdf>
- Conflicts and Socioeconomic Consequences in Northeast India: <http://ajouronline.com/index.php?journal=AJHSS&page=article&op=view&path%5B%5D=2265>

D6.4: Blog contributions – ECDPM produced two blogs published on ECDPM's TalkingPoint blog which has a wide readership among policy makers and practitioners. They communicated the issues we are working on and reflected on some emerging observations (resulting from research) on civil registration and vital statistics and on education in fragile situations. The blogs were announced through ECDPM's Weekly Compass Newsletter and via ECDPM's Twitter account.

- The first blog was published on 13 February 2015 : "Civil Registration and Vital Statistics in Conflict and Emergencies", <http://ecdpm.org/talking-points/education-crisis-stability/>
- The second blog was published on 13 March 2015 : "Is education a hidden short-cut from crisis from stability?" <http://ecdpm.org/talking-points/civil-registration-vital-statistics-conflict-emergency/>

D6.5: Project website – NILU's contribution was the development of a sophisticated web portal, the development of the project's branding, including logo, choice of domain name and portal colour palette, as well as ensuring that publications, reports, etc, were made available quickly, once approved from the project office.

The publications page contained the public deliverables, scientific publications, press releases and Blog articles that were produced by the Consortium in the first year. Of particular note are three scientific publications.

▶ Work Package 1		
Title	Description	
D1.1 Policy learning paper on LRRD policies and instruments Analysis	PDF Format 27th February, 2015	Download
D1.3 First Consultation Report	PDF Format April 19 th , 2015	Download
▶ Work Package 2		
Title	Description	
D2.1 Conceptual framework and review of key public health aspects	November 27 th , 2014	Download
D2.2 Dynamics of Provision of health services by non-state armed actors	February 27 th , 2015	Download
▶ Work Package 3		
Title	Description	
D3.1 The role of education in the transition from relief to development:	A review of existing knowledge and suggested way forward. 27 November, 2014	Download
▶ Work Package 4		
Title	Owner	
▶ Work Package 5		
Title	Description	
▶ Work Package 6		
Title	Description	
D 6.5 Project Website Report	30 th May, 2014	Download
▶ Work Package 7		
Title	Description	
D7.1 Kick off Meeting Report	PDF Format May 27 th , 2014	Download
D7.2 First Consortium Meeting Report	PDF Format 29 th April, 2015	Download

▶ Scientific Publications	
Conflict, disaster, and health security. An article in the LANCET from the CAERUS team.	
Simon Rushton, Louis Lillywhite, Bhimsen Devkota View Article	
River Bank Erosion Induced Human Displacement and Its Consequences	
Tuhin K. Das and Sushil K. Haldar and Ivy Das Gupta and Sayanti Sen View Abstract	
Conflicts and Socioeconomic Consequences in Northeast India	
Tuhin K. Das, Ivy Das Gupta, Sushil K. Haldar, Sudakhina Mitra View Abstract	

▶ CAERUS Blogs	
How can education contribute to the transition from crisis to stability? Click for Blog Article	
Civil Registration and Vital Statistics in Conflict and Emergencies. Will the Momentum be Used to Address the Right Challenges? Click for Blog Article	

▶ Press Releases	
Title	Description
NILU Press Release	Press Release announcing CAERUS Project and NILU's role. Download

Figure 4. Website - Publication page

Furthermore, NILU also wrote a press release, developed the dissemination strategy, and ensured that the project portal was maintained, backed up and secure from cyber attacks.

NILU in CAERUS - Bridging the gap: Raising aid efficiency through technology

In June 2013, the UN's refugee agency (UNHCR) reported that the number of people currently in situations of displacement has hit 45 million. These refugees from war-ridden and post-conflict societies are raising the migratory pressure towards the European Union. But most victims of war and conflict stay on in areas where crises and conflicts entail a substantial degradation of the human and social capital, and where the same crises continue to create barriers to the post-conflict recovery and stabilization.

The CAERUS Consortium aims to identify which humanitarian relief actions actually pave way for human development and stability in post-conflict societies. Participants from Belgium, Norway, the Netherlands, Austria, United Kingdom and India are working together to find answers to these main questions:

- Why do some countries escape the cycle of violence and conflict, while others suffer?
- What role does national, international and European post-conflict relief action and developmental cooperation play in these cases?

Offering young people real opportunities beside warfare significantly lowers the violence and conflict rate. In line with this, the CAERUS project focus its research on health and educational policies, but is

also trying to assess how European technologies such as field telecommunications and mobile laboratory capacities can be used to increase the effectiveness of service provision in remote areas. With more knowledge about this, European aid organizations may give more efficient response to outbreaks of rare and emerging pandemic diseases.

NILU – Norwegian Institute for Air Research – has long been known as a centre of excellence for climate change research, but NILU is also known for developing advanced IT systems. NILU shall support the CAERUS project by providing the architectural foundations and technologies for intelligent management of critical data for the purpose of enabling faster decision support and creating added-value applications and services in crisis/post crisis situations and areas.

NILU's software development group works within a broad spectrum of both traditional and cutting edge technologies and provides expertise in modelling, databases, communication technologies, social media platforms and mobile and web services. This provides a foundation that enables the institute to keep abreast of current trends in technology as well as provide a wealth of services in cooperation with its strategic partners.

Figure 5. NILU Press release - March 2014

Significant results

During the first year, NILU principally focused on the development of the project website, the project's branding and the dissemination strategy for the project partners.

- Website development
- Branding development
- Logo design
- Press release
- Market Analysis
- Dissemination strategy



Figure 6. Logo designed as part of an outreach activity

- The logo was developed as part of a dissemination activity in conjunction with the Riversides Ungdomhus (Riverside Youth house) <http://www.riverside.no/>, who mentor youths in technologies, and help them achieve skills relevant for working. This collaboration resulted in an elegant and appropriate logo for the project. This design was later ratified by the Consortium, with minor modification to the wording of the sub sentence.

- In addition to the logo, a general colour scheme and look and feel was developed for the project website, which resulted in a modern looking design, making use of cloud words, QR Codes (Quick Response) and clickable images to navigate between pages.

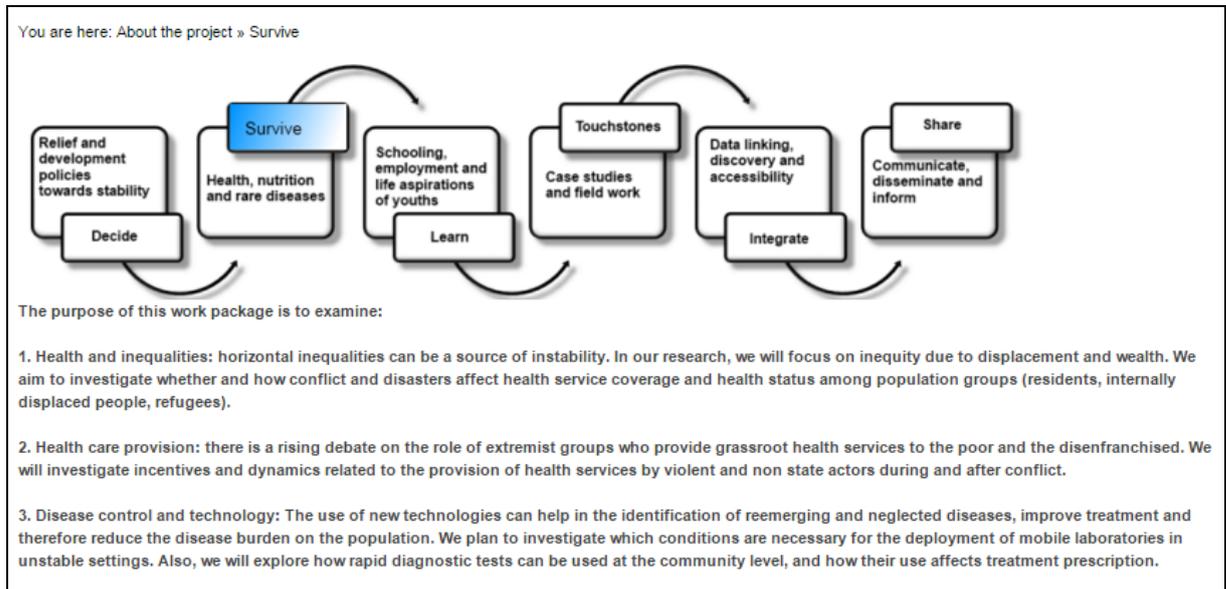


Figure 7. Clickable image maps

These clickable image maps not only provided an intuitive navigation mechanism between the various work packages, but they also ensure that the pages were dynamic, enhancing the user experience.

BRIDGING THE GAP
CAERUS - EVIDENCE BASED POLICY FOR POST CRISIS STABILITY

Search...

HOME ABOUT THE PROJECT THE CONSORTIUM PUBLICATIONS EVENTS CONTACT US

You are here: Home

Word Cloud: livelihoods, social, droughts, earthquakes, natural, loss, acute, health, education, conflict, injuries, migration, famines, services, proliferation, civil, floods, chronic, unemployment, instability, crises, violence, protracted, death, disasters, smaller, arms, chronic, civil, services, proliferation, injuries, migration, famines, floods, chronic, unemployment, instability, crises.

Natural disasters and civil conflict are the most common causes of acute crises around the world. Earthquakes, floods, droughts, protracted civil violence bring with them not only immediate death, injuries and losses of livelihoods but they bring about serious knock on effects such as migration, famines, chronic instability, small arms proliferation and unemployment. All of these are both underpinned and aggravated by the lack of basic social services such as health and education, pushing the communities further down the spiral of hopelessness.

Event Start	Event End	Title
3/20/2015	3/20/2015	First annual meeting of the CAERUS project
3/19/2015	3/19/2015	Technical Project Review
9:00 AM	4:00 PM	
3/18/2015	3/18/2015	Stakeholder Meeting
2/24/2015	2/24/2015	WPS Technical Meeting
11/25/2014	11/27/2014	Project internal meeting
6/27/2014	6/27/2014	Field work update
6/26/2014	6/26/2014	WPS Technical Meeting
4/14/2014	4/16/2014	Project Kick-Off
7/8/2013	7/9/2013	First Consortium Meeting
7/3/2013	7/3/2013	Consortium invited to EU for negotiations

Conflict, disaster, and health security

The Lancet has published a special issue on global health security which explores different perspectives on the wider lessons that can be drawn from the recent Ebola outbreak, including how it has demonstrated the importance of securing individuals' access to health care as part of the pursuit of global health security.

The review includes a series of essays one of which, Conflict, disaster and health security addresses the threats to individual and population health arising from violent conflict and natural disasters. The essay was prepared by Simon Rushton, Louis Lillywhite and Bhimsen Devkota as part of the CAERUS project. Perhaps unsurprisingly, as the CAERUS is intended to inform EC and wider global security policy, the main message from this essay and included as one of the Lancet's key messages is that the setting of priorities and allocation of resources to mitigate the effect of, and recovery after, conflict and natural disaster is a quintessentially political challenge, not merely a technical one. Both individual and collective health security are intimately tied up with successfully meeting this challenge.

[Read More](#)

Project Details:
 Name: CAERUS
 Title: Evidence based policy for post crisis Stability: bridging the gap
 Theme: SEC-2013.4.3-1 SEC-2013.4.3-1
 Start date: TBA
 Duration: 36 months
 This project has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under the grant agreement 607960

Figure 8. CAERUS website

Market Analysis

As part of WP6, we did a comprehensive review of existing technologies and systems that could either compete, or compliment the work being done in CAERUS. The particular focus was determining competitors for the CAERUS Data Services Platform, and the result was that there were no systems currently duplicating the services offered by the CDSP. We did identify specific technologies that we considered useful and potentially compatible with our development processes and we designed the CDSP to output its data in a format that would be usable by the Humanitarian Data Exchange. <https://data.hdx.rwllabs.org/>

Press Release

NILU/CAERUS press release, March 2014 (Error! Reference source not found.)

II.3 Project management

Work package objectives:

1. Overall coordination and monitoring of project activities, timelines, budgets
2. Coordination and monitoring of financial reporting
3. Coordination and monitoring of all ethical and security requirements
4. Organization of project meetings
5. Preparation of management and activity reporting
6. Trouble shooting, ensuring liaison between EU and Consortium and provision of general support to Consortium members

Summary of progress towards objectives and details for each task

The three members of the Ethical Advisory Board (EAB) were appointed, two of which attended the kick-off meeting in Brussels in April 2014. Bilateral meetings with each member of the EAB have taken place to inform them about the progress of the project. Their advice was sought as far as the development of the Consortium's policies on confidentiality and privacy, handling of personal identifiable data and security measures to prevent improper data use and disclosure. The EAB provided inputs to review the Nepal study protocol before applying for ethical clearance. Finally, the EAB prepared their first report as planned at the end of year 1.

The project Relevance Monitoring group was also established. Two out of the three members attended the kick-off meeting. A meeting with the third member took place in June 2014.

Overall coordination and monitoring of project activities, timelines, budgets

Coordination for tasks and management has been monitored by UCL since the beginning of the project, with communication and support to all partners. The coordinator has worked to increase communication and dissemination of materials to each partner through emails, telephone conference calls to increase the inter-Consortium linkages according to the respective competences of each Consortium member.

UCL has been in regular communication with the EU project officer since the beginning of the project.

Once the pre-financing of the EU contribution has been received, UCL forwarded the funding to each partner in April 2014, according to the agreement reached by the Consortium.

Following the bilateral meeting between UCL and the EU project officer in November 2014, UCL started to work on an amendment that would have been introduced after the technical review meeting. This amendment would have taken into account the conclusions and recommendations of the technical review along with the update of the field sites and the change in the title of the project.

Preparation of Consortium agreement, scientific and financial reporting requirements

The Consortium agreement was prepared before the beginning of the project and signed by all parties within the first month of the project.

Scientific and financial reporting requirement have been ensured through the following activities:

- Mission reports and meeting reports

- FP7 reporting requirements have been disseminated to each partner
- Specific work package templates have been created for each partner with detailed instructions
- Financial templates and detailed instructions have been given to the partners.
- Constant communication between the coordination team and the partners has taking place

There have been regular checks on deliverables and milestones between the coordination team and each partner relative to deadlines in the description of work. Timelines have been monitored and updated each month since the start of the project.

In March 2015, the Consortium met in Brussels for the annual meeting and a presentation and explanation was delivered on how to report has been given to all partners along with a copy of the different templates to fill in in order to prepare the first periodic reporting.

Organisation of meetings and workshops

UCL planned and organized the CAERUS kick-off meeting held in Brussels, Belgium on April 14-16, 2014. All Consortium partner institutions were present for three days of productive planning and discussion. The kick-off meeting was a very useful opportunity for partners to meet face-to-face and to plan for the first period. Discussions about the project website, and the development of other outreach resources also occurred.

UCL planned along with REA the Technical Review which take place on March 19, 2015 in REA premises and where all partners were represented. A bilateral meeting between UCL and the project officer has been organized in November 2014 to discuss the objectives, content and possible agenda of the review along with the progress of the meeting.

UCL planned and organized the first annual meeting held in Brussels, Belgium on March 20, 2015. All Consortium members were represented. This meeting was initially planned to discuss the progress made during the first twelve months of the project along with the next steps the Consortium will take and to discuss the feedback from the technical review held the day before. Given unexpected announcement during the technical review, the plenary session mainly focus on discussing the comments provided during the latter meeting.

Error! Reference source not found. lists the meetings, workshops and conferences attended by the Consortium.

4.1.4 Potential impact and main dissemination activities and exploitation of results

During the lifetime of the project, the CAERUS Consortium, objectives, and project work plan are completely oriented towards achieving the main impacts. The project is conceived to maintain a sound balance between high-quality research products and relevant public policy recommendations. CAERUS is channeled through impact on policy makers, politicians and senior programme directors; impact on immediate effectiveness; and impact using new technologies.

Relief to development policy is still unfolding as understanding of the field barriers to the implementation of the concept becomes clearer. This gives the project an excellent opportunity to make an impact on this developing policy field. An external policy consultation and a round table with NSAG and INGOs were held. Meetings in selected field sites were also organized with key informants in Myanmar, India and the Philippines.

We have devoted considerable resources to improving the understanding and analyzing the existing mechanisms of relief actions as implemented by the EU, EU member states, UN and non-EU actions in recent crisis and conflict situations. Furthermore, the contribution of local and international NGOs directly concerned

with humanitarian and development aid as counterparts in the field studies, will channel the field based evidence and the need for policy reform towards the non-governmental sectors at global and regional meetings.

The scientific component of CAERUS has two main targets: the academic community and the UN agencies in the sectors of health and education. We have published four scientific papers and are preparing two additional ones for submission in the first year of the project. Lessons learnt from both literature reviews and the more pragmatic-oriented field studies would have been integrated into comprehensive guideline in post-crisis and post-conflict situations that can inform policy makers of the most appropriate and sustainable interventions to maintain stability and ensure long-term security.

Contact details

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4.2 Use and dissemination of foreground

Section A (public)

LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, STARTING WITH THE MOST IMPORTANT ONES									
	Title of output	Author/s	Journal name	Number, date, Frequency	Place of Publication	Year of publication	Relevant pages	Permanent identifiers	Is/Will open access provided to this publication?
1	River Bank Erosion Induced Human Displacement and Its Consequences	Tuhin K. Das , Sushil K. Haldar , Ivy Das Gupta , Sayanti Sen	Living Reviews in Landscape Research	Vol. 8	Germany	01/01/2014	/		YES
2	“Conflict, disaster, and health security” in Global health security: the wider lessons from the west African Ebola virus disease epidemic	Article authors: Simon Rushton, Louis Lillywhite, Bhimsen Devkota. Series authors: Prof David L Heymann, MD, Lincoln Chen, MD, Prof Keizo Takemi, MA, Prof David P Fidler, BCL, Jordan W Tappero, MD, Mathew J Thomas, MPH, Thomas A	Lancet, The	385	United Kingdom	09/05/2015	1884-1901		YES

		Kenyon, MD, Thomas R Frieden, MD, Derek Yach, MBChB, Sania Nishtar, FRCP, Alex Kalache, Prof Piero L Olliaro, MD, Prof Peter Horby, MD, Els Torreele, PhD, Prof Lawrence O Gostin, JD, Margareth Ndomondo- Sigonda, MBA, Prof Daniel Carpenter, PhD, Simon Rushton, PhD, Louis Lillywhite, MSc, Prof Bhimsen Devkota, PhD, Prof Khalid Koser, PhD, Rob Yates, MBA, Ranu S Dhillon							
3	Civilian deaths from weapons used in the Syrian conflict	Debarati Guha-Sapir , Jose M Rodriguez-Llanes , Madelyn H Hicks , Anne- Françoise Donneau , Adam Coutts , Louis Lillywhite , Fouad M Fouad	BMJ Open	351	United Kingdom	29/09/2015	h4736		YES
4	Conflicts and Socioeconomic Consequences in Northeast India	Tuhin K. Das, Ivy Das Gupta, Sushil K. Halder, Sudakhina Mitra	Asian Journal of Humanities and Social Studies (ISSN: 2321 - 2799)	Vol 3, No1		2015			YES

Table 2. List of scientific (peer reviewed) publications

LIST OF DISSEMINATION ACTIVITIES

No	Type of Activities	Main Leader	Title	Date/Period	Venue	Type of Audience	Size of Audience	Countries Addressed
1	Conference/workshop	ECDPM	First external consultation event	March 18, 2015	Brussels, Belgium	Policy makers		
2	Conference/workshop	RIIA	Roundtable event on the role of Non-State Armed Groups in healthcare provision	March 25-26, 2015	Geneva, Switzerland	Policy makers & practitioners		
3	Conference	PLUS	Impact of Environmental Changes on Infectious Diseases (IECID) Participation	March 23-26, 2015	Sitges, Spain	Research institutions		
4	Conference/workshop	PLUS	Resilience, security and critical infrastructure – how to measure impact and progress Participation	May 20-22, 2014	Bonn, Germany	Research institutions		
5	Conference	RIIA	Non State Armed Groups and the Protection of Healthcare	June 26, 2015	Oslo, Norway	Global (Podcast)		

Table 3. List of dissemination activities

Section B (Confidential2 or public: confidential information to be marked clearly)

N/A

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