

Annual Report 2014

Linking science, policy and practice for community resilience



RED CROSS/RED CRESCENT
CLIMATE CENTRE



International Federation
of Red Cross and Red Crescent Societies

The Netherlands  Red Cross

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COVER PHOTO: TIGABU MUCHE, WHO WORKS WITH THE ETHIOPIAN METEOROLOGICAL SERVICE, USING A CAMPBELL-STOKES SUNLIGHT RECORDER AT A WEATHER STATION JIJIGA, CAPITAL OF SOMALI REGION, WHERE THE ETHIOPIAN RED CROSS, SUPPORTED BY THE CLIMATE CENTRE AND PARTNERS, IS IMPLEMENTING A NEW PROJECT. THE SKILLS AND EXPERIENCE OF METEOROLOGISTS LIKE TIGABU WILL BE CRUCIAL IN SEVERAL NEW "FORECAST-BASED FINANCING" PROGRAMMES BEING ROLLED OUT IN AFRICA AND ASIA. (PHOTO: STEPHEN MCDOWELL/CLIMATE CENTRE)

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Acronyms¹

AR5	IPCC 5th Assessment Report
ASAP	(IFAD) Adaptation for Smallholder Agriculture Program
BRACED	Building Resilience and Adapting to Climate Extremes and Disasters
CBA8	8th International Community-Based Adaptation Conference
CCA	Climate Change Adaptation
CCAFS	Climate Change, Agriculture and Food Security (CGIAR programme)
CCRD	Climate Change Resilient Development (USAID programme)
CDKN	Climate and Development Knowledge Network
COP	Conference of the Parties (UNFCCC)
CPRR	(IFRC Department of) Community Preparedness and Risk Reduction
CTK	Climate Training Kit
D&C Days	Development and Climate Days (at COP meetings)
DFID	(UK) Department for International Development
DGIS	Directorate-General for International Cooperation (at Netherlands foreign ministry)
DRR	Disaster risk reduction
EMR	Ecosystem management and restoration
FAO	(UN) Food and Agriculture Organization
FoodSECuRE	(WFP) Food Security Climate Resilience facility
GFCS	Global Framework for Climate Services
GFDRR	Global Facility for Disaster Reduction and Recovery
ICRC	International Committee of the Red Cross
IFAD	International Fund for Agricultural Development
IFRC	International Federation of Red Cross and Red Crescent Societies
IIED	International Institute for Environment and Development
IPCC	Intergovernmental Panel on Climate Change
IRI	International Research Institute for Climate and Society
LET	(Red Cross Red Crescent) Learning, Education and Training Hub
NAP	National Adaptation Plan
Noragric	Department of International Environment and Development Studies, Norwegian University of Life Sciences
ODI	(UK) Overseas Development Institute
PfR	Partners for Resilience
PLACARD	Platform for Climate Adaptation and Risk Reduction
SREX	(IPCC) Special Report on Extremes

¹ For brevity acronyms for individual Red Cross Red Crescent National Societies are only given in the text.

UNFCCC	United Nations Framework Convention on Climate Change
UNOCHA	UN Office for the Coordination on Humanitarian Affairs
USAID	United States Agency for International Development
VCA	Vulnerability and Capacity Assessment
WCDRR	World Conference on Disaster Risk Reduction
WFP	World Food Programme
WG	(IPCC) Working Group (I, II and III)
WMO	World Meteorological Organization

Preface

In 2014, the Intergovernmental Panel on Climate Change (IPCC)² delivered its landmark Fifth Assessment Report (“AR5”). It emphasizes that climate risks have already increased and could run out of control if we do not curb greenhouse gas emissions. Welcoming the report, President Konoe of the International Federation of Red Cross and Red Crescent Societies (IFRC) said: “We must ensure that information on risk finds its way to those who need it most, especially vulnerable groups directly affected, so local knowledge is combined with the best available science.”

The Red Cross Red Crescent Climate Centre³ not only contributed to this IPCC assessment but also supported the Red Cross and Red Crescent Movement (“the Movement”) in addressing its implications.

In Cali, the IFRC adopted a framework on community resilience and launched an ambitious campaign to increase the resilience of a billion people. This was reflected in commitments by IFRC Secretary General Elhadj As Sy at the UN Climate Summit in New York, where he said: “We also commit [to scaling up] public awareness and education on changing climate risks by mobilizing our 17 million volunteers and 189 National Societies, and systematically communicating to the general public about the role of climate change in major disasters.”

The Climate Centre’s new work on real-time attribution of extreme events exactly underpins these commitments, enabling rapid, science-based decision-making on future risks inside the critical window of opportunity just after a major disaster.

The IFRC’s Climate Training Kit and e-learning module, both successfully launched in 2014, will help to build the capacity of Red Cross Red Crescent staff and volunteers to address rising risks.

Our work on “forecast-based financing” enabling early action based on scientific forecasts ahead of a disaster contributed to global efforts to make the management of climate risk more effective. This work – advancing rapidly through pilots by the Togo and Uganda Red Cross, global policy dialogues and cutting-edge scientific work – is especially timely in the run-up to the 2016 World Humanitarian Summit and several other milestone agreements in 2015, including the COP 21 UN climate talks in Paris, new sustainable development goals, and the new framework for disaster risk reduction (DRR) agreed at Sendai, Japan.

The Climate Centre looks forward to supporting the Movement in these policy processes, and especially in their implications on the ground. We have much to build on, such as the success of the Partners for Resilience (PfR) programme. As IFRC President Konoe put it, “we will need to communicate in simpler and clearer terms. Not only to scientists and global policy-makers, but in businesses, in schools, in the smallest villages, all over the world; through hard data and facts, but also storytelling, animations and games.”

The Climate Centre very much looks forward to continuing this vital work in the pivotal year 2015, bridging science, policy and practice.



Ed Nijpels
Chairman



Maarten van Aalst
Director

² For simplicity, acronyms are expanded once only on first reference in this report, starting here.

³ The Red Cross Red Crescent Climate Centre (“the Climate Centre”, or sometimes to avoid repetition and when clear just “the Centre”) is an official IFRC specialist reference centre set up in 2002 and hosted by the Netherlands Red Cross in The Hague.

Introduction

The Climate Centre supports the Red Cross and Red Crescent Movement and its partners in reducing the humanitarian impacts of climate change and extreme weather on vulnerable people worldwide. The Centre acts as a think tank and network hub, bridging science, policy and practice.

Our activities build on and facilitate work by individual Red Cross and Red Crescent National Societies, the IFRC secretariat, and a growing number of external partners (especially in universities and think tanks) that are contributing to our collective efforts.

The Climate Centre's activities are designed to feed into the IFRC's 2013–16 plan of action on climate change, and are aligned with the work plan of its Community Preparedness and Risk Reduction (CPRR) department.

This annual report summarizes the highlights of 2014, organized along the lines of our annual work plan.

1.1 Partners for Resilience

PfR is the biggest programme for which the Climate Centre provides operational support, supported by the Dutch Ministry of Foreign Affairs and comprising the Netherlands Red Cross (NLRC) as lead agency, CARE Netherlands, Cordaid, Wetlands International and the Climate Centre.

It integrates DRR, climate change adaptation⁴ and ecosystem management and restoration, and has now reached at least 520,000 beneficiaries in 565 communities in Ethiopia, Guatemala, India, Indonesia, Kenya, Mali, Nicaragua, the Philippines and Uganda.

In 2014 – its third year – PfR crossed the finish line on many of its original targets. Communities implemented risk reduction measures, took initiatives to protect their livelihoods, and worked with partners – including governments – to apply its integrated approach in their work.

Government institutions increasingly endorse this approach, while the proper management of ecosystems that can provide protection and livelihoods is recognized by implementing agencies, civil society and governments.

In the penultimate year of the first phase of PfR, the emphasis of our efforts has started to shift from innovations to documenting the wealth of good practice, lessons learned and recommendations surfacing from practical experience and policy dialogues.

Professionally-facilitated writeshops in Guatemala and Nicaragua (*see box page 12*) generated book-length collections of case studies based on PfR achievements. The methodology consisted of presentations, peer review and feedback sessions on stories from field. The Guatemalan and Nicaraguan case studies were presented at a regional platform for DRR in Ecuador in May 2014, aimed at helping to shape the UN World Conference on Disaster Risk Reduction (WCDRR) at Sendai on the “HFA II” framework. They included help for local teams to organize their own documentation workshops.

Globally, PfR has also been involved in policy discussions ranging from annual UN climate talks, negotiations on new sustainable development goals, regional ministerial meetings for HFA II, the UN Climate Summit in New York, and national strategies for DRR, adaptation and ecosystem restoration.

The “Minimum standards for climate-smart local DRR” (“the minimum standards”) were used extensively in PfR, both in policy dialogues and for local planning and practice.

⁴ “Adaptation” in this annual report means adaptation to climate change unless an alternative context is specified.

In 2014, four researchers supported PfR through the Climate Centre's global scholarship programme in Indonesia, the Philippines and Uganda. Graduate students from universities including King's College, London, conducted research and supported documentation of the project.

The UK-based Climate and Development Knowledge Network (CDKN) provided additional funding to complement PfR in, especially, Indonesia and the Philippines, in the development of the first edition of the minimum standards, and also supporting local partners to take part in conferences to influence decision-makers and share best practice, tools, and case studies. In 2015, the final year of the first phase of the programme, the focus will be on learning and sustainability.

BOX

Strengthening community resilience in Ethiopia

Building on the successful integrated PfR approach a new project has started in Ethiopia's Somali Region – one of the most food- and water-insecure parts of the country, containing its most inaccessible areas – implemented by Ethiopian Red Cross and supported by the NLRC, Climate Centre and Wetlands International.

It aims to strengthen community resilience and enhance water and food security by protecting and restoring natural resources, and includes a blend of anticipation, response, adaptation and transformation.

With support from the Resilient Infants project of the Ethiopian Red Cross Society, the project includes early warning early action components related to frost, health, floods and commercial destocking. Cooperation with different ministries and the meteorological service is being established, while the approach thus far builds on the forecast-based financing concept. Extreme poverty in Ethiopia generally and Somali Region in particular leave large proportions of the population disproportionately at risk of climate or weather induced crisis. The main hazards are drought and floods. While in some parts of the country their frequency and severity is low enough to allow people to recover, in others – including much of Somali Region – they can become long drawn-out. Droughts in this area have risen in frequency from once a decade in the 1970s–80s to as often as every other year now.

Somali Region is also prone to conflict over increasingly scarce and fragile resources, environmental degradation, health hazards (including for livestock), and road traffic accidents.

BOX

Building sustainability in the Nicaraguan ‘dry corridor’

PfR are working in nearly 30 vulnerable communities in the sub-watersheds of the Inali and Tapacali rivers – tributaries of Nicaragua’s River Coco – where some 20,000 people live and face problems typical of the Central American “dry corridor”. Above all, their livelihoods depend on rains that are increasingly unpredictable due to climate variability and change and they face a severe risk of drought. Some are also exposed to landslides, erosion, forest fires and floods.

Farming and cattle-raising are the main sources of livelihood and most families produce beans and maize; some also grow coffee, but this crop has been affected by disease. Subsistence agriculture and extensive cattle-farming have degraded natural resources in the sub-watersheds, and unwise use of land, deforestation, and poor farming and environmental practices have increased vulnerability already deepened by climate change.

PfR focused on watershed administration and management to integrate disaster risk management, adaptation, ecosystems and land. We support integrated management plans of these sub-watersheds to help people make use of natural capital sustainably and improve their quality of life.

PfR now plan to replicate the Inali and Tapacali experience in other sub-watersheds in Nicaragua, establishing strategic alliances at the institutional level.

BOX

The power of networking in a flood-prone Philippine city

Valenzuela City – the thirteenth most populous in the Philippines with approximately 570,000 inhabitants – is one of the conurbations that together make up Metro Manila. It's an affluent industrial suburb in a low-lying area and bordered by three interconnecting rivers: the Tullahan, Polo and Meycauayan.

This makes it vulnerable to both tidal and flash floods in the rainy season. Stagnant water contaminated with sewage can linger for weeks. People are trapped in their homes with little food and safe water, exposed to waterborne disease such as dengue and leptospirosis, and coughs and colds.

Businesses like street vendors, furniture-makers, car repairers, and fishmongers are forced to watch as their livelihoods literally sink. Even office workers lose income if they can't reach their places of work.

Now PfR is adopting environmental approaches in urban areas. The programme has been working to promote understanding and joint ownership of problems associated with flooding, reinforcing institutional mechanisms to help address them while empowering local people through networking and volunteering.



GLADYS ADALY LEON, FROM A DROUGHT-AFFECTED COMMUNITY IN GUATEMALA, WITH PRODUCE FROM HER NEWLY IRRIGATED VEGETABLE GARDEN, HELPED BY PfR ECOLOGICAL WATER FILTERS. THESE ALSO ASSIST THE RE-USE OF WASTE WATER AND ROLL BACK CLIMATE IMPACTS. THE PfR PROJECT THERE IS IMPLEMENTED BY WETLANDS INTERNATIONAL AND CORDAID'S GUATEMALAN PARTNER, CARITAS ZACAPA. (PHOTO: CLAUDIA ZALDAÑA/PfR POOL OF TRAINERS)

1.2 Early warning early action and forecast-based financing

For some years now, a key focus of the Climate Centre has been to improve the use of climate information across timescales for early action *before* disasters or health emergencies strike.

In 2014, we advised the Movement on relevant climate science, such as the weak El Niño developing in the Pacific, with monthly climate updates, and through the IFRC's ongoing partnership with the International Research Institute for Climate and Society (IRI) supplying tailored forecasts to help Red Cross Red Crescent disaster managers worldwide prepare for and respond to disasters – the digital IFRC “map room” and associated technical help desk emailable on ifrc@iri.columbia.edu. We also provided advice on the role of climate in ongoing disasters through our emerging work on real-time attribution of extreme events (*see box page 25*).

A key obstacle to making better use of such climate information is that much of the funding for disaster-risk management is only available *after* disasters, when it is too late for early action, or alternatively for long-term DRR and adaptation, without the flexibility to fund activities in anticipation of disasters anticipated in the next days, weeks or months. Forecast-based financing bridges this gap.

The year 2014 saw major breakthroughs in its implementation. On the ground, there was exciting progress in the initial pilots implemented by the Togo and Uganda Red Cross, the first two National Societies to pilot the approach, with support from the German government and Red Cross and technical support from the Climate Centre. In 2014, our researchers spent time in Togo and Uganda identifying actions that can be triggered by forecasts in advance of flooding.

Initial results in Uganda identified many such actions that could be taken to reduce health impacts or property damage; the cost is reasonable, particularly when compared to potential losses (*see box page 15*). In Togo, the Red Cross worked with the Climate Centre to identify areas vulnerable to flooding that are good candidates for forecast-based financing.

Several other National Societies now include elements of forecast-based financing in their programmes. For instance, the concept was embraced as part of a new NLRC-supported programme by the Ethiopian Red Cross in the country's Somali Region.

At its 34th Forum on Global Issues in June, held in collaboration with the German Red Cross (GRC), Germany's Federal Foreign Office presented an action plan that represented an important policy shift and made it the first humanitarian donor to guarantee funding for emergency assistance in response to scientific forecasts. The government announced it was earmarking €10m in support for the GRC and World Food Programme (WFP) to initiate several more pilot programmes for forecast-based funding.

The Climate Centre in 2014 also supported dialogue in the wider humanitarian community that will include weather and climate experts in preparation for the 2016 World Humanitarian Summit in Istanbul, Turkey.

We provided input to, for example, the WFP's new "Food Security Climate Resilience" (FoodSECuRE) facility, and published a peer-reviewed paper to promote engagement in the humanitarian sphere by the academic community, which has already volunteered significant resources in terms of expertise.

Best practice and lessons learned were presented internationally at conferences for practitioners and scientists, including the first ever World Weather Open Science Conference hosted by the World Meteorological Organization (WMO) in Montreal, and the Understanding Risk conference in London.

BOX

Triggers and thresholds in Uganda

As part of the forecast-based financing programme in the country, Uganda Red Cross Society personnel last year identified standard operating procedures that could be triggered by a flood forecast: preparing evacuation sites including digging defensive trenches, providing jerrycans and water-treatment tablets, helping villagers move food supplies into waterproof storage, rehabilitating boreholes, and assisting with actual movement of people when the authorities give the order to evacuate. These were based on community interviews and brainstorming by Red Cross disaster managers.

Broadly speaking there are two phases: activities that should be completed at the outset of the year or the rainy season to facilitate other actions later, and a second stage to quickly implement activities triggered when the actual forecast-risk threshold is crossed.

Participants at a workshop in 2014 discussed how often they would be willing to "act in vain" (since no forecast is perfect), and how many disasters the Red Cross should aim to mitigate with forecast-based financing. They also explored the actual forecast thresholds that could be established as triggers for action.

1.3 E-learning and the Climate Training Kit

A key element of the Climate Centre's role as a reference centre for the Red Cross Red Crescent Movement is to distill and consolidate best practice, methods and tools, as well as wider experience from other actors, and make them easily accessible.

Major highlights of 2014 included the official launch of the Climate Training Kit (CTK) – supported by the Canadian Red Cross and one of the Climate Centre's most important products of recent years, aimed at National Societies and launched jointly with the IFRC's CPRR department.

Within a few weeks of its launch, the CTK had more than 500 subscribers in at least 120 countries, and was receiving positive feedback from a user survey. It's now been used in workshops all over the world.

Trainings that included CTK components included sessions run by the IFRC Asia-Pacific and Africa zones, as well as early warning early action planning in the Horn of Africa by the Somali Red Crescent Society as part of a community-resilience project supported by the Canadian, German and Norwegian Red Cross.



IFRC SECRETARY GENERAL ELHADJ AS SY – ON A VISIT TO DADAAB, KENYA IN SEPTEMBER 2014 – LOOKS ON AS COMMUNITY MEMBERS TRAINED BY THE LOCAL RED CROSS TEST WATER SUPPLIES. AT THE CLIMATE SUMMIT IN NEW YORK THAT MONTH, HE ANNOUNCED A MAJOR NEW “INFORMATION TO ACTION” INITIATIVE TO STRENGTHEN THE USE OF CLIMATE INFORMATION. (PHOTO: BENOIT MATSHA-CARPENTIER/IFRC)

A new course, compiled jointly with the CPRR department, was launched in March on the IFRC secretariat's⁵ online learning platform: *Climate change – an introduction to staff and volunteers*. The 30-minute course can be used on smartphones and tablets and was developed for staff and volunteers with limited knowledge of climate issues, (or none), but interested in learning more.

The learning platform is part of the Red Cross and Red Crescent Learning, Education and Training Hub, linking visitors to a wealth of professional development opportunities. As of early 2015, more than 1,200 users had registered on the website and 530 had completed the course.

1.4 Educational games

Demand continued to grow for the development and facilitation of educational games. Since 2012, the Climate Centre and its partners have designed over 40 new games about a very wide range of issues, encompassing food security, humanitarian logistics, climate information, coastal development, urban-waste management, and disaster preparedness and response. Games have proven to be a highly effective tool to communicate complicated science or changing risks, for audiences ranging from farmers to policy-makers.

Our games have become a key tool for many National Societies, but are also in strong demand by multilateral organizations, donor agencies, NGOs and universities. The Climate Centre's involvement in games is rooted in the need to find engaging new ways to develop policy and practice aimed at increasing the resilience of vulnerable people facing climate impacts.

The year included more than 60 distinct game sessions, including many run for National Societies, as well as externally with multilateral and donor agencies such as the World Bank and the British and Netherlands development ministries, and at side events at the COP 20 UN climate talks in the Peruvian capital, Lima. One especially well-attended event (some 800 people) was facilitated in just five minutes at the World Bank's "Understanding Risk" conference in London.

5 IFRC "secretariat" is used in the correct sense to mean both the organization's Geneva and field (zone, region and country) offices. "The IFRC" means the secretariat and all 189 member National Societies; the "Movement" means the IFRC in this sense and the ICRC. IFRC and "International Federation" are used interchangeably.

The Climate Centre has been supporting the International Fund for Agricultural Development (IFAD) in its 35-country *Adaptation for Smallholder Agriculture Programme*, which provides add-on grants to existing projects. IFAD workshops that covered climate risk used our games to facilitate dialogue in Mali, Rwanda and Vietnam, in addition to a session for session at its headquarters in Rome. IFAD's programme is the largest single source of global finance supporting adaptation by smallholders; it includes improved use of weather forecasts and provides input to national policy-makers.

We facilitated dialogue on climate-smart decision-making and designed games to improve the use of climate information in Zambia as part of the UK-backed *Future Climate for Africa* (FCFA) programme, in close partnership with the Zambia Red Cross. The Climate Centre is also involved in a consortium in the overall FCFA programme, led by University of Cape Town and focusing on Southern Africa.

In partnership with Plan International, the Climate Centre has been developing an educational game for children in Asia – with a special focus on South-East Asia – that will strengthen their understanding of the climate impacts they can see and help them develop ideas on what people can do to adapt and increase resilience.

Our work on games for risk management is gaining recognition in the academic world. The University of Lugano in Switzerland hosted a three-day course on games for humanitarian and development work. Designed jointly by the Climate Centre and the Engagement Game Lab, the course engaged practitioners in the basics of participatory learning and dialogue; it's now expected to feature at the university's annual humanitarian summer school.

The journal *Humanitarian Logistics and Supply Chain Management* launched a call for submissions for a special issue to address games for humanitarian work, with Climate Centre Associate Director for Research and Innovation, Pablo Suarez, as co-editor.

2. Mobilizing human and financial resources

The Climate Centre aims to support the Red Cross and Red Crescent Movement to attract resources to address the rising risks of climate change. This includes financial resources but also human resources – people with the specialist skills needed to make our work *climate-smart*.

2.1 Financial resources

In 2014, the Climate Centre helped National Societies and the IFRC secure funding for climate-smart programming and policy work, enhancing their profile in an increasingly competitive landscape where many donors require activities funded through regular channels to be climate-smart, rather than seeing adaptation as a new development area to be financed.

We also attracted new resources for our own activities. Projects that got underway in 2014 are described elsewhere in this report; here we highlight resource mobilization over the year, including for new initiatives that will begin only in 2015 or even later.

The Climate Centre joined nine partners in making a successful joint proposal under the European Union's Horizon 2020 – its biggest-ever research and innovation programme, starting in 2015. The vision of the proposal, a *Platform for Climate Adaptation and Risk Reduction*, is to provide a platform for dialogue between the DRR and adaptation communities, shaped by the needs of actors in research, policy development and strategy.

In addition, Climate Centre training in games facilitation was part of a successful British Red Cross proposal to the EU for its Community Resilience in Urban Areas project that will help urban communities prepare for more severe floods, aid recovery after flood disasters, and share best practice in multi-agency partnerships in civil protection.

The German government is providing valuable additional support to the WFP, German Red Cross, Climate Centre and IFRC forecast-based financing pilots by National Societies.

The Climate Centre joined several partners in Southern Africa to apply for the FCFA initiative, focusing on improved decision-making in Africa over the next five to 40 years.

The Danish government through the Danish Red Cross agreed to support the Climate Centre in a three-way partnership with the IFRC secretariat in a project to provide input to National Adaptation Plans (NAPs). This will help ensure that adaptation policies centre on the needs of the most vulnerable people.

PfR was selected as a strategic partner by the Netherlands Ministry of Foreign Affairs for 2016–20, building on the successes of the first phase of the programme. The focus of “PFR 2.0” will be on strengthening the capacity of implementing partners in the global South to lobby and advocate for better resilience.

The UNICEF country office in Ghana supported game design there, starting in January 2015, to encourage handwashing with soap and healthy behaviours for children and youngsters.

A major building block for the Climate Centre’s work in the coming years will be its role in the UK-supported *Building Resilience and Adapting to Climate Extremes and Disasters* (BRACED). The Climate Centre joined a consortium led by the UK-based Overseas Development Institute (ODI) think tank and including the Asian Disaster Preparedness Centre, ENDA Energie, Itad,⁶ the Thomson Reuters Foundation, and the University of Nairobi.



A PHILIPPINE RED CROSS SPEAKER AT THE MANILA LAUNCH IN APRIL OF ‘CREATING NEW PATHS TO RESILIENCE’ – A BOOK-LENGTH COLLECTION OF “WRITESHOP” CASE-STUDIES SPRINGING FROM PfR WORK IN THE PHILIPPINES AND INDONESIA. (PHOTO: CLIMATE CENTRE)

⁶ The “Information, Training And [sic] Development” organization is now known just by the word *Itad*.

BRACED includes a major knowledge-management component, and our role will be to ensure that evidence about climate-related best practice is shared within the consortium and feeds into wider policy and practice. That contribution is, of course, informed by our experience with PfR in which the Climate Centre helped harvest lessons for sharing at the global level. BRACED's inception phase ran to March 2015, while the project itself will end 2018.

2.2 Human resources

The second key aspect of resource mobilization relates to human resources – attracting talent that can help us address changing risks, and either retain them inside the Movement or foster continued partnerships that will enable collaboration and infusion of brainpower and new networks into the Red Cross Red Crescent.

In 2014, the Climate Centre continued its successful internship programme with several partner universities. In addition, we successfully recruited volunteers from our academic network (*see Section 4.3*). Several past interns have either joined the Movement or moved on to relevant positions in partner institutions.

For instance, Brenden Jongman, a PhD student at the Institute for Environmental Studies at the Free University of Amsterdam, who worked with the Climate Centre in Uganda, has joined the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR), and will remain engaged with us throughout his ongoing doctorate work.

Louisa Whitlock, who joined the Climate Centre's staff after an internship from her MA at King's College, London, moved on to the Austrian Red Cross to work on their Caucasus programme, supporting the region's National Societies to engage in policy dialogues on adaptation.

The Climate Centre also helped build capacity of its National Society partners, for instance to document and communicate best practices and local needs through professionally facilitated "writeshops", and to connect to national, regional and global networks, for instance through participation in conferences like the 8th International Community-Based Adaptation Conference (CBA8) in Nepal.

3. Humanitarian diplomacy

For international policy, 2014 was a stepping stone to the milestone agreements to be reached in 2015, including a new global climate deal at the COP 21 UN climate talks in Paris, replacements for the Millennium Development Goals, new agreements on financing for development, WCDRR, and the 2016 World Humanitarian Summit.

The IPCC's Fifth Assessment Report provides a solid scientific base for these agreements. Climate and development are intricately linked, and sustainable development is impossible without comprehensive solutions to both rising risks and rising emissions.

At the same time, it's clear that no international policy process will be able to provide all the answers. Solutions will be based on local actions and require strong national rather than just global policies. The Red Cross Red Crescent, with its ubiquitous network of millions of volunteers in virtually every country on Earth, is uniquely well-placed to connect these layers and advocate for the most vulnerable worldwide.

In 2014, we at the Climate Centre both relayed the IPCC's global policy messages and helped devise an intricate patchwork of local solutions that increased community resilience to changing risks.

3.1 The IPCC's Fifth Assessment Report

About every seven years, the world's best climate scientists – working under the umbrella of the IPCC – provide a formal assessment of the scientific literature on climate, with a summary formally approved by all governments. The most immediately significant part for the Red Cross Red Crescent is the contribution of Working Group II (“WG II”), which deals with vulnerability, impacts and adaptation, and for AR5 in 2014 Dr Van Aalst contributed as lead author of Chapter 21 and to the technical summary.

AR5 has a much stronger focus on *risk* and on variability and extreme events – partly resulting from the conclusions of the IPCC's 2012 Special Report on Extreme Events and Disasters – “SREX” – which also included input from the Climate Centre.

After a week-long session leading to governmental approval, the WG II report was launched at a news conference in the Japanese port city of Yokohama. Dr Van Aalst, who was in Yokohama as IFRC spokesperson, blogged about the process and highlighted the humanitarian perspective to the international media covering the launch.

The Climate Centre provided specific support to the IFRC on WG II by drafting both a press release and an op-ed for President Tadateru Konoe – *IPCC climate report sounds humanitarian “clarion call”* – that was published at the end of March by the Thomson Reuters Foundation. It argued that the IPCC’s “careful wording reflects an increased emphasis on risk – the risks we face today and our choices about the ones we face in the future.”

Five case studies from around the world were produced in parallel, highlighting National Societies’ work on climate-related risk. The Climate Centre also compiled answers to key questions about the findings of the WG II report and an overview of the main content in a “summary of the summary”.

Working Group II provided the year’s biggest single media impact on climate achieved by the IFRC, assisted by the Climate Centre. The Red Cross Red Crescent perspective on AR5 was covered in hundreds of media in at least 40 countries and in at least seven languages – including the *Washington Post* and *Boston Globe* and major international broadcasters like Al Jazeera and MSNBC. This global coverage was mainly due to agency interviews in Yokohama that Dr Van Aalst conducted with the Associated Press and Agence France Presse news agencies, as well as the UK’s *Guardian* newspaper.

The Climate Centre’s news service, which focuses on the humanitarian impacts of climate change and the work going on worldwide to address them, included full coverage of the various 2014 working-group reports by the IPCC, as well as the publication in November of the full Synthesis Report.

The Climate Centre also contributed to several IPCC outreach events, including a seminar for international broadcasts meteorologists hosted by the Forum Meteo et Climate in Paris, and a set of regional outreach events organised by CDKN, as well as a range of summary products on the IPCC by CDKN, with a focus on policy-making in developing countries.

3.2 The Red Cross Red Crescent and the One Billion Coalition for Resilience

The Climate Centre contributed a practical climate perspective to discussions at the IFRC Resilience Forum in Cali, Colombia, where over 200 representatives from 79 National Societies, the IFRC secretariat, and external partners discussed a new framework for scaling up work on resilience, including the “One Billion Coalition for Resilience”. We presented on the minimum standards, climate finance and communication. (Over the next few years the Climate Centre’s work will dovetail with the framework and the One Billion campaign.)

In a joint statement at the end of the Cali meeting, the IFRC said it was committed to “working with governments and other stakeholders to promote the prioritization of community resilience” in various post-2015 processes, including development, DRR, the World Humanitarian Summit, and COP 21.

3.3 Shaping the policy environment

Bridging the science-based messages from AR5 and the Red Cross Red Crescent perspective on resilience, the Climate Centre engaged in a range of international policy processes. This importantly included the build-up to a new climate agreement to be agreed at COP 21 in Paris, the UN Climate Summit in New York (*see next section*), and COP 20 in Lima.

The Climate Centre partnered with CDKN, ODI, and the International Institute for Environment and Development (IIED) to organize the 13th Development & Climate days (“D&C Days”) alongside the annual COP meeting (*see Section 3.5*).

In addition, the Climate Centre has been linking these climate-oriented processes to the range of other global discussions that are strongly affected by climate, but too often treated separately. This includes the new sustainable development goals and regional ministerial meetings in preparation for WCDRR.

In collaboration with the NLRC and other PFR alliance members, we attended several meetings with Dutch ministries and participated in conference calls as part of the run-up to HFA II. Our input was used by the Dutch government in their contribution to the drafting and negotiation process – including at the level of EU negotiation. PFR developed several written inputs for HFA II, including a position paper for Sendai, *A Recipe for Resilience*.

3.4 The UN Climate Summit in New York

The Climate Centre joined the IFRC delegation, led by Secretary General Elhadj As Sy, at the UN Climate Summit in New York, hosted by Secretary General Ban Ki-Moon and attended by heads of state and government.

The IFRC announced a “Climate Information to Climate Action” initiative, combining its own efforts with those of government and multilateral partners to strengthen the use of climate information. Mr Sy said: “We also commit ...[to] systematically communicating to the general public about the role of climate change in major disasters.”

BOX

Attributing extreme-weather events

In the past 10 years there has been tremendous progress in climate science regarding extreme-weather events. We now understand much better how the risk of certain extremes is changing due to global warming.

Unfortunately, we usually miss the opportunity to tell that story when a major disaster happens, simply because it takes us too long to get a science-based statement about a possible connection to climate change (or the absence of one). This was the case, for instance, with Typhoon Haiyan in the Philippines, where the coastal storm-surge exacerbated by higher sea-levels attributed to climate change was responsible for most of the casualties.

Saying this clearly when international media are coming to the Red Cross Red Crescent for information can help us to communicate both on the need to reduce disaster risk, and the underlying causes of these rising risks.

In order to better support the Movement with timely and clear information on the connection between disasters and climate change, we have started a new partnership with Climate Central, based at Princeton University in the US, and they have already recruited several research groups to help with the scientific work.

The Climate Centre is working with these specialists to classify lines of evidence to produce timely but accurate public, scientific statements about how extremes may have changed, and how certain we are of this.

The IFRC commitments were prominently reflected in the section on resilience in UN Secretary General Ban Ki-moon's summary of the summit's outcomes. More generally, the meeting was regarded as having established a positive tone for the UN climate negotiations, and helped position humanitarian partners by emphasizing issues related to climate risks and climate information for the most vulnerable.

3.5 COP 20 and Development and Climate Days

The Climate Centre joined the IFRC delegation to COP 20 in Lima in December 2014 – the last round of UN climate talks before the key round of negotiations in Paris in 2015. While emphasizing the need for a strong global climate agreement and highlighting AR5 conclusions, much of our engagement was actually about new partnerships and solutions, and enabling initiatives that will eventually help the world tackle both rising climate risks and emissions.

D&C Days over the weekend of 6–7 December was themed around the concept of *Zero poverty. Zero emissions. Within a generation* (“zero-zero”), and provided a unique opportunity to integrate global efforts to tackle climate change and poverty, aiming to set the world on a path to zero extreme poverty and zero net emissions.

This echoed the conclusions of IPCC reports, underlined in Lima by IPCC co-chair and Stanford professor, Chris Field, and linking directly to several of the key global agreements that need to be reached in 2015. “One of the really important conclusions from the IPCC [AR5] report is that no matter what climate target we adopt, the world is headed for zero emissions of carbon dioxide and other heat trapping gases,” Professor Field told the International Council for Science (ICSU).



REBECCA WINDSOR OF SAN SILVESTRE SCHOOL, LIMA, WITH FRIENDS AND COLLEAGUES AT THE D&C DAYS IN LIMA. TWENTY YOUNG PEOPLE FROM LIMA SCHOOLS AND THE PERUVIAN RED CROSS PARTICIPATED IN THE ZERO-ZERO EVENT, AND INJECTED INFECTIOUS LEVELS OF ENERGY AND ENTHUSIASM INTO THE DEBATES. (PHOTO: ALEX WYNTER/CLIMATE CENTRE)

“The implication is that all countries can play a role in adopting and deploying 21st century energy technologies.”

Hashtagged *#zerozero* on Twitter, D&C Days 2014 highlighted the passion of the young to do things differently: around 20 young people from Lima schools and the Peruvian Red Cross injected infectious levels of energy and enthusiasm into the debates.

The programme featured lightning talks, high-level panels, interactive sessions, shared experiences from the field, and an experimental artistic performance. Subjects for debate included cutting fossil fuel subsidies while compensating poor householders who would face rising energy costs, and setting carbon prices at levels that would drive low-carbon investments. Participants ranged from schoolchildren to elder statesmen and women.

Commenting on zero-zero, the former president of Ireland, Mary Robinson, a D&C Days regular, stressed that a “fair, ambitious and legally binding climate agreement in 2015” was needed to achieve a fair and equitable world, with zero emissions and zero extreme poverty. Greater participation and access to information for all would help inform a more robust agreement and more effective climate policies.

Helen Clark, the United Nations Development Programme Administrator and a member of the high-level panel on the Sunday, was optimistic that future development goals would underpin an agreement on climate. In what was seen as one of the most quotable interventions of the entire D&C Days session, she noted that her generation had “mobilized against the Vietnam War and South African apartheid”. Now, she argued, the public must call more loudly and coherently for zero poverty and zero emissions.

ANTON CHILUFYA, A VOLUNTEER WITH THE ZAMBIA RED CROSS, ESCORTS A GROUP OF ORPHANS FOR VACCINATION AGAINST MEASLES. HE AND HIS COLLEAGUES FACE A CHALLENGING FUTURE FOR HUMAN HEALTH AS CLIMATE IMPACTS THREATEN SUPPLIES OF SAFE DRINKING WATER. IN 2014 THE CLIMATE CENTRE JOINED SEVERAL PROJECTS INTENDED TO SHED LIGHT ON WHAT ACTIONS MIGHT BEST STRENGTHEN RESILIENCE IN ZAMBIA. (PHOTO: MARKO KOKIC/IFRC)



Also on the panel were: Peru's Environment Minister and the president of COP 20, Manuel Pulgar-Vidal; Daniele Violetti, UNFCCC Chief of Staff; Selwin Hart, the UN Secretary General's climate chief; and Michael Jacobs, adviser for the Global Commission the Economy and Climate.

A game run by the Climate Centre explored the complexity of shared challenges with an interactive session in which players were given limited information with which to confront decisions with consequences for them, their teams, and others.

Shortly before D&C Days got underway, the IFRC issued a call for a greater level of ambition on cutting greenhouse gas emissions. Failing that, "adaptation will be out of reach for many vulnerable communities, and it will simply not be possible for them to cope," the IFRC's Under-Secretary General for Programme Services, Walter Cotte, wrote on the Climate Centre website.

D&C Days in Lima also included an ambitious, volunteer-based project to create solar-powered, lighter-than-air sculptures, challenging people to rethink approaches to tackling climate and poverty (*see box page 29*).



D&C DAYS PARTICIPANTS IN LIMA INSIDE INTIÑAN – A QUECHUA MEANING “WAY OF THE SUN” AND THE NAME GIVEN TO A LIGHT-THAN-AIR SCULPTURE CONSTRUCTED WITH HELP OF LOCAL STUDENTS AND RED CROSS VOLUNTEERS, SYMBOLIZING WHAT HUMAN AMBITION AND IMAGINATION CAN ACHIEVE. (PHOTO: TOMAS SARACENO)

BOX

Rethinking possible futures: solar-powered, lighter-than-air sculpture at D&C Days

An ambitious, cooperative project to create solar-powered, lighter-than-air sculptures at D&C Days in Lima challenged people to rethink approaches to tackling climate and poverty.

The experimental artistic performance by Tomas Saraceno, a world-renowned Berlin-based artist, invited volunteers from local communities and government and business leaders to harvest, clean and tape together used plastic bags to make a lighter-than-air sculpture six metres high five wide.

The sculpture is named Intiñan – a Quechua meaning “way of the sun.” It was constructed with help of local students and Red Cross volunteers.

The experiment is intended to encourage a strengthened focus on the 2014 D&C Days zero-zero theme.

Saraceno set himself the task of making a beautiful, giant flying sculpture without using new resources. Through inspired thinking, old plastic bags and the bottomless passion of a team of volunteers, the sculpture symbolizes what human ambition and imagination can achieve.

“It’s an amazing idea that will get everyone in the community involved,” said Roberto Brito de la Cuesta, the Regional Representative of the American Red Cross, which is co-sponsoring the project.

“With this structure, we are recycling and reusing materials, and bringing together government, non-government agencies and businesses, children and adults.

Tom Mitchell, Head of Climate and Environment at the Overseas Development Institute, another co-sponsor of the sculpture, said: “Seventeen percent of the world’s population still lives in extreme poverty, which is unacceptable with the resources at humanity’s disposal in today’s world.

“The sculpture turns our conventional thinking on its head: if a team of willing volunteers, inspired by a big idea, can make a solar-powered balloon fly over Lima, surely when working together we can eliminate poverty and radically cut emissions at the same time.”

4. Learning, research and analysis

Climate-related shocks are increasingly the focus of programmes that seek to build the resilience of poor and vulnerable people. Yet evidence on what actions actually work best to strengthen resilience is scarce at the programme level.

The Climate Centre engages in a number of research projects and will play an important knowledge-management role in BRACED – one of the largest resilience projects of its kind.

Last year also saw a deepening of existing collaborations and the emergence of new, important partners, continuing well-established relationships with academic stakeholders.

4.1 Learning for climate-smart resilience on the ground

The ability of governments, civil society and the private sector to harness learning on resilience and recycle it back into investment, policy design and practice is limited. The Climate Centre joined a number of projects aimed at improving this general picture, including in the context of PfR.

Another key example was a group of projects in Zambia supported by the Department of International Environment and Development Studies at the Norwegian University of Life Sciences (“Noragric”), the UK Department for International Development (DFID), and the United States Agency for International Development (USAID).

The pilot study for the first phase of FCFA in Zambia looked at how to make climate science accessible so decision-makers can make informed investments in adaptation and development that are robust to a range of outcomes in the future. The process included inception workshops in the southern town of Kazungula and the capital, Lusaka, that included senior policy-makers. This pilot initiative ended in September 2014 and led to a follow-up proposal under the leadership of the University of Cape Town.

Separate research in Zambia in 2014 – From *Vulnerability Assessments to Adaptive Action* – was supported by USAID as part of its Climate Change Resilient Development (CCRD) programme. This evaluated flood warnings on various timescales in the Zambezi river basin, generating insights into the potential dividends from investing in forecast-based decision-making.

One of the key questions for this research was to explore how an improved understanding of the vulnerability of a community could be reached by exploring a livelihoods-based approach. By evaluating the vulnerability of residents in a community, research revealed key patterns for humanitarian work linking early warning to early action.

The Noragric project aimed at bringing the processes in Zambia together and maximizing synergies, encompassing interactions between humanitarian institutions, development organizations and governments, developing information about the factors behind disasters, including conflict and migration, and exploring modalities for dialogue.

4.2 Case studies, working papers, articles

The Climate Centre published two new working papers in 2014. *Ready! Lessons in the design of humanitarian games*, in February, involved a detailed look at best practice for games in disaster risk reduction. Using the example of *Ready!* sessions in Namibia, the paper documented what's been learned by humanitarian organizations, designers, and practitioners interested in the potential of games.

In July, *Turning climate science into animations: A lesson in teamwork from the Pacific* told the story of two humorous animations produced by an alliance of agencies, including the Climate Centre, in the Pacific linking climate science with decision-making and preparedness.

In other contributions, the Climate Centre's Pablo Suarez, Janot Mendler de Suarez and Bettina Koelle, and Max Boykoff, Assistant Professor in the Center for Science and Technology Policy at the University of Colorado-Boulder, co-authored a chapter of a new book, *Community-Based Adaptation to Climate Change*, made available online by publishers Routledge in January.

An article in the February issue of *Nature Geoscience* by the Climate Centre’s Senior Climate Specialist, Erin Coughlan de Perez, Senior Programme Officer Fleur Monasso, Maarten van Aalst and Pablo Suarez argued that despite increasing predictability, people most affected by climate-related disasters often do not receive warnings when hazardous events are likely, partly because government agencies and humanitarian organizations are not sufficiently connected to climate science.

A research paper for the journal *Natural Hazards and Earth System Sciences* was published as a discussion paper by specialists from the Climate Centre, the German Red Cross, the Royal Netherlands Meteorological Institute (KNMI) and VU University Amsterdam argued that automatic triggers for emergency finance based on forecast warnings of weather and climate extremes could “catalyze humanitarian action”.

In July, a new Australian Red Cross briefing paper, *Gender and climate change*, became the latest addition to the National Society’s briefs series covering how gender can shape vulnerability to climate change. This was co-produced by the Climate Centre and includes technical input from the 2007 Red Cross Red Crescent Climate Guide.

The Climate Centre also provided technical input to an IFRC October briefing note – *Environment and Climate Change, The impact of climate change on human mobility*.



PARTICIPANTS AT THE FINAL CONFERENCE OF THE CLIMATE FORUM EAST PROJECT IN MINSK IN OCTOBER USED GAMES TO FLAG THE RISING HEALTH CHALLENGES OF A WARMING WORLD. THE CONFERENCE – TOWARDS JOINT ACTION ON CLIMATE CHANGE IN EASTERN PARTNERSHIP COUNTRIES – CENTRED ON LESSONS LEARNED FROM THE EXPERIENCE OF THE TWO-YEAR CLIMATE FORUM EAST PROJECT, COORDINATED BY THE AUSTRIAN RED CROSS. (PHOTO: BELARUS RED CROSS)

Peer-reviewed manuscripts co-authored by Climate Centre team members, all published in 2014, also include:

- Bachofen, C., Sunstrom, R., Iqbal, F. Y. and Suarez, P. Participation, learning and innovation in adaptation to climate change: Development & Climate Days 2013. In print at *Climate and Development*.
- Coughlan de Perez, E., L. Nerlander, F. Monasso, M.K. van Aalst, G. Mantilla, E. Muli, Thuan Nguyen, G. Rose, and C. Rumbaitis Del Rio (2014) Managing health risks in a changing climate: Red Cross operations in East Africa and Southeast Asia, *Climate and Development*, DOI: 10.1080/17565529.2014.951012
- Coughlan de Perez, E., Monasso, F., van Aalst, M. and Suarez, P. Science to prevent disasters. *Nature Geoscience* 7 (2): 78-79.
- Coughlan de Perez, E., van den Hurk, B., van Aalst, M., Jongman, B., Klose, T. and Suarez, P. Forecast-based financing: an approach for catalyzing humanitarian action based on extreme weather and climate forecasts. *Natural Hazards and Earth System Science Discussions* 2 (1-2): 1-26.
- Dal Farra, R. and Suarez, P. (2014). Red Cross / Red Crescent Climate Centre and Balance-Unbalance: *The art! x climate* Project. *Leonardo* doi:10.1162/LEON_a_00818.
- Gordon, E., Walter, S. and Suarez, P. Engagement Games: A case for designing games to facilitate real-world action. Boston: EGL.
- Gannon, C., Kandy, D., Turner, J., Kumar, I. Pilli-Sihvola, K. and Sisala Chanda, F. Near-term climate change in Zambia: What the research tells us. Project report: Future Climate For Africa. The Hague: Red Cross Red Crescent Climate Centre.
- Koelle, B., Bachofen, C., Suarez, P., Jones, R., Coughlan, E. and Mudenda, W. Future Climate For Africa: Pilot Phase Zambia Technical Report. The Hague: Red Cross Red Crescent Climate Centre.

In addition, Dr Van Aalst wrote for both the technical summary and the full 2014 IPCC Working Group II report on impacts, adaptation and vulnerability.

- Field, C.B., V.R. Barros, K.J. Mach, M.D. Mastrandrea, M. van Aalst, et al. (2014) Technical summary. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Hewitson, B., A. C. Janetos, T. R. Carter, F. Giorgi, R. G. Jones, Won-Tae Kwon, L. O. Mearns, E. L. F. Schipper, M. K. van Aalst (2014), Chapter 21, Regional Context. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Barros, V.R., C.B. Field, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

4.2 Academic collaboration

Our programme *Young scholars for humanitarian work* recruited 12 postgraduate students who carried out humanitarian work as part of their requirements at leading universities, both through fieldwork and desk study.

Graduate programmes that consolidated their support of our work include University College London, Vrije University, Amsterdam, Northeastern University in Boston, and the University of Colorado-Boulder.

Professor Ricardo Dal Farra from Concordia University's department of music mobilized peers to organize a competition on "sound art miniatures" for the D&C Days at COP 20, which led to dozens of submissions on rising sea levels and the event's zero-zero theme.

The Game Lab at the Massachusetts Institute of technology (MIT) included a set of challenges defined by Climate Centre as tasks for some 40 students taking a course in digital game design – a collaboration that led to the web platform for the game *Snap!*, in which players learn what they think about a new topic, used on several occasions during the year, including at COP 20.

More than 30 workshops and talks featured Climate Centre personnel in academic settings, ranging from a course on the global environment at Harvard University School of Public Health to sessions at Berlin's Haus der Kulturen der Welt for the Anthropocene Campus.

Pablo Suarez taught courses at University of Lugano on innovations in climate risk management and on games for humanitarian and development work; Maarten van Aalst taught at Wageningen University and University of Amsterdam; Erin Coughlan, taught a seminar course at Department of Earth and Environmental Sciences at Columbia University.

Pablo Suarez sits on the editorial board of the journals *Climate and Development*, *Urban Climate*, and *Journal of Humanitarian Logistics and Supply Chain Management*; Maarten van Aalst sits on editorial board of the journal *Earth Perspectives*.

5. External communications

The past year saw very close collaboration with the IFRC communications department, partly thanks to the delegation by the secretariat of a Geneva-based information officer with specific responsibility for climate.

We also collaborated directly with professional communicators from the external partners involved in D&C Days, cross-promoting each other's independently generated content from Lima.

5.1 Climate Centre news and IFRC communications

The Climate Centre assisted the IFRC communications department with coverage and technical insights on AR5, as well as on COP 20.

One of Maarten van Aalst's two bylined pieces for the IFRC's own news site during the year was an op-ed on Typhoon Hagupit and climate attribution, filed and posted during the COP meeting; the other was a blog from Yokohama, Japan, where the WG II report was released.

The IFRC press release, op-ed by President Konoe, case studies, IFRC and CDKN blogs, and remote interviews with specialist reporters from IRIN and Thomson Reuters all achieved good exposure in the specialist humanitarian and development media.

Other joint coverage exercises with the IFRC communications department included the information-to-action initiative announced at the UN Climate Summit in New York, the first-ever global health conference hosted by the World Health Organization, and the Small Island Developing States Conference in Samoa – all in September. Stories were posted simultaneously on the Climate Centre's website and the IFRC's and cross-promoted.

The bulk of the material published on our news platform was *original content*, but we also reproduced verbatim relevant stories by the IPCC, the Thomson Reuters Foundation, the Earth Institute and George Washington University; when relevant we carried original media releases by the IFRC, PfR, IPCC, and the WMO.

In October Megan Rowling of the Thomson Reuters Foundation reported on one of the most important developments in climate communications of 2014: *world weather attribution*. This covers efforts by climate scientists to say, almost in real-time, whether global warming has a hand in extreme-weather events, and if so to what extent.

5.2 The website and @RCClimate

In total, nearly 70 news items were posted in 2014. Much of the development work for the Climate Centre's new website (launched in April 2015), was carried out during 2014.

The new information architecture will include a main-menu that will change very little over time, grouping more flexible drop-down items. The overarching objective is to make the Climate Centre's major content – and the operational and humanitarian priorities it reflects – *browsable*.

The year also saw major growth in our Twitter audience (now, in early 2015, well past the 1,000 mark), including many National Societies, as well as the IFRC secretariat, including zone and regional offices.

We are also followed on Twitter and/or retweeted by an ever-widening professional community of interest, including National Societies and senior officials at DFID, USAID, the White House and the European Commission.

A MEETING IN VANUATU, HELD AS PART OF THE COPING WITH CLIMATE CHANGE IN THE PACIFIC ISLAND REGION INITIATIVE, DISCUSSES THE CLIMATE-RELATED ANIMATION KLAOD NASARA – "CLOUD MEETING PLACE" IN THE BISLAMA LANGUAGE. IT WAS ONE OF TWO ANIMATIONS WHOSE GENESIS WAS DETAILED IN A NEW CLIMATE CENTRE WORKING PAPER IN 2014. (PHOTO: ULA MAJEWSKI/CLIMATE CENTRE)



6. Following the future

As an reference centre, the Climate Centre has an important role in monitoring and shaping emerging discussions relevant to our field. In 2014, such areas included geo-engineering, work on interactive tools to enhance risk-informed decision-making, and

6.1 Geoengineering

There continues to be rapid growth in the scientific and policy realm on *geoengineering* – the human manipulation of the climate to reduce the impacts of global warming by, for example, infusing sulfur dioxide in the upper atmosphere to reflect some sunlight and cool the planet. We continue to track developments in this field, and we now participate in and provide input for several relevant initiatives.

The Climate Centre is seen as a key player in the humanitarian dimension of the geoengineering debate, which is increasingly shaped by the awareness that mitigation and adaptation are not progressing fast enough, making it more likely that proposals for the management of solar radiation will be put forward in the next few decades.

In 2014, Pablo Suarez was invited to join the advisory group for the Climate Engineering Conference in Berlin in August, which convened some 350 participants from more than 40 countries representing academia, policy-makers and civil society.

Climate Centre engagement in geoengineering is proving useful in indirect ways, as illustrated by the relationships fostered with stakeholders as diverse as Oliver Morton (editor at *The Economist*), the author Naomi Klein, and the scientist Alan Robock, who will support the Climate Centre's exploration of how volcanic eruptions might predict extreme weather.

6.2 Tools, techniques and interactivity

A promising area of work initiated in 2014 is human computation: hybrid approaches that leverage the strengths of humans and computers in combined systems that exceed the best each can do alone. Examples include crowdsourcing, organic computing and citizen science.

The NASA publication *The Developer* reported on *UpRiver*, a collaboration between the Climate Centre, the Engagement Lab in Boston, and the Zambia Red Cross that engages subsistence farmers in the Zambezi river basin to collect data that supports predictive hydrological models and increases people's trust in flood warning.

Our pioneering work on games has seen substantial growth and consolidation, as demonstrated by the continued uptake of educational games in Red Cross Red Crescent workshops and events, ongoing collaboration with partners such as the World Bank, GFDRR, and IFAD's smallholder programme.

New game projects initiated during this year include the game to promote hand-washing for schoolchildren in Ghana, piloted with the participation of the Ghanaian Red Cross; another supported community resilience in urban areas where the British, Danish, Hungarian and Netherlands Red Cross are working.

Continuing with its exploration of innovative ways to communicate climate risks, the Climate Centre has deepened its collaboration with the Applied Improvisation Network, leading to highly successful interactive activities such as *Snap!*, and the solar-powered balloon sculpture that inspired participants at D&C Days in Lima.

6.3 Volcanoes and climate

Centuries of evidence suggest that volcanic eruptions have led to widespread humanitarian impacts through their impact on climate, as well as the immediate effect of the eruption itself. The eruption of Indonesia's Mount Tambora 200 years ago blocked enough sunlight to substantially change regional conditions, according to some present-day climate modelling, eventually leading to famine in China and typhus spreading across Europe.

After Mount Pinatubo in the Philippines erupted in 1991 solar radiation was reduced by 10 per cent, lowering global temperatures by about half a degree Celsius for about two years.

The impacts of future climate-changing volcanic eruptions will be felt at the global scale. The Climate Centre is now working with Dr Alan Robock of Rutgers University – a scientist who has been studying how changes in atmospheric composition cause anomalous patterns in rainfall and temperature – to examine the potential for scientific insights informing humanitarian decisions in this field. If we can forecast what climate anomalies may be triggered after some volcanic eruptions, the humanitarian sector can and should prepare for them.

It's anticipated that during 2015 the Climate Centre and partners will propose a task force convening volcanologists, climate researchers, humanitarian planners, donors, media and other stakeholders to create guidelines and awareness-raising materials for early warning early action around volcanoes.



THE CLIMATE CENTRE JOINED WORLD EXPERTS TO DISCUSS THE EXCITING NEW FIELD OF "HUMAN COMPUTATION" IN WASHINGTON, DC IN JUNE, WHICH OPENS UP POSSIBLY UNPRECEDENTED CAPABILITIES THAT CAN ARISE FROM INNOVATIVE HUMAN-COMPUTER COLLABORATIONS. PICTURED IS AN "INFOODLE" OF THE OPENING SESSION OF THIS HUMAN COMPUTATION ROADMAP SUMMIT. (IMAGE: SUNNI BROWN)

7. Finance and administration

7.1 Income

The largest part of Climate Centre funding in 2014 came from the Dutch Ministry of Foreign Affairs, CDKN, USAID, and the Canadian and Norwegian Red Cross.

In total, nine National Societies have contributed financially either to core costs or specific activities:

- American Red Cross
- Austrian Red Cross
- British Red Cross
- Canadian Red Cross
- Finnish Red Cross
- German Red Cross
- Netherlands Red Cross
- Norwegian Red Cross
- Swiss Red Cross

The other financial contributors to Climate Centre programmes were the Norwegian University of Life Sciences, the Global Disaster Preparedness Center, IFAD, WMO, Plan International, DFID and the European Commission.

We thank all of them warmly for the generous collaboration.

7.2 Organization

The Climate Centre is an independent foundation under Dutch law. The Centre has three board members responsible for management and policy, one nominated by the NLRC and another by the IFRC, and an independent chair selected jointly by the NLRC and IFRC.

NLRC board member Cees Breederveld was succeeded in early 2014 by the new NLRC Director General, Gijs de Vries. The governing board met in July and December 2014.

The Climate Centre remains grateful to its hosts, the Netherlands Red Cross in The Hague. Each year the Centre receives support from many different departments of the NLRC and benefits from the expertise of its human resources, legal and financial departments.

7.3 Board

Name and function	Position in 2014
Mr E.H.T.M. Nijpels, Chair	Chairman NLIngenieurs (Dutch association of consulting engineers), former Netherlands Minister of the Environment
Mr Walter Cotte	Under Secretary General, IFRC
Mr Gijs de Vries, Treasurer	Director General, NLRC

The Climate Centre's director is Dr Maarten van Aalst, who combines a background in atmospheric science with extensive experience in the management of climate risk in policy and practice; he is also a Lead Author for the IPCC.

7.4 People updates

The Climate Centre's office is located in the Hague, The Netherlands. Many of its team members are based around the world, facilitating regional or in-country support to IFRC Offices, National Societies and partners. We have a strong network of counterparts in a range of IFRC offices, National Societies, and partner institutions, as well as several expert consultants.

In 2014, the Climate Centre's team grew by several people and below is an update only on changes to our team in 2014.

Among new staff in 2014 is **Bettina Koelle** who is based in South Africa and has been working on projects in Zambia. She holds a master's degree in geography, cartography and anthropology from the Free University of Berlin. She has been working in development for the past 15 years and is involved in climate change adaptation, working with rural communities on training, social research and organizational development.

Stephen McDowell, based in Nairobi, helps implement the community resilience project in Ethiopia. A specialist in food security, famine early-warning and livelihoods, Steve has worked for the UN Food and Agriculture Organization (FAO) and the IFRC regional office in Nairobi.

Janot Mendler de Suarez is based in Boston and has been contributing to applied research since 2010, developing educational games for programmes in Africa, helping to train the PfR country team in Mali, and jointly editing the publication *Games for a New Climate* with Boston University's Pardee Center. She worked with the Togo Red Cross and the country's meteorological and hydrological agencies and the German Red Cross on the forecast-based financing pilots, and supported the Climate Centre's partnership with Plan International to design a game on climate adaptation for young people in Asia.

Bellar Marie van Renssen, who joined the team in September, is the new manager of our office in The Hague. Bellar Marie has previously worked at the Netherlands foreign ministry and the Dutch embassy in South Africa.

Andrew Kruczkiewicz, an IRI climatologist, is spending part of his time at the Climate Centre, supporting the Global Framework for Climate Services in Tanzania and Malawi, monthly climate updates, and other climate information-related work.

Louisa Whitlock, the Climate Centre's intern coordinator and PfR Ethiopia focal point left the team in early 2014, to join the Austrian Red Cross in support of their Caucasus programme to support National Societies in that region engage in policy dialogues on climate change adaptation. We are very grateful for her contributions to the Climate Centre work.

8. Annual accounts 2014

Balance sheet as at 31 December 2014 (in euros)

After appropriation of the result

Assets	12/31/14	12/31/13	Liabilities	12/31/14	12/31/13
Tangible fixed assets (1)	4,637	2,954	Unrestricted funds		
Accounts receivable and prepayments (2)	385,901	457,925	– going concern reserve (4)	602,188	590,491
Cash and cash equivalents (3)	480,027	521,854	Restricted funds		
			– donor restricted funds (5)	<u>48,351</u>	<u>170,515</u>
			Total equity	650,539	761,006
			Short-term debts (6)	220,026	221,727
	870,565	982,733		870,565	982,733

Statement of income and expenditure for 2014 (in euros)

Income	Actual 2014	Budget 2014	Actual 2013
Income from own fund-raising			
Gifts and donations (7)	441,748	518,800	583,798
Government grants (8)	684,571	704,500	644,743
Other income and expenditures	3,517	-	20,903
Total available for Climate Centre's objectives	1,129,836	1,223,300	1,249,444
Expenditure			
Climate Centre operations			
- own activities (9)	1,142,334	1,253,327	1,142,516
- general operating costs (10)	97,969	42,939	18,160
Total expenditure for Climate Centre's objectives	1,240,303	1,210,388	1,124,356
Balance for the year	-110,467	12,912	125,088
Appropriation of balance for the year			
- donor restricted funds	-122,164	-	56,619
- going concern reserve	11,697	12,912	68,469
	-110,467	12,912	125,088
Brief summary			
Donor restricted funds			
- Income	862,441	-	935,779
- Expenditure	984,605	-	879,160
	-122,164	-	56,619
Going concern reserve			
- Income	267,395	1,223,300	313,665
- Expenditure	255,698	1,210,388	245,196
	11,697	12,912	68,469
	-110,467	12,912	125,088

Notes

The 2014 financial statements have been prepared in accordance with the provisions of the Guideline for annual reporting C1 “small not-for-profit organizations” (*Richtlijn Verslaggeving Organisaties zonder winststreven*). They aim to give an understanding of income and expenditure and the overall financial position of the Red Cross Red Crescent Climate Centre.

Principles of valuation and presentation

General

The financial statements have been drawn up on the historic costs. Unless stated otherwise, the assets and liabilities are posted at nominal value. Balance-sheet items in foreign currencies are converted at the rate on the date of the balance sheet, and the ensuing gains or losses in exchange are recorded in the statement of income and expenditure under the heading “investment revenues”. Unless stated otherwise, all amounts are given in euros.

Financial Instruments

Financial instruments of the entity include receivables, cash items and also trade creditors and other payables. Financial instruments are initially stated at fair value, including discount of premium and directly attributable transaction costs. After initial recognition financial instruments are valued in the manner as described below.

Tangible fixed assets

These are stated at acquisition cost less cumulative depreciation. Depreciation is calculated as a percentage of the acquisition cost, according to the straight-line method on the basis of useful life.

Accounts receivable

Receivables are carried at amortised costs using the effective interest method (for the entity equalling the nominal value) less any bad debt provision deemed necessary.

Trade creditors and other payables

Trade creditors and other payables are carried at amortised costs using the effective interest method (for the entity equalling the nominal value).

Principles for determination of the result

Costs and revenues are allocated to the period to which they relate. The entities's pension plan is a defined contribution pension plan. Obligations for the contribution to this plan are recognised as an expense in the statement of income and expense as incurred.

Government grants

Grants that the provider has made dependent upon the costs of a project are included in the statement of income and expenditure for the year in which the subsidized expenditure was incurred.

Notes to the balance sheet as at 31 December 2014 (in euros)

Tangible fixed assets (1)	2014	2013
Acquisition cost at 1 January	2,954	3,907
Investments (computers)	3,737	688
Depreciation charged for year (33.33%)	-2,054	-1,641

Book value at 31 December **4,637** **2,954**

Accounts receivable and prepayments (2)	2014	2013
Receivables re activities	383,578	453,626
Accrued interest	2,323	4,299

Total **385,901** **457,925**

Almost all receivables have a remaining term of less than 1 year.

Cash and cash equivalents (3)	2014	2013
Current accounts	480,027	521,854

Total **480,027** **521,854**

Equity

In accordance with the aforementioned guidelines, the Climate Centre's equity is broken down into restricted funds and unrestricted reserves. Restricted, earmarked funds are that part of equity to which a third party has dictated a specific use, and the Climate Centre can only use these funds for that purpose. The remaining equity is reported as unrestricted.

Going concern reserve (4)	2014	2013
Balance at 1 January	590,491	522,022
Appropriation of balance for the year	11,697	68,469
Balance at 31 December	602,188	590,491

Restricted funds (5)	2014	2013
Balance at 1 January	170,515	113,896
Appropriation of balance for the year	-122,164	56,619
Balance at 31 December	48,351	170,515

	Balance 1-Jan	Appropriation of balance		Balance 31-Dec
		Income	Expenditure	
IASC	18,452	-	-	18,452
Audiovisuals	8,690	-	3,226-	5,464
Partners for Resilience (Dutch Government / MFS II)	-	451,473	451,473-	-
Climate Training Kit (Canadian RC)	-	61,201	58,591-	2,610
IDAMS (European Commission)	16,813	-	3,975-	12,838
CDKN Africa	-	743	743-	-
CDKN Asia	83,201	39,238	122,439-	-
ACCRA	14,644	-	14,644-	-
Norwegian University of Life Sciences	12,882	30,392	43,274-	-
American Red Cross games	-	46,529	46,529-	-
World bank	15,833	-	15 833-	-
USAID Zambia	-	68,093	68,093-	-
GDPC Research PIR	-	21,814	21,814-	-
IFAD	-	26,457	26,457-	-
GFCS	-	21,563	18,884-	2,679
Plan Games	-	10,795	4,487-	6,308
FCFA Zambia	-	84,143	84,143-	-
	170,515	862,441	984,605-	48,351

The donor-restricted funds include the portion of equity that may be used only for certain purposes, either because a third-party (donor) has stipulated the restriction or because the money was collected for a specific purpose. Allocations to the donor-restricted funds are determined according to the specific purposes for which gifts and donations are given.

The Climate Centre's policy is to spend the restricted funds within three years of the stipulation being made.

Short-term debts (6)	2014	2013
Accounts payable	77,576	39,207
Taxes and social security premiums	9,314	15,001
Other accounts debt	133,136	167,519
Total	220,026	221,727

Notes to the statement of income and expenditure for 2014 (in euros)

Gifts and donations (7)	Actual 2014	Budget 2014	Actual 2013
PNSs: Netherlands Red Cross	25,000	325,800	25,000
German Red Cross	53,564		60,745
Danish Red Cross	-		1,191
American Red Cross	46,529		120,887
Swiss Red Cross	12,236		12,169
British Red Cross	6,061		14,269
Austrian Red Cross	6,098		41,432
Norwegian Red Cross	118,184		102,707
Finnish Red Cross	1,854		12,448
Canadian Red Cross	61,201		24,109
	330,727	325,800	414,957
IIED	-	-	7,174
Global Environment Facility	-	-	23,883
Norwegian University of Life Sciences	30,392	70,000	35,328
IDAMS (European Commission)	-	-	2,239
ACCRA	-	-	50,865
World Bank	-	-	49,352
Research Forecast Tresholds (GDPC)	21,814	73,000	-
IFAD	26,457	50,000	-
Global Framework for Climate Services (WMO / IFRC)	21,563	-	-
Plan international	10,795	-	-
Total	441,748	518,800	583,798

Government grants (8)	Actual 2014	Budget 2014	Actual 2013
Partners for Resilience (Dutch Government / MFS II)	451,473	400,500	378,130
CDKN (Department for International Development)	124,124	215,000	177,131
ICLEI (Local Governments for Sustainability)	-	-	3,476
JICA (Japan International Cooperation Agency)	-	-	81,521
Usaid Zambia	68,093	-	4,485
Strengthening community resilience Ethiopia (Dutch Government; Chronic Crisis)	16,764	-	-
DfiD / Braced	24,117	-	-
Development & Climate Days	-	89,000	-
Total	684,571	704,500	644,743
Climate Centre operations (9)			
Own activities	Actual 2014	Budget 2014	Actual 2013
Attributed to projects	471,859	836,977	558,034
Other employment expenses	113,535	416,350	92,825
Consultants/volunteers	520,357		396,616
Office and housings costs	38,677		87,517
Campaign materials	-		4,618
Other direct costs	2,094		2,906
Total	1,142,334	1,253,327	1,142,516

Climate Centre Operations (10)			
General operating costs	Actual 2014	Budget 2014	Actual 2013
Employment expenses			
Salaries	165,611	275,990	202,161
Salaries foreign staff	202,879	338,097	228,320
Social security charges	24,594	40,986	27,275
Pension contributions	23,382	38,966	13,443
Attributed to projects	471 859-	836,977-	558,034-
	55,393-	142,939-	86,835-
Other employment expenses	15,065	} 100,000	1,934
Consultants/volunteers	49,717		34,229
Office and housings costs	40,878		28,723
Other general costs	47,702		7,657
Total	97,969	42,939-	18,160-

During the financial year, the average number of (part time) employees without long term consultants amounts to 6 (2013: 7) of which 3 persons were employed outside the Netherlands (2013: 4 persons).

No board member has received a salary, loans or guarantees.

The budget for 2015 lists 1,389,150 euros in income and 1,384,491 euros in costs, which gives a balance of 4,659 euros.

The Hague, 19 June 2015

Board of Governors

Mr E.H.T.M. Nijpels

Chairman

Mr G. De Vries

Treasurer

Mr W. Cotte

Member of the board

Other information

Independent auditor's report

To the board of governors of the Red Cross/Red Crescent Climate Center:

Report on the financial statements

We have audited the in this report on page 44 to 52 the 2014 financial statements of the Red Cross Red Crescent Climate Centre at The Hague, which comprise the balance sheet at 31 December 2014, the statement of income and expenditure for the year then ended, comprising a summary of the accounting policies and other explanatory information.

Management's responsibility

Management is responsible for the preparation and fair presentation of these financial statements and for the preparation of the management board report in accordance with the Guideline for annual reporting C1 "small not-for-profit organizations". Furthermore management is responsible for such internal control as it determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. This requires that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves procedures to obtain evidence about the amounts and disclosures in the financial statements. The procedures selected depends on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements whether due to fraud or error. In making such risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used, and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements give a true and fair view of the financial position of the Red Cross/Red Crescent Climate Centre on 31 December 2014, and of its result for the year ended on that day in accordance with the Guideline for annual reporting C1 “small not-for-profit-organizations” of the Dutch Accounting Standards Board.

Report on management board report

We have no deficiencies to report as a result of our examination whether the management board report, to the extent we can assess, has been prepared in accordance with the Guideline for annual reporting C1 “small not-for-profit organizations” of the Dutch Accounting Standards Board. Further, we report that the management board report, to the extent we can assess, is consistent with the financial statements.

The Hague, 19 June 2015

MDM accountants

w.g. R. Munnikhof AA

Colophon

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