

MONITORING, EVALUATION AND LEARNING REPORT

2019

LIST OF ABBREVIATIONS

CAR@WAN	Central Asian Regional Water Network
CB-HYDRONET	Congo Basin Network for Research and Capacity Development in Water Resource
CDAs	Capacity development activities
CKNet	Collaborative Knowledge Network
IWRM	Integrated water resources management
LA-WET Net	Latin America Water and Education Capacity Building Network
MELP	Monitoring, Evaluation and Learning Plan
MyCDNet	Malaysian Capacity Development Network for Sustainable Water Management
NGOs	Non-governmental organizations
Phil CapNet	Philippines Capacity Development Network
REDICA	Central America Capacity Building Network
REMERH	Mexican Network of Water Resources
SCaN	South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs) Capacity Development Network
SDGs	Sustainable Development Goals
UNDP	United Nations Development Programme
WASH	Water, sanitation and hygiene
WA-Net	West Africa Capacity Building Network
WOGSP	Water and Ocean Governance Support Programme

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EXECUTIVE SUMMARY

The Monitoring, Evaluation and Learning Plan (MELP) summary report 2019 throws new light into Cap-Net various capacity development activities (CDAs) implemented in 2018.

The knowledge transferred through Cap-Net activities in 2018 impacted across four different boundary levels, namely, communal, river basin, national and regional. More than 55 key institutions (from water ministries, local government, river basin authorities and national water utilities to community-based organizations, NGOs, academia and the private sector) from 55 countries have directly contributed to strengthen the integrated water resources management (IWRM). Looking at the extended impacts, altogether 67 countries benefitted at the individual, institutional and policy levels by using the knowledge delivered through Cap-Net activities - as it was confirmed by more than 500 participants.

Regarding the types of outcomes and impacts captured, knowledge sharing and advancing in interdisciplinary research techniques and the academic curricular have been highly influential in achieving transformations towards IWRM. Major academic impacts were related to the design of new IWRM methodologies, the development of research publications and the continuous development and delivery of school programs, master and doctoral curricula on IWRM.

Furthermore, there have been behavioral changes linked to gaining new skills for safely managing groundwater and trans-boundary aquifers, changing community perceptions of water as an economic good, improving handwashing practices and developing communal solid waste management and river pollution control measures, among others. There have also been changes in policies, plans and strategies related to the relocation of communities living in riverbeds and floodplains, the inclusion of the Sustainable Development Goals in institutional strategic plans, the participation of women in water associations and the development of nationwide plans for growing bamboo in watersheds.

Moreover, in this reporting year 2019, the outcome monitoring surveys incorporated a gender-segregated monitoring and evaluation sub-indicator as part of Cap-Net three main indicators used for data collection on the network's monitoring surveys. The report compares male and female participation as well as their use and dissemination of the

knowledge gained through Cap-Net training activities. Two impact stories also illustrate how Cap-Net training activities are contributing to women's empowerment in the water sector.

All in all, the MELP summary report 2019 shows Cap-Net continues to perform as an agent of change contributing to the sustainable management of the water resources by strengthening its collaborations with networks and partners at different boundary levels. Capturing the impacts of Cap-Net CDAs require continuous monitoring and follow-ups able to find specific trends, changes and challenges on the ground.

INTRODUCTION

Cap-Net's Monitoring, Evaluation and Learning Plan (MELP) focuses on improving the monitoring efficacy and strengthening the impact of the capacity development activities (CDAs) delivered by Cap-Net 23 affiliated national and regional networks and the Cap-Net Virtual Campus. The MELP aims to measure the achievements of Cap-Net networks' sustainable water management goals by accurately monitoring, evaluating and documenting their outcomes and impacts.

The monitoring and evaluation of outcomes and impacts is a continuous annual process that measures the quality of activities and analyses, based on empirical evidence, the changes or impacts made through the capacity development interventions. Cap-Net MELP tools and procedures have required revisions to be further aligned with the United Nations Development Programme (UNDP)'s Water and Ocean Governance Support Programme (WOGSP) result-based framework; this involved the revision of tools and reporting templates and also capturing outcomes and impacts with more effective methods for a more inclusive reporting mechanism.

All in all, the MELP implementation is key to understand whether the CDAs have positively influenced water management systems and practices and to decide on the most relevant learning tools and approaches to achieve Cap-Net's targets and goals.

The following indicators were used for data collection in the networks' outcome monitoring surveys:

- Use of gained knowledge,
- Share of knowledge among different audiences and groups inside and beyond organizational boundaries,
- Observed impacts associated to participants' gained knowledge.

To note, in this reporting year 2019, the outcome monitoring surveys incorporated a gendersegregated monitoring and evaluation sub-indicator as part of the three main indicators mentioned above. Furthermore, a country level mapping of the performance for the different indicators was introduced. This report presents details of Cap-Net networks' monitored activities and rates of responses as well as a summary of outcomes and impacts from 2018 (and probably also part of the continued efforts from previous years) which were captured in 2019. Moreover, thirteen impact stories are presented together with lessons learned and key findings. Despite online courses from Cap-Net Virtual Campus being evaluated separately, findings from virtual learning surveys are also compiled in this document.

Cap-Net outcomes and impacts within UNDP WOGSP's Theory of change

Capacity development – the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their development objectives over time – has shown to be effective to improve water resources management. Cap-Net networks develop capacity in the water sector by bridging the knowledge gap between governments, academics and practitioners. Through its continuous learning and sharing activities, Cap-Net regional and national level networks create effective platforms and opportunities to share global knowledge which leads to cross-boundary and cross-sectoral learning.

Learning and capacity development have become an essential part of UNDP WOGSP's Theory of change, and Cap-Net has worked as a catalyst to achieve them. By making water knowledge available to all and disseminating it to develop the capacity for integrated climateresilient, sustainable and inclusive management of water and ocean resources, Cap-Net is generating an impact on individuals' lives, leading to transformation and action through those stakeholders who acquired new and improved knowledge. Institutional transformation happens through individuals' actions and shared knowledge, and both individual and institutional actions lead to improved water and ocean governance which facilitates the equitable and inclusive access to services and wellbeing. Figure 1 illustrates Cap-Net connections to UNDP WOGSP's Theory of change and how capacity development contributes to improved water and ocean governance.



Figure 1: Cap-Net's contribution to the water and ocean governance transformation

MONITORED ACTIVITIES AND RATES OF RESPONSE

A total of 42 CDAs have been conducted in 2018 which consisted of 30 face-to-face and 12 online (Virtual Campus) courses. Out of the 42, outcome monitoring surveys were carried out reaching the participants of 30 CDAs, 21 of which were face-to-face and 9 were online training courses. These activities have been monitored using Survey Monkey and Google Forms, also by conducting focus group discussions (in a few cases only) and in-depth interviews via telephone with network managers and participants aimed for collecting additional information that supported the writing of impact stories. As shown in Table 1, the overall response rate is 42% which is comparatively a moderate rate while the response rates for face-to-face and online CDAs are almost the same, 43% and 42%, respectively.

Out of all the monitored activities, 43% took place at the national level, 28% at the regional level and 19% at the river basin level. Furthermore, 29% of the activities were training

programs, 29% were workshops, 19% were training of trainers and 10% were school education programs.

	No. of participants	No. of responses	Rate of response
Face-to-face CDAs	756	322	43%
Online CDAs	636	269	42%
Total	1,392	591	43%

Table 1: Overview of response rates to face-to-face and online CDAs' monitoring surveys

Gender-wise distribution of responses

Even though the participation of men in Cap-Net CDAs has been 5% higher than of women in 2018, according to the networks' outcome surveys, female responses are 5% higher than male responses (Table 2).

	No. of participants	No. of responses	Rate of response
Men	730	279	38%
Women	662	285	43%

Table 2: Overview of response rates to CDAs' monitoring surveys by men and women

*To note, the data discrepancies between the total number of responses and men/women total number of responses is because 27 respondents haven't reported on their gender.

Country-wise distribution of responses

Responses to the outcome monitoring surveys have been received from a total of 67 countries. Like the previous reporting year, 2018, Latin America shows the highest rate of responses. The largest number of respondents comes from Argentina (n=89) and it is followed by Indonesia, Kazakhstan and Nigeria with above 30 respondents each.



Figure 2: Global overview of responses for CDA's monitoring surveys

The responses to the outcome monitoring surveys from face-to-face (on-site) and Virtual Campus (online) training activities also show a slight variation according to the country. For on-site CDAs, 10 countries recorded more than 10 responses (ordered according to the largest number of responses: Argentina, Kazakhstan, Indonesia, Sri Lanka, Nigeria, Democratic Republic of Congo (DRC), Trinidad and Tobago, Bangladesh, Grenada, Dominican Republic) whereas, for online courses, only four countries recorded such response number (ordered according to the largest number of responses: Argentina, Peru, Costa Rica and Bolivia). However, this result is in part due to online courses having a more geographically diverse outreach compared to the more location-specific participation of on-site training courses. Taking that into account, Virtual Campus helped to reach a wider audience and to impact on a greater number of individuals, institutions and countries.

SUMMARY OF OUTCOMES: USE AND DISSEMINATION OF KNOWLEDGE

Overview of the use of the knowledge gained from Cap-Net CDAs

Information from the outcome monitoring surveys of the face-to-face and online training courses shows that **541 participants** (92% of the total number of respondents) have used the knowledge gained to enhance their working performances related to water resources management (Figure 3). This number represents 44% of the total number of participants who attended the monitored CDAs.

Data disaggregation shows that 224 participants enhanced their skills and built their capacity on water management, 197 participants enriched their academic and research skills and 175 participants raised awareness about compelling water resources management topics, among other ways of applying the knowledge gained. Furthermore, 115 participants have applied the gained knowledge to formulate policies and strategies and 34 participants to support projects for the achievement of the Sustainable Development Goals (SGDs). In fact, all these have - directly and/or indirectly - impacted on the SDGs achievement, particularly SDG 6 (ensure access to water and sanitation for all).



Figure 3: Use of the gained knowledge by number of participants

Figure 4 illustrates the thematic distribution of the use of knowledge by the participants of the monitored CDAs. Climate-resilient access to water supply and sanitation has been the most influential thematic area for the implementation of water-related projects, for the innovation and adaptation of water technologies as well as for SDGs' achievement. Capacity development in cross-cutting governance areas (especially on gender, integrity, water law and human rights) has highly contributed to policies, regulations and strategies' development and enforcements while it has also enhanced skills and built capacity on water management and water sector routine work.

In addition, Figure 4 shows that climate-resilient integrated water resources and costal management was an important thematic area for academia and research as well as for raising awareness about water management and for applying knowledge in water sector routine work. Trans-boundary water topics were limited to fewer areas, mainly water routine work and formulation of water policies, regulations and strategies, but this was in part a result of the comparatively fewer number of trainings on this topic.



Figure 4: Thematic-wise distribution of the use of knowledge

Gender-wise distribution of the use and sharing of knowledge

Both male and female participants have mostly applied and disseminated the knowledge gained by enhancing their skills and building their capacity on water resources management and on water routine work (Figure 5). However, there is a slight variation between genders in the main use of that knowledge. Female respondents (n=100) mentioned that they have mainly applied the gained knowledge for educational purposes such as the development of research and academic projects while male respondents (n=108) reported that they have mostly applied the gained knowledge on raising awareness about water resources management-related topics.



Figure 5: Gender-wise distribution of the use of knowledge

Geographic distribution of the use and sharing of knowledge

Overall, **67 countries** have been benefitted by the knowledge gained as confirmed by 541 participants. If we disaggregate this number by type of CDA, 290 participants from online courses (representing 63 countries) and 251 participants from face-to-face CDAs (representing 20 countries) have used and disseminated the knowledge gained. Latin American, South East Asian and Central Asian countries have the highest number of respondents who confirmed using and sharing the knowledge gained (Figure 6).



Figure 6: Global overview of responses to the use and dissemination of knowledge

Sharing the knowledge within and beyond organizational boundaries

375 participants (63% of the total respondents to the CDAs' monitoring surveys) have shared learning within their organizations while **224 participants** (39% of the total respondents) have shared them beyond their organizational boundaries. In specifying how the gained knowledge on water resources management was shared, 243 participants mentioned they have mainly shared it through informal conversations (including social media), 199 participants through formal conversations and 104 participants by organizing and facilitating capacity building and training programs (Figure 7).



Figure 7: Channels of knowledge dissemination by number of participants

Furthermore, Figure 8 shows that informal conversations are the preferred dissemination channel for the four main thematic areas of Cap-Net. In the case of climate-resilient access to water supply and sanitation, another preferred channel is having formal conversations and meetings. For the climate-resilient integrated water resources and coastal management topic, research and academic programs are other chosen channel while for trans-boundary-related topics, document sharing is another relevant way of disseminating knowledge. Finally, for cross-cutting governance issues, having formal conversations is other of the main dissemination channels chosen by the participants. The use and share of knowledge through these different channels will support institutional processes and behavioral changes towards sustainable water and ocean governance, as illustrated in Figure 1 about Cap-Net's contribution to UNDP WOGSP's Theory of change.



Figure 8: Channels of knowledge dissemination by thematic area

ACTIONS LEADING TO OUTCOMES AND IMPACTS ON THE GROUND

The use and dissemination of knowledge may or may not trigger for certain actions, therefore an in-depth assessment is required to recognize the outcomes and impacts on the knowledge gained, used and shared. Cap-Net MELP tools have been designed to carry out this assessment. This section describes the outcomes and impacts captured by applying the MELP tools.

More than **200 participants** representing **55 countries** were part of the actions and changes on the ground driven by the gained and applied knowledge at the individual, institutional and policy levels. Detailed comments from the respondents show that **more than 55 institutions** have been involved in such actions as a result of the knowledge that was transferred through the Cap-Net CDAs held in 2018. The Annex presents a brief overview of selected outcomes and impacts organized by networks and relevant institutions involved; the institutions represent a broad spectrum of stakeholders, from government, semigovernment entities and academic and research organizations to community-based organizations, NGOs and the private sector. The geographic distribution of actions and changes driven by the gained and shared knowledge is shown in Figure 9 with a breakdown for face-to-face and online training programs.

The Cap-Net impact stories presented below outline significant actions which have driven changes in behaviors, processes, and/or policies. Most of these stories are connected to an on-going process of change fostered by one or more partners motivated by the knowledge delivered by Cap-Net networks. Twelve networks worked on the thirteen impact stories presented in the coming sub-section.



Figure 9: Global overview of observed actions and changes driven by the knowledge gained

Impact stories from Cap-Net CDAs

Cap-Net's impact stories are short narratives aimed to introduce and expand on a positive outcome that has happened on the ground as a result of one (or more) of the networks' training programs held during the past year(s). Cap-Net's impact stories provide live testimonies from the participants regarding changes, partners involved in the process of change, and the impact that those actions and changes have triggered.

The thirteen stories presented below reflect on the impacts from Cap-Net CDAs and belong to twelve regional and national networks: Cap-Net Bangladesh, Cap-Net Lanka, CAR@WAN, CB-HYDRONET, CK-Net, LA-WETnet, MyCDNet, PhilCapNet, REDICA, REMERH, SCaN and WA-Net.

The following impact stories come from 3 different regions and 12 different countries: Africa (Democratic Republic of Congo (DRC) and Nigeria), Asia (Bangladesh, India, Kazakhstan, Malaysia, Philippines and Sri Lanka) and Latin America (Bolivia, Chile, Dominican Republic and Mexico). Furthermore, they are organized according to the type of impact they refer to 1) new/further knowledge gained, 2) changes in practices/program's implementation and 3) changes in policies, plans and strategies.

1. New/further knowledge gained



Fostering the curricula of master and doctoral programs in Water Sciences in Mexico REMERH, Mexico

REMERH and Cap-Net have fostered the curricula of master and doctoral programs in Water Sciences at the Inter-American Institute of Technology and Water Sciences (IITCA) from Universidad Autónoma del Estado de México (Autonomous University of Mexico State); particularly on strategic planning and integrated water resources management (IWRM) methodologies. IITCA's postgraduate training programs are recognized by the National Science and Technology Council as high-quality education programs in Mexico. In these programs, not only national human capital has been developed as professionals have come from other Latin American counties such as Cuba, Ecuador, El Salvador, Guatemala, Panama and Peru. Furthermore, this initiative has fostered the production of case studies by IITCA's researchers

and graduate students whose master and doctoral thesis have focused on IWRM in Mexico and Latin America.

A methodology has also been developed to put in practice a participatory IWRM planning process and also software called MoSoPEP to facilitate the implementation of the methodology. Below are a few titles of published articles:

- <u>Use of structural systems analysis for the integrated water resources</u> <u>management in the Nenetzingo river watershed, Mexico (Manzano-Solís et al.,</u> <u>2019)</u>
- Impacts of climate change on the irrigation districts of Rio Bravo basin (Paredes-Tavares et al., 2018)
- Dynamic adaptive model for the sustainable decision making process in the urban hydro-social cycle in Mexico (Vilchis-Mata et al., 2018)
- <u>Socio-ecological regionalization of the urban sub-basins in Mexico (Cervantes-</u> Jiménez et al., 2017)
- Geo-informatics tool with an emergency accounting approach for evaluating the sustainability of water systems: Case study of the Lerma river, Mexico (Fonseca et al., 2016)

Moreover, a multi-stakeholder forum is currently been organized by the Mexican Government for the development of a new national water law after training activities on IWRM were conducted by REMERH with members of the Rio Grande River Basin Council (a bi-national basin between Mexico and the United States). Additionally, a workshop titled 'Integrity and Transparency in Water Management in Mexico' was previously held and members of the Rio Bravo River Basin Council, who attended the workshop, had the opportunity to apply the knowledge gained during the IWRM training activities.

Developing a flood marking system in Nigeria



WA-Net, West Africa

People living along the flood plains in Nigeria have experienced the loss of life, properties and sources of livelihood for several years now, as it was the case during the 2012 flooding in the Ibadan region. Through WA-Net's training on climate resilience, which has been carried out since 2015, a great level of awareness has been raised among key water sector stakeholders such as the Department of Dams and Reservoir Operations, the Upper Benue River Basin Development Authority of Yola, the Kaduna State Water Corporation, the National Water Resources Institute and the Institute for Peace and Conflict Resolution of Abuja.

The training has led to the installation of flood marks as an adaptive measure for flood management. The approach has been included in the Federal Government of Nigeria national annual budget. The pilot phase of the project has kicked off in Kaduna state and will be replicated subsequently in all the 36 states of the country and in the federal capital. The approach was adopted to have a scientific means of quantifying the flood level over a given period of time. The collected data will help predict the likelihood of flood occurrence in the future, find out the causes of upstream flooding and identify the vulnerability of an area to a high level of flooding.

2. Changes in practices/program's implementation



Mercury pollution awareness trickled down to KazTransOil employees in the Pavlodar region, Kazakhstan CAR@WAN, Central Asia

In 2018, the Cooperation for Sustainable Development Center organized, with the support from the Information and Analytical Center for Environmental Protection of the Ministry of Energy of the Republic of Kazakhstan and UNDP Kazakhstan, a training titled 'The role of Central Asian women in IWRM and preventing the effects of mercury pollution of Lake Balkyldak, in Pavlodar region, on the health of women and children'.

After the training, one of the participants, an engineer ecologist at KazTransOil, included the topic in an environmental training course delivered to her staff. This has had a positive effect on KazTransOil employees as they are now aware of the dangers of mercury and thereby there is a more responsible approach to handling mercury-containing waste.

Furthermore, after the training, KazTransOil decided to replace all mercurycontaining light bulbs found in the enterprise. It was reported that seeing that the organization was taking a more responsible approach towards collecting, packing and handling over mercury-containing waste and lamps for disposal contributed to employees increasing their level of responsibility when using and disposing of mercury-containing raw materials.

KazTransOil is the largest oil pipeline company in Kazakhstan providing oil transportation services to the domestic and international markets. The actions taken by the company are raising the awareness of other enterprises inside and outside the country.



Raising community river pollution awareness in Selangor state, Malaysia

MyCDNet, Malaysia

The 'Training of Trainers on River Pollution Public Outreach Program' took place on the 17th and 18th of October 2018 in Kuala Lumpur, Malaysia as part of a collaborative program between MyCDNet, the Global Environmental Centre (GEC) and the Asia Pacific Environmental Consultants Sdn. Bhd. (ASPEC) with the support from Cap-Net UNDP. The objective of the training was to build capacity on how to safeguard the sustainability of the public outreach program, which under the Ministry of Federal Territories, aims to monitor and prevent river pollution through effective stakeholder engagement.

The participants of the training came from various backgrounds; there were lecturers, teachers, local authorities, government officers, consultants, students and community members. The Selangor state local authorities, who participated in the training, became more aware of the water pollution sources at the sites that were visited during the training and contacted the consultants from GEC and ASPEC to follow-up on the issues that were raised.

On the 14th of August 2019, a workshop was organized in Selangor state by the local authorities and consultants from GEC and ASPEC, and it was attended by river-related government agencies and the local community to come up with solutions to solve the pollution problems of the Batu river. Some of the solutions discussed among the participants were a river cleanup, beautification of river banks into a recreational green space, deepening of the river beds to prevent flooding, planting a community garden by the river and setting up recycling corners in the residential areas to raise awareness on proper waste management.

After the workshop, monthly river clean-ups at various locations along the Batu river have been set, together with a recycling corner in the community centre and monthly recycling drives in community apartment compounds. The communities are more aware of river pollution and its prevention, and the importance of separating, recycling and reducing waste. Batu river cleanup activities have seen more participants each time and people living in apartment compounds are reaching out to carry out recycling drives at their premises while some others are starting to organize recycling drives independently. Furthermore, lecturers from the International Islamic University of Malaysia who attended the training also applied the knowledge gained by organizing, together with the local community, a clean-up and river water quality monitoring activities at the Gombak river basin, also in the state of Selangor.

Women mass participation in India's WASH programs

SCaN, South Asia

At the beginning of the *Swachh Bharat Abhijan* (Clean India Campaign), Mrs Srabani Ojha, an ex-ward member from Gualsingh village, was reluctant to construct her own toilet as she understood the process could deprive her and her community of the basic rights to development assistance. The Institute for Rural Development and Planning (IRDP) with the support from SCaN conducted a capacity development training at the *gram panchayat* (village) level to develop roles and responsibilities of ward members on WASH, and through this 1) raise WASH awareness among villagers; 2) present cost-effective and appropriate technologies for ecologically safe and sustainable sanitation; and 3) foster community managed environmental sanitation systems focused on waste management.

After the IRDP-SCaN training, the village council decided to build toilets and make Gualsingh open defecation free with the support from the Panchayati Raj Institution and the Village Water and Sanitation Committee which were made responsible for the construction, supply, demand generation and proper use of individual household latrines. The village council also supported Srabani and her community members to access subsidies for the purchase of toilets from the government scheme.

The process was further strengthened by *Gram Sabha's* (rural village deliberative assembly) decision to intensify the Swachh Bharat Campaign by fostering women's mass participation. A *Nirmal Gram Puraskar* (open defecation free status) co-ordination committee was formed through the respective *Anganwadi* workers (female carers of newborn children) who organized women's participation. Motivated by the open defecation free incentive, fifty women from Gualsingh created a women group association to request the local government the construction of water facilities to access safe drinking water. Srabani also decided to take part.

All in all, the entire process-driven mechanism was strengthened by the frequent training program conducted by IRDP and SCaN which focused on WASH mass awareness, regular WASH progress monitoring, proper alignment of hardware and software WASH components, and the harmonization of WASH technologies with end user's preferences. The training program prioritized gender equality in access to WASH by stimulating women's involvement in the development and management of

WASH technologies as well as men's family involvement in WASH-related tasks. The training supported ward members to define their WASH-related duties and this motivated Srabani and other women not only to build their toilets and water schemes but also to operate and maintain their WASH facilities.

Water purification systems and new sanitation and hygiene practices in coastal Bangladesh

Cap-Net Bangladesh, Bangladesh

The national level workshop titled 'Climate Resilient Water Supply and Sanitation Technology', organized by the Bangladesh Centre for Advanced Studies (BCAS) and Cap-Net Bangladesh, was held in 2018 and impacted on its participants in numerous ways.

Firstly, after the training, the lower local government administrative units (Tala upazilla parishad (sub-district) and 20 union parishad wards) of Bagerhat and Khulna districts have incorporated best practices to improve water and sanitation services in their municipalities. They have installed pond sand filters and bio-sand filters at the community level. Pond sand filters are a low-cost technology with very high efficiency in turbidity and bacterial removal and they have been used by medium-sized settlements in arsenic affected areas of Bangladesh. Bio-sand filters are a cost-effective household water treatment technology and they have been used in the coastal areas of Bangladesh to improve the quality of the water regarding turbidity and chlorination.

Furthermore, participants from the Local Environment Development and Agricultural Research Society, the Participatory Development Action Program, the Development Organization of the Rural Poor, the Bangladesh Women and Water Network, and the Center for Environmental and Geographic Information Services conducted training with local communities from the Tala upazilla (sub-district) in the Shatkhira district, located in the coastal areas of Bangladesh, on how to use bio-sand filters for household water purification. This training supported government efforts to install water purification systems. Locals are now more aware of the misuse of clean water and they are installing purification systems to have safe water during floods or cyclones when clean water becomes scarce as the coastal areas are inundated by saline water.

Secondly, the Human Environment and Livelihood Promotion Society ran a project called 'Bangladesh Rural Water Supply and Sanitation Project' under which it organized training activities at the ward and union level in Rupsha upazilla, Khulna district. These activities were supported by the Department of Public Health Engineering, the Institute of Water Modeling and the NGO Forum for Public Health and were funded by the Government of Bangladesh and the World Bank. The activities were called 'Ward WatSan Meeting' and 'Union Watsan Meeting', respectively. (To note: wards and unions are the lowest administrative boundary in Bangladesh; 'wards' apply for city administrations only).

There have been positive behavioral changes observed among the local communities of Rupsha upazilla after the training. For example, locals are following safe hygiene practices such as avoiding open defecation (especially in children) and washing hands with soap after defecating and before handling and eating food. The communities have also started building latrines 30 feet away from the water sources so that latrines don't pollute the water sources during flood times. All in all, after the training activities, coastal people have become more aware of safe hygiene practices as well as sanitation measures to implement during hazard times.

Training of trainers to improve the sanitation and hygiene practices of estate communities from Nuwara Eliya area, Sri Lanka Cap-Net Lanka, Sri Lanka

In 2018, CapNet Lanka, partnering with World Vision Lanka, conducted a training of trainers (ToT) on WASH which focused on improving sanitation and hygiene practices of estate communities in the area of Nuwara Eliya, Sri Lanka. Participants of the ToT were public health officers, estate welfare officers, pre-school teachers and World Vision Lanka field staffs.

The program was especially focused on estate communities as estates in Sri Lanka are recognized as vulnerable areas with major challenges regarding access to safe drinking water and sanitation facilities. According to the International Water Association's data, in 2013, 48% of households in the Nuwara Eliya area didn't have safe water coverage and 45% of households didn't have access to sanitation services. A higher rate of water-borne disease was reported in this area due to the lack of sanitation facilities and safe hygiene practices.

The participation of public health officers and estate welfare officers in the ToT was significant and, as a result, they were able to develop action plans that aimed to improve the estate's public health service delivery system. One of the public health officers who participated in the ToT mentioned that he has used the presentations and video materials shown in the ToT for awareness-raising, as it has been easier to explain safe sanitation and hygiene practices to people with low literacy levels.

After the ToT, a volunteer from World Vision Lanka raised the WASH awareness of 226 community members and students from the Nuwara Eliya

area, and field officers from World Vision and the government's health service office raised awareness of 100 adults and children at the grassroots level. These participants became role models for the communities they were working with.

Moreover, waste management systems were established in the four estate schools where World Vision Lanka was implementing the Nuwara Eliya Area Program. These were Diyagama, Agarapathana, Kotagala and Pathana schools. Teachers who attended the ToT have noticed improved practices among pre-school children who participated in the WASH awareness programs.

One year after the ToT, welfare officers noticed 80%-100% behaviour change among pre-school children and their parents from Nuwara Eliya as they improved sanitation and hygiene practices related to safe toilet usage, handwashing with soap and safe waste disposal. A reduction of water-borne diseases has also been observed in the area.

Installation of bio-planters for the management of community sewerage in the Dominican Republic

REDICA, Central America

In 2018, REDICA organized the 'Water supply and sanitation' workshop in the Dominican Republic together with SOCOSADA (a female community leaders' organization) and the Dominican Agroforestry University 'Fernando Arturo de Meriño'. The workshop comprised theory days about the right to water and sanitation and the review of national water and sanitation regulations, and also a day of practice for the participants to learn how to measure the permeability of the soil for them to develop *bio-jardineras* or bio-planters connected to septic tanks.

The bio-planters are local affordable solutions for the management of sewerage at the community and municipal level. The bio-planters consist of a septic tank containing sewerage which is buried in the ground. Once the tank is buried, plants are grown on top to absorb nutrients, and some of them also contaminants. Some of the plants (the ones which don't absorb contaminants) can serve for animal consumption and all of them help to create a greener space at the household and community level. This is a sustainable method for those communities where a water treatment plant is not available and who usually have no other option but to dump fecal sludge into a clean water body.

Plan Yaque del Norte, a Dominican public institution developing the upper basin of the river Yaque del Norte, was one of the 30 participants at the workshop. By the time of the workshop, the organization had already provided bio-planters to 12 households. The representatives from Plan Yaque who attended the workshop refreshed their knowledge about the construction of bio-planters and after the workshop, they substituted the plants they were using at the household level with plants with shorter roots as these need to be replaced less frequently.

Furthermore, after the workshop and with the sponsorship from Agua Yaque del Norte Fund and the Jarabacoa City Council, Plan Yaque supported the building of a water treatment plant for the Cristo Rey community which contributed to its environmental sanitation. What used to be an open glen became a boulevard that currently works as a recreation area for the community.

As mentioned by one of Plan Yaque's engineers, 'REDICA's 'Water supply and sanitation' workshop updated the technical information participants already had and clarified specific technical aspects in order to have more sustainable and eco-friendly solutions such as the bio-planters'.

Enhancing knowledge on bamboo production for watershed protection and rehabilitation in the Philippines

PhilCapNet, Philippines

In early November 2018, a small pilot program was organized by PhilCapNet, in Lubao, Pampanga province, which was attended by representatives of the Local Water Utilities Administration (LWUA) and Baguio City Water District, among others. Specialists explained the environmental benefits and commercial uses of bamboo. Presentations were followed by a guided visit to the Lubao Bamboo Hub and Eco-Park where participants were given additional information about the different bamboo species and advice on how to plant them.

After the pilot program, the LWUA representatives worked with the LWUA Administrator to include bamboo planting in the 'Buhay KYUT' Water Information and Education Program which was held later that month in Murcia, Negros Occidental. Being the regulator and provider of technical and financial assistance to water districts all over the country, LWUA brought bamboo planting to the attention of the water districts that are all responsible for protecting and rehabilitating their watershed areas.

In October 2019, the Baguio City Water District hosted the Save Water Advocacy Program in collaboration with LWUA and PhilCapNet. A total of 112 participants attended the event in Baguio City, Benguet province where the



LWUA Administrator himself, Mr Jeci Lapus, spoke of the usefulness of bamboo in watershed protection.

It is relevant to highlight here that the bamboo training organized by PhilCapNet for water sector stakeholders were the first to advocate for the planting of bamboo for watershed protection and rehabilitation in the Philippines.

Also in October 2019, the Philippines Department of Environment and Natural Resources announced its plan to increase bamboo plantations from 20% to 40-45% due to bamboo's high survival rate and its numerous potential uses (such as carbon sink, water storage, erosion control, environmental clean-up, forest cover and source of food, medicine, lumber and biomass). The Philippine Senate also supported the re-alignment of funds from the Enhanced National Greening Program to bamboo-planting programs.

Furthermore, in November 2019, the Chairman of the Mindanao Development Authority announced the launching of the Green Mindanao Project in Davao del Norte. The project was designed to encourage tribal communities and settlers in hard-to-reach areas to plant bamboo and other trees in idle lands to solve water supply, flooding and landslide problems and to provide sustainable income to indigenous peoples.

All things considered, the advocacy efforts of PhilCapNet have strongly complemented the programs of the national and some local governments to promote the planting of bamboo in the Philippines in order to protect the environment and provide new livelihood opportunities for the local communities.

3. Changes in policies, plans and strategies



Development of a national catchment framework on flood risks and disaster management in DRC

CB-HYDRONET, DRC

In 2018, CB-HYDRONET organized a training called 'Catchment based approach to flood disaster risks and management' in Kinshasa, DRC. The training involved 26 people from government offices, community-based organizations, river basin organizations, REGIDESO (the national water utility), academia, NGOs and the media.

The training encompassed awareness-raising about catchment protection measures undertaken at different levels by communal authorities, managers of REGIDESO, community elders and farmers. It is in this context that meetings for sharing and awareness-raising were organized with different stakeholders to explain issues and challenges related to the flood phenomena in the city of Kasangulu, the preventive measures to be taken and the behaviors to be adopted in the event of flooding.

After the training, a consultative stakeholder forum was formed at the national level to discuss a framework for catchment protection. The forum was made of experts from the Ministry of Environment and Sustainable Development, the Ministry of Energy and Hydraulic Resources, REGIDESO, the Association des Usagers du Bassin de la Rivière Lukaya (AUBRL – River Basin Organization), the University of Kinshasa and Water Dream (NGO).

The members of the forum took the Lukaya river basin in Kasangulu as an experimental catchment and focused on the design and implementation of a water resources management plan. It was agreed that each member would carry out an accurate analysis of the current basin situation, its prevention against possible risks, its preservation against degradation, as well as the maintenance of its sustainable production functions in order to discuss the frameworks in an annual meeting.



Voluntary Agreement for the management of watersheds in Itata Valley, Chile

LA-WETnet, South America

The National Coordinator of Instruments for the Chilean Agency for Sustainability and Climate Change attended the 'Sustainable Water Governance training' at the AECID Training Center in Montevideo in June 2017. The skills gained in the course allowed him to coordinate the preparation and negotiation of the <u>Voluntary Agreement for the Management of Watersheds in the Chilean Valley of Itata</u>, which included an action plan and collective goals signed by 15 entities for a 5-year period.

The main problems and challenges of the Itata river basin were related to the scarcity of water for human consumption and productive activities, the contamination of the environment, the deficit of sewage connections, and the vulnerability of the area to floods and forest fires. Furthermore, the territory was classified as an area with high levels of poverty and geographic isolation. As Sebastián highlighted, measures of adaptation to climate change, conservation of biodiversity and public-private coordination were highly required at that time in the basin.

The actors who took the initiative to develop the agreement were the Forest Institute, the Batuco Fine Water Committee, and the Municipality of Ránquil. These actors expressed interest in developing an agreement in the basin, mainly in support of the participatory local monitoring work that they had carried out a few years back in the Batuco micro-basin with the support of the University of Concepción.

Nine monthly workshops were held addressing the following key aspects: a) mapping of actors, b) definition of the territorial scope of the Itata basin, c) review of the preliminary basin diagnosis, d) identification of problems and challenges, e) establishment of objectives and goals around the identified problems, f) identification of gaps in information and management, g) establishment of an action plan with voluntary commitments and h) development of the agreement document.

The negotiation phase was also carried out with participatory workshops. The governmental Agency for Sustainability and Climate Change coordinated this phase. All the aspects involved in the agreement document were negotiated, including the voluntary commitments that each entity assumed. The document went through an iterative stage until it obtained the approval of all its legal representatives.

Since the agreement was signed in 2018, important actions have been carried out, such as the constitution of a Communal Union of Rural Drinking Water Committees which allows the most isolated groups of the Itata basin to have greater representation and access technical support and training to, for example, monitor the quality and quantity of the water available. A Technical and Financing Subcommittee was also established for the articulation with forestry companies and the generation of fire prevention plans as well as for searching for financing sources that support carrying out further actions in the basin.



Introduction of the integrated flood management concept in Malaysia's National Environment-Friendly Urban Drainage Guideline *CKNet. Indonesia*

In 2009, with the financial support of the Government of the Netherlands and the World Meteorological Organization (WMO), CKNet organized an international short course on integrated flood management in Indonesia. The participants came from the Southeast Asian Region and many of them from press associations. One of the participants was a member of the formulation team preparing the Malaysian National Environment-Friendly Urban Drainage Guideline (MSMA). Upon his return to Malaysia, the participant introduced the concept of flood management to his team members. After the introduction of the new concept, the Department of Irrigation and Drainage (DID) from the Government of Malaysia invited specialists from the WMO and CKNet to Kuala Lumpur to discuss the flood management concept in more detail with the Directors and Director General of the River and Coastal Department and the Minister of Water, Land and Natural Resources. After a 4-day discussion, DID decided to apply the new flood management concept to their national regulations and guideline on urban drainage and flood management.

A one-day national conference was organized by the Water, Land and Natural Resources Ministry to introduce the concept to the Malaysian federal state departments, NGOs, universities, consultants and contractors and to inform that the new flood management concept would be in effect through a new Ministerial Decree and applied by the national MSMA guideline.



Water Funds training course: A valuable tool to strengthen environmental studies and the development of environmental regulation in Bolivia

LA-WETnet, South America

A technical staff in the Municipal Government of Tarija participated in the training course titled 'Water Funds: Key elements for design and sustainability' developed by LA-WETnet in 2018. She has been working specifically on the supervision group which studies the update of the Environmental Management Plan of the biological reserve of the Cordillera de Sama.

Thanks to the training received, this technical staff has participated proactively in the formulation of the environmental study of the external damping zone of the biological reserve of the Cordillera de Sama. Biological reserves are protected areas which constitute a common good and are part of the natural and cultural heritage of Bolivia. Protected areas fulfill environmental, cultural, social and economic functions for sustainable development. They are natural territories with or without human intervention, declared protected areas through legal provisions with the purpose of protecting and conserving wildlife, genetic resources, natural ecosystems and river basins. They have scientific, aesthetic, economic and social values, and they ensure that management and conservation contribute to the improvement of the quality of life of the local population and to regional development.

The learning acquired within the training course has specifically helped her to acknowledge that one of the most important threats that could affect the environmental functions is the urbanization process which doesn't contemplate a regulation that protects the water sources. Based on this knowledge gained, the environmental study of the Sama biological reserve determined that the Municipal Governments of Cercado-Tarija, Uriondo, San Lorenzo and Padcaya had to define a regulatory instrument that guided the current and future growing urbanization within the external buffer zone of the biological reserve. The major main was to protect the water sources of the Central Valley of Tarija.

Three regulations have been developed since the Water Funds training. Their scope aims to enrich the provisions of the integral and territorial planning expressed in the Territorial Plans of Integral Development, both at the departmental and municipal level. These are:

- Inter-governmental Agreement for Joint Institutional Action
- Departmental Law declaring the External Buffer Zone of the Biological Reserve of the Cordillera de Sana
- Municipal Laws on Zoning and Land Use of the External Buffer Zone of the Biological Reserve of the Cordillera de Sana

Main findings from the networks' impact stories

It is possible to highlight from the thirteen stories presented in the previous section that the impacts from the networks' capacity development training happened at four different boundary levels (community, river basin, national and regional), were related to six main topics (in order of relevance: IWRM, water supply, water quality, disaster risk management, river basin management and WASH) and involved several different stakeholders (from local communities to Water Ministries (and related ones), local government authorities, national water utilities, river basin authorities, academia, NGOs and the private sector).



Regarding the design of a new methodology aimed to run an IWRM planning process and the development of IWRM-related case studies and journal papers by researchers and master and doctoral graduates in Mexico, it is important to point out how developing a master and doctoral curricula exclusively on IWRM has increased the interest and focus as well as the exchange of knowledge regarding IWRM and IWRM-related subjects in Mexico and Latin America. The leading role of academia in IWRM has also strengthened the government involvement in the sector who organized a multi-stakeholder forum for the development of new national water law in Mexico.

Similar to REMERH's story, PhilCapNet's impact story illustrates how the network's efforts to advocate at the national level for the planting of bamboo in the Philippines, by the facilitation of workshops and field trips, have complemented the government involvement in the subject which resulted in increasing the national bamboo plantation from 20% to 40-45% as well as launching the Green Mindanao Project to encourage tribal communities in hard-to-reach areas to plant bamboo to solve water supply, flooding and landslide problems.

From the local communities raised awareness regarding river pollution and organized cleanups in Malaysia, the increased participation of women in WASH programs in India (not only for implementation but for raising community awareness and operation and maintenance of WASH facilities) to the installation of flood marks as an adaptive method for flood management in Nigeria, the bio-sand filters in Bangladesh for household water purification and bio-planters in the Dominican Republic to manage the fecal sludge, and the improvement of WASH practices in Sri Lanka; it is key to stress the importance of generating community/group awareness while strengthening community/group involvement and ownership of the programs and the newly acquired behaviors for the acceptance and long-term sustainability of the new practices.

In the story of CAR@WAN, the case of KazTransOil (the largest oil pipeline company in Kazakhstan) taking a more responsible approach towards raising awareness about the negative effects of replacing mercury by all mercurycontaining light bulbs from its business, stresses the importance of having not only community members but also leaders and



entire institutions fully involved and committed to incorporating (or laying aside) certain common practices.

Concerning the development of a consultative stakeholder forum for catchment protection in DRC, the inclusion of the integrated flood management concept in Malaysia's National Environment-Friendly Urban Drainage Guideline and the development of environmental regulations to preserve biological reserves in Bolivia; it is valuable to outline the importance of bringing key stakeholders together and allowing spaces for discussion and reflection, shared learning and joint-planning. The stories also draw attention to the importance of generating advocacy grounded in quality assessments and reality checks.

LA-WETnet's impact story on the signed Voluntary Agreement of the Itata watershed in Chile also provides good evidence on the importance of fostering participation among different actors to allow better communication, agreement and implementation of policies and regulations between key stakeholders. In addition, the bottom-up approach applied not only to the workshops but also to the negotiation phase of the agreement allowed all involved stakeholders to raise their voices to jointly identify problems and challenges alongside jointly setting-up objectives and goals aimed to solve them.



Moreover, SCaN and LA-WETnet impact stories about women mass participation in WASH matters in India and a female technical staff leading the development of an environmental study and new regulations in Bolivia also illustrates how Cap-Net training activities are contributing to women's empowerment in the water sector.

Lastly, based on the networks' own MELP reports from 2018 CDAs (and in some cases also contributed by previous years interventions), it is possible to add that in 2019 changes in knowledge have also been related to developing new interdisciplinary research techniques and gaining new skills about the management of groundwater and trans-boundary aquifers. Additionally, changes in practices and programs have also been linked to the changing community perceptions of water as an economic good, improving handwashing practices and developing communal solid waste management. Changes in policies, plans and strategies have also been related to the relocation of communities living in riverbeds and floodplains, the inclusion of the SDGs in institutional strategic plans and the participation of women in Water Boards (see the Annex for more information).

CONCLUSION

The impacts from the Cap-Net networks' capacity development training happened at four different boundary levels (community, river basin, national and regional). Cap-Net training programmes have positively influenced policies, behaviors and practices' changes related to IWRM, water supply, water quality, disaster risk management, river basin management, groundwater and WASH.

Altogether more than 540 participants from 67 countries benefitted by the applied knowledge at the individual, institutional and policy levels, as it was shown by the survey results. More than 55 institutions have been involved in actions and changes on the ground as a result of the knowledge that was transferred to improve capacity towards sustainable water management. Over 200 participants from 55 countries were also part of the extended impact.

Moreover, in this reporting year 2019, the outcome monitoring surveys incorporated a gender-segregated monitoring and evaluation sub-indicator as part of Cap-Net three main indicators used for data collection on the network's monitoring surveys. Data shows that women have significantly used the gained knowledge in educational projects and raising awareness, among others. The impact stories of SCaN and LA-WETnet also illustrated how Cap-Net training activities are contributing to women's empowerment in the water sector.

Cap-Net is performing as an agent of change who contributes to the transformation towards sustainable resource management. Networks and partners at different levels are at the core of this transformation. The captured outcomes and impact stories presented in this report show how Cap-Net networks' capacity development activities from 2018 have positively impacted the water sector in three main directions:

- 1. Fostering academia involvement in the IWRM sector to develop/strengthen learning and raise awareness on IWRM and IWRM-related subjects (especially from the government side)
- 2. Generating community/group awareness while strengthening community/group involvement and ownership of new practices to develop/strengthen new habits and behaviors

3. Bringing key stakeholders together and allowing for new participatory spaces for discussion and reflection, shared learning and joint planning for the design/revision of policies, plans and strategies

With no doubt, the continuous and systematic monitoring, evaluation and learning will help to strengthen Cap-Net partnerships, enhance the quality of Cap-Net programmes and expand Cap-Net's outreach and impact.

ANNEX: CAP-NET NETWORKS' MAIN TRAINING OUTCOMES FROM 2018 CDAs

No.	Network	Capacity development activity	Outcome(s)	Organization(s)	Country	Additional comment (by respondent)
1	AGW-Net [Nigeria]	AGW-Net 'Integration of [Nigeria] Groundwater Management in Trans-boundary	Joint-management of surface water and ground water	Inkomati Usuthu Catchment Management Agency	South Africa	
		Basin Organizations in Africa' training	Improved water quality monitoring for the access to potable water	Water Utility Institute	Botswana	
	program	program Imp ma ass Enf par boo	Improved data management and assessment	Department of Water and Sanitation	South Africa	Improved knowledge of water resources
			Enhanced government participation in trans- boundary aquifer	Cuvelai Watercourse Commission	Namibia	Introduction of groundwater management into river basin management
			management	ARA Centro (Local Water Resources Management Center)	Mozambique	
2	MyCDNet [Malaysia]	'River Pollution Management' training program	Workshop held to discuss solutions for the pollution problems of the Batu river in Selangor Estate	Selangor Estate local authorities/Global Environmental Centre (GEC)/Asia Pacific Environmental Consultants (ASPEC)	Malaysia	Story by MyCDNet

			Gombak river voluntary clean-ups in Selangor Estate	International Islamic University of Malaysia	Malaysia	Story by MyCDNet
		'Water Safety Planning' training program	Development of water safety plans by water operators	Water operators	Malaysia	(MYCDNet to more follow-up with the water operators)
3	Phil Cap-Net [Philippines]	'Symposium on Bamboo: lts Environmental Benefits and Uses' training program	Discussions held to develop a national bamboo plantation project	Philippine Association of Water Districts (PAWD)	Philippines	Nationwide effort to plant bamboo can have a positive impact on the water supply which is suffering the effects of climate change Story by Phil CapNet
			Preparation of a concept note for the development of a bamboo study	WaterLinks (Local NGO)	Philippines	Develop a study to raise awareness about the benefits of planting bamboo
4	REDICA [Costa Rica]	'Water Supply and Sanitation (WASH) in	Changes in WASH behaviors at government and	University of Cologne, Germany	Dominican Republic	Government adoption of a more responsible attitude towards WASH commitments
	Dominican Republic' training	community level	[Pending to be confirmed]	Dominican Republic	Latrines' installations in the community of the Higuero micro-basin	
		program	Construction of community aqueducts and water traps in community ponds	Jarabacoa Municipality	Dominican Republic	
			Construction of bio- planters to treat wastewater	Plan Yaque	Dominican Republic	Bio-planters built as a community project in 6 households
			New tools for communal water resources protection	University of Cologne, Germany	Dominican Republic	Strengthened the surveillance of communal solid waste disposal

				School District, Jarabacoa Municipality	Dominican Republic	Municipal and Community Heritage Unit, schools and producer associations jointly- taking care of communal water resources
		'Water and Women' virtual course	Development of initiatives that foster women participation in water management and WASH	Ministry of Public Works and Communications	Paraguay	Fostering the participation of women in Water Boards. An indicator was established to measure women's participation
				Costa Rican Institute of Aqueducts and Sewers	Costa Rica	Focus on women and girls' rights and participation in WASH. Mainstream of a gender approach for water projects
5	SCaN [India]	'South Asia Water Studies Fellows' Interdisciplinary	Development of a water resources management program at the school level	Center for Water Resources, Anna University	India	Awareness raised about safe water resources management among school students
		Research Methods' training program	New light shed on communal water management perspectives	Inst. of Water and Flood Management, Bangladesh University of Engineering and Technology	Bangladesh	Development of interdisciplinary research techniques to understand communities' water management methods
		'Development of ward members' WASH roles and responsibilities' village-level training program	Enhanced women's participation in WASH programs	Integrated Rural Development Program (IRDP), Government of India	India	An ODF coordination committee was formed by female carers who organized women's mass participation in Kendrapara district Story by SCaN

6	REMERH [Mexico]	'Planning for the Integrated Management of Water Resources Case study: Lerma- Edo Basin of Mexico' workshop	Integration of IWRM concepts into a software to strengthen IWRM strategic planning	Autonomous University of Mexico Estate	Mexico	[Several other impacts of the postgraduate programs are documented in the Story by REMERH
7	Cap-Net Bangladesh [Bangladesh]	'Climate Resilient Water Supply and Sanitation Technology'	Development of initiatives to tackle the freshwater crisis in coastal areas	Local Environment Development and Agricultural Research Society	Bangladesh	Water purification bio-sand filters were distributed among 950 families Story by Cap-Net Bangladesh
		training program		Human Environment and Livelihood Promotion Society/People's Action in Change and Equity	Bangladesh	Local communities learnt how to collect safe drinking water and practice safe sanitation and hygiene during natural hazards
				Village Education Resource Center	Bangladesh	Community members started building latrines 30 feet away to avoid polluting the water sources
			Improved WASH facilities and the linkage between government	Development Organization of the Rural Poor	Bangladesh	The 'Panii Jibon' (Life in Water) project was developed
			and communities in disaster prone areas	Life and Life Onlus	Bangladesh	Local government institutes are incorporating best practices to improve their municipal WASH services

8	Cap-Net Lanka [Sri Lanka]	'WASH training of trainers' training	Improved hygiene practices at the community level	Medical Office of Health	Sri Lanka	80%-100% improved hygienic behaviour of estate communities
		program		World Vision Lanka	Sri Lanka	Installation of waste management systems in schools from the Central Hills Estate
9	CAR@WAN [Kazakhstan]	'The Role of Central Asian Women in IWRM and in Preventing the Effects of Mercury Pollution of Lake Balkyldak on the Health of Women and Children' training program	Private sector's control of mercury pollution in water bodies	KazTransOil	Kazakhstan	Improved practices of employees on handling mercury waste and replacement of mercury- containing products Story by CAR@WAN
		'Adaptation of local communities to	Improved feedback reception from local communities	Kazselezaschita Estate	Kazakhstan	Special focus on communities which suffered from mudflows
		the consequences of climate change' training program	Strengthened project management skills on water quality	Water Specialist	Kazakhstan	Enhanced recommendations of the study on the water quality of Lake Balkhash. Almaty region

10	CB-HYDRO Net [Democratic Republic of Congo]	'Environmental aspects of hydrology. Meeting Water Management and Water Security. Keys to the achievement of the SDGs' training program	Relocation of populations living in riverbeds and floodplains	Kinshasa Estate	DRC	After the relocations, river clean-ups were organized to reduce pollution and improve water quality Story by CBHydroNet
11	WA-Net [Nigeria]	'Climate Change Resilience: Access to Water Supply and Sanitation' training program	Development of a national flood marking system	Kaduna/Nigeria Water Resource Institute	Nigeria	Story by WA Net
12	LA-WET Net [Latin America]	'Water Funds: Key Elements for Design and Sustainability' virtual course	Formulation of new water legislations through an enhanced environmental study	Municipal Government of Tarija	Bolivia	Update of the environmental management plan of the biological reserve of the Sama Cordillera Story by LA-WETnet
			Discussions held/Creation of Water Funds	Regional Water Center for Arid and Semi-Arid Areas of Latin America and the Caribbean (CAZALAC)	Chile	Conversations held with different stakeholders from the Limarí basin to develop Water Funds in arid lands
				Caldas Hydroelectric Power Plant (CHEC) S.A.	Colombia	Creation of the 'VIVO Cuenca' Water Fund for the protection of the Chinchina river basin

		'Water	Development of a	Ministry of	Peru	
		Governance in	proposal for a National	Agriculture and		
			proposation a National	Irrigation		
			Research and the structure	Ingation		
		and the	Plan			
		Caribbean	Incorporation of water	National Water	Argentina	
		virtual course	governance contents	Institute		
			into IWRM training			
			plans and programs			
		'Water	Implementation of	Autonomous	Mexico	
		Education for	small projects within	University of		
		Sustainability'	university courses to	Hidalgo		
		virtual course	reduce water usage at			
			the school level			
		'International	Agreement between	National Water	Peru	
		Water Law in	Peru and Ecuador for	Authority		
		Latin America'	the delineation of the			
		virtual course	IWRM Commission's			
			regulation			
			Design of new water law	Ministry of	Dominican	Provincial water law
			proposals including	Environment and	Republic	development
			trans-boundary	Natural Resources		
			regulations	Mapreco S.A.	El Salvador	National water law
						development
13	Cap-Net	'Water Integrity:	Mainstreaming integrity	Kenya Water for	Kenya	
	virtual	Principles and	in water and sanitation	Health		
	campus and	Concepts'	programming	Organization		
	partners	virtual course		(KWAHO)		
			An integrity assessment	Water Sector	Palestine	Service providers are
			is now part of the	Regulatory Council		required to do an internal
			performance			assessment as well as to
			monitoring			respond to the Council's
						integrity assessment

	New assessment of water facilities distribution at the community level	Welthungerhilfe	Uganda	Involvement of communities at all levels of the water projects' implementation
'Unpacking the Opportunities Integrated	Amendment of a new of water and sanitation bill	People Voice for Development	Tanzania	Engagement with the Parliamentary Social Service Committee
Urban Water Management for Sustainable Cities' virtual course	Inter-sectoral workshops held to develop a national water policy	Hydrological Research Center, Ministry of Scientific Research and Innovation	Cameroon	Water management integration and water resources managed at the basin level were prioritized
'Delta Planning and Management' virtual course	g Development of an advocacy campaign for the protection of coastal areas	Assistance to Families and Victims of Clandestine Migrations (AFVMC)	Cameroon	Raised awareness of local populations on the cutting of trees and the pollution of the sea by industrial and plastic waste
'Professional Management o Water Drilling Projects' virtua	 Geologists recruited by the government to carry out quality assessments of boreholes drilling 	UNICEF	Kenya	
course	Meeting held to discuss the effectiveness, implementation and use of the Water Drilling Technical Manual	Ministry of Agriculture, Irrigation and Water Development	Malawi	Meeting organized by JICA for government, district water officers, WASH partners and drillers to discuss gaps of drilling projects

Website <u>www.cap-net.org</u> Virtual campus <u>http://campus.cap-net.org/en/</u> Email <u>info@cap-net.org</u> Facebook <u>https://www.facebook.com/capnet.undp/</u> Twitter @capnet_undp

