

Nelson Anne (Orcid ID: 0000-0002-7525-7703)  
Wenzel Lauren (Orcid ID: 0000-0002-5320-3616)

## **Integrating social network development into marine protected area management capacity building and institutionalization in the Philippines and Indonesia**

Anne Nelson<sup>1</sup>, Gabrielle L. Johnson<sup>2</sup>, Lauren Wenzel<sup>3</sup>, Adrienne Antoine<sup>4</sup>,  
Lea Avilla<sup>5</sup>, Ma. Leanna Manubag<sup>6</sup>

<sup>1</sup> NOAA Marine Protected Areas Center International Capacity Building Program on contract with Lynker Technologies, Inc., Oregon, US [anne.nelson@noaa.gov](mailto:anne.nelson@noaa.gov)

<sup>2</sup> NOAA International Marine Protected Areas Capacity Building Program/Coral Reef Conservation Program on contract with The Baldwin Group, California, US [gabrielle.johnson@noaa.gov](mailto:gabrielle.johnson@noaa.gov)

<sup>3</sup> NOAA Marine Protected Areas Center, Maryland, US

<sup>4</sup> NOAA Climate Program Office Climate and Societal Interactions, Coastal and Ocean Climate Applications, Maryland, US

<sup>5</sup> Philippines Department of Environment and Natural Resources Biodiversity Management Bureau - Coastal and Marine Division, Quezon City, Philippines

<sup>6</sup> Philippines Department of Environment and Natural Resources Biodiversity Management Bureau - Coastal and Marine Division, Quezon City, Philippines

### **ABSTRACT**

1. Recent research demonstrates a critical and ongoing need for capacity building of marine protected area (MPA) practitioners in order to ensure effective management of MPAs and MPA networks that protect coastal and marine ecosystems. MPA capacity development needs are site and network-specific, although commonly include leadership development, building shared goals across networks, understanding impacts and identifying appropriate management approaches, and building system-wide monitoring and evaluation programmes.
2. Designing capacity building programmes at the network scale can contribute directly to enhancing learning and social networking, sustaining and strengthening effective management of ecosystems and improving coordinated network governance. Network-wide capacity building amplifies the effect and availability of technical resources and expertise, lessons learned at different management scales and collaborative decision-making. The net result is shared capacity development across the network and improved functioning of multiple MPAs as a unit, all from a singular capacity building effort.
3. In the spirit of contributing to the ongoing growth of the global social network of MPA practitioners, this paper shares observations from social MPA network building as part of recent MPA capacity building in the Philippines and Indonesia. These programmes

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deliver technical capacity and a participatory learning framework for participants to enhance their MPA social network and support long term implementation of gained knowledge and skills.

4. Important elements in supporting successful network development through capacity building programming include:
  - Comprehensive needs assessment
  - Strong collaborative partnerships for programme delivery
  - Clear learning objectives and intended long-term results
  - Strong and sustained political will at the local, national and regional scale
5. Each MPA site, region and capacity building programme is unique in structure and content, yet what all programmes have in common is that they build on the principles of trust and community building to create a locally-relevant format and framework for the network to flourish.

#### **KEYWORDS**

capacity building, marine protected area(s), MPAs, marine protected area management, MPA networks, resilience, resiliency, social network(s), management effectiveness

#### **INTRODUCTION**

Recent and ongoing studies validate the critical importance of capacity building (Gill et al., 2017) for effective management of marine protected areas (MPAs). Effective management is essential for ensuring MPAs protect ecosystem services that support ecological integrity, sustenance and livelihoods for communities. Achieving effective MPA management also supports regions in meeting national and international MPA targets including the 10th Conference of Parties to the Convention on Biological Diversity Aichi Biodiversity Target 11:

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes (CBD COP10, Aichi, 2010).

and the IUCN World Conservation Congress, Hawai'i, US, 1-10 September 2016:  
Resolution WCC-2016-Res-050 (motion 053): Increasing marine protected area coverage for  
effective marine biodiversity conservation:

1. CALLS ON the Director General and all components of IUCN to promote and support the actions described in paragraphs 2-4 below;
2. ENCOURAGES IUCN State and Government Agency Members to designate and implement at least 30% of each marine habitat in a network of highly protected MPAs and other effective area-based conservation measures, with the ultimate aim of creating a fully sustainable ocean, at least 30% of which has no extractive activities, subject to the rights of indigenous peoples and local communities. (IUCN 2016)

Much has been written on critical elements of effective MPAs and ecological networks, (Edgar et al., 2014; Fernandes et al., 2012; Walton et al., 2014; White, Aliño, & Meneses, 2006) their benefits, including climate resiliency, (Green, Meneses, White, Kilarski, & Christie, 2008; Green, White, & Kilarski, 2013; Horigue et al., 2015; McLeod, Salm, Green, & Almany, 2009) and the needs of leadership at the local, regional and national scales (Dehens & Fanning, 2018; Hilborn, 2016). In acknowledging the critical importance of leadership, international agreements and local partnerships, this paper focuses on a foundational aspect of MPA management effectiveness - the relationship between social network building and capacity building to support the larger network of global MPA practitioners. Social networks are recognized as a key element of effective MPAs and networks (Alexander & Armitage, 2015; Horigue et al., 2015).

This paper highlights recent MPA capacity building work of the National Oceanic and Atmospheric Administration (NOAA) Marine Protected Areas Center International Marine Protected Areas Capacity Building Team (IMPACT) in the Coral Triangle region, specifically the Philippines and Indonesia. These countries represent two of six countries under the Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security (CTI-CFF) that work collaboratively to build management effectiveness tools including the Coral Triangle Marine Protected Area System (CTI-CFF 2013) and the Marine Protected Area Regional Exchanges. This collaboration is intended to create results in strengthening MPA management by developing a shared learning network of managers learning from each other. Both nations have committed to building capacity to ensure effective management of MPAs at the site and network level. This national level leadership has provided the vision, regulatory guidance, advocacy and the acquisition of key resources for making the MPA network functional. Local MPA and network leadership is based on the strong understanding of how the ecological, socio-economic and governance aspects of a particular area influence a given MPA (White et al., 2014).

The programmes and activities of IMPACT since 2005 (Walton & Moore, 2012) aim to build local leadership by creating a collaboratively-developed framework for MPA leaders to learn together while developing technical skills and capacity to build an MPA social network for lasting mutual support. In the spirit of contributing to the growth of the global MPA social network, this paper explores tools, methodologies and lessons learned, developed in partnership with local MPA leaders in the Philippines and Indonesia. The IMPACT learning processes are designed to support increased management effectiveness of existing MPAs and networks, develop an MPA community of practice, and a social learning and sharing network. These tools and methodologies are designed to support MPAs in reaching both their individual site and the MPA network's long-term conservation goals, while providing long lasting socio-economic benefits to local communities and to Coral Triangle Marine Protected Area System (CTI-CFF, 2013; Weeks et al., 2014).

Much of what is addressed in the capacity building workshops is determining priority management development needs for the MPA managers, based on science and best management practices – within the context of their specific biophysical, socio-economic and governance settings. Increasingly, MPA managers are called upon to incorporate understanding of complex issues and projects related to coastal and marine resource management uses. The breadth of knowledge and capacity needed to address these issues is likely too great for any one MPA manager or even small team already busy dealing with local community issues, monitoring, funding and general administration duties of an MPA. The building of a community of MPA practitioners as part of the capacity building process is integrated into the trainings by design to collectively support and empower managers to address these complex issues beyond the completion of the trainings. This ensures that as they learn together in a training event, they also create a peer-to-peer support network that provides a base for sharing knowledge and experiences in response to some of their shared management priorities. Additionally, participants in the capacity building programme engage with a group of trainers with varied on-the-ground experiences, including practitioners from NOAA's Office of National Marine Sanctuaries and many other partners, that have been challenged with many of these same issues.

## **METHODS**

### *Overview*

The IMPACT capacity building programmes are designed to provide MPA practitioners and managers with the essential skills and knowledge to effectively manage MPAs through characterizing the biophysical setting of their sites, understanding root causes and addressing

potential threats, and assessing areas of vulnerability and resilience (strengths and weaknesses), not only in terms of the natural resources, but also in terms of management capacity. The team establishes multi-year agreements with in-country partners to support training and skill building on an array of topics prioritized by in-country managers and practitioners dealing with pressing and changing management challenges. Topics are co-determined with in-country partners as part of the programme needs assessment process and may include the need for broad topical learning categories such as:

- Natural Processes and Ecosystems
- Planning for Climate Change
- MPA Fundamentals
- Planning for Sustainable Tourism in MPAs
- Coastal and Marine Spatial Planning
- Ridge to Reef Management
- MPA Management Planning
- Planning for Sustainable Fisheries in MPAs
- Damage Assessment, Response, Restoration and Monitoring

#### *Goals of MPA Capacity Building Programme*

IMPACT programmes create a learning framework for participants to learn from each other. By creating an environment that encourages community building amongst practitioners, MPA managers are gaining knowledge together, the learning is infused in the foundation of the social network to inform future work and collaborative problem solving. As integral to the training programme, design and materials are customized and new learning components developed by focusing on the network's shared threats and provide a space for creative learning and problem solving.

Common shared threats such as coastal development via tourism and urbanization pose challenges for MPA managers as they often occur outside management area boundaries. The training events build in time and structured exercises for participants to share best practices, lessons learned and provide opportunities to collaboratively address shared threats and potential solutions, thus strengthening networks alongside site management effectiveness planning.

Capacity building topics are connected throughout the training events by creating opportunities for practitioners to co-create multiple benefit management actions and long-term plans to address shared threats. Resiliency, ecosystem function and addressing cumulative impacts are

consistent themes of sessions on topics such as marine spatial planning, sustainable tourism, planning for climate change and management planning.

[insert Figure 1 here]

### *Partnerships*

The success of programmes is dependent on partnerships between government agencies, local government units, non-governmental organizations (NGOs), universities or research institutions, etc. To build critical capacity for effectively managed MPAs, key partners need to collaborate early and consistently on programme planning, goal and milestone setting, and develop a long-term path forward after the capacity building programme implementation phase. By building the framework for leadership at the site level, parallel with providing practical tools for addressing key management challenges, programmes have an excellent chance of successful uptake and internal replication through institutionalization of the capacity building programme. After initial partnership discussions and agreements, NOAA's IMPACT works with local partners to conduct an analysis of the current level of management capacity through a comprehensive needs assessment process.

### *Needs Assessment and Programme Framework*

The needs assessment begins with data collection through both surveys and interviews. The needs assessment identifies priority capacity building needs, and where capacity (MPA management expertise) exists amongst individual MPA staff and other local and regional experts that could be used to support the capacity building programme. The results are then utilized to design a framework for a multi-year MPA capacity building programme, including describing the implementation phase, which ensures the skills and knowledge learned are actually exercised in the field. This is when capacity starts to be built. The implementation phase itself needs to be strategic and requires follow-up, on-going support, technical expertise and incentives when possible.

### *Mentor Programme*

The mentor programme is another key programme component ensuring implementation as well as institutionalization throughout the network of MPAs. Mentors are invited to participate in the programme based on potential leadership ability through an application and invitation process completed by the in-country leads. This programme focuses on the development of both their training skills and knowledge base in order to become trainers for their peers, as well as to develop their leadership skills to help manage the network programme over the long term. Mentors regularly receive training in skills such as communication, facilitation techniques, conflict resolution, and participatory training. Mentors also support the regular training events,

taking on a co-trainer role in directly delivering elements of the training and receiving guidance from the lead trainers. Through this role as co-trainers, the mentors become champions for MPA network capacity building and support others in the programme as part of the network and institutionalization.

*[insert Figure 2 here]*

#### *Implementation Planning and Action*

To support implementation action by training participants, a key part of the capacity building programme includes developing implementation agreements, administering a small grants programme, and providing additional technical support. As part of each training workshop, participants are required to submit a daily implementation agreement outlining how they will apply what they have learned in the day's training. These are reviewed by the mentor and training team and follow-up is completed with the in-country partners several months later to ensure plans are completed. Individual implementation plans may include activities such as developing monitoring programmes, building partnerships, sharing technical information through meetings, trainings and presentations, developing education programmes and materials such as signage.

A further step to implementation is a small grants programme. The competitive grant programme may be the first exposure to grant writing for some participants. Providing a 'writeshop' as part of a training workshop, participants gain practical experience developing proposals, meeting grant criteria and building partnerships for the proposed project in a supportive environment with real-time feedback. The competitive small grants provide small amounts of funding to further support actions outlined in participants' implementation plans. At the end of the programme a summit is held where participants share the results of their small grant projects with their peers through presentations and posters, providing perhaps a first exposure to large audience public speaking and conference poster presentation.

#### *Networks*

One of the key components of the capacity building framework is establishing a strong MPA learning network among participants. Development of this network is built into the learning process by design and based on adult learning principles to emphasize a cooperative learning environment through exercises and peer-to-peer sharing. As relationships strengthen and trust is built, the network grows as participants initiate and engage in their own social media groups and listservs. These networks provide opportunities for participants to share stories and lessons learned. Establishing this network is a vital component of the capacity building programme's long-term success as it encourages participants to look to each other as experts and a support

system. It ensures participants understand the breadth of knowledge of their existing colleagues and reinforce the notion their colleagues are people they can go to for help and support. In addition, these social/learning platforms provide a forum for anyone within the programme to share requests for grant proposals, announcements of trainings, webinars, on-line courses, conferences, events, new literature and tools as well as day-to-day successes.

*“It is inherent with the Filipinos to have a strong social network. When people get to know each other more through constant meeting, doing something for a common cause, (for this training, saving and protecting the environment), people started to build and firm up camaraderie among learners/participants. And being a social person that we are, the training programme becomes an easy task because as a group, the participants gain knowledge together, analyze every problem better and finding solutions easier. Social networking strengthens the confidence of every individual knowing that they are not alone and they are with people who wants the same for the environment. The learning is not only coming from the modules introduced to them but also through the exchanges of knowledge and experiences and the strategy to address common threats will first be treated differently through knowledge sharing again until all come up with a unified decision.”*

Philippines DENR NIPAS MPA Capacity Building Program Mentors

## RESULTS

IMPACT capacity building programmes in the Philippines and Indonesia, highlight efforts to support MPA social network development and sustenance as part of the training objectives. USAID Indonesia and Philippines funded this work to build effective networks of MPAs by building capacity for government MPA managers. The programmes were designed collaboratively between the country leads, USAID and IMPACT to fit the model of governance and long-term institutionalization of the programmes. Indonesia began as a bottom up programme resulting in top down institutionalization. The Philippines programme was designed from the top down and by design led to institutionalization at the agency level and bottom up expansion of peer-to-peer training and implementation.

[insert Figures 3a., 3b., 3c here]



In both countries, the MPA capacity building programme framework was incorporated into national workplans and financial plans, indicating a commitment to the programme. Other institutionalization actions include embedding training elements into the national training division such as curriculum adaptations, training of trainer concepts, and mentor opportunities. The programmes also provide a forum for aligning training topics with other government programmes and initiatives from international down to the local level. For example, connections were made between the capacity building programme and other programmes such as the USAID Climate Programs, alignment with the Regional Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security (CTI-CFF) initiatives, and activities such as the MPA Regional Exchange which occurs almost annually.

Across these programmes, participants have the unique opportunity to gain insights on management strategies from local experts, MPA managers from NOAA National Marine Sanctuaries Program and other MPA peers from across the globe who share their knowledge as trainers and mentors in week-long highly participatory workshops. As part of their implementation agreements, participants then apply the knowledge and skills gained in the training by facilitating their own community-based training. Tools from the training events are modified and utilized to facilitate meetings and planning activities. Others utilize tools to help fill in data gaps needed to better inform management decisions by utilizing the tools provided in the training events.

Lastly, as a result of these programmes, MPA social networks are developed and stay connected via social media groups such as the MPA Capacity Building Facebook page, the Open Channels MPA network, webinars, and other already established networks in their region.

## **PHILIPPINES**

The Philippines Department of Environment and Natural Resources (DENR)-USAID-NOAA capacity building for the National Integrated Protected Area System (NIPAS) of MPAs in the Philippines began with collaborative development of the capacity building programme framework. MPA managers prioritized their capacity needs initially through an extensive survey. After analysis of survey results, DENR agency leads, USAID and NOAA led several regional workshops to review and explore the findings and jointly create the programme elements, training topics and timeline. This resulted in the programme framework that guided the capacity building programme over a four-year period and was completed in 2018. Training participants, mentors and national agency leads were integrally engaged in developing the framework, institutionalized it into national work plans and ensured funds and staff time were dedicated for the duration of the programme.

The series of eight training topics completed, based on the needs assessment process were:

- MPA Fundamentals
- Ocean Processes and Ecosystems
- Planning for Sustainable Tourism in MPAs
- Planning for Climate Change in Coastal and Marine Environments
- Coastal and Marine Spatial Planning
- MPA Networks
- Assessing Benefits and Threats
- Natural Resources Damage Assessment

The Philippines mentor programme is a strong element and key to the successful training events and uptake of knowledge into management actions. Ten mentors, chosen through a competitive application process, completed a series of training of the trainer workshops consisting of progressive facilitation and participatory training delivery skill building. Mentors guided their peers through the participatory exercises, kept the week-long training events lively and built the social network by actively guiding small groups through structured exercises on applying tools and process frameworks.

#### *Impact and Evaluation*

At the 2018 completion of a four-year MPA capacity building programme in the Philippines, national agency partners institutionalized the national pool of mentors into a lasting and viable team to support ongoing coastal and marine protected area management in 2018-2019 and beyond. This programme is a partnership of Philippines Department of Environment and Natural Resources, USAID Philippines and NOAA. Budget and commitment of the national government is solidified for the mentor pool to conduct two training events per region for a total of six events in 2019. Commitment is in place to continue funding and growing the programme in subsequent years.

Individual site managers have and continue to put into action their implementation plans by:

- establishing and reviving MPA networks;
- developing new and updating sustainable tourism plans to include limits of acceptable change;
- filling data gaps
- delivering community-based training events which are modifications of original events;
- building partnerships with local governments on marine spatial planning;

- building capacity of their partners by sharing technical information and management effectiveness tools; and
- creating educational signage, activities and partnerships with local schools and universities.

## **INDONESIA**

The Indonesia MPA Capacity Building Program was designed to provide MPA practitioners and managers with the essential skills and knowledge to effectively manage into the future, Indonesia's goal of 20 million hectares of MPAs by 2020. This programme consists of a partnership between Conservation Units (KKJI) under the Ministry of Marine Affairs and Fisheries (MMAF), Human Resources Development Agency of MMAF (BPSDM-KP), Coral Triangle Support Partnership/MPA Governance Network (MPAG) and NOAA under the USAID Marine Program. Between 2010 and 2015, more than 400 MPA practitioners, managers, local government, NGO, University and other MMAF staff have been trained.

Based on the initial needs assessment of 2009 and subsequent follow-ups, the following training topics were delivered several times across the country:

- MPA 101- Introduction to MPAs
- MPA Management Planning
- Planning for Sustainable Fisheries in MPAs
- Planning for Sustainable Tourism in MPAs
- Stakeholder Engagement
- Facilitating Collaborative Enforcement and Compliance

Several mentors from the programme assisted with additional training events which were modifications of the original training materials as part of the institutionalization of the programme. This included additional training events led by BPSDM-KP and KKJI reaching over 200 participants, as well as 30 community level trainings in partnership with MMAF, reaching over 500 community members on the topics of MPA-101, and MPA Management Planning, Planning for Sustainable Fisheries in MPAs, and Planning for Sustainable Tourism in MPAs. In one instance a team of mentors turned trainers supported vital work at an MPA in Indonesia that resulted in a partnership between the government and the village leader. This partnership continues to influence the surrounding area to consider sustainability when designing any future development programme.

In 2016, the Indonesia Capacity Building Program shifted to more direct technical assistance in close partnership with the USAID SEA Project, which is focused on the north-eastern region of Indonesia. Under this project, the IMPACT Program in partnership with other NOAA offices is providing technical support to MPA managers and government ministries in the topics of Marine Spatial Planning, MPA Management Planning and Sustainable Tourism.

### *Impact and Evaluation*

The following is a summary of how the mentors and training participants applied and/or implemented the concepts and experiences from the various training events:

#### *Mentors:*

- Increased ability to share concepts of conservation with colleagues
- Informed when interacting with local government about MPA issues, management planning, fisheries, spatial design and zoning
- Utilized materials and participatory training techniques to conduct training events/share marine resource management concepts with technical officers, communities and fishermen
- Shared with colleagues who may not have other professional development opportunities
- Utilized materials in developing community outreach activities
- Utilized materials as a framework for developing other training events

#### *Participants:*

- Development of community level training in MPA 101 concepts
- Applied management planning concepts and strategies with MPA authorities
- Applied concepts to support zoning plans and related management strategies
- Utilized materials to support the mobilization of community support through outreach activities
- Direct training of staff, patrol staff, and community members
- Applied concepts to support more effective management plans within MPAs

## **DISCUSSION**

Based on direct participation and observation of the training experience, the participants' sharing of their own experiences is one of the most important elements of the training events. All contributions are valued and encouraged, and this is continually reinforced throughout each

training event in the programme. To achieve a high level of sharing and thus a productive, collaborative learning experience, participants need to be comfortable speaking out.

Creating this environment often takes time and trust building. This trust building and encouragement of contribution to the whole is the foundation of a social MPA network in microcosm, played out in the capacity building training events. The IMPACT programme format supports mentors in applying their facilitation skills to simultaneously guide peers through technical exercises while building trust and a supportive small-group environment to share and learn together, peer-to-peer. This and the following criteria are vital components of capacity building programmes to ensure long-term success of social networks and resulting implementation for MPA managers:

- 1) Every contribution from participants is valuable to the learning experience. Design of training events should be built around and provide a forum for this principle.
- 2) Develop a follow-up plan to support implementation.
- 3) Establish a social network as part of the capacity building programme plan.
- 4) Create further professional development and continued connectivity opportunities for mentors and participants.

First, implementation of capacity building is closely related to the extent of follow-up support and connectivity (Fish & Walton, 2013). Through regular peer review of participants' daily implementation plans at each training, then monitoring of actions at each subsequent training, participants demonstrate a high success rate of implementing their own workshops and receive regular positive feedback and opportunities to share their experiences, challenges and success.

Second, capacity building should include a social network that serves as an organizing platform for learning exchanges and peer-to-peer support as part of both the training events and other learning activities. These networks can and do take on many types of learning exchanges such as between participants, between mentors, across participant-mentor, across mentor-trainer, or participants-partners. As part of this, a communication forum for alumni could also be included, providing a platform for continuing the cycle of sharing implementation lessons learned and the momentum of the programme overall. This learning network also provides a platform for local programme champions to share success stories, thus serving as inspiration to others as well as highlighting each other's work. It provides a means to coordinate information sharing, including training materials, references and support materials, tools and techniques and results of evaluation and monitoring.

Creating a social network wherein participants feel their inputs are heard and valued builds the critical sense of ownership of the training experience and the practical application of those experiences. IMPACT training events provide a framework for participants to take ownership of and be active participants in the learning process. The goal is to impart technical and management skills and knowledge, including field experience from the trainers alongside building the confidence and trust for participants to recognize that they have valuable knowledge, skills and tools to share. During feedback sessions, many participants said that before their participation in the MPA capacity building programme they were afraid to lead and speak in public. They shared that they now feel empowered to contribute to the training events and speak publicly as part of their work as MPA managers. In addition, several of the mentors have gone on to lead training events and workshops including adapting materials for community level training events. In addition, they noted gaining practical knowledge that can be easily taught in every social level in the countries - fishermen, government officials, university students, NGOs, etc.

Lastly, during the life of the capacity building programme, the mentor teams become a tight-knit peer group. Since they will be instrumental in the continuation of the programme after the initial programme reaches completion, it is critical to continue to provide opportunities for their growth and continued connectivity.

*“What makes the mentor programme an effective component to the success of the training implementation is again because of strong social network. While the training modules is built with all the best possible references and models for MPA Management and the mentors who were selected have the potential leadership ability, it is their established trust and again camaraderie (being one of them) among the participants that made the whole mentoring programme a success. The training skills received by the mentors at the start of every training made them a better leader building up from the familiarity of the participants in every mentor.”*

Mentor team from Philippines DENR NIPA MPA Capacity Building Program 2018.

The national leadership in both Indonesia and the Philippines are prioritizing institutionalization of the mentor programme to serve as a national pool of mentors. This may include developing new mentor groups, delivering training events, presenting at conferences, engagement in new tool development, consulting on MPA networks, ongoing professional development

opportunities and more. The training partnership encourages continued network building with international MPA colleagues through site visits and exchange programmes with other MPA sites that would consist of spending several weeks at the site. Additionally, some of the mentors have led the development of site level mentor networks, thus further strengthening the connection between the site level and the national government.

*“I was one of the participants in the NOAA MPA Capacity Building Program in Indonesia when it was first initiated in the Bird's Head Seascape, Papua in 2009. And along with that program I was chosen as one of the participants to be trained by NOAA to become an MPA trainer - mentor for Indonesia. The mentor program I have been involved in to this day has tremendously built my practical knowledge and capacity in training others on how to manage MPAs from planning, implementing and monitoring as well as evaluating MPA effectiveness. The mentor program has also contributed a great amount of value in my professional network and career. As of today, I am involved in the USAID funded project to strengthen Indonesia's Marine Resources Management and Sustainable Fisheries Program.”*

Chris Rotinsulu, West Papua Program Coordinator for SEA Project Indonesia (Mentor with Indonesia MPA Capacity Building Program) 2018.

As part of building capacity, IMPACT programmes strive to support its partners in continuing the momentum after a programme has been completed. Regular follow-up is maintained to discuss current issues and progress. Additional technical assistance is provided as needed and provides further implementation support. This may come in the form of additional training events or arrangement of webinars, sharing guidance documents, tools and updates. Implementation is further supported by regular engagement. Alumni of the capacity building programmes are encouraged to engage in professional exchanges and topical working groups. The training partnership continues to support additional leadership development and internships for alumni and mentors. Finally, the programme supports strengthening social MPA networks through encouraging participating in and strengthening regional MPA networks and contributing to the global community of MPA practitioners through avenues such as Open Channels ([openchannels.org](http://openchannels.org))

Over the life of IMPACT, MPA managers and practitioners from across the globe have received training in more than a dozen topics. This training provides the essential skills and knowledge base necessary for effectively managing MPAs. In addition, the various geographical programmes have resulted in a team of highly skilled in-country trainers/mentors to provide

support for future implementation of activities. Institutionalization continues to progress within the various geographical programmes thus ensuring the long-term sustainability of the programme within the framework of partner organizations.

A critical ingredient of the mentor team's cohesion, commitment and sense of community is sharing their new knowledge with their communities and each other. MPA managers face multiple challenges often with a small team of 2-3 colleagues. MPA managers are contending with coastal and upland development, increased tourism and other issues they may not have authority to participate in decision making. Their sites, which are key to the resilience and sustainability of ecosystems within the Coral Triangle, are vulnerable to increased human pressures that are beyond their control. Despite these ever-present challenges and calls on their time, a key aspect that brought these managers together consistently over the years to attend trainings, is dedication to conservation of these vital ecosystems and the communities that depend on them.

There was a general sense of commitment to conservation from all participants observed from sharing and notably from the ministry/departmental leads and site managers. Participants throughout the MPA Capacity Building programmes have shared that being part of and contributing to the social network increase their commitment. The team tracks and supports the alumni as part of the programme's commitment to their continued success. Mentors from multiple capacity building programmes are now leaders, championing MPA management and conservation in their regions.

Mentors from across IMPACT capacity building programmes have cited the value of the social network as well as the respect and trust built within the mentor team.

The following summarizes feedback received from the Philippines and Indonesia programmes.

**Network** - The mentor programme is successful because it's a social network among the mentors – started with intent to build a network by bringing together folks from different offices. The social network builds as the programme goes along as teams build more important purpose to provide information, knowledge, facilitation and direction to the other participants. For the mentors, both the facilitation skills and social network grow with each training event. Enforcement, education and other capacity skills are built on that same human network framework.

**Respect** – The programme focuses on supporting and accepting others' opinions as well as giving back to each other. Respect is the basis of interaction. Participants accept each other's



words and are not critical. The older generations are not selfish with their knowledge and lessons and the younger teammates are hungry for direction and information. In life, the younger generation is taught to respect and listen to their elders. Because of this, the younger mentors willingly learn from those who have been there for a while as well as learn new concepts through their education. Once the network is built, mentors are more open and share opinions. They are humbled by how the older generations can accept such changes and refer to their elders as “adopted millennials.” They also share being target driven. They collectively always can hear the connection, can relate to the sea, the fish, and want to help. This drives the hunger for improving MPA management on their sites and the MPA network.

**Trust** - Building community means building trust and an atmosphere where participants are comfortable speaking up and contributing. New participants are sometimes shy and are gently encouraged to build confidence and trust, that builds the support network and then more confident to contribute and share lessons and build the network. Trust building is key along with empathy through shared experience.

**Champions** – Beyond the learning MPA network, MPA networks have to first find the champion within the network to strengthen leadership. MPA network concept and goals need to be socialized to the mayors. In ten years, this generation of MPA practitioners has seen great difference in coastal management and understand that past activities didn’t necessarily work and are eager to replicate successful efforts. The MPA social network supports and encourages this replication, though the group needs to continue to monitor effectiveness and manage adaptively incorporating new knowledge and techniques new to the network.

**Leadership** – Success is found by leveraging timing of current marine management scenarios and the urgency of natural resource conditions. High level leadership ensured there was funding for the program and approvals for participants to attend the 8 – 6- day training over the course of 3 years.

## CONCLUSION

Three critical elements are important to ensuring the success of MPA networks, whether within the Coral Triangle context or global setting: 1) ensuring and maintaining strong leadership, commitment and political will at multiple levels; 2) developing an MPA social and learning network for sharing capacity across individual MPAs within the network; and 3) providing a means for continuous opportunities for learning and capacity development at the site and network level.

To ensure institutionalization of programmes, a consistent number of staff are required throughout the lifetime of the programme. In the Philippines, this includes having a dedicated set of national level mentors who regularly engaged in capacity building activities. In Indonesia, MMAF is developing competency standards for MPA staff, which will require regular training and support continuity in the long-term. Institutionalization also requires a dedicated budget to support capacity building and the MPA network in general. This also ensures that as capacity is built, the programme's ownership can be taken over by the partner agency.

To establish and maintain these critical elements, MPA programmes need champions. It is important to identify a capacity lead within the government institution that can guide institutionalization. This includes allocating a budget, providing a *legal* means for the mentors to be trainers as part of their job description, provide time for mentors to be engaged, provide an incentive (i.e. small grants or competency) for participants to attend AND implement information, have attendance count towards professional development or other professional designation (for example Indonesia has competency standards for MPA managers.) These champions can ensure the capacity building programme is implemented and social networks can successfully improve MPA management effectiveness long term. Champions, mentors and participants collectively as MPA social networks need to address required roles, accountability, funding and staff turnover challenges, institutionalizing budget and securing ongoing leadership in addition to the more technical aspects of the capacity building programmes.

Building crucial social/learning networks as part of any capacity building strengthens the learning experience and ensures sharing of lessons learned to strengthen the network. Learning and peer discussions and observations from recent capacity building programmes in the Philippines and Indonesia show participants create a common bond, a sense of family or community, built on trust and respect as part of their learning. Coming together as a network powers a shared sense of purpose and inspires participants to bring home this collective momentum to effectively manage their MPAs and support their communities.

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## List of Figures

Integrating social network development into marine protected area management capacity building and institutionalization in the Philippines and Indonesia

Anne Nelson, Gabrielle L. Johnson, Lauren Wenzel, Adrienne Antoine, Lea Avilla, Ma. Leanna Manubag

Figure 1. MPA Capacity Building Program Timeline

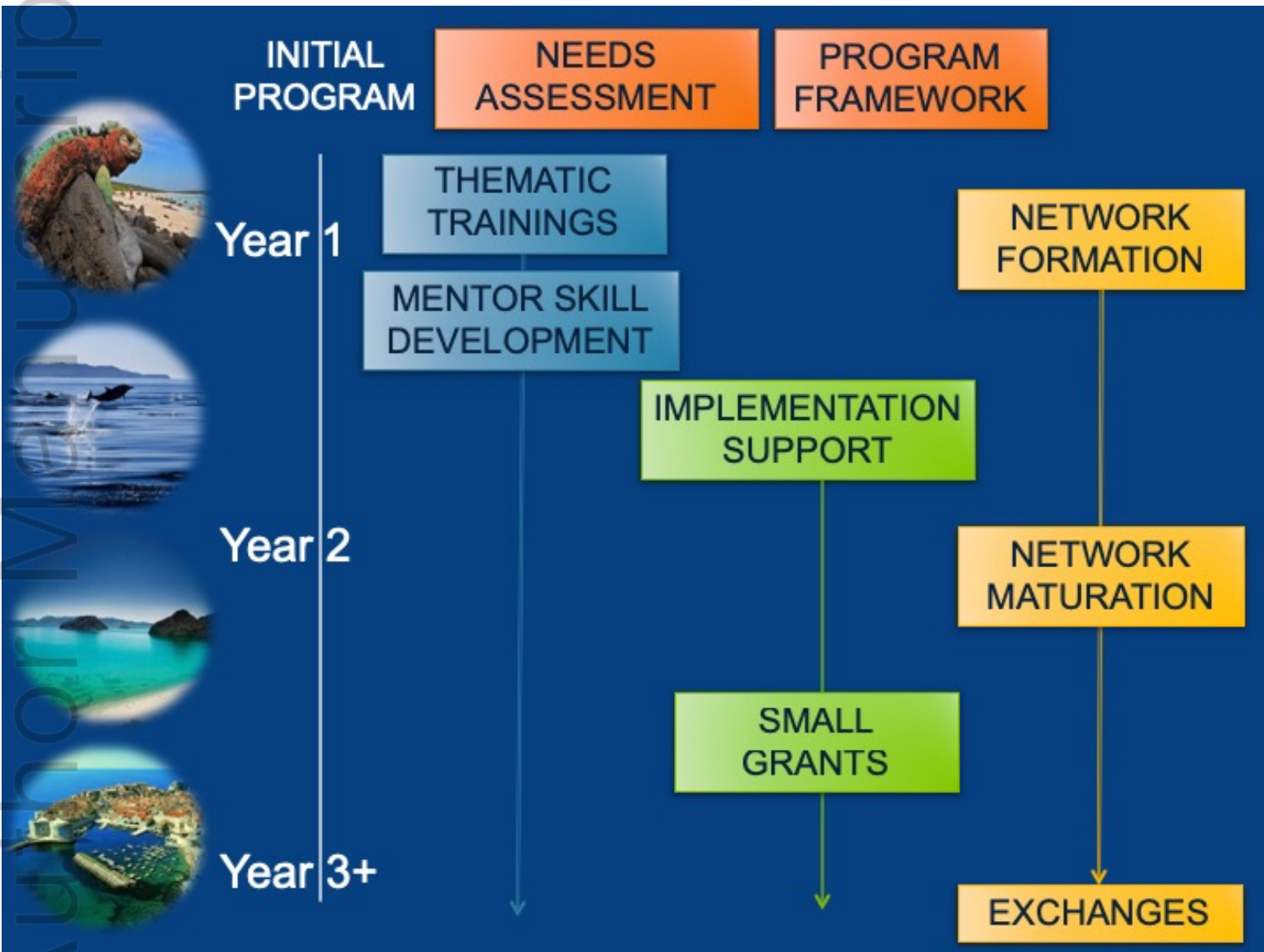
Figure 2. Mentor Program Skills Progression

Figure 3a. Comparison between Top-Down and Bottom-Up Approach to Capacity Building. The Philippines MPA Capacity Building Program started by focused on the Top-Down Approach and is now rolling out activities at the site-level, while the Indonesia Program was born out of a Bottom-Up Approach that was then adapted into a Top-Down National Government Program.

Fig 3b. Schematic of Philippines MPA Capacity Building Program, reflecting the Top-Down Approach at the National Government Level.

Fig 3c. Schematic of Indonesia MPA Capacity Building Program, reflecting the merging of the Bottom-Up Approach from the site level, to the Top-Down Approach at the National Government Level.

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## MENTOR PROGRAM

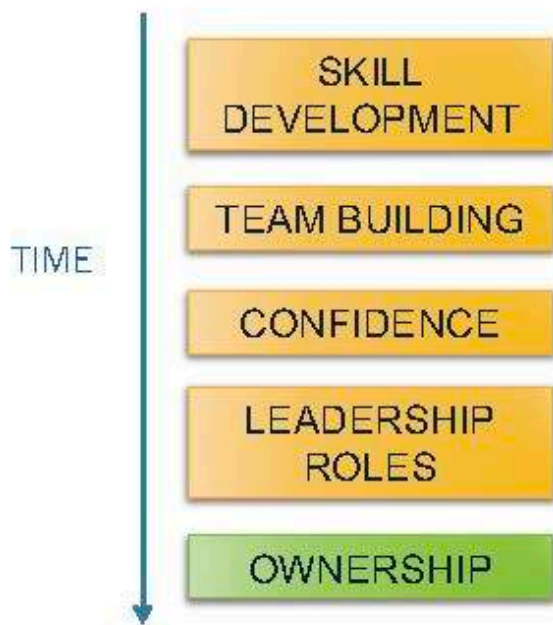


Figure 2. Mentor Program Skill Progression

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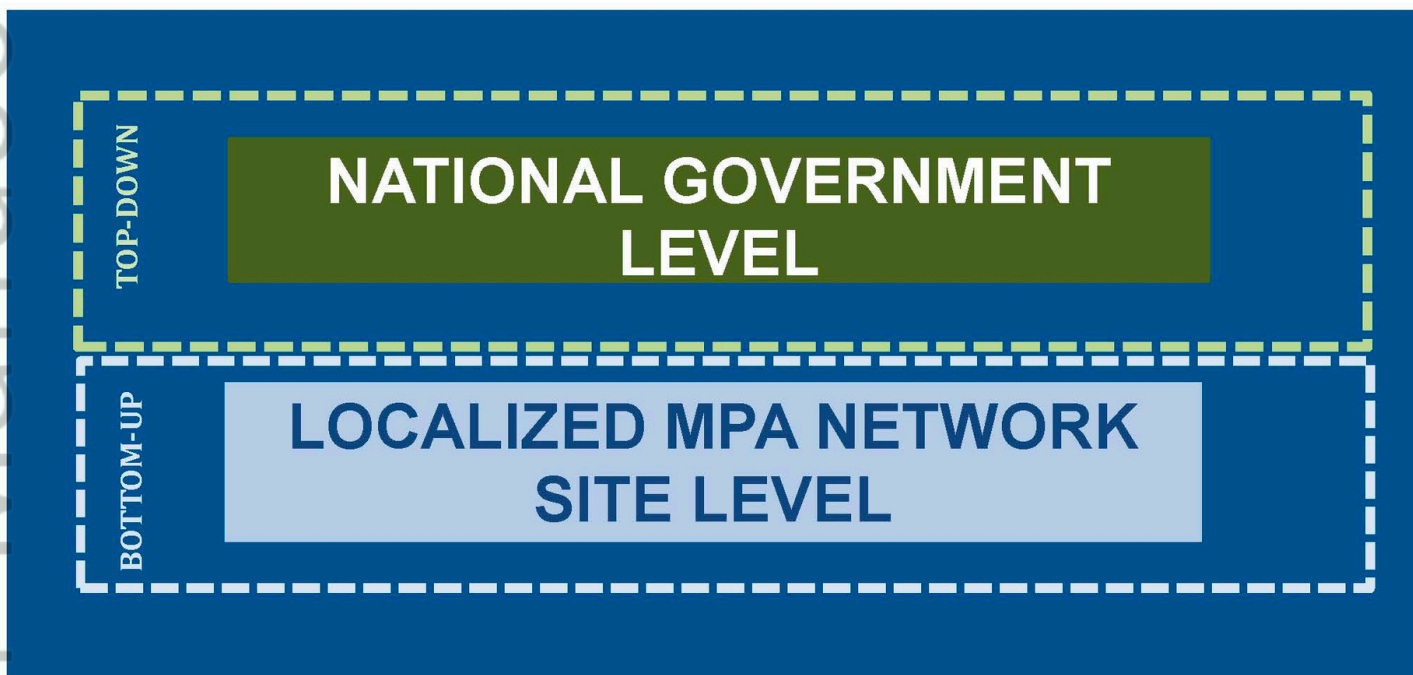


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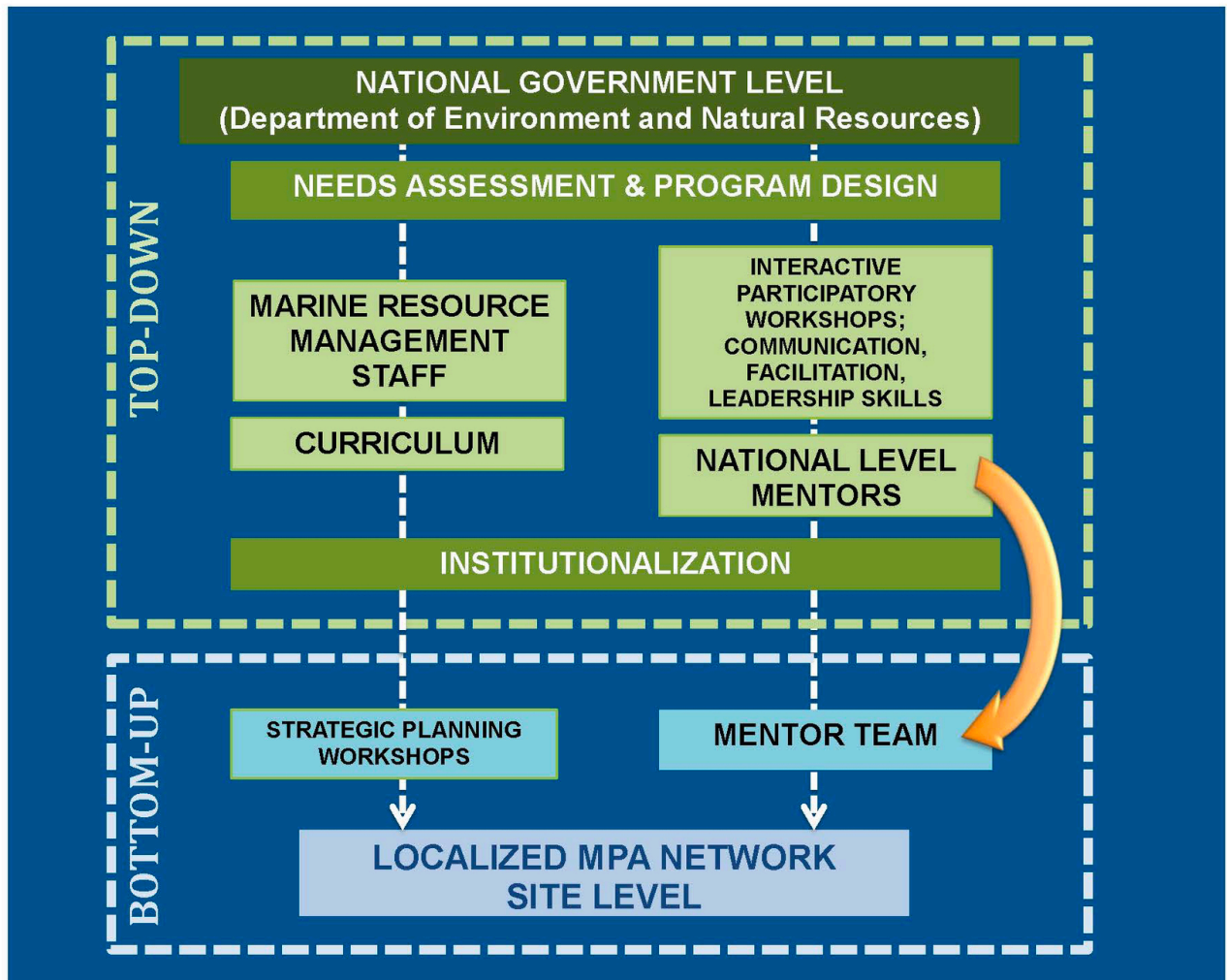


Fig 3b. Schematic of Philippines MPA Capacity Building Program, reflecting the Top-Down Approach at the National Government Level.

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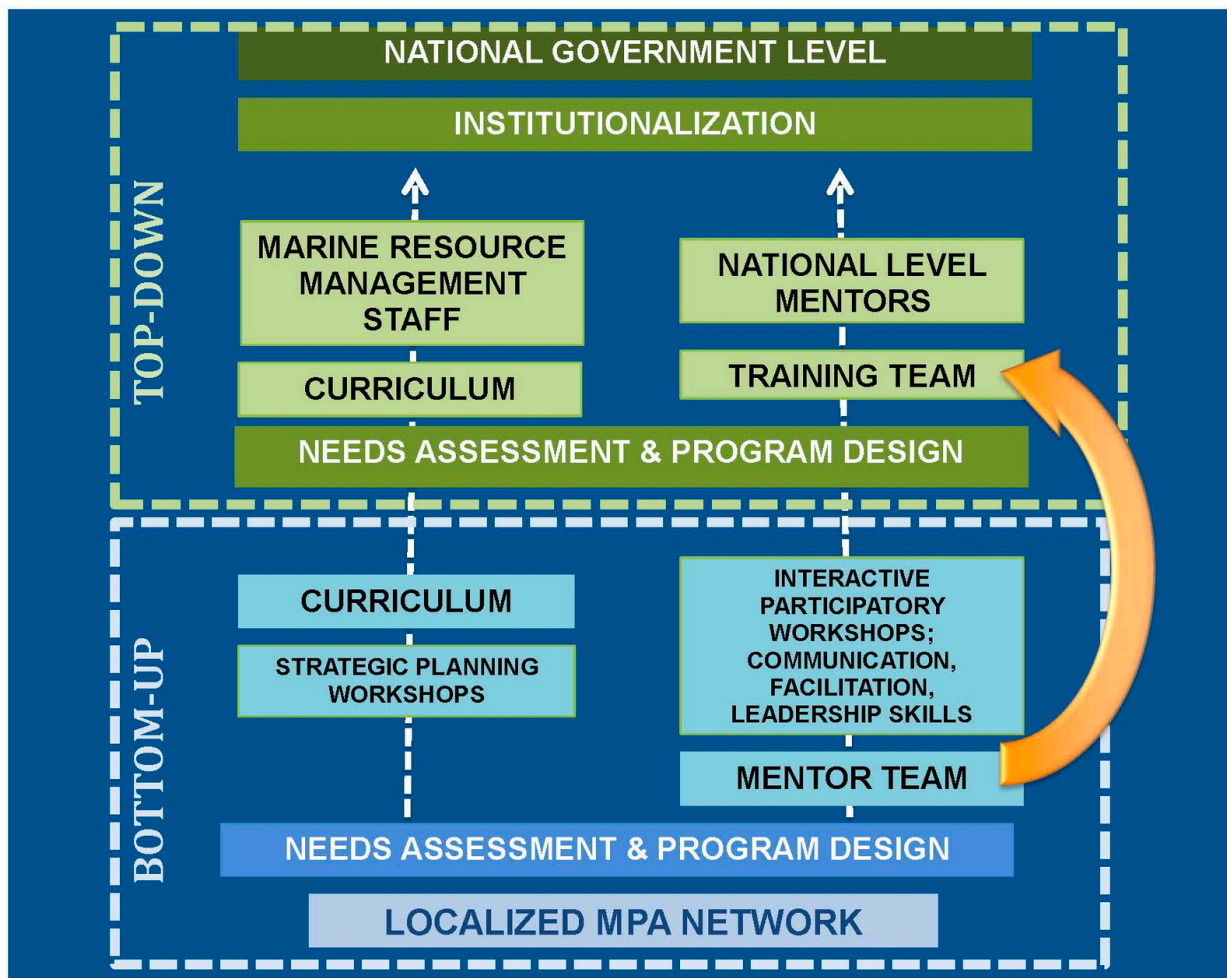


Fig 3c. Schematic of Indonesia MPA Capacity Building Program, reflecting the merging of the Bottom-Up Approach from the site level, to the Top-Down Approach at the National Government Level.

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