POGO Capacity Development
Programmes, partnerships and impacts

Dr Sophie Seeyave
POGO Executive Director
What is POGO?

• POGO is a consortium of major oceanographic institutes around the world, represented by their Directors.

• Mission:
  – Lead innovation and development of the crucial components of the ocean observing system.
  – Identify and contribute to the development of the key skills, capabilities and capacities needed to achieve the vision.
  – Work with governments, foundations and industry, to articulate the benefits to society and required funding to build and sustain the system.
Scientists from developing countries spend up to 3 months receiving one-to-one training and supervision in ocean observations at a major oceanographic institution.

As part of its strategy to expand ocean observations in the Southern Hemisphere, POGO provided travel support for participants, mostly from Latin America, to attend the ASI.
Collaboration with the Nippon Foundation

Major sponsor for capacity building in marine science.
Funding ~650K USD per annum

**NF-POGO Visiting Professorships (VP)**

- **2005-2007**
- Scientists visited a developing country for training in ocean observations. Funds were invested in equipment to facilitate the establishment of a new observing system.

**Nippon Foundation-POGO Centre of Excellence (CofE)**

- **2008-pres**
- Each year, ten young scientists from ten different, mostly developing, countries, study for ten months in an intensive programme on ocean observations.
NF-POGO CofE Regional Training Programme (RTP)

An intensive 2-3 week long training course conducted in conjunction with the CofE, in a different country every year, often hosted by an alumnus of the CofE (Brazil, Vietnam, India, Philippines, Mexico, Ireland)

2009-pres
History of POGO shipboard training

• BEAGLE circumnavigation organised by JAMSTEC in 2003 with fellowships provided by POGO, IOCCG and IOC.
• AMT fellowship in partnership with PML since 2008
• Concept expanded to cruises run by other institutions (NOC, GEOMAR) with funding from other partners (AtlantOS, Nippon Foundation, GreenSeas)
• Using spare berths, provides fellowships for participation in international research cruises and one-to-one training before, during and after the cruise.
• Dedicated “floating summer schools” providing training for 20-30 students (with NF/AWI/SMART in 2015 & 2016).
• Ocean Training Partnership launched in collaboration with AWI and SMART in Dec 2017, funded by NF.
Ocean Training Partnership

- New web portal launched in Dec 2017 (www.oceantrainingpartnership.org), linked to MarineTraining.eu portal
- Call for partners and collaborators to join the initiative and host fellowships/training cruises
- Shipboard training fellowships conducted on PAP (NE Atlantic), AMT (N-S Atlantic transect) and Fridge (UK to Caribbean) cruises
Other training Initiatives Supported in 2017

Ocean-Colour Data in Climate Studies
International Training Course at PML
Sept 2017

• Jointly funded with NERC, EUMETSAT and IODE
• Supported early-career scientists from POGO member institutes in Chile (Univ. Concepcion) and India (NIO)

International Workshop for Nutrient Analysis at NIOZ, Nov 2017

• Jointly funded with SCOR
• Supported participants from Argentina, Brazil, China, India, Kenya, Mexico, S. Africa, Venezuela
But what about the impacts?

1. Global reach of the training

Countries of origin of POGO trainees
2. Monitoring and follow-up: NF-POGO Alumni Network for Oceans (NANO)

• Main objectives
  – Maximize benefits from training;
  – Facilitate active contacts among alumni and with faculty;
  – Promote joint research and outreach activities built on training.

• Members
  – Alumni: Past and present scholars of NF-POGO trainings
  – Friends: Distinguished ocean scientists, instructors and/or advisors on joint research projects
Career progression

- **Prestigious scholarships** (e.g. Fulbright, Newton)

- **Senior management positions** (e.g. Deputy Director General of Fisheries in India; Directors of research institutes in Mauritius, Tanzania, Brazil; Vice-Chairman Intergov Coordination Group for Indian Ocean tsunami warning and mitigation systems)

- Many alumni are involved in **teaching**, in their own institutions and/or on NF-POGO programmes.

1/3 have PhD, another 1/3 are pursuing one.
Monitoring of HAB species in the coastal waters of India and Sri Lanka

NANO Regional Projects (2012-2017)

Striking a balance with the lionfish: Habitat suitability modeling and social awareness measures in the Southern Caribbean

Pigment analysis using HPLC in ANTARES Network coastal time series stations

Eutrophication in the coastal regions of South-East Asia

Nearshore hydrodynamics

Monitoring of HAB species in the coastal waters of India and Sri Lanka

New Global Project “A global study of coastal productivity, deoxygenation and ocean acidification at selected sites”
3. Evaluation of training programmes (cont’d)
- Impacts on careers

Did the training have a positive effect on your education/career, in any of the following ways?
(scores between 1-5)

- Enroll in graduate...
- Finish MSc or PhD
- Obtain job
- Promotion
- Position abroad
- Participate in new...
- Implement new...
- Participate in...
- Project...
- Collaboration

Total score

- NF-POGO CofE RTP
- NF-POGO CofE
- ASI
- NF-POGO VP
- POGO-SCOR Fellowship

Partnership for Observation of the Global Oceans
### Evaluation of training programmes (cont’d)

#### Passing on the knowledge

<table>
<thead>
<tr>
<th></th>
<th>% respondents who have given seminars/lectures based on the training</th>
<th>% respondents who have supervised students</th>
<th>% respondents who have mentored colleagues</th>
</tr>
</thead>
<tbody>
<tr>
<td>POGO-SCOR Fellowships</td>
<td>88</td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td>NF-POGO VP</td>
<td>87</td>
<td>76</td>
<td>66</td>
</tr>
<tr>
<td>ASI</td>
<td>64</td>
<td>82</td>
<td>27</td>
</tr>
<tr>
<td>NF-POGO CofE</td>
<td>81</td>
<td>56</td>
<td>63</td>
</tr>
<tr>
<td>NF-POGO CofE RTP</td>
<td>73</td>
<td>91</td>
<td>55</td>
</tr>
</tbody>
</table>
3. Evaluation of training programmes (cont’d)
- Impacts on institutions, countries and regions

<table>
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<tr>
<th>Most relevant benefits to institutions (as per institution survey respondents)</th>
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</thead>
<tbody>
<tr>
<td>1. New knowledge and skills passed on through seminars, practical sessions, or mentoring (4.4/5)</td>
</tr>
<tr>
<td>2. Broadening the scope of their oceanographic research (4.2/5)</td>
</tr>
<tr>
<td>3. Participation in international or regional projects or networks (4.1/5)</td>
</tr>
<tr>
<td>4. Setting up a new monitoring or observation programme (3.7/5)</td>
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</tbody>
</table>

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<th>Most relevant benefits to countries/regions (as per institution survey respondents)</th>
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<td>1. Improved quality of marine science (4.5/5)</td>
</tr>
<tr>
<td>2. Better able to monitor their coastal zone (4.3/5)</td>
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<tr>
<td>3. Increased contribution to international marine science networks (4.1/5)</td>
</tr>
<tr>
<td>4. Better able to manage their coastal resources (3.7/5)</td>
</tr>
</tbody>
</table>
Summary

• With its partners, POGO has developed a portfolio of training programmes to enhance the global capacity for ocean observations.
• It has had a global reach, providing training to almost 800 students from 80 countries;
• With the Nippon Foundation, POGO has developed a network of former trainees to monitor their career progression and provide additional support;
• A formal evaluation of its training programmes has shown that the training is having positive impacts not only on the trainees, but on the capacities of their home institutions, countries and regions to conduct marine science and ocean observations and to participate in international networks.
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