

FISH CAPACITY DEVELOPMENT STRATEGY REVIEW

May 23-24, 2019
WorldFish – Penang, Malaysia

WORKSHOP REPORT

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Workshop Rationale

Capacity Development (CapDev) is one of the key enablers of the impact pathways for the CGIAR Research Program (CRP) on Fish Agri-food systems (FISH) and one of the key performance indicators for the program's success. The global trend in agricultural research and innovation *fora* is to strengthen the focus on CapDev as necessary for realizing impact on the ground.

Many International Organisations (FAO, IFAD, etc.) have put CapDev at the heart of their mandate, considering the development of capacities of societal institutions and organizations as the core of any development project and necessary for the success and sustainability of development efforts¹.

CapDev in projects contributing globally to Sustainable Development can help researchers, institutions, fishers, and farmers to discover and develop their own expertise and confidence. However, it is through CapDev interventions directly from the communities and organizations in these countries, on these territories, that actions can affect and reduce poverty, food insecurity and environmental degradation².

CapDev in the FISH CRP is already included in many activities, such as training, communications and media, mentoring and coaching of students, institutional development, partnership mediation, and many more with the goal of strengthening the capacities of individuals, organizations and systems and provide enabling environment for development.

The FISH CRP, being a multi-centre research program, makes a strength in its geographical representation and will make its scientific research relevant by fostering the leap from individual learning to sustainable livelihood outcomes and impacts through an integrated cross-country CapDev approach paying particular attention to gender and youth issues and women's empowerment.

The approved FISH CRP proposal defined different components contributing to the CapDev (ToC, partnerships, strategic actions, etc.) and a preliminary strategy was drafted and included in the proposal (see page 24 of the [FISH CRP Proposal](#)).

In the FISH CRP proposal, it was stated that CapDev will be continuously refined based on the outcome evaluation that will track assumptions and risks regarding mechanisms of change and our effectiveness in addressing them. Impact assessment will measure quantitative progress towards achievement of our SLO and flagship outcome targets, disaggregated to track benefits for men, women and youth. Outcome evaluation and impact assessment will drive program-level learning and adaptation, and we will periodically adjust investment in our research areas and geographies as we gather evidence on results.

The CapDev activities implemented along the FISH CRP impact pathways are contributing to the following crosscutting sub-IDOs at the CRP level: *enhanced institutional capacity in public sector and private research organizations and improved capacity of women and youth to participate in decision-making*. Moreover, each flagship has identified crosscutting capacity sub-IDOs within its theories of change guiding strategic CapDev actions.

The Capacity Development Workshop goal, which was held at WorldFish's Head Quarters on the 23rd and 24th of May, 2019, was to review the effectiveness of the Capacity Development strategy by stimulating scientific dialogue around the framework to strengthen the FISH approach to capacity

¹ http://www.ifad.org/english/institutions/synthesis/synthesis_report_web.pdf

² <https://www.gfar.net/news/capacity-development-it-people-and-local-organizations-matter>

development. The overall key questions addressed during the workshop to assess the validity of the strategy were:

- 1) *What is needed? (Need);*
- 2) *What is available and adequate to meet the needs? or, what has been successful, and can be built upon (Availability);*
- 3) *What is missing or needs improvement in order to meet the needs? (Missing/gaps);*
- 4) *What actions are needed? (Actions).*

The workshop objectives were to (1) assess the capacity development activities supported by the FISH CRP (2017 – present); (2) establish formally a Capacity Development Community of Practice (CoP) to coordinate/accelerate Capacity Development in FISH; and (3) revise and agree on the elements to include in the FISH Capacity Development Strategy review (see agenda in annex 1).

A five-stage self-assessment process was proposed

The workshop and the actions proposed to establish an effective approach to CapDev in the FISH CRP followed a five-stage self-assessment process:

1. The CapDev and the M&E Leaders performed a first CapDev assessment based on the information collected during the annual reports drafting processes (for 2017 and 2018) and on the data harvested from MEL and OCS (presented during the workshop).
2. The CapDev leader organized a Capacity Development workshop and invited key FISH CRP staff involved in Capacity Development activities, with the following objectives:
 - Present a CapDev background document based on the approved FISH CRP proposal;
 - Present the preliminary self-assessment analysis performed by the CapDev leader;
 - Present the draft ToC developed based on documents a & b by the CapDev and M&E leaders;
 - Discuss and agree the scope of the CapDev activities supported by the FISH CRP (group discussion: SWOT analysis; Analysis of the Need/Availability/Gaps/Actions required for Cap Dev; Three-dimensional framework for assessing capacity needs; contribution to internal and external CapDev; partnerships for building capacity; contribution to Sub-IDOs);
 - Revise all the outputs from the points above and revise the CapDev Framework;
 - Establish a Community of Practice (CoP) internally to the FISH CRP and WorldFish: during the workshop the CoP members will be nominated (one member per focal/scaling country);
 - The CapDev leader will introduce a second self-assessment exercise that each country will have to carry-out in the following months, to address more detailed aspects of the identified elements based on their national needs;
 - MEL Capacity Development module training will be organised.
3. The newly appointed Cap Dev CoP members have to complete the self-assessment reports and return them to the Cap Dev leader within an agreed period.
4. The Cap Dev leader will coordinate the compilation of the final self-assessment draft report; and based on the latter and the discussions had during the workshop she will draft the FISH CRP Capacity Development Strategy. The strategy will be then circulated for comments to the Cap Dev CoP, FISH CRP Management Committee and Directors.
5. Based on the comments received, a final reviewed FISH Capacity Development Strategy will be prepared and published by Cap Dev leader. The process may take longer than expected if the feedback from countries and key researchers is not submitted timely.

Capacity Development Vision and Strategy in 2016

*CAPACITY DEVELOPMENT IN THE CGIAR STRATEGY*³

Results Framework

CGIAR's Results Framework ([link](#)) describes the vision, mission and three strategic goals, or System Level Outcomes (SLOs), for the work of CGIAR and its partners over the 15-year period to 2030 set by our funders. CGIAR work will contribute to the reduction of poverty (and creation of wealth), to improved food and nutrition security (leading to better health), and to better management of natural resources (leading to improved ecosystem services).

The SLOs are the higher-level goals for the CGIAR system aligned with international development imperatives like the Sustainable Development Goals (SDGs). They cannot be achieved by CGIAR or by research alone. Progress must be driven by national governments and by international development organizations and agreements, and other partners.

Although research conducted, by CGIAR and its partners can and will contribute to the achievement of more than one System Level Outcome, four issues cut across the whole research agenda: Climate Change, Gender and Youth, Policies and institutions, and Capacity Development.

The need for capacity development arises in all fields of agri-food research, but is particularly pressing in new areas such as data management and communication technologies, landscape analysis and climate-smart agriculture.

Besides addressing the needs of the research community, capacity development should seek to enhance innovation throughout the agri-food system, including farmers and other groups along the value chain.

Partnership and Capacity Development Strategy

Partnerships for Impact

Partnerships are critical to the achievement of CGIAR's goals, especially given the disparity between the magnitude of the problems and the resources that CGIAR alone can bring to bear on them. CGIAR partnerships will be increasingly diverse, extending beyond the system's traditional collaboration with national and regional research and extension programs to a broadening circle of advanced research institutes, development agencies, NGOs, policy bodies and private-sector companies. The contributions of all partners will be explicitly recognized, and the general expectation will be of burden sharing and parallel finance, rather than internal transfer from one partner to the others.

According to the CGIAR strategy, CGIAR partnerships will be guided by the following principles, based on relevant lessons from experience:

- **A common agenda** - All partners must share a vision for change, including a common understanding of the problems and a joint approach to solving them.
- **Shared measurement** - Collecting data and measuring results consistently across all locations ensures that efforts remain aligned and partners hold each other accountable.
- **Mutually reinforcing activities** - Partners should have distinct roles, which need to be coordinated through a mutually reinforcing plan of action.

³ [CGIAR's Strategy and Results Framework 2016–2030](#)

- **Continuous communication** - Consistent and open communication lines are critical in order to build trust and ensure the realization of shared objectives.
- **Backbone support** - Creating and managing collective impact requires a designated entity with staff and specific skill sets, to serve as the backbone for the partnership.

In some cases, particularly where countries have recently emerged from conflict or crisis or national research systems are severely under-resourced, the capacity of partners may not be sufficient to support relationships as defined above. In such cases, CGIAR will, upon invitation, work with implementation partners (often international NGOs or development organizations) and national clients to define the knowledge agenda and capacity development needed to accompany a development intervention.

CGIAR research program theories of change now explicitly acknowledge the role of the private sector. CGIAR can make important contributions in the pre-competitive space for innovations that will eventually be taken up and spread by private firms. Further work on intellectual property and related matters will be needed to harness the full potential of these growing partnerships.

Multi-stakeholder platforms and alliances convened around major global issues are promising instruments for involving partners from the private sector, as well as others.

Scaling Up

Achieving impact at scale is one of the greatest challenges facing the development community. Research by CGIAR and its partners can support the drive to disseminate innovations, but the scaling up effort must be led by national institutions, supported by regional or international development organizations where appropriate. The private sector also has a major role to play.

To support scaling up the CGIAR proposes to adopt a five-fold strategy of:

- Deliberate prioritization of research efforts to target constraints of wide applicability and regions of concentrated poverty and hunger;
- Close alignment of efforts by centers and CRPs in selected areas, to capture synergies;
- Coordinated planning with implementation partners so that the knowledge of CGIAR and the financial and programmatic resources of these partners complement each other;
- Commitments from clients and national partners to make complementary investments and policy reforms where CGIAR is investing; and
- Institutionalization of a culture of regular monitoring and evaluation to gauge progress towards impact and to learn from experience.

Capacity Development

Capacity development is a strategic enabler of impact for both CGIAR and its partners. It goes far beyond the transfer of knowledge and skills through training, and cuts across multiple levels – individual, organizational and institutional. To support implementation of this broader concept of capacity development, we have a Capacity Development Framework.

Stronger academic institutions in low-income countries enables CGIAR to concentrate on developing capacity for strategic and translational research in relevant fields. The system can provide practical, hands-on mentorship in well-resourced research laboratories and experiment stations, as well as in farmers' fields. An example of such a CGIAR facility is the Nairobi-based Biosciences eastern and central Africa - International Livestock Research Institute (BecA - ILRI) Hub, co-created by ILRI and the New Partnership for Africa's Development (NEPAD) and run by ILRI to provide cutting-edge facilities

for Eastern and Central African bio-scientists. CGIAR can further leverage its capacity development by strengthening whole organizations and institutions, not just individuals. This means significant institutional changes are needed within CGIAR as well as in our relationships with our partners. The multiple dimensions of this change include: mainstreaming previously under-resource areas such as nutrition, data management, information technologies, gender and resilience in research programs; engaging stakeholders and partners in new ways to ensure research leads to development; creating a culture of accountability and results-based management; and developing skills in resource mobilization and partnership building.

Efforts to mainstream new capacities in partner institutions should yield high returns. Activities will be embedded in ongoing research programs and will target key skill sets requested by partners, as well as by CGIAR itself. Alongside new approaches to enhancing the capacity to innovate, tried and tested mechanisms such as staff exchanges, sabbaticals and post-doctoral programs will continue to play a role in ensuring that CGIAR and its partners are equipped to deal with today's rapidly evolving research agenda.

FISH CRP CAPACITY DEVELOPMENT ROLE IN IMPACT PATHWAYS

Role of capacity development in the FISH Theory of Change

The FISH Theory of Change (ToC) centres on the role of multidisciplinary research addressing the challenges outlined for the priority geographies, and the steps from research to development outcomes. It is in response to clearly identified needs of poor producers and consumers of fish along with those women and men whose livelihoods depend upon aquaculture and SSF value chains. Impact pathways for the delivery of outcomes stem from research in two closely integrated flagships: (1) sustainable aquaculture, and (2) sustaining small-scale fisheries, both focusing on securing sustainable supplies of fish, improving livelihoods of fisheries and farmers and ensuring a contribution of fish to the nutrition and health of the poor.

As a strategic enabler of impact, CapDev in each of these domains aims to influence change through the four change mechanisms incorporated into the FISH ToC and is required to support movement from research outputs of the two flagships to research outcomes and ultimately to development impacts.

The four change mechanisms of the ToC include that the FISH CRP identifies capacity development interventions of key stakeholders along the pathway as follows:

a) Capacity of aquaculture farmers to assess technology needs and apply improved practices and fishing communities to implement co-management:

Local adoption and dissemination of technologies and management practices comprises the initial application of gender-responsive innovations and technologies, such as improved breeds, feeds and disease management practices in aquaculture; equity- and effectiveness-enhancing governance innovations in fisheries management; and new processing technologies to reduce postharvest waste and loss and produce fish-based products for women and children. These are achieved through implementation partnerships and capacity development in selected sites within our focal geographies, including government and NGO partnerships. The mechanism also includes the spread of these technologies and practices through research innovation platforms at subnational or national levels, and their exchange through regional networks.

b) Capacity of private investors to identify appropriate opportunities and enterprises to adopt innovative business models:

Private sector investment and replication of innovative and gender-inclusive business models include actions by small- and medium-scale entrepreneurs, reached directly through our capacity development partnerships, as well as large-scale aquaculture enterprises that we partner with to demonstrate the feasibility of a package of investments at scale. It also includes subsequent scaling aided by robust evaluation of the financial returns and broader social, economic and ecological sustainability of new business models, and communication of these through industry associations and regional networks.

c) Public sector capacity to design and implement policy and regulatory measures that affect the viability of scalable technologies, management practices and organizational innovations:

Public sector policy improvement and institutional strengthening comprises improvements in the policy and regulatory measures that affect the viability, scalability and equity implications of technologies, management practices and organizational innovations. These include, for example, regulations addressing land use and agricultural intensification, allocation of fishing rights and approval of new fish-based products by food and health regulatory bodies. Recognizing that the design of appropriate policies does not in itself ensure effective implementation, this mechanism takes into account the institutional capacity development that is often required for public sector agencies to fulfil their roles in these technical domains.

d) Civil society capacity to promote solutions drawing on research evidence, as well as the capacity of development agencies to integrate these into their programming and investment priorities:

Influence on policies and priorities of civil society and development agencies includes actions such as NGO partners incorporating gender-responsive and inclusive aquaculture technology packages, fisheries management and livelihood development strategies, or behavioural change communication tools for early childhood nutrition as part of their broader programming in our focal countries and beyond. It also includes influence on the priority-setting of bilateral and multilateral development agencies operating in the fields of agricultural innovation, rural livelihoods and food security in coastal and aquatic landscapes, reflected in higher levels of investment in the solutions validated by program research.

Capacity development will be continuously refined based on the outcome evaluation that will track assumptions and risks regarding mechanisms of change and our effectiveness in addressing them. Impact assessment will measure quantitative progress towards achievement of our SLO and flagship outcome targets, disaggregated to track benefits for men, women and youth. Outcome evaluation and impact assessment will drive program-level learning and adaptation, and we will periodically adjust investment in our research areas and geographies as we gather evidence on results.

We test the assumption that careful selection of partners in target countries and collaboration with policy stakeholders and regional institutions will influence favourable policy and institutional changes to promote adoption of innovations at scale. The ToC also assumes synergies realized with other elements of the overall CGIAR portfolio through site integration and joint research on cross-cutting challenges, such as natural resource governance (PIM), climate change impacts (CCAFS), food and nutrition strategies (A4NH) and landscape-level resource competition (WLE).

Capacity development implemented along FISH impact pathways will contribute to the following crosscutting sub-IDOs at the CRP level: *enhanced institutional capacity in public sector and private research organizations* and *improved capacity of women and youth to participate in decision-making*. Further, each flagship has identified crosscutting capacity sub-IDOs within its theories of change guiding strategic capacity development actions. As a strategic enabler of impact, capacity development in each of these domains aims to influence change through the four mechanisms

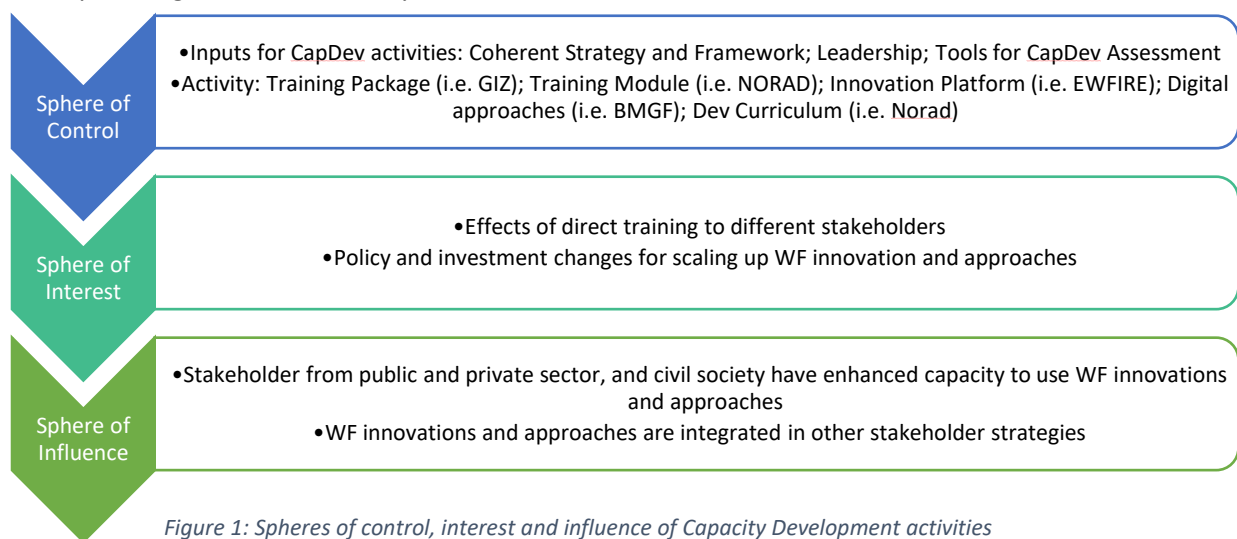
incorporated into the FISH ToC and is required to support movement from research outputs of the two flagships to research outcomes and ultimately to development impacts.

Strengthened policies and institutions are an integral part of the scaling strategy to reach program-level outcome targets. Consequently, the sub-IDO enhanced institutional capacity in public sector and private research organizations is identified as a goal at CRP level. Further, improved capacity of women and youth to participate in decision-making will be achieved through the program’s gender and governance research. Program research on sustainable aquaculture (FP1) seeks to contribute to increased capacity of beneficiaries to adopt research outputs relating to aquaculture technologies and enhanced individual capacity within partner research organizations to conduct aquaculture technology research. Research on sustainable small-scale fisheries (FP2) seeks to contribute to enhanced capacity to deal with climate risks and extremes with an emphasis on poor households and enhanced capacity of women and youth to participate in decisions making around small-scale fisheries management.

In pursuing the program’s capacity development strategy, we will draw upon the comparative advantage and experience of managing partners in specific areas of science and practice, while working through national and international partners to implement specific capacity development activities.

CapDev activities in the FISH CRP ToCs: insights from Countries

In 2018 FISH CRP MC supported a country level exercise to defining the ToCs in different focal countries where FISH operates. A set of workshops were then implemented for identifying and reviewing the plausibility and consistency of the plan that each country has to achieve and contribute the impact targets both at country level and for the FISH CRP.



The ToCs developed focused on understanding the relevance and causality behind research products, outputs and outcomes, but also around the achievements of development outcomes and impacts targets until the year 2022. Generally, this has been key to inform the Result-Based Management system of the FISH CRP and for reflecting on the change mechanisms, on what is necessary to unlock or to enable in the context where we operate to achieve for greater impacts. More specifically, this has also important implications for the monitoring and evaluation of the FISH investments, including those related to the different enabling factors or change mechanisms such as capacity development.

Based on the ToCs developed at country level is then possible to reflect on what best suits the capacity strengthening needs and priorities for the FISH CRP. *Figure 1* shows the different stages - from control to influence - on which is necessary to use different CD elements. *Figure 2* shows rapid assessment and learning loops of the FISH CRP Capacity Development ToC. The ToC has been constructed through a in-depth analysis based on specific indicators as recommended by CGIAR⁴.

⁴ [Capacity Development Indicators for the second phase of CGIAR Research Programs](#)

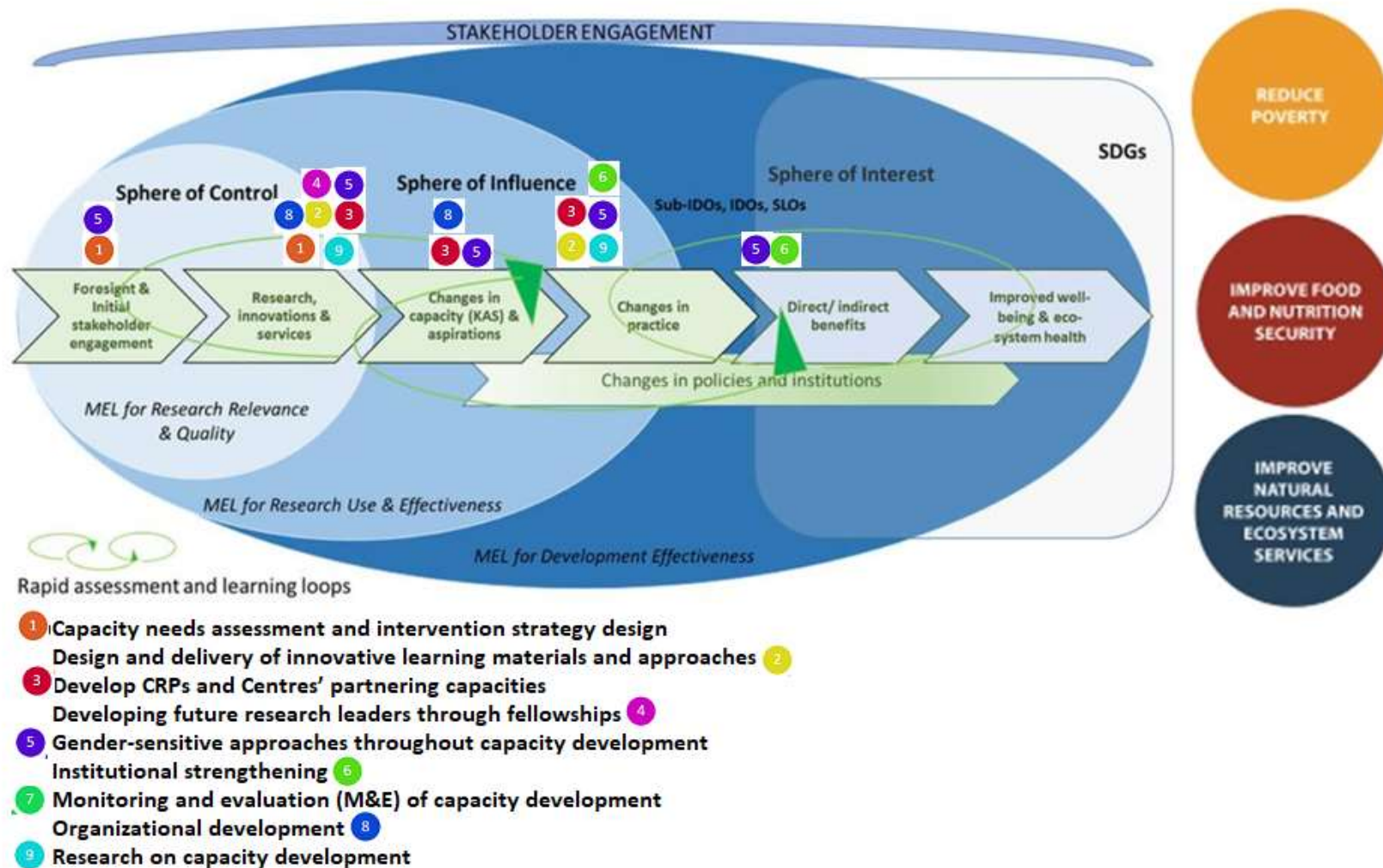


Figure 2: Rapid assessment and learning loops of the FISH CRP Capacity Development ToC

Elements of Capacity Development

CGIAR has adopted a systems-thinking approach to capacity development. The main innovation from this is that emphasis is placed upon defining the system as a whole, which is made up of interacting parts. It is also about recognizing complexity and knowing that one cannot always predict outcomes so one has to have the capacity to learn and adapt along impact pathways. Capacity development is hence a multifaceted process combining elements across several dimensions, which themselves are interrelated. In addition, capacity development is also linked with improved governance critical to outcomes. This framework proposes nine key elements of capacity development, illustrated in *figure 3*. Each CRP should adapt and utilize the elements according to its needs and the particular setting of each CRP, guided by the requirement to attain the cross-cutting capacity development IDO. Although CRPs do not have to include all nine elements in its capacity development strategy, the CGIAR advised that a minimum set of elements should be applied to convincingly achieve expected outcomes.

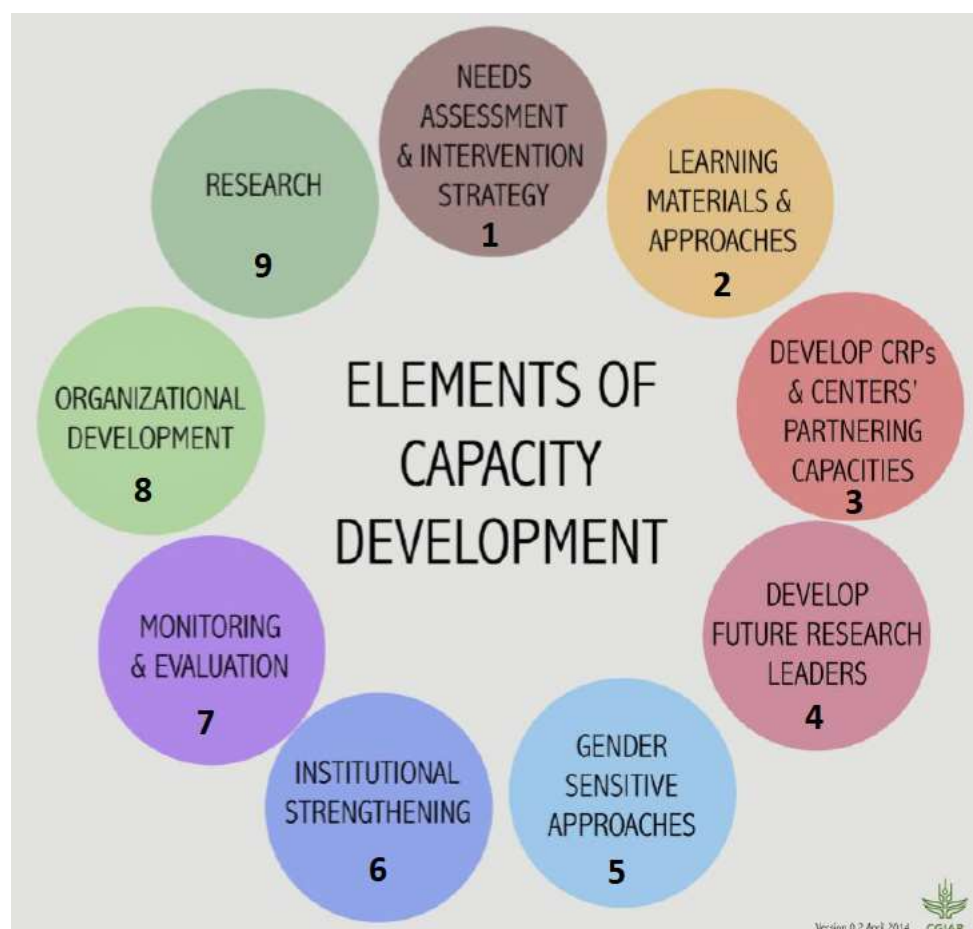


Figure 3: Elements of Capacity Development

- 1. Capacity needs assessment and intervention strategy design**
 - Identifying appropriate interventions for the intended audience in appropriate formats
 - Focus investments and leverage other resources
- 2. Design and delivery of innovative learning materials and approaches**
 - Content development
 - Adult learning theory and instructional design
 - Harnessing technology for CD initiatives

- 3. Develop CRPs and Centers' partnering capacities**
 - Identifying and brokering appropriate partnerships models
 - Assessing and developing partners' capacity
- 4. Developing future research leaders through fellowships**
 - Convergence of policies and procedures within and across CRPs
 - Strategic focus of investments in fellowship programs
 - Strategic focus given to on-the-job-training to maintain competences of existing staff and partners relevant throughout their careers
- 5. Gender-sensitive approaches throughout capacity development**
 - Provide expert capacity development input into CRPs' gender strategies
 - Ensure gender dimension is incorporated into capacity development activities
 - Leadership & women-entrepreneurship development
- 6. Institutional strengthening**
 - Institutional assessments to inform policy design and reform
 - Facilitate and engage in multi-stakeholder dialogues
 - Develop capacity of decision makers to use research outputs
- 7. Monitoring and evaluation (M&E) of capacity development**
 - Integrating capacity development into monitoring and evaluation systems across the CRP ecosystem
 - Capturing lessons learned for replication and upscaling
- 8. Organizational development**
 - Developing CRPs organizational capacity to move along the R4D process
 - Enhancing NARS research and research management capacity
 - Strengthening boundary partners for research uptake
- 9. Research on capacity development**
 - Learning what worked in what context
 - Action research

The FISH CRP CapDev strategy identifies how each of the elements will be pursued to develop the capacities required to ensure quality implementation and support movement along the impact pathways (see next section for specific interventions in each flagship).

In designing and implementing the FISH capacity development strategy, we draw upon learning from the L&F and AAS CRPs, which supported development of the CGIAR framework, as well as our work through bilateral projects.

Specifically, the strategy will use a systems approach to capacity development, building on learning from the AAS CRP (Apgar *et al.* 2015) and associated methodologies that include working across individual, institutional and organizational spheres, which have been used successfully to develop capacity in gender research and practice (Sarapura *et al.* 2015). We will build on capacity development within fish value chains in Bangladesh through L&F and its use of novel training methods and strategies, such as developing husband and wife family teams and career progression for national scientific staff. We will use the high quality learning materials developed with partners through bilateral work on aquaculture technologies in Bangladesh, and build on the strong track record for training African researchers in aquaculture technologies at the Abbassa aquaculture research and

training center in Egypt. To build capacity around small-scale fisheries, we will continue to use training materials developed through work on community based marine resource management in the Pacific (WorldFish 2013).

At the program level, there are three ways in which capacity development will involve cross-flagship coordination:

1. monitoring and evaluation (M&E) of capacity development (element 7) will be integrated into program M&E through identification of specific capacity indicators and tracking for learning and progress as theories of change are evaluated;
2. development of FISH and managing and implementing partners' capacity to collaborate (element 3) will support the partnerships strategy; and
3. geographic and thematic coordination of capacity development activities across flagships will be managed through coordination among capacity development leads in each flagship.

Capacity development interventions are also instrumental to the FISH program's gender and youth strategies. Specifically, capacity development will enable interventions in gender sensitive technologies and innovation processes, women-targeted opportunities, and gender-transformative strategies contributing to gender outcomes, including improved capacity of women and young people to participate in decision-making. Further, capacity to implement quality gender research will be developed through work with the cross-flagship gender team. FISH will promote youth engagement in small-scale fisheries and aquaculture by using age-relevant skills training methods and content, including on fingerling production and distribution, feed and handling methods, and co-management and youth leadership.

Strategic capacity development actions within FISH flagships

In the FISH CRP proposal, each of the FISH flagships will implement a program of capacity development activities organized around the nine elements of the CGIAR framework. This will enable quality implementation with local stakeholders and partners and consequently support the change mechanisms and sub-IDs identified in their theories of change. Table 1 provides a summary of the prioritization of the nine elements for each flagship from the proposal. Criteria used to prioritize include the importance of the element to successful implementation of research activities and change mechanisms and the level of investment required.

| Flagship | Elements of the CGIAR Capacity Development Framework (as numbered in Figure 3) | | | | | | | | |
|--|--|------|--------|--------|------|------|--------|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| <i>FP1. Sustainable aquaculture</i> | High | High | Medium | Medium | High | High | Medium | Low | Low |
| <i>FP2. Sustaining small-scale fisheries</i> | High | High | Medium | Low | High | High | Medium | Low | Low |

Table 1: Summary of prioritized elements in each flagship

In the FISH CRP proposal, four elements are proposed to be implemented at high intensity through activities in all flagships (needs assessments, intervention strategies, and innovative learning materials and approaches that are gender- and youth-sensitive, and work on institutional strengthening), while two will be implemented with medium intensity (developing CRP partnering capacity and M&E of

capacity development). Clear outputs and indicators that could be used to track progress and contribution to CapDev sub-IDOs were identified as in Table 2.

| Element | Implementation | Indicators |
|--|--|--|
| 1. Capacity needs assessment and intervention strategy design | All flagships will invest in detailed capacity needs assessments and intervention strategy design at the start of the CRP2 cycle and revisit throughout through after-action reviews (part of program M&E for learning). | (Adapted) needs assessment methodologies available in published form Proportion of CD budget allocated to interventions consistent with capacity needs assessment recommendations (disaggregated by implementing organization and flagship) |
| 2. Design and delivery of innovative learning materials and approaches | All flagships will use a systems approach with blended learning methodology, build on existing quality materials and develop new tailored materials as required. | Proportion of learning materials developed for external audiences piloted with representative audiences Participant evaluation of training and workshops to assess increase in knowledge and skills Number of people trained (disaggregated by sex, age, job or role, location and literacy) |
| 3. Apply gender-sensitive approaches throughout capacity development | In partnership with the gender teams and youth experts, gender and youth dimensions are incorporated into capacity development activities throughout the flagships. | Proportion of capacity needs assessments that proactively target women and youth Number of capacity development activities in gender approaches and toolkits initiated (disaggregated by type) |
| 4. Institutional strengthening | All flagships will support the outcome of public sector capacity to design and implement policy and regulatory measures that affect the viability of scalable technologies, management practices and organizational innovations for aquaculture, fisheries and nutrition outcomes through specific strategies designed as part of their engagement agenda. | Number of institutional assessments conducted with national agricultural research systems (NARs) Number of policy decisions informed by engagement and information provided by FISH Outcome evaluation citing improved institutional capacity in achievement of other FISH outcomes |

Table 2: Indicators for M&E of capacity development

Implementation strategy within flagships

The FISH CRP CapDev implementation strategy includes four dimensions that combines 7 elements out of 9 of the CGIAR CapDev proposed framework elements, as outlined below:

(1) Needs assessment and intervention strategy, learning material and approaches, gender-sensitive approaches, and M&E (elements 1, 2, 5 & 7)

These four elements of the framework are understood as part of a capacity development process that starts with identifying specific capacity needs of critical stakeholders and intervention strategies (CGIAR Capacity Development Framework element 1) to provide the foundation for operationalizing the impact pathways. An assessment of the internal capacity needs (element 1) has shown that major cost drivers are scientific personnel, travel, consumables and capital equipment. Scientific personnel

costs include those of flagship and cluster leaders, principal investigators and cluster research teams, including those at WorldFish HQ (Malaysia) and our key research hubs in the focal countries Bangladesh and Egypt. During the implementation of the flagship we plan to increase allocation of funds to focal country programs in Africa (Nigeria, Tanzania, Zambia) and Asia (Cambodia, Myanmar), while maintaining the core cluster investments in scientific personnel. Investments are also made in personnel for leading/coordinating key cross-cutting dimensions of flagship activities, including gender, youth and capacity development. We anticipate funding a coordinator for flagship 1 activities in each focal country where we operate. Scaling to countries beyond the core program countries will be through bilateral funding. Travel includes investments in field visits and assessments, planning and review meetings/workshops, partner consultations and scientific supervision. Capital equipment includes items for the tilapia breeding program necessary to upgrade their efficiency and to support experiments in Egypt (Abbassa), automated fish measuring systems for genetics research, genomics analysis software and associated large data hardware (with M&E component of the CRP), and fish health and feeds equipment for cluster 2 research in the Abbassa aquaculture research and training center in Egypt. Consumables include the costs for molecular characterization of fish stocks and diseases, which are a fundamental part of the research. It will focus on capacity of smallholders to demand and adopt aquaculture technologies and use improved management practices, as well as needs of service providers to supply inputs, knowledge and skills targeted at men and women fish farmers. Resulting interventions will use innovative learning materials and approaches (element 2) such as partnering with IT providers to pilot the use of mobile financial services in Bangladesh and training in aquaculture technology and policy development and entrepreneurship for Africa. All materials and approaches will be gender and youth sensitive (element 5) in line with our gender and youth strategies. Monitoring and evaluation of capacity development (element 7) will be integrated into program-level M&E.

Each flagship has already broadly identified the target stakeholders and thematic areas that will inform more detailed capacity needs assessments to be carried out at the outset where necessary. In conducting these assessments, and designing targeted capacity development activities in response, each flagship will give careful consideration to how the program can best leverage partnerships, comparative advantage, and the principle of subsidiarity. Our working assumption is that the managing partners will draw upon their experience and comparative advantage to design the program's approach to capacity development, but that wherever possible, specific training activities will be conducted by other program partners at national and local levels.

FP1 will focus on the capacity needs of smallholders to effectively demand and adopt new aquaculture technologies and apply best management practices, as well as the needs of service providers to effectively supply inputs, knowledge and skills targeted at men and women fish farmers. In Africa and Asia, a focus on enhanced capacity for aquaculture technologies research in partner organizations will continue.

FP2 will focus on the needs of natural resource management NGOs and government agencies, multi-stakeholder networks, regional and intergovernmental agencies, and individual researchers within national research institutes in focal countries. The flagship will assess the following capacity areas: gender-sensitive and transformative approaches, learning and governance networking, community livelihood and co-management interventions, and responsive and accountable institutions.

Across all interventions, the learning methods and materials used will be gender and youth sensitive. Implementation will use a blended learning methodology across three phases of learning: learning in, from and for action (Garison and Kanuka 2004; Wilson and Biller 2012). This will build on experience of developing quality materials in past work. M&E will be integrated into CRPH level learning

processes, including annual reviews within flagships to revisit capacity needs and inform annual planning of interventions and monitoring of capacity development indicators.

(2) Developing CRPs' and Centers' partnering capacities (element 3)

Development of the capacity for FISH, participating CGIAR centers, and managing and implementing partners to work together will be implemented within each flagship by working with multi-stakeholder partnerships designed to harness emerging science in aquaculture and fisheries. Aligning with the program's partnerships strategy, our needs assessment will identify gaps and interventions to increase the capacity of scientists to partner (element 3).

(3) Institutional strengthening (element 6)

The program aims to develop public sector capacity to design and implement policy and regulatory measures that affect the viability of scalable technologies, management practices and organizational innovations for aquaculture, fisheries and nutrition outcomes. To achieve this, each of the flagships will focus on specific interventions with associated institutions. Institutional strengthening (element 6) will focus on strengthening public and private sector capacity in fish breeding and dissemination of new technologies in extension and outreach programs. This will include multi-stakeholder dialogues to inform improved policy and legal frameworks in the countries where we work.

FP1 will focus on strengthening public institutions and private sector organizations, such as farmer associations, to manage fish breeding programs, integrate new technologies into extension and outreach programs, and achieve research and development outcomes at scale. Interventions will use policy dialogues associated with multi-stakeholder forums and innovation platforms (in Egypt), engaging decision-makers through the research process (in Bangladesh), and conducting participatory action research with partners to test and adapt new institutional arrangements (in Zambia).

FP2 will work towards institutional strengthening in two modes. First, it will develop the capacity of learning and governance networks and platforms to realize impact (i.e. to become more than the sum of their parts) through multi-stakeholder engagement. Second, it will increase the capacity of institutions (national public institutions and regional intergovernmental institutions) to help secure the ecological sustainability, food security and poverty alleviation functions of small-scale fisheries through targeted capacity development, multi-stakeholder dialogues and strategic planning activities.

(4) Develop future research leaders (element 4)

FP1 will develop future aquaculture research leaders in both Africa and Asia through internships and masters and PhD programs with discovery and upstream research partners to accelerate national capacity for research and extension. A new partnership with the University of Malawi, as a NEPAD African center of excellence for aquaculture research, provides an opportunity to enhance postgraduate training of aquaculture researchers within sub Saharan Africa. We will develop future research leaders (element 4) through internships and postgraduate programs, such as through partnerships with key universities and at the WorldFish aquaculture research and training centre in Abbassa, Egypt.

FISH CRP Cap Dev implementation strategy review:

PRE-WORKSHOP FINDINGS

Capacity development activities are reported into the MEL system complying with the CGIAR SMO Common Results Reporting indicators that was approved in 2017. The indicators include the Number of trainees, type of person trained, gender, and type of training. The type of training was defined as follows:

- **FORMAL TRAINING:** PhD and master's-level researchers, short-term vocational training for farmers, fishers and extension personnel.
- **INFORMAL TRAINING:** learning platforms, knowledge exchange at international and national conferences and workshops, field events and other events for research and scaling activities.

After the 2017 annual report, the CGIAR SMO communicated to the CRP leaders that annual reporting on this indicator was generally limited and poorly evidenced. Few CRPs were able to provide this information because the CRPs rely on Centres for the reporting, and different Centres collect different types of information on capacity development.

In the annual reporting template for 2018 the CGIAR SMO sent an update on reporting requirements for capacity development for 2018. As a quick corrective measure, they requested all CRPs/Platforms to report the indicator already used in 2017 of the CRPs in the following way:

- Numbers of people trained, disaggregated into men and women and '**long term**' (academic degree training) vs '**short term**' (everything else).

This 'lowest common denominator' was done to ensure that everyone was able to report.

As our organisation is also collecting to some extent information on academic degrees awarded, we also reported the number of men and women awarded different types of degrees: Post-doc, PhD, Masters, and Bachelors. In the future, we will be asked also to report information such as numbers by geographic location, type of training, topic of training, type of trainees.

The CGIAR-SMO would like to develop much better harmonised reporting on capacity development for the future, but this will take a substantial cross-CGIAR exercise to come to an agreement, in particular about indicator(s) and 'disaggregates', drawing on the work already carried out by the previous capacity development community of practice⁵. They anticipated that they will work with the MIS developers early in 2019 to see how we could facilitate such 'optional' reporting through their systems into CLARISA.

Prior to the workshop a mapping exercise of all Capacity Development activities reported in MEL was performed.

Capacity development – 2017

During 2017, 53,856 people received formal training, of which 68 percent were women. A further 20,727 people received informal training, of which 34 percent were women.

Formal training activities included training for PhD and master's-level researchers as well as short-term vocational training for farmers, fishers and extension personnel, conducted using various

⁵ https://cgspace.cgiar.org/bitstream/handle/10947/4080/CapDevIndicators_18%20Nov2015.pdf?sequence=1

methods and tools via partners. Within the FishTrade project, a regional food systems research activity, 22 master's students from 10 countries (Ghana, Nigeria, Cameroon, Ivory Coast, Zambia, Malawi, Uganda, Tanzania, Zimbabwe and South Africa) were supported. The World Bank recently awarded a four-year grant to the Lilongwe University of Agriculture and Natural Resources (LUANAR) in Malawi to establish an African Centre of Excellence (ACE) in Aquaculture and Fisheries (the AquaFish Centre). WorldFish signed a MoU as partner, providing a mechanism for an expanded cooperation in capacity building of aquaculture and fisheries researchers within Southern and Eastern Africa. Within Asia and the Pacific, a strong cooperation with national partners exists for formal training across FISH focal and scaling countries. Young researcher support was also provided through secondments and partnerships. For example, two postgraduate students received Crawford Fund Awards to support their work with FISH, and three students commenced their PhDs within the Sustaining Small-scale Fisheries flagship with managing partner James Cook University (JCU).

Formal training for fish farmers and fishers made up the largest number of participants, with 55,385 farmers/producers involved, largely via partners. Short-term vocational practical training in aquaculture is offered by FISH through the Africa Aquaculture Research and Training Centre in Egypt, which during 2017 provided practical training in aquaculture technologies for 323 people (70 of them women) from 32 countries. A new cooperation with vocational education providers in Zambia was also strengthened during the year, and a coordinated Africa regional vocational training program for aquaculture practitioners will be launched during 2018, with a strong focus on measures and approaches that can equip small-scale farmers with improved management and business skills.

Informal training included a wide range of activities during the year, such as aquaculture learning platforms in Egypt and Bangladesh, knowledge exchange at international and national conferences and workshops, field events and other events for research and scaling activities, in all involving 20,727 participants during the year.

Capacity development – 2018

FISH made substantial progress in capacity development activities in 2018, across various dimensions, including researchers, national partners and communities, at global, regional and national levels. During 2018, 67,687 people received short-term training through FISH, of which 37% were women (25,270). Long-term training in 2018 included an investment in 19 students (12 PhDs, 6 MSc, and 1 Bachelors) of which 12 were women.

Capacity development in **Africa** was a priority, with several new training initiatives and partnerships. Cooperation with the African Centre of Excellence (ACE) in Aquaculture and Fisheries in Malawi, to support Masters and PhD training was established. FISH is a partner in the Technologies for African Agricultural Transformation (TAAT) Aquaculture compact, which commenced in 2018. Training of trainers was conducted at WorldFish's Abbassa Centre with 40 participants from the 10 TAAT countries in Africa. Training activities in aquaculture were undertaken also with JICA and EICA (Egyptian International Centre for Agriculture) on a regular basis. An Africa regional vocational training program for aquaculture practitioners was launched in Zambia during 2018, with support from NORAD, with a strong focus on equipping vocational schools and small-scale aquaculture farmers with improved training skills in aquaculture operations and business. Knowledge and experiences from Zambia are expected to provide a foundation for expansion elsewhere in Africa during the next 3 years. Within **Asia and the Pacific**, a strong cooperation with national partners exists for formal training across FISH focal and scaling countries. Young researcher support was also provided through various secondments and partnerships, including new PhDs on fish in food systems with A4NH and aquaculture genetics. Another example of this was the student enrolled in the CCAFS MSc

program at the Galway University whom has performed her research on gender issues related to climate change in Bangladesh farmer's households.

During 2018 particular emphasis was given to building capacity around communication of research in various domains, key to our research credibility, science quality, and impact pathway (translating research activities to research outcomes).

With this focus three key initiatives were organized: 1) A write-shop hosted by the Zambia office provided a space for students of the FishTrade project to finalize their manuscripts and articles mentored by WorldFish scientists and submitting them to international journals; 2) a write-shop entitled "Science writing and communication skills week", hosted by the HQ in cooperation with many partners; 3) and a series of short instructive videos designed to reduce the mystery around successful scientific publication was released on the new FISH CRP website.

Gender integration was also given further special attention during the year, building on the FISH gender strategy and associated gender integration guidelines. The cross-CRP "Gender & Breeding Post-Doctoral Fellows (PDF) Capacity Development Initiative" provided mentoring as it focused on a cross-Flagship review of lessons for gender-inclusive livelihoods and value chains. Statistics and gender training were also organised by the PDF project during 2018.

Capacity development – 2019 and beyond

The majority of the reported capacity development activities under the FISH program and in its bilateral projects are related to organizing trainings and mentoring students. Even if not fully defined, Capacity Development in our FISH CRP embraces many activities that go beyond trainings and students, and include for instance communications and media, governance restructuring, infrastructure development, partnership mediation and collaboration, and many more with the goal of strengthening the capacities of individuals, organizations and systems and provide enabling environment for development.

The program is pursuing an integrated body of research in six focal countries: Bangladesh, Cambodia, Myanmar, Nigeria, Tanzania and Zambia. Two additional countries constitute a focus for particular areas of research: Egypt as a research hub and training centre for our sustainable aquaculture (SA) Capacity Development in Africa, and Solomon Islands as a hub for our learning networks on small-scale fisheries (SSF) governance in the Pacific. A recent meeting in the latter also suggested expanding this role towards SSF in Small Island Developing States (SIDS).

This multi-centre research program makes a strength in its geographical representation and will make its scientific research relevant by fostering the leap from individual learning to sustainable livelihood outcomes and impacts through an integrated cross-country Capacity Development approach paying particular attention to gender issues and women's empowerment.

To ensure implementing a coordinated approach for Capacity Development in 2019 more attention will be given to establish a defined framework with the revision and final drafting of the capacity development strategy for the FISH CRP, building off what was approved in the proposal, combined with the first 2 years' experience of implementing the CRP. Attention will be also given to establish a Community of Practice to monitor its implementation, facilitate sharing of learning and develop a methodology to monitor its impact on the targeted stakeholders. A capacity Development leader was recently assigned to ensure a standardized and coordinated approach for capacity development.

WORKSHOP OUTPUTS AND RECOMMENDATIONS:

Capacity development is embedded into all projects, but often very difficult to assess results and impacts generated from those dedicated activities. A rigorous mapping of all the Capacity Development activities that are delivered by our bilateral projects is fundamental to achieve a coordinated approach in our Capacity Development initiatives. This mapping exercise and a coordinated approach at program level will allow us to assess the impact that will be generated by our activities in the long-run. The MEL system includes a module for Capacity Development that will help in identifying all the projects deliverables related to Capacity Development.

At program level, there are three ways in which capacity development has been involving cross-flagship coordination: (1) monitoring and evaluation (M&E) of capacity development through identification of specific capacity indicators and tracking for learning and progress as theories of change are evaluated (this process is still on going and will be revised yearly); (2) development of FISH and managing and implementing partners' capacity to collaborate; and (3) geographic and thematic coordination of capacity development activities across flagships are managed through coordination among capacity development leads in each flagship and cluster of activity.

Capacity development interventions are also instrumental to the FISH program's gender and youth strategies. Specifically, capacity development enables interventions in gender-sensitive technologies and innovation processes, women-targeted opportunities, and gender-transformative strategies contributing to gender outcomes, including improved capacity of women and young people to participate in decision-making. FISH promotes youth engagement in small-scale fisheries and aquaculture by using age-relevant skills training methods and content, including on fingerling production and distribution, feed and handling methods, and co-management and youth leadership.

The CGIAR in 2017 performed an Evaluation of Capacity Development Activities, and several recommendations were drafted. The purpose of this evaluation was to understand better the contribution that CD has made, and can make in the future, to reaching CGIAR's aims and help CGIAR Centers, CRPs and the CGIAR system to improve the relevance, comparative advantage, effectiveness of CD activities and sustainability of the results; it was also to provide CGIAR partners and donors with essential evaluative information, extract relevant insights, draw conclusions and produce useful recommendations.

The report suggested eight good practice statements that represent principles related to the three main evaluation criteria used in the report are:

Relevance

1. CD needs to be based on participatory needs assessments and understanding of the organization and institutional context.
2. CD is not an end in itself but must contribute to strategic development goals.

Effectiveness

3. The pedagogic design of CD interventions must be appropriate for the specific developmental context needs.
4. Resolving development challenges requires multiple individuals and entities working together and linking capacities at the individual, organization and institutional level.
5. CD is a voluntary process where ownership, self-esteem, respect and accountability are critical.
6. CD requires learning lessons from implementation and subsequent adjustment.

Sustainability

7. CD is a long-term process that requires continued engagement and support across different interventions and modalities.
8. Key change agents on both sides of the knowledge exchange, and their linkages and networks require support.

They have identified as **principal challenges**: 1) Funding CapDev expert positions and CapDev support units – most CRPs do not have a dedicated staff position; 2) CGIAR’s matrix structure of CRPs and Centres makes it difficult for Centres engaged in many CRPs to plan and manage CapDev activities in a systematic way.

Key recommendations were as follows:

Recommendations 1-3: Strategic prioritization of CapDev activities

- Under leadership of System Management Board CGIAR should develop and commit to a comprehensive CapDev agenda
- Centres and CRPs should develop clear CapDev strategies and incorporate CapDev more consistently into their Theories of Change
- CGIAR should take full advantage of the experience and facilities of Centres and training of local end users and communities should be de-emphasized

Recommendations 4-5: Approaches to CapDev

- Centres and CRPs should build on successful partnership approaches such as facilitation of collaborative multi-stakeholder networks, multi-donor programmes and platforms to ensure long-term CapDev perspective.
- CGIAR should systematically review the existing experience on innovation platforms to establish how effective they are for enabling large-scale adoption of CGIAR’ research products.

Recommendations 6: Strengthening institutional set-up and support for CapDev

- Centres in collaboration with CRP management and CapDev CoP facilitation should integrate adequate CapDev support into their management systems and approaches
- Ensure adequate dedicated CapDev staff at CIFOR with appropriate financing
- Strengthen CIFOR-ICRAF collaboration on CapDev
- Fund and facilitate re-emergence of CGIAR CapDev CoP to further refine CapDev framework and knowledge exchange between Centres and CRPs

Recommendations 7: Monitoring and reporting on CapDev

- The System Management Office should revise CapDev-related reporting requirements and put emphasis on reporting against strategic and annual planning to reflect intended purpose, type and modality of CapDev specifying stakeholder groups targeted
- Use qualitative approaches to monitoring and reporting such as long-term tracer studies and outcome case studies
- Improve systems to capture, archive and retrieve data on CapDev activities

The evaluation also highlighted some issues in regards to Capacity development Monitoring & Evaluation:

- monitoring information on training in Centers is not standardized, and no systematic monitoring of results takes place for different types of CD;
- lack of staff and financial resources for updating and managing data;
- fragmented recording of CD activities and low levels and delayed data entry especially for CD implemented as part of research projects;
- confusion about CD beyond training and lack of monitoring standards;
- risk of duplicating CD records in the Center/CRP matrix;
- no clear responsibilities in Centers and CRPs for CD monitoring;
- no appreciation of the usefulness of the data and hence limited motivation for tedious data collection work;
- more systematic coverage of CGIAR CD reviews to assess CD approach (research) and providing assessment of how CD activities lead to enhanced and sustained capacity of partners, particularly at organizational and institutional levels.
- limited availability of core funding has affected resourcing CD units and staff at Centers, in particular, which in turn is likely to affect follow-up and monitoring of CD results.

Having taken into account this evaluation, during the FISH CRP CapDev Strategy Review Workshop, the participants were asked to:

a) Review the level of importance, contribution and indicators of the 9 elements of CapDev in relation to the FISH CRP; and

b) Develop a SWOT analysis to investigate further the needs for FISH CRP CapDev aligned to our projects portfolio and activities developing key recommendations for the strategy review.

Our strategy identifies how each of the elements will be pursued to develop the capacities required to ensure quality implementation and support movement along the impact pathways

In designing and implementing the FISH capacity development strategy, we draw upon learning from the L&F and AAS CRPs, which supported development of the CGIAR framework, as well as our work through bilateral projects.

Capacity Development elements review:

Among the nine elements, four elements were selected to be implemented at high intensity through activities in all flagships:

1. Capacity needs assessment and intervention **strategy** design
2. Design and delivery of **innovative** learning materials and approaches
3. Apply **gender-sensitive approaches** throughout capacity development
4. **Institutional** strengthening

The participants suggested modifying the intensity of implementation of all chosen elements as follows

Note: In red the suggested modifications of importance

| Strategic capacity development actions (see CD Framework) | | Indicators—from the CD Indicators document or other—that could be used to track progress and contribution to CD sub-IDOs | Justifications and recommendations for change | |
|--|---|--|---|---|
| Intensity of implementation of chosen elements | How chosen elements will be implemented | | | |
| (Element 1) Capacity needs assessment and intervention strategy design | High | All flagships will invest in detailed capacity needs assessments and intervention strategy design at the start of the CRP2 cycle and revisit throughout through after-action reviews (part of program M&E for learning). | (Adapted) needs assessment methodologies available in published form; proportion of capacity development budget allocated to interventions consistent with capacity needs assessment recommendations (disaggregated by implementing organization and flagship) | To keep as high intensity, adding strict evaluations also of partners contribution |
| (Element 2) Design and delivery of innovative learning materials and approaches | High | All flagships will use a systems approach with blended learning methodology, build on existing quality materials and develop new tailored materials as required. | Proportion of learning materials developed for external audiences piloted with representative audiences; participant evaluation of training and workshops to assess increase in knowledge and skills; number of people trained (disaggregated by gender, job or role, location, and literacy) | Still very high intensity, but need of external consultants (lacking skills across the organisation). Moreover the designs are not well tailored to end users and still very heterogenetic among research teams |
| (Element 3) Develop CRP and | High (previously) | Flagships will identify gaps and interventions to increase the capacity | Biannual survey of partner satisfaction | More indicators for this element need to be developed; suggested to invest more in |

| | | | | |
|--|---|--|---|--|
| centres' partnering capacities | identified as medium) | of scientists to partner to achieve target outcomes. | | agreement with government for secondment. |
| (Element 4) Develop future research leaders through fellowships | Medium (previously identified as low) | FP1 and FP3 will support internships and postgraduate students with research partners and tertiary education institutes. | | It is important to fight political country constraints (like corruption) with knowledge. |
| (Element 5) Apply gender-sensitive approaches throughout capacity development | High | In partnership with the gender teams and youth experts, gender and youth dimensions are incorporated into capacity development activities throughout the flagships. | Proportion of capacity needs assessments that proactively target women and youth; number of capacity development activities focusing on gender approaches and toolkits initiated (disaggregated by type) | Still high, but internal culture of WF needs to change; important to integrate youth into gender; and we are lacking assessments for these themes. |
| (Element 6) Institutional strengthening | Medium (previously identified as high) | All flagships will support the outcome of public sector capacity to design and implement policy and regulatory measures that affect the viability of scalable technologies, management practices and organizational innovations for aquaculture, fisheries and nutrition outcomes through specific strategies designed as part of their engagement agenda. | Number of institutional assessments conducted with national agricultural research systems (NARS); number of policy decisions informed by engagement and information provided by FISH; outcome evaluation citing improved institutional capacity in achievement of other FISH outcomes | It was deprioritized because considered still too soon to be effectively performed due to the current WF internal culture and processes. |
| (Element 7) Monitoring and evaluation (M&E) | High (previously identified as medium) | As part of the program's M&E system, capacity development indicators will be monitored to support adaptive | Budget (including staff time) allocated to M&E of capacity development activities; treatment of capacity development within program M&E | Crucial to monitor and evaluate the impacts of CapDev activities |

| | | | | |
|--|--|--|---|--|
| of capacity development | | management and measures' contribution to cross-cutting sub-IDOs. | and impact assessment reports, including Centre Commissioned External Reviews | |
| (Element 8) Organizational development | Medium (previously identified as low) | Organizational development will be pursued as appropriate within the work on institutional strengthening. | | Indicators need to be developed; Important that HR gets involved in this and ensures ad hoc trainings for managers. |
| (Element 9) Research on capacity development | Medium (previously identified as low) | Research on capacity development will be implemented through flagship research. | | It is important to research which methodologies are suitable for the users we target and assess in a scientific way what we have been doing (f.i. in climate change) |
| (Element EXTRA) Capacity to innovate | Medium (previously identified as low) | Capacity to innovate will be addressed within research promoting aquaculture innovation platforms (FP1) and capacity for social-ecological resilience (FP2). | | This element needs to relate to the way we want to project our CapDev activities toward the future. |

Reviewing the elements, participants also stressed the need of avoiding grouping the elements as done in the first strategy. The categories can be perceived as constraining and, in some cases mutually interlinked or interdependent. The elements were grouped as follows:

Group 1: Elements that address how we plan and manage capacity development.

These include

- a) Element 1 - Work out what capacity development is needed in our target audience through a process of capacity needs assessment
- b) Element 2 - Develop and deliver a plan to meet that need
- c) Element 5 - And in doing so, make sure that a gender-inclusive approach is taken.
- d) Element 7 - And in doing so, put in a system that will tell you and, more importantly, the people whose capacity is being strengthened, whether it has worked or not.

Group 2: Elements that address who will be receiving the capacity development

These include

- a) Element 3: Specifically working with the CRP and associated centers.
- b) Element 4 – Future Research leaders
- c) Element 6 – Institutions – OK, so it says ‘Institutional Strengthening’. However, that is a catch-all phrase, where the one solid(ish) element is the institution.

Group 3: Elements that address what the capacity development will address

These include

- a) Element 8: Organizational Development
- b) Element 9: Research capacity
- c) Element 10 / Extra: Innovation

Review the grade of priority given to each of the 9 CGIAR’s Cap Dev elements:

- All our training activities should have come about as a result of a needs assessment.
- This should have led to the development of a bespoke training plan, duly advised by our inclusivity policy.
- Where possible, this should have linked to our M&E system, although not quite such a high priority.
- We should have set a really high priority on working with institutions, but not forgetting the CRP partners and future leaders.
- In the strategy it wasn’t specified what our training would address.

What capacity development activities have been undertaken based on the Annual Reports of the FISH CRP? They are listed as follows:

- Joint training of Masters and PhD students with LUANAR , wearing their Centre of Excellence hat
- Cooperation with TAAT (to strengthen)

- Training of 40 trainers at Abassa
- Launching of a vocational aquaculture training and entrepreneurship program in Zambia
- Strong cooperation with National partners in Asia and Pacific (to strengthen)
- Provision of tools for small scale fish farmers with low or no numeracy in Sierra Leone
- Mentoring of young researchers in a write-shop in Zambia
- Mentoring of young researchers in a write-shop led by JCU
- Publication of instructional videos on the FISH Web Site.

Recommendations from the participants:

- These were the main CapDev activities undertaken in 2018, but how can we have trained 67,687 people, 25,270 of them women? This number is not concomitant with the activities that are described in the report.
- How many capacity development activities were undertaken as a result of a carefully thought-out strategy, based on a needs assessment, how many were based on ‘We have the facilities, let’s use them’ and how many on ‘Carpe Diem’. In the revised action plan we should acknowledge that CapDev activities can also be performed based on using assets or seizing the moment.
- Even though we make much of institutional strengthening in various documents, the reports do not suggest that we have actually done much on this to date. Considering it very important, strengthening working activities with future research leaders and partners is key.
- Training needs to be thought out, thus based on needs assessment. Those needs assessment have to result in an effective plan and it is important that any plan is gender inclusive. Also, it is important to recognize scale as needs assessments vary a great deal in depth.
- The main need by far is to ensure that the CapDev strategy and plan is framed in an effective planning and management like in the MEL system. Before any system can be effective, people need to know how to use it. Therefore, building the capacity of people to use the system that we are using must be top priority, and that is why it has been proposed to upgrade the importance of M&E.
- The CapDev must be both internal and external.

SWOT ANALYSIS:

The SWOT analysis was developed as a survey with several options STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS to grade with a score from 0 to 5 (0= not aware, 1 =strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree) - results of the SWOT analysis can be found in ANNEX 2:

Among the **strengths**, participants have recognised that capacity development has always been integral part of the researchers’ work; that WorldFish/FISH have successful modalities and tools currently used in capacity development activities; that the alumni of our capacity development activities who are now occupying leading positions in different places are good ambassadors to the quality of our capacity development activities; and our strong network with NARS, fishermen associations and different stakeholders support the success and reaching out of our capacity development activities.

Among the **weaknesses**, participants have recognised that capacity development is mainly offered through workshops /group sessions and does not make use of other available modalities that may

prove of more benefit in certain situations and that the weak data collection does not help reaching out to Alumni of our previous capacity development activities for support in their environments.

Among the **opportunities**, participants have highlighted that there are many opportunities for building capacities in the following sectors where we work: Food Security, natural resources management, gender equality and ending poverty are major issues especially in developing countries. Moreover, Capacity development is an expressed need of the partners and leverage our joint CD activities with managing partners could increase research outputs. The focus of the donors on capacity development is an opportunity to strengthen the role and widen the coverage of capacity development. All the research teams are collecting all the basic cap dev indicators (e.g. trainings, policy recommendations, etc.) but still need support from the organisation.

Among the **threats**, participants have highlighted that CGIAR-CRPs members may miss realising the wider-scale provision of capacity development if they insist on implementing capacity development themselves rather than channelling some of the activities through capable partners. Also, the unending financial crisis, competition over funds, Inter-centers' competition and potential outside partners unwillingness to participate unless they have a direct interest themselves may negatively affect capacity development

ADDITIONAL RECCOMENDATIONS FROM THE PARTICIPANTS BASED ON KEY QUESTIONS:

How far do the FISH CRP current capacity development activities support the implementation of the IDOs (refer to the FISH Cap Dev Strategy and CGIAR Strategy)?

The FISH CRP is gradually strengthening the research in development activities useful for capacity development to support the implementation of the IDOs. It includes the following major activities:

- The leadership support of researchers at country level and building up teams around clusters help internal Capacity Development;
- The focus on the MEL found to be useful to measure achievements of the activities and its follow up improvement program – all these are useful to measure the efficiency in implementation and therefore, for capacity development;
- Now major steps are gradually been undertaken on how the capacity development activities of the bilateral projects could be mapped under the major FISH CRP program, by the allocation of a CapDev Leader, this will be useful to achieve the IDOs related with CD;
- Along with the emphasis on flagships the crosscutting issues such as; gender, youth, environment are becoming extremely important and capacity development is one of them coming as equally important, the workshop on the development of strategy on CD is thus important steps for this.
- The FISH CRP activities itself support the implementation of the IDOs, but the lack of human and financial resources is a limiting factor in achieving targets.
- All CD efforts can be linked/mapped to IDOs and Sub-IDOs, but realistic attribution is not going to be easy. This is where measuring the baseline level of knowledge and capacity, doing needs analysis and then specifically designing CD activities that will contribute to IDOs assumes importance.
- By defining the nine elements to help organize plan and implement capacity development activities using systems approach to capacity development, building on learning, and working across individual, Institutional and organizational.

- CapDev activities are run behind every successful outcomes. They trigger the implementation of IDOs . As FISH CRP current capacity development theme is one of the key performance indicator, it needs to be better tracked to assess its impact.
- There is further room to develop capacities supporting implementation of the IDOs which needs ground level scoping to develop a clearer understanding on the context of the countries where we operate. Certainly, this would help organizing the initiative most effective way.

What are some current innovative capacity development approaches/activities followed by other projects/programs - that FISH CRP can adopt? Give examples and/or references.

The following capacity development approaches/activities followed by others can be adopted for capacity development of the FISH CRP:

- Establishment of Innovation Platform: Platform use as avenue for capacity development for all types of stakeholders (farmers, value chain actors including researchers, academics and policy makers), e.g. the innovation platform for tilapia already developed by WorldFish Egypt, the approach now extended to other countries of Africa and very recently it is planned to set up as a collaborative platform between Bangladesh and Egypt.
- Leadership Development of Women at Community Levels by providing Training of Trainers (ToT) and regular visits and mentoring – this was found effective in building up capacity of fellow women members involved in fish production in their small homestead ponds using ecosystem based management approach. The approach developed by the BLUE GOLD funded project of WorldFish “Ecopond and Empowerment of Women (<http://www.bluegoldbd.org/wordpress/wp-content/uploads/2017/11/WorldFish-Ecoponds-v1.pdf>)
- For Solomon Islands – as WorldFish is the only research organisation apart from two academic institutions in the country – concrete step forward in establishing a learning hub.
- Similar programs to the BMP program that was conducted in Egypt through IEIDEAS, STREAMS, IDH, and YEAG project, where cap dev programs delivered to thousands of beneficiaries (farmers, retailers, and fisherman) in the last 6 years.
- Similar activities as in the Great Green Wall for the Sahara and Sahel Initiative where they Plan at the national level by organizing actions at the local level (think globally, act locally)
- Rely on what is already in place: the structures, the local communities, the projects underway, but also the national or regional programmes – and leverage from partnerships for establishing strong capacity development programs.
- Enhance cooperation between countries on the basis of existing networks (Platforms, NGO networks, academic cooperation, etc.)
- ECOFISH-Bangladesh Project is applying Ecosystem Approach to Fisheries Management (EAFM) ecosystem protection. Actually this is very new in Bangladesh especially in the case of Fisheries co-management. So it requires developing the capacity of the stakeholders along with Govt. Officials. It can be implemented in other CRPs.
- Building capacity of the public sector and community based associations is one of the key initiative taken in Myanmar which would sustain the program beyond a respective project/program span. Developing capacity of the community leaders on research and extension as one of the resource person also seems working which could be adopted by FISH.
- Short term/refresher courses for staff
- Exchange visits/secondments with key partner organisations
- Continuing of mentorship of students from national universities. Supporting Masters and PhD studentships within CRPs and also in bilateral projects. Supporting national

institutions and universities to register students under WorldFish programs for undertaking their PhD or masters research. Examples are PhD of Kabir (completed) and PhD of Partho (ongoing). This is also a career development path for young national scientists, which is missing as a strong focus in WorldFish. And also projects like CIRCLE – DFID funded – that targeted senior researchers.

<https://devtracker.dfid.gov.uk/projects/GB-1-201871/documents>

- If possible, using FISH CRP funds (or funds not tagged to a specific project) to hire staff member(s) for each country office with skills/donor proposal experience and a significant proportion of their FTE dedicated to securing additional funding – internal capacity development.
- Developing an online platform to ensure some of our capacity building materials can reach a wider audience, generating more impact in the long run.

What are the areas of comparative advantage in capacity development that we should focus on?

- The CapDev activities have to be fully integrated under the three key themes of our research: SA, SSF, and VCN, and related cross-cutting themes. But a clear strategy from design to implementation needs to be adopted in a coherent and coordinated way.
- As now the bilateral projects proposals also developed in line with the WorldFish Strategy, it is also useful to align the bilateral project activities with FISH CRP as well as the capacity development strategy.
- The key organisation that we would target locally is with national government partners, particularly the Ministry of Fisheries and Marine Resources. They are our key partners at country level and stakeholder in the country program.
- The teaching of fish farming in collaboration with professional schools.
- The learning of fisheries and aquaculture to graduates through entrepreneurship and private sector cooperation.
- Researches
- Information & communication technology
- Fund rising
- We should give more emphasis on field level cap dev study. As for e.g. studying the impact of the cap dev. activities in poverty reduction. Innovative/Effective methods of cap dev for the illiterate/women farmer etc.
- We as an organization got years of experience on capacity building, this is all what we have been doing since decades. These experiences are the key strength and advantage to achieve our uttermost goal.
- Extend capdev activities with innovative tools used at country level such as virtual extension, Facebook, Photo-voice.
- Cost-benefit analyses of strategic aquaculture technologies – including very basic/elemental technologies for contexts like Cambodia. Other quantitative analyses that have high potential of influencing policy makers and the private sector.
- Quantitative evidence of the successes of innovative methods for participatory gender empowerment / gender-transformative approaches in fisheries and aquaculture. E.g. those shared by Steve Cole from Zambia at a conference in October 2018.
- Quantitative evidence of the successes and benefits of innovations around fish-friendly rice or other crop irrigation schemes. (potentially in partnership with IRRI, IWMI)
- Strengthen cooperation with managing partners (NRI, WUR and JCU) that are universities and confer internationally recognised awards, which in themselves have a great value (bachelors, masters and PhDs). This is a comparative advantage.

What organizations and institutions are you targeting or, you wish to target, with capacity development? Why?

- Advanced institutions already under partnership with the FISH CRP as well as others, with which key capacity development activities for WorldFish and partners staff can be targeted. F.i. in Bangladesh in addition to the lined ministries of Government such as; Ministry of Fisheries and Livestock, Department of Fisheries and Bangladesh Fisheries Research Institute, the Universities, the private sectors at National and International levels working in Bangladesh can be included as partner to play a key role for capacity building. In Myanmar, Department of Fisheries, Department of Agriculture, Department of Agricultural Extension, Department of Irrigation, Universities, Private Sector, local NGOs, INGOs with no fisheries experience in the country (Save the Children, HKI +++), water management and e-flow entities, Regional authorities, CBOs, and supermarkets. Others: Fisheries Administration at national level; RFF II project (USAID-funded); 140 Community Fish Refuge committees; Fisheries Administration staff at provincial level; Village chiefs and commune council members; Village Health Support Group workers; Local fisher-farmers
- All national development and research institutions in our country of operation dealing with aquaculture and fisheries. Exposing them to global developments, global thinking on new concepts, linking them to our partners can bring out hidden national talents and research ideas to the open.
- Over the years, the private sector is playing a major role in using the business and entrepreneurship model to provide necessary services to farmers and other users. This practice has been found to be very effective and sustainable during time.
- National fisheries related organization (gov and non gov) especially those who deliver extension services have proven to be an asset in delivering and widely disseminating key messages.
- Any organization that can provide fund/support in many/different areas where capacity building is needed.
- Existing national and international partners (PACT, NAG, GRET, HKI, CSO, Government entities etc.) are currently targeted to have impact at scale. Building their capacity on technical areas, social aspects, research and extension are the key at this point as these are the areas where donors wanted us to pay more attention as these would help impacting on food security, gender and other cross cutting components.
- Smallholder fish farmers in order to avail them appropriate skills and knowledge so they would improve production levels. Work with communities under CBFM and Co-Management scenarios.
- WorldFish team members in order to improve our potential in whatever we are mandated to do.
- In the specific context of FISH CRP, our main focus should be to:
 - Build the capacity of policy makers to use our research outputs to frame better policies
 - Build the capacity of those engaged in the value chain to do better business as a result of our research outputs.

How to strengthen the cooperation with managing partners for cap dev activities and leveraging partnerships in support of capacity development processes implementation?

- It is useful to involve the partners in development of the capacity development strategy, highlighting how it is useful to achieve the common national and global priorities e.g. Country Investment Plan, Blue Economy, the sustainable development goals (SDGs).

- FISH CRP partners and other CG centres should conduct annual cap dev *fora* for sharing expertise, challenges and achievements.
- Regular communication is also very important to bring them in action and share the outcomes of every activity to create their ownership of capacity development activities. Developing Cap dev. guidelines and other documents to follow among the managing partners would be helpful for a better implementation of the activities. Regular feedback through follow-up of managing partner activities, meeting, joint presentations at international conferences, exchanging learnings and workshop will be helpful to strengthen cooperation in diverse activities. Also secondment to each other's organizations of scientists with complementary skills for specific joint work. This will result in working together toward a common goal and have better synergies. These processes will help refining the partnership strategy and seizing benefits and impacts in the long run.
- Write good proposals with a focus on capacity development for national partners and attract funding, and discuss potential joint proposals. Without good funding support, CapDev cannot be pursued and promoted. Also, specific funding (in addition to bilateral project funding) for exchange visits by scientists from each centre/organization.
- Undertaking small CapDev activities under bilateral projects is OK, but will not really create big impacts.
- Put in an effective planning and management system and train us in its use.

Other recommendations? Please specify.

- Overall, it is important to develop a strategy for Capacity Development with plan of actions for short, medium and longer term for the implementation of key activities supported by an allocated budget.
- The workshop itself has been a very good and timely initiative which would streamline the capacity building activities as an integral part of the organization.
- Our work is all about capacity development at every conceivable level – especially where entities are not aware or are badly informed about fish, fisheries, aquaculture and post-harvest aspects.
- Food safety aspects need to be focussed more along with HACCP work.
- Seems useful to be more specific in talking about capacity building – why, what capacity specifically, for whom, where, when, how – and to look 'bottom-up' (i.e. starting with specific WorldFish needs in specific countries) as well as 'top-down' (CGIAR needs and strategies).

Annex 1: Workshop Agenda

| Time | Topic | Lead |
|--------------------------------------|--|----------------------------------|
| DAY 1 – Thursday May 23, 2019 | | |
| 9:00-9:15 | Welcome and opening remarks | Mike |
| 9:15-10:15 | Session 1: Capacity Development Vision and Strategy <ul style="list-style-type: none"> - Workshop Objectives; - Overview of the Capacity Development strategy in the approved FISH CRP proposal; - Presentation of the preliminary self-assessment exercise on Cap Dev activities | Paola |
| 10:15-11:00 | Session 2: Group Discussions Assessing Capacity Development types and needs (Part 1) | |
| 11:00-11:15 | BREAK | |
| 11:15-12:00 | Session 3: Group Discussions Assessing Capacity Development types and needs (Part 2) | Paola |
| 12:00-13:00 | Session 4: Group Discussions Internal capacity development needs | Katy & Elvy |
| 13:00-14:00 | LUNCH | |
| 14:00-15:00 | Session 5: Group Discussions Resource mobilization and partnerships for building capacity | Dave |
| 15:00-15:45 | Session 6: Group discussion outputs Wrap-up session of the group discussion outputs | Group's rapporteurs presentation |
| 15:45-16:00 | BREAK | |
| 16:00-17:15 | Session 7: Capacity Development ToC <ul style="list-style-type: none"> - Capacity Development Framework: present and revise the Capacity Development ToC; - What we want to achieve by 2021 and beyond and questions that need to be addressed - Contribution (and attribution) toward SLOs and SDGs | Cristiano |
| 17:15- 17:30 | Close of Day 1 | Paola |
| 19:30-21:30 | Social Event | |

| Time | Topic | Lead |
|------------------------------------|--|-----------|
| DAY 2 – Friday May 24, 2019 | | |
| 9:30-10:30 | MEL Capacity Development Module Training | Cristiano |
| 10:30-11:00 | Capacity Development activities tracked in OCS (Cap.dev, Partnerships, HR) | Patric |
| 11:00-11:15 | BREAK | |
| 11:15-13:00 | Self-assessment exercise template <ul style="list-style-type: none"> - Presentation of the detailed self-assessment exercise template, expectations, and timeline - Discussion on how better support this process and what is expected from the CoP members | Paola |
| 13:00-14:00 | LUNCH | |
| 14:00-15:00 | Closing session: <ul style="list-style-type: none"> - Summary of Day 1 and 2 - EOB - Next Steps to complete the CapDev strategy for the FISH CRP | Paola |

Annex 2: SWOT ANALYSIS RESULTS

| Strengths Scoring | | | | | | | | | | | | | Tot. Average |
|--|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| FISH - CRP managing partners have long history of offering effective capacity development interventions | 5 | 3 | 4 | 3 | 3 | 3 | 0 | 4 | 4 | 3 | 0 | 5 | 3.7 |
| Center's excellence in research has translated into strong reputation for scientific excellence that we can build on in strengthening our capacity development activities | 4 | 4 | 0 | 5 | 4 | 4 | 5 | 3 | 3 | 3 | 3 | 5 | 3.9 |
| Capacity development has always been integral part of the responsibilities of my team | 5 | 4 | 4 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4.5 |
| My team members are qualified to provide high quality capacity development activities to target beneficiaries | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 3 | 3 | 5 | 3.9 |
| We have successful modalities and tools that we currently use in capacity development | 3 | 4 | 5 | 0 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 0 | 4.1 |
| Up-to-date materials and curricula exist for capacity development | 4 | 2 | 4 | 0 | 4 | 4 | 3 | 5 | 5 | 2 | 4 | 0 | 3.7 |
| Alumni of our capacity development activities who are now occupying leading positions in different places are good ambassadors to the quality of our capacity development activities | 4 | 5 | 5 | 5 | 3 | 3 | 0 | 4 | 4 | 3 | 0 | 5 | 4.1 |
| Our strong network with NARS, fishermen associations and different stakeholders support the success and reaching out of our capacity development activities | 5 | 3 | 5 | 5 | 4 | 3 | 4 | 5 | 5 | 3 | 4 | 5 | 4.3 |
| The access we have to external expertise in different specializations supports our capacity development activities | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 3.5 |

Additional Strengths:

- Presence of research centers and facilities of WorldFish (e.g. Abbassa in Egypt) useful to use for capacity building of participants with regional and global focus
- The provision to hire and engage relevant experts as consultants from other institutions to work with the team members of WorldFish and partner institutions useful to increase capacity development in relevant fields
- The successful capacity development programs that our team has delivered over the last 2 decades are well recognized and appreciated among the fish sector actors, stakeholders and related institutions
- Collaboration with high ranked institutes and universities led to organize high quality capacity development as MSc and PhD

- WorldFish Cambodia’s Country Director (Yumiko) and Aquaculture Scientist (Olivier) both have long continuous experience in and institutional knowledge of Cambodia, and are often consulted by many consultants / other organizations as part of TORs, concept notes, research etc. they are developing.
- Project teams have both relevant technical knowledge and good working relationships at sub-national and national levels in relation to their specific project activities.
- WorldFish’s experience in and results achieved by the Rice Field Fisheries projects are seen as useful and important for fisheries conservation and food and nutrition security

| Weaknesses Scoring | | | | | | | | | | | | | Tot. Average |
|--|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Capacity development is mainly offered through workshops /group sessions and does not make use of other available modalities that may prove of more benefit in certain situations | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 4 | 2 | 2 | 3.3 |
| Capacity development, for beneficiaries, is done in a piecemeal fragmented manner through one off activities that do not necessarily fit into a holistic approach and with little coordination among participating FISH partners, little planned follow-up and no set mechanism to ensure and measure results on the ground NB for WorldFish staff there is no CapDev. | 1 | 2 | 3 | 1 | 4 | 2 | 5 | 1 | 1 | 5 | 2 | 4 | 2.6 |
| FISH teams expertise does not stretch to all the fields where capacity development is needed development delivery | 1 | 3 | 3 | 5 | 0 | 4 | 5 | 1 | 1 | 4 | 5 | 2 | 3.1 |
| Team members and Staff have responsibilities other than capacity development and thus do not give them the needed attention | 1 | 4 | 4 | 5 | 3 | 2 | 5 | 1 | 1 | 4 | 5 | 2 | 3.1 |
| There is no incentive system to motivate scientists to invest time and effort in capacity development of targeted beneficiaries | 1 | 4 | 4 | 5 | 4 | 3 | 4 | 1 | 1 | 5 | 4 | 1 | 3.1 |
| There is no entity responsible for planning, coordinating and monitoring and evaluation of capacity development activities | 1 | 3 | 3 | 5 | 3 | 2 | 5 | 1 | 1 | 3 | 4 | 5 | 3.0 |
| The weak data base does not help reaching out to Alumni of our previous capacity development activities for support in their environments | 3 | 0 | 4 | 5 | 5 | 4 | 5 | 1 | 1 | 5 | 4 | 5 | 3.8 |

Additional Weaknesses:

- The short contract and uncertainty in continuation of the jobs of staff create problem in capacity development of staff

- The limited coordination of the capacity development activities carried out in different projects/programs not clearly reflected the strength of the capacity development program
- The lack of coordination between different CG centers and among the different offices of one center to deliver joint cap dev programs

| Opportunities Scoring | | | | | | | | | | | | | Tot. Average |
|--|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Food Security, natural resources management, gender equality and ending poverty are major issues especially in developing countries | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 4 | 4.6 |
| Capacity development is an expressed need of the partners | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 2 | 3 | 4.4 |
| The strong direction of CGIAR toward strengthening its capacity development role offers an opportunity to emphasize capacity development as integral part in realizing the goals of development of CGIAR | 2 | 4 | 5 | 3 | 5 | 4 | 5 | 1 | 1 | 4 | 0 | 4 | 3.5 |
| CGIAR Centers have a history of collaboration with international and regional organizations and local communities and have identified and worked with effective partners for capacity development | 4 | 5 | 5 | 4 | 3 | 5 | 3 | 2 | 2 | 3 | 0 | 4 | 3.6 |
| My team has developed an updated list of targeted beneficiaries' capacity development needs | 3 | 0 | 4 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 0 | 3.3 |
| My team has a compiled an updated list of external experts that can be outsourced for capacity development purposes | 4 | 0 | 4 | 2 | 0 | 4 | 2 | 5 | 5 | 3 | 3 | 0 | 3.6 |
| My team members are collecting all the basic cap dev indicators (e.g. trainings, policy recommendations, etc.) | 4 | 0 | 4 | 3 | 3 | 5 | 4 | 5 | 5 | 3 | 0 | 0 | 4.0 |
| Leverage our joint CD activities with managing partners could increase research outputs | 4 | 4 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4.4 |
| The focus of the donors on capacity development is an opportunity to strengthen the role and widen the coverage of capacity development | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 4 | 4.5 |

Additional Opportunities:

- The focus on creating impacts from our research encourages us to work beyond and that demands lot of capacity development programs of farmers for scaling and adoption of research findings
- Opportunities identified in WorldFish Cambodia's theory of change

- Seconding WorldFish staff (not only staff from Cambodia) to work within key partner organizations – not only Fisheries Administration, but potentially Min Agriculture and even private sector organizations
- ‘Decentralizing’ – some WorldFish Penang staff relocate to country offices where they could provide on-the-job technical and other support.
- Prioritizing the engagement of medium-term (12 month term minimum) volunteers, including HQ dedicating additional funding and in-kind support for high-level liaison with sending organizations (universities and managing service contractors) and helping to advertise for volunteers. Volunteers who have appropriate skill sets can have a dedicated capacity building mandate (this is already a requirement by Australian Volunteers for all their volunteers), and could even work within WorldFish partner organizations (Fisheries Administration etc.).
- Hiring or partnering with organizations specializing in areas like human-centered design, social behavior change communication, etc.
- Important in countries where the Fisheries Administration / Min Ag. Receives budget support from donors. They may be unwilling to share this with other organizations, but if WorldFish can provide someone with very relevant / desirable skills, s/he can help WorldFish gain entry points for our proofs of concept / technologies etc.
- Generally, I see these skills could complement WorldFish’s technical knowledge very well. My perspective is that we have a lot of technical knowledge to, for example, produce BMP guidelines etc. But it may benefit us to have external help to make these much more ‘user-centered / user-friendly’, and to promote these through strategic entry points into other programs and sectors.
- E.g. how the Save the Children-led NOURISH project in Cambodia has partnered with the Manoff Group for behavior change communication. Their work (including work on producing small fish powder) is very visible and well-known in Cambodia due to e.g. the project’s national TV campaigns.

| Threats Scoring | | | | | | | | | | | | | Tot. Average |
|--|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| CGIAR-CRPs members may miss realising the wider-scale provision of capacity development if they insist on implementing capacity development themselves rather than channelling some of the activities through capable partners | 2 | 4 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 3.9 |
| The unending financial crisis , competition over funds, Inter-centres’ competition and potential outside partners unwillingness to participate unless they have a direct interest themselves may negatively affect capacity development | 2 | 5 | 3 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 2 | 4.0 |
| Political changes and uprisings limit the ability to reach out to certain populations | 4 | 4 | 3 | 5 | 3 | 3 | 4 | 5 | 5 | 2 | 2 | 3 | 3.6 |
| The diversity of regions served and of needs expressed challenge our CD efforts | 3 | 4 | 4 | 5 | 3 | 4 | 3 | 5 | 5 | 2 | 4 | 2 | 3.7 |

Additional Threats:

- Limited research staff with expertise in respective fields and limited coordination due to workloads made challenging in Capacity Development
- Some donors (e.g. USAID) are currently prioritizing 'self-reliance' – including linkages with the private sector to ensure longer-lasting benefits. If WorldFish aren't able to gain/maintain a competitive advantage in relation to innovations that will eventually be taken up and spread by private firms, it may lose-out overall.
- I don't know enough about what WorldFish does globally, including in partnership with the private sector.