



MIDTERM PERFORMANCE EVALUATION

Climate-Resilient Ecosystems & Livelihoods

Final Report

December 15, 2015

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FINAL REPORT

Climate-Resilient Ecosystems and Livelihoods (CREL) Project

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Cover Photo: Evaluation interpreter interviewing two Rohingya refugee women collecting a small amount of dead and down firewood in the Teknaf Wildlife Sanctuary. Photo by John Michael Kramer.

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ACRONYMS

ACME	Accelerating Capacity for Monitoring and Evaluation
ADP	Annual Development Plan
ADS	Automated Directives System
CBNRM	Community-Based Natural Resources Management
CBO	Community-Based Organization
CDCS	Country Development Cooperation Strategy
CMC	Co-Management Committee
CMO	Co-Management Organization
CNRS	Center for Natural Resource Studies
CODEC	Community Development Centre
CPG	Community Patrol Group
CREL	Climate Resilient Ecosystems and Livelihoods
CREL-PE	CREL-Midterm Performance Evaluation
CY	Calendar Year
DEC	Development Experience Clearinghouse
DiD	Difference-in-Difference
DO	Development Objective
DoE	Department of Environment, Bangladesh
DOAG	Development Objective Agreement
DoF	Department of Fisheries, Bangladesh
DRR	Disaster Risk Reduction
ECA	Ecologically Critical Area
EG	USAID Economic Growth Office
EQ	Evaluation Question
FD	Forest Department, Bangladesh
FDG	Focus Group Discussion
FELC	Financial and Entrepreneurial Literary Centre
FTF	Feed the Future Initiative
FY	Fiscal Year
GCC	Global Climate Change
GoB	Government of Bangladesh
IGA	Income Generating Activity
IPAC	Integrated Protected Areas Co-management Project
IR	Intermediate Result
KII	Key Informant Interview
LGI	Local Government Institutions
LSP	Local Service Provider
M&E	Monitoring and Evaluation
MoL	Ministry of Land, Bangladesh
NACOM	Nature Conservation Management
MACH	Management of Aquatic Ecosystems through Community Husbandry
MET	Midterm Evaluation Team
MOCHTA	Ministry of Chittagong Hill Tracts Affairs, Bangladesh
MoEF	Ministry of Environment & Forests, Bangladesh
MoFL	Ministry of Fisheries & Livestock, Bangladesh
MOL	Ministry of Land, Bangladesh
NGO	Nongovernmental Organization
NR	Natural Resource

NRE	Natural Resource Extraction
NRM	Natural Resource Management
NS	Nishorgo Shahayaks
NSP	Nishorgo Support Project
NTFP	Non Timber Forest Products
PA	Protected Areas
PAD	Project Approval Document
PF	People's Forum
PIRS	Project Indicator Reference Sheet
PY	Project Year
QS	Quantitative Survey
RAISE	Raising Rural and Agricultural Incomes with a Sustainable Environment
RMO	Resource Management Organization
RUG	Resource Users Group
SLGD	USAID Strengthening Democracy and Local Government Project
SOW	Statement/Scope of Work
UNO	Upazila Nirhabi Officer
USAID	U.S. Agency for International Development
VCF	Village Conservation Forum
VCG	Village Conservation Group

Glossary

<i>Beel</i>	Permanent oxbow lake within larger more seasonal wetland
<i>Co-management organization</i>	One of several Government of Bangladesh-recognized institutions formed to support co-management of designated area or landscape (see table 3.1)
<i>Haor</i>	An extensive seasonally flooded saucer-shaped geologic depression
<i>Jalmohal</i>	A public water body where traditionally fishing rights have been leased out
<i>Khas</i>	Public land
<i>Nishorgo Shayaks</i>	Community-based co-management facilitators
<i>Parishad</i>	A council (Union Parishads are the grass-roots level of elected local government in Bangladesh, comprising an elected council)
<i>Upazila</i>	Sub-district in Bangladesh government

I. EXECUTIVE SUMMARY

I.1 PROJECT BACKGROUND

The Climate-Resilient Ecosystems and Livelihoods (CREL) project provides technical assistance, training, and modest material support to Bangladeshi communities and government agencies to enable them to collaboratively manage (co-manage) biologically significant ecosystems and surrounding landscapes in four focus regions of Bangladesh (see Figure 1 CREL Project Site Map). The project helps create viable, diversified livelihoods for rural poor individuals, especially women, living near protected forest areas and government-owned wetlands. CREL also builds the capacity of government agencies and community organizations to plan and implement activities that support sustainable, climate-resilient ecosystems and an inter-ministerial process of policy development intended to strengthen the legal and policy structure for the Government of Bangladesh (GoB).

The five-year \$35.5 million project (October 2012 through September 2017) is funded by \$32.6 million from the U.S. Agency for International Development (USAID) and \$2.9 million in cost-share from a consortium of international and Bangladeshi nongovernmental organizations (NGO) implementing partners, led by Winrock International. The bulk of the field work is conducted by three Bangladeshi NGOs, Center for Natural Resource Studies (CNRS), Community Development Centre (CODEC), and Nature Conservation Management (NACOM).

I.2 EVALUATION PURPOSE AND EVALUATION QUESTIONS

The purpose of the Climate-Resilient Ecosystems and Livelihoods midterm performance evaluation (CREL-PE) is to assess the project's progress toward its performance goals and to identify any challenges or opportunities that warrant adjustments. The findings and recommendations will be used to gather lessons learned that can be used to improve implementation of CREL and inform the design of future projects.

CREL Mid-Term Performance Evaluation Questions

1. In what ways has CREL integrated learning from past USAID biodiversity activities (Integrated Protected Areas Co-Management (IPAC), the Nishorgo Support Project (NSP), the Management of Aquatic Ecosystems through Community Husbandry (MACH)) to strengthen local governance structures for natural resources management? How effective is this approach in improving local governance of natural resources at targeted sites?
2. Is there evidence that the CREL project's training and capacity building activities have resulted in strengthened organizational capacity of national resource management (NRM) institutions? For example, have trainings resulted in improved capacity within co-management organizations to achieve sustainable financing and/or manage shared revenue from protected areas?
3. To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?
4. Is the CREL multidimensional integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?
5. How effective is CREL's engagement with national level GOB partners in building government ownership of the co-management approach and strengthening the legal and policy framework for co-management?

6. What opportunities exist to enhance and strengthen programmatic effectiveness such as adding, changing, rescaling, and/or removing activities to meet or surpass project targets/objectives and ensure sustainability?

I.3 EVALUATION DESIGN, METHODS, AND LIMITATIONS

The evaluation team used a mixed-method evaluation approach. This included:

- A thorough literature review (see Annex V.I Bibliography)
- Interviews with 51 CREL staff, USAID officials, and other informed parties (Annex V.II)
- 28 key informant interviews with CREL beneficiaries
- 27 focus group discussions with CREL beneficiary groups
- 31 key informant interviews with GoB officials
- Direct observations of CREL activities at 10 of 30 protected area sites
- A quantitative survey of 352 CREL livelihood beneficiaries

The fieldwork in Bangladesh took place between September 27 and November 15, 2015. Most of the findings reported in this evaluation are based on project outputs and results as of September 30, 2015, CREL's third project year. The report includes a few points that have occurred since October that have direct bearing on important findings and recommendations.

There are two primary limitations to this evaluation:

- Given limited time and human resources, the evaluation team used purposive sampling in selection of CREL sites which, while commonly used for field assessments with constrained resources, may introduce bias that could be avoided when using a random sampling approach.
- The evaluation team conducted individual and group interviews with over 400 CREL beneficiaries. These interviews included questions intended to determine if CREL had a direct and measurable impact on the protection of natural resources of the protected areas. The evaluation team found that this approach introduced a social desirability bias.¹ As a result the evaluation team is not confident that the data collected accurately captures the quantity of reduced illegal extraction (see section 2.4.2 for details).

I.4 FINDINGS AND CONCLUSIONS

Technically and administratively, CREL has been well managed, and Winrock International has effectively built and made use of the management capacity of its Bangladeshi NGO implementing partners in establishing an outreach capacity that has reached a large percentage of the households living in or near 30 widely dispersed protected areas with meaningful and effective community-based alternative income generation (AIG) and natural resources management (CBNRM) interventions.

Some highlights of CREL's accomplishments include:

- Nearly 180,000 people benefitted economically from sustainable natural resource management and conservation²

¹ Social desirability bias describes the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others. It can take the form of over-reporting "good behavior" or under-reporting "bad", or undesirable behavior.

² CREL defines "Increased economic benefits" to include increased income, new employment, new enterprises, additional benefits from ecosystem services, etc. Economic benefits may be based on actual cash transactions or the economic value of

- Improved natural resource management on nearly a million hectares
- Reduced carbon emissions by over 600,000 metric tons of CO₂e
- Increased the capacity of nearly 44,000 people in more than 100 villages to adapt to the impact of climate variability
- Helped 31,500 farmers and others apply improved climate resilient agricultural technologies or management practices

1.4.1 Progress toward performance goals

CREL got off to a slow start due to problems with collaboration with its Government of Bangladesh (GoB) counterparts (see [Section 3.2.5](#)). As a result of this and Winrock's overly ambitious targeting for two indicators CREL has had mixed success in achieving its targets.

CREL has 19 indicators. As of the end of PY3 (September 30, 2015) it was on schedule for 11 and behind in eight of these. CREL is monitoring six standard indicators and is on track for five of these. Most significantly, it has met the Mission's Development Objective (DO) 4 targets for reduced carbon emissions and stakeholders with increased capacity to adapt to climate change. CREL has also met its target for number of hectares of biological significance and/or natural resources under improved management (see [Section 3.1](#)).

Overall CREL has met or exceeded, in some cases quite substantially, its targets related to beneficiary training and livelihoods and AIG activities. For example, it has exceeded over three-fold the number of farmers and others who have applied improved climate resilient technologies and management practices. The key to this is the success CREL has had in building a massive beneficiary training program to support climate resilient livelihoods, natural resources management, and biodiversity conservation. It has substantially exceeded its targets for number of persons receiving training and number of person hours of training. CREL is also on track for building CMO organizational capacity in management, program planning, and administration.

On the other hand, CREL lags in meeting its targets for the number of legally defined public land units assigned for co-management and the number of co-management organizations (CMO) realizing improved revenue collection and/or sharing. These shortfalls reflect arguably the project's greatest weakness, the continued inability to ensure financial sustainability of CMOs.

CREL also lags in meeting targets for the number of people with increased economic benefits and amount of funding leveraged from public and private sources. The evaluation team feels this is more a function of Winrock's overly optimistic proposed targets for these indicators as opposed to weakness in implementation.

While CREL is meeting its target for number of laws, policies, agreements, or regulations officially proposed, adopted, or implemented, a closer examination reveals that this is as much a function of how USAID measures the roll up of progress for this indicator. A closer examination of progress toward this indicator reveals that CREL is substantially behind schedule for its policy development activities (see [Section 3.1.2](#)).

other natural resources. This indicator measures the number of direct and indirect beneficiaries gaining statistically significant and attributable increased benefit, regardless of the number of sources or their aggregate value, from the baseline established at the outset of the activity.

1.4.2 Evaluation questions

The CREL mid-term evaluation scope of work posed six questions for the evaluation team to address. Following is the summary findings and conclusions for these questions. A detailed assessment is presented in [Section 3.2](#).

Question 1

In what ways has CREL integrated learning from past USAID biodiversity activities (IPAC, NSP, MACH) to strengthen local governance structures for natural resources management? How effective is this approach in improving local governance of natural resources at targeted sites?

CREL is the current flagship of USAID Bangladesh's natural resource co-management program, implemented continuously since 1998. As a result of this 18 year investment much positive change has resulted in developing the public awareness, technical approach, and institutional capacity to co-manage priority areas in Bangladesh. This program has painstakingly developed and is putting into practice the tools for supporting natural resources co-management and policies for improving the livelihoods of resource dependent households.

There have been numerous documents written that assess, evaluate, and collate the lessons learned from this generational experience. The evaluation team chose five of these lessons that in their opinion best apply to the CREL project.

- *Co-management is working well (MACH)*³: MACH was USAID Bangladesh's first major co-management activity. A 2006 evaluation of the project found that co-management was an appropriate tool for improving resource productivity and social welfare. CREL is now making excellent progress in strengthening the organizational capacity of co-management organizations (CMO). The majority of CMOs supported by CREL are implementing their work effectively and progressing toward expected outcomes.
- *Collaboration is a Necessity, not an Option (NSP)*⁴: At the onset of CREL the Forest Department (FD), citing lack of proper GoB authorization, did not effectively collaborate with CREL creating substantial delays in several project components including policy development and some aspects of GoB capacity building. Underlying this issue was the USG decision during IPAC to withdraw its long-standing USG local currency support to the FD. In an attempt to replace this funding the FD and the Ministry of Environment and Forests (MOEF) sought direct USAID funding for GoB support to the project. This was not acceptable to USAID. Through many hours of working together through the issues the collaboration between CREL, FD, MOEF and USAID steadily improved in project years two and three and the collaboration is now functioning much more effectively. However, the damage was done and life of project (LOP) accomplishments of several key CREL outcomes have been jeopardized, particularly policy development, some aspects of GoB capacity building, and CMO financial sustainability⁵. It wasn't until in PY3 and early PY4 that the formal GoB authorization came through unstopping a number of bottlenecked activities.

³ Whitford, Peter W., Brent Tegler, Md. Khairul Alam, and Md. Anwarul Islam, *Evaluation of USAID/Bangladesh: Environment Program, Raise Plus-Limited Scope of Work, Final Report*. USAID, June 2006.

⁴ DeCosse, Philip, Paul Thompson, Ishtiaq Uddin Ahmed, Ram Sharma, and Azharul Mazumder, trans., *Protected Area Co-Management Where People and Poverty Intersect: Lessons from Nishorgo in Bangladesh*. USAID, 2012.

⁵ CMO financial sustainability is closely linked to several key policies being development with CREL support. Delays in policy are a major but by no means sole driver of CMO financial weakness.

- *Co-management needs a coordinated inter-ministerial approach (IPAC)*⁶: Each of CREL's three GoB counterpart departments required formal authorization from higher levels of government, known as a Technical Project Proforma (TPP) for formal participation in CREL. As of the end of PY3 only the Department of Fisheries (DoF) TPP had been signed, though the Forest Department (FD) TPP was signed in early PY4. The three TPPs each establish an inter-ministerial steering committee to guide the collaboration between the Departments and CREL. The steering committees provide a measure of coordination between government agencies but inter-ministerial coordination is not a strength of the GoB. The DoF and FD steering committees held their inaugural meetings early in PY4. However these are project-specific coordination entities and CREL has not been succeeding in creating a functioning inter-ministerial co-management steering committee as anticipated by USAID, nor has the government made satisfactory progress in integrated co-management policy development across ministries. However, at the local level, CREL has had better success with inter-ministerial coordination. This includes the Jamohal Wetlands handover between the MoL and the DoF and the multi-agency Haor management plans under the auspices of the District Commissioner.
- *CMOs need a strong purpose and financial support (IPAC)*⁷: CREL has substantially redesigned the approach to CMO organizational capacity building from IPAC. After conducting an assessment of CMO organizational capacity early in PY1, CREL triaged several sites with dysfunctional CMOs and began an intensive program of training, funding, and restructuring. CREL substantially improved the FD relationship with and appreciation of forest-based CMOs resulting in joint FD and CMO planning and improved cooperation in implementing co-management activities. CREL has organized two follow-up assessments, which showed steady improvement in CMO organizational capacity. However, while there is progress in some avenues of sustainable CMO finance, such as ecotourism revenue sharing, all but a handful of the 51 CMOs CREL supports currently do not have a sustainable source of funding to continue their activities after CREL. Sustainable CMO funding will likely be achieved only through a diverse set of funding channels for different types of CMOs and, in all likelihood, multiple finance sources for individual CMOs.
- *The greatest threats to protected areas come from powerful socio-political interests (NSP)*⁸: CREL was not designed to address this finding presented in a book written by several leaders of the USAID/Bangladesh co-management program. As a result the implementation of CREL cannot be faulted for failure to directly address it. The organization structure of the forest-based CMOs incorporates local elites to provide a measure of accountability by powerful people and certain of CREL's activities do address the issue indirectly, but the evaluation team encountered significant evidence that this issue is still very much at play in protected areas. It is a difficult and controversial task, but it needs to be part of an integrated co-management program.

Question 2

Is there evidence that the CREL project's training and capacity building activities have resulted in strengthened organizational capacity of NRM institutions? For example, have trainings resulted in

⁶ Mackenzie, Catherine, Luca Etter, and AJM Ifjalul Haque Chowdhury, *Final Performance Evaluation of the Integrated Protected Areas Co-management (IPAC) Project: Democracy and Governance Components*. USAID, September 2013.

⁷ Ibid.

⁸ DeCosse, Philip, Paul Thompson, Ishtiaq Uddin Ahmed, Ram Sharma, and Azharul Mazumder, trans., *Protected Area Co-Management Where People and Poverty Intersect: Lessons from Nishorgo in Bangladesh*. USAID, 2012.

improved capacity within co-management organizations to achieve sustainable financing and/or manage shared revenue from protected areas?

- CREL has trained more than 56,000 people in climate resilient awareness and practices, more than 1,200 government officials in co-management theory and practice, and conducted hundreds of training workshops, seminars, courses, presentations, study tours and field demonstrations. CREL has monitored improved capacity outcomes of some of its training programs, e.g., CMO capacity building, women's financial literacy, NGO transition grant training, and used this to improve these components.
- However, CREL has not effectively monitored the impact of its training for livelihoods beneficiaries or GoB staff, two major training target groups. CREL has also not prepared a meaningful training needs assessment or a training strategy. This is not to say that CREL's training program is not strategic. It is tied closely to annual work plans and these in turn are clearly linked to CREL intermediate results. Still it is difficult to demonstrate the effectiveness of the training program and make appropriate adjustments without clearly identified training objectives, baseline and post-training assessment, and assessment of progress toward expected outcomes for beneficiaries that is correlated with the training program and other CREL support.
- CREL has succeeded in enabling CMOs to plan, budget, and account for operational financing; over three-quarters (77%) of the 34 CMOs surveyed by CREL showed an average of 38 percent improvement (PY3 compared to baseline) in their internal organizational management capacity. However, as noted above sustainable CMO funding remains to be resolved. Through the draft PA Rules policy, now being reviewed by the GoB, CREL has made progress in promoting ecotourism revenue sharing. More importantly, over the course of CREL the FD had come to view the CMOs as partners in forest protection and management, largely due to their increased capacity to plan and implement annual activities including budget and financial management.
- While CREL has trained over 1,200 government and elected officials, on the whole CREL and the GOB are not progressing satisfactorily in building a cadre of officials at various levels and working for various agencies to carry on a vital co-management program in the absence of external support. CREL has initiated an activity to develop and introduce co-management curricula in higher education institutions but the bureaucratic process of curricula change has, as of the end of PY3, hampered adoption of the curricula.
- CREL's communications activities were not strategically aligned with program objectives. The communications program was based largely on traditional print and web-based channels and this was not balanced with more innovative communications tools.

Question 3

To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?

CREL's livelihoods and IGA program is doing the job it was designed to do.

- It has promoted market-driven alternative income generation (AIG) activities for nearly 44,000 direct participants, 75% above the PY3 target (see [Annex I, Table 4.1](#)).
- The program is very popular, widely adopted, generating substantial income, and enhancing household resilience to climate change-induced shocks.
- CREL's livelihoods program has become an important pillar of the co-management program, providing a strong incentive for households to participate with the co-management program as a whole, including natural resources protection.

CREL livelihoods activities are responsive to beneficiaries' needs. They incorporate a value chain approach and provide need-based skills and knowledge transfer. The IGAs are having a positive effect on income for beneficiaries, whether they are used as a primary or supplementary source of income. This is substantiated by the survey of beneficiaries, which showed that their income had increased by an average of 42 percent above what they earned prior to CREL's launch.

- Sub question 3.1 Livelihoods and Resource Protection: The evaluation team conducted a survey of 352 CREL livelihood beneficiaries in part to address this sub question. Beneficiary responses indicated there is a positive correlation between CREL's livelihoods program and reduced participating household illegal resource extraction. However, given the likelihood of respondent social desirability bias when answering questions about illegal resource extraction, the evaluation team finds that it is not possible with the time and resources available to the evaluation team to quantify the overall impact on natural resource protection. Even if the beneficiaries' reports were accurate one would not be able to draw conclusions about the measurable impact of AIG adoption and the protection of natural resources. Perhaps the activities of natural resources extractors not participating in CREL have offset reduced extraction from AIG adopters⁹. CREL and others are conducting natural resource status surveys and inventories but the results were not yet available. A reliable answer to the first sub question 3.1 will require both a reliable before and after survey of natural resources status and socio-ecological assessment to determine natural resource extraction patterns of various actors.
- Sub question 3.2 Supplementary vs. Alternative Income:¹⁰ CREL's livelihoods program is creating both alternative and supplementary income. The program has shifted income generation from extraction to IGAs (alternative) and is providing supplementary income to households that remain resource extractors as well as households that have not had, and do not have, significant income from resource extraction.

The team found that other than the three field-based, USAID-funded CREL sub-recipients, CREL does not have sufficient, well-established, institutional partnerships (e.g., government agencies or capable NGOs) through which the livelihoods program could be sustained after the project ends by providing ongoing support to existing households and scaling-up to new households, villages, and sites.

Question 4

Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?

- CREL's gender approach has successfully integrated women in the project's activities. The project's cooperative agreement mandated the project to include at least 50 percent women in its livelihood program. It has exceeded this goal by 50 percent as nearly 75 percent of the livelihoods beneficiaries are women. There is a concern, however, that it is men who are responsible for the bulk of natural resources extraction and perhaps increased enrollment of resource dependent men would be appropriate. The evaluation team found that many of the

⁹ This is parallel to the 'leakage' issue in forest carbon finance.

¹⁰ The evaluation team defined these terms as follows: supplementary income derives from AIG activities that increase household income but do not substantially reduce income from resource extraction; alternative income comes from AIG activities that substantially or completely replaced income from resource extraction.

alternative income generation (AIG) livelihoods opportunities supported by CREL, such as home gardens, small animal rearing, and handicrafts, were more socially and economically attractive to women than men. CREL's support to the AIG for aquaculture and several of the more commercial AIGs were clearly successful in reaching men.

Question 5

How effective is CREL's engagement with national level GoB partners in building government ownership of the co-management approach and strengthening the legal and policy framework for co-management?

- The GoB's decision to not fully engage with CREL over the TPP issue had several important implications for project implementation: formal CREL/GoB steering committees were not established, CREL was not able to support a full range of activities (e.g., forest restoration) inside the forest PAs, policy development and GoB staff capacity building program progressed slowly, and employment generation, particularly important for male livelihood beneficiaries, did not evolve as originally planned. Now, with formal authorizing documents in place, significant strides have been made, including key policy actions taken and the renewal of operations in the PAs.
- CREL's support to the development of GoB policies, essential for sustainable co-management outcomes, is well behind schedule in meeting milestones that should have already been passed. Key elements of CREL's policy work, such as the PA Rules, the Wetlands Leasing Policy, and the Ecologically Critical Area (ECA) Rules are at risk of not being formally adopted by the end of the project. CREL's end of project target for 14 policies being implemented is highly unlikely to be achieved for the most important national level policies.

Question 6

What opportunities exist to enhance and strengthen programmatic effectiveness such as by adding, changing, re-scaling and/or removing activities to meet or surpass project targets/objectives and ensure sustainability?

- *Policy:* Now that the formal GoB collaboration documents have been finalized, CREL and the GoB have an opportunity to push for the formal adoption of several key co-management policies, including: the revised FD PA Rules, the Wetlands Leasing Policy, and the ECA Rules.
- *CMO Funding:* As policy development progresses cementing the legal standing of CMOs, there is an opportunity to explore both novel and classic approaches to finance. Other than ecotourism, PA CMOs are not designed to generate funds from market mechanisms or membership fees. While such approaches should not be ruled out, more likely opportunities include GoB line item funding. Wetlands CMOs have an opportunity to generate funds from fishing and there CREL could explore cooperative-type opportunities to formalize this revenue source.
- *Inter-ministerial coordination:* Given widespread concern about wetland siltation and recognition of the watershed drivers, CREL has an opportunity to build on its successful experience in developing the Hakaluki Hoar management plan and its work with the Sunderban ECA stakeholders to initiate support for landscape level, integrated co-management programs, perhaps combined with a transition grant to a Bangladeshi NGO.
- *Livelihoods program sustainability:* Some of CREL's livelihood activities lack local institutional support to continue building capacity and support value chains after CREL. While some individuals have the capacity to successfully sustain income-generating activities (IGAs), many will not. CREL's local service provider (LSP) program has shown promise for input-heavy value chains such as aquaculture and animal husbandry. There is a need and an opportunity to develop a variety of mechanisms to sustain IGAs. With regard to male oriented IGAs, with the signing of the FD TPPs, an opening exists to create FD-led employment opportunities for forest protection and restoration. The successful Pebbles handicraft IGA supported by the fair trade handicraft company, Hathay Bunano, will likely continue support of several CREL-supported

women's handicraft groups and there is an opportunity to expand Pebbles and replicate this approach with other types of handicrafts.

- *Communications*: CREL has an opportunity to adopt innovative communications technologies and apply them with a strategic communications approach that thoughtfully supports key CREL outcomes, such as policy development and GoB buy-in, CMO sustainability, and to proactively address issues regarding powerful drivers of illegal resource extraction.

I.5 RECOMMENDATIONS

I.5.1 Indicators Falling Short of Plan

It is clear that there will be a shortfall in meeting PY 4 and 5 targets for two Intermediate Results:

- IR 4: Number of people with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance, and
- IR 3.1: Funding leveraged from public and private sources contributing to improved natural resource management.

USAID and CREL should avoid the temptation to increase spending to accomplish these results which would divert scarce project resources from more important activities such as policy development, communications support redesign, and capacity building. The evaluation team recommends that USAID and CREL set new targets that balance priorities between activities and that can be feasibly reached.

I.5.2 Question 1: Integrating Learning from Past Activities

Co-management is working well and appears to have distinct advantages over previous approaches in the sector.

USAID should continue its support for co-management. The advances made during CREL and over the past 18 years have been substantial. Co-management approaches have been largely accepted by both the GoB and households living in and near the protected areas. However, this progress could be undone without external resources to continue to institutionalize co-management within the government and to secure financial sustainability of the CMOs.

Formal collaboration is a necessity, not an option.

USAID, the American Embassy, and ranking officials of the GoB should formally reconcile the TPP and DOAG mechanisms to avoid repetition of the TPP problem that CREL faced at the beginning of implementation. In the meantime, timeliness of TPP execution should be mitigated by USAID maintaining close working relationships with counterpart implementing agencies during project design.

USAID, the GoB Ministry of Planning, and CREL should take full advantage of the signed TPP to assess and plan activities for the remainder of the program that meet mutual priorities.

Environmental governance initiatives like co-management need a coordinated inter-ministerial approach

For the remainder of CREL and during the CREL follow-on activities, USAID's co-management program should emphasize inter-ministerial cooperation at the Upazilla level and work on activities such as integrated management plans. At the national level, inter-ministerial coordination should focus on supporting effective TPP steering committees as well as on some discrete policy issues such as wetlands handover. USAID should forgo more ambitious efforts to obtain inter-ministerial coordination such as a standing inter-ministerial co-management steering committee until there is a clear demand for this from the GoB.

CMOs need a strong purpose and financial support

CREL should continue and refine its efforts in building CMO capacity. This is further addressed below under Question 2.

The greatest threats to forest PAs come not from the neighboring poor, but from powerful socio-political interests

During the remainder of CREL, the implementing partners should work on potential solutions that, without increasing risk of harm to project staff or stakeholders, might be piloted during CREL and expanded in a follow-on program. USAID/Bangladesh's Democracy and Governance program and other agencies are working on corruption issues and may have useful approaches. The power of modern technology and media is one promising avenue.

1.5.3 Question 2: NRM Institutional Training and Capacity Building

The evaluation team recommends that CREL do a stock taking of its training program, including an assessment of the outcomes of various elements of the training. The stock taking would likely identify some trainings, such as generic awareness raising, that have outlived their usefulness, and the resources that could be better used on building capacity for sustainability. CREL maintains a comprehensive database (CRELLink) of training by participants and is conducting periodic assessments of project impact on the livelihoods of individual livelihood beneficiaries. CRELLink data should be extracted and compared to livelihoods results to help assess training effectiveness and make adjustments in training strategy and approach to better match training and capacity building with outcomes.

It is necessary to build the capacity of the GoB implementing partners' to train their own staff in the key elements of co-management and enable them to support and strengthen the institutional capacity of CMOs. CREL should expand its co-management master trainer program and ensure that the master trainers have the financial and institutional support they need to apply what they've learned. Building stakeholder capacity to implement the new set of co-management policies, rules, and guidelines is a priority. CREL should leave the follow-on activities with a well-structured training strategy based on this stock taking to facilitate the path forward.

CMO Capacity Building

CMOs will continue to need ongoing organizational capacity training. A mechanism for providing ongoing capacity support to CMOs should be put into place before the end of CREL. There are multiple ways to do this. Building GoB capacity to provide these services is the obvious choice, but it is not straightforward nor is it evident at this point that the GoB would embrace this responsibility or have the resources to undertake it. CREL and the GoB should make a concerted effort to move in this direction. At the same time, USAID should consider alternative mechanisms and sources of support for continuing its funding for CMOs.

The GoB, USAID, and CREL need to make a focused effort to address sustainable financing of the basic CMO operating and program funds. It is likely that a variety of business models will be needed for sustainable (non-donor) funding of the diverse types of CMOs. CREL and its partners should assess the feasibility of and develop multiple lines of financing. These range from routinized GoB funding, to cooperative like business ventures, to ecotourism revenue sharing.

Government of Bangladesh Training and Capacity Building

CREL and the GoB should prepare a clear set of objectives, training needs assessment, and plans for developing GoB organizational capacity focused on field managers. Indicators should be developed and tracked to measure training effectiveness and used to make improvements in targeted capacity of GoB staff. CREL should also continue to focus on introducing a co-management curriculum with a few key higher education institutions, especially those that are closely aligned with the line ministries. CREL should work closely with the relevant human resources offices of the GoB to ensure that in-service training plans include co-management modules where needed.

Communications

CREL should critically assess current communications objectives and strategy and redesign the communications plan, making greater use of creative messaging and innovative communications methods and channels to be more strategic and align with key project objectives.

1.5.4 Question 3: Livelihoods-Impact on Protected Areas, Income and Household Climate Resilience

The evaluation team's overall recommendation is that USAID recognize that IGAs introduced by CREL are a valuable pillar of co-management of PAs in Bangladesh and should be continued. This includes finding a viable mechanism for continuing support for IGAs after September 2017.

Related recommendations include:

- CREL should identify and increase participation in the livelihoods program of persons whose primary source of income is resource extraction, most of whom will be men. Men may not find the current set of livelihood activities to be sufficiently lucrative and CREL should seek to add IGAs that meet the needs of this target group.
- As women gain experience with income generation, nascent demand for new IGAs will increase and CREL should examine new IGAs to meet this increased demand.
- CREL should expand its SLG program, as financing is a key limiting factor for successful IGAs.
- CREL should expand the LSP program to keep pace with the growing number of livelihood participants engaging in agriculturally-related activities. This should include an assessment of the effectiveness of LSPs, application of lessons learned, and revised approaches as needed.

1.5.5 Question 4: Integration of Women and Vulnerable Populations

- While retaining strong female participation in livelihoods program, take steps to increase male resource extractor participation by, among others, including IGAs such as employment generation and commercial agriculture.
- Continue to empower women in their existing leadership positions in CPG, NS and CMC by providing leadership trainings and speaking opportunities in order to help build confidence.
- Set up a mechanism to measure women's empowerment in CMOs, CPGs, and other livelihoods groups, monitor change in women's empowerment, and take steps to improve it when problems are detected.
- Increase outreach to men about gender issues, as changes in men's perceptions of the value of women are crucial in raising women's status. Place greater emphasis on the role of women in co-management and CMO leadership from the Community-Based Organization (CBO) level up.

1.5.6 Question 5: Engaging National Level GOB Partners and Strengthening Policy Framework

Engaging National Level GoB Partners

USAID and the GoB Ministry of Planning should formally reconcile the TPP and DOAG mechanisms to avoid repetition of the problem that CREL faced. USAID should begin discussions now on CREL follow-on activities to prepare for a quick finalization of the TPP when the new activities are awarded.

CREL, USAID, and the GoB should take steps to extend the current TPP to cover at least CREL and, if possible, the initial year of the CREL follow-on period. This should be the point of entry for discussions regarding the TPP for the entirety of the follow-on period.

Strengthening Policy Framework

- CREL should work with the GoB implementing partners to agree on policy priorities (see text box), a timeline, and a detailed work plan for enacting priority co-management policies and focus further work according to an agreed upon schedule.
- CREL partners should increase and enhance their efforts to move the policy development forward including actions such as embedding CREL staff in ministerial offices, publicizing policy accomplishments to build a constituency for reform, and supporting civil society advocacy for co-management.
- The GoB and CREL should pilot policy implementation at select sites to test implementation modalities and refine them prior to wider scale implementation.

Recommended Priority Co-Management Policies

- Forest PA Rules
- Wetlands Co-Management Guidelines
- Wetland leasing policy
- ECA policy/rules on co-management

USAID should be proactive in the policy dialogue using its comparative advantages of access and ability to be heard at the right levels of the GoB to ensure that barriers to the policy approval are addressed and to visibly demonstrate Mission commitment to the reform.

1.5.6 Opportunities to Enhance and Strengthen Programmatic Effectiveness

Follow-on Program Recommendations

To protect the investment that USAID has made in co-management under CREL and increase the likelihood of successful attainment of CREL’s outcomes, the evaluation team recommends two interrelated program design adjustments. USAID should:

- Provide Winrock with a one-year funded extension of the CREL cooperative agreement.
- Start the process of awarding transition grants to eligible Bangladeshi NGOs to initiate projects that complement CREL and build sustainability of key components in a post-CREL environment.

While a one-year extension may not be sufficient to accomplish all of CREL’s objectives, achievement of an effective co-management policy environment and at least partial development of sustainable financing schemes for CMOs are possible. The extension could also open novel opportunities for subsequent USAID investment in climate resilient livelihoods and natural resource co-management.

Transition grants

CREL has successfully built the capacity of three national NGOs who are now certified and qualified to receive substantial direct funding from USAID. The evaluation team recommends that USAID begin the process of awarding grants to these NGOs to take over field operations in all four CREL regions, focusing on ongoing support to CMOs and livelihoods activities. The evaluation team concludes that an additional year of CREL activities would help secure USAID’s investment in these programs as well.

2. PROJECT INTRODUCTION

CREL was developed based on a 2012 USAID/Bangladesh Project Approval Document (PAD) under the framework of USAID/Bangladesh's Country Development Cooperation Strategy (CDCS) 2011-2016 goal for *Bangladesh to become a knowledge based, healthy, food secure and climate resilient middle income democracy*. CREL falls under the CDCS Development Objective 4 (DO4): *Responsiveness to Climate Change Improved*. The CREL project contributes to the achievement of CDCS DO4 IR 4.1: *Improved management of natural resources* and IR 4.2: *Enhanced adaptation capacity and resilience to shocks*.

DO4 aligns directly with the GOB's 6th Five-Year Plan and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP 2009), which recognize the adverse effects of climate change as a major development challenge. DO4 also aligns USG Global Climate Change and PL 480 Title II resources to improve Bangladesh' ability to respond to climate change and to mitigate the effects of climate change on the country's most vulnerable populations.

Bangladesh is among the countries most vulnerable to climate change – as well as the country most vulnerable to tropical cyclones and the sixth most vulnerable to flooding. These natural disasters cause loss of life, damage to infrastructure and economic assets, and adversely impact lives and livelihoods of many of Bangladesh's 150 million people, especially the economically disadvantaged men and women, who are more vulnerable to disasters and climate change. The combination of frequent natural disasters, high population density, poor infrastructure, and low resilience to economic shocks make Bangladesh especially vulnerable to climate risks.

Bangladesh's forest resources have been severely degraded in the last several decades from population pressures, resulting in land clearing for agriculture, grazing, fire, uncontrolled logging, and firewood collection. People who live in and around protected areas (PAs) are dependent on these resources for their livelihoods and have limited alternative economic opportunities. For women, these opportunities are more limited as they do not have equal access to these resources and have limited mobility. Currently, Bangladesh has one of the lowest per capita rates of forested land at less than 0.02 hectares per person. Protected areas, which predominantly consist of forests and wetlands, represent only 1.6%¹¹ of the country's land mass, one of the lowest rates in the world. Maintaining the health of these forest, aquatic, and marine ecosystems along with the biodiversity contained within them is essential to adapting to climate change in the near and long-term, as well as supporting livelihoods and the Bangladeshi economy overall.

In 1998, USAID/Bangladesh began a series of major investments in natural resources co-management with an innovative wetlands fishery co-management program, Management of Aquatic Ecosystems through Community Husbandry (MACH), working with the DoF. In 2002 USAID began to expand the co-management experience to forest ecosystems through the Nishorgo Support Project (NSP), working with the FD and its system of protected areas (PA), the most stringently protected of the FD's forest reserves. In 2008, USAID combined its support to wetlands and forest co-management and added a third zone, ecologically critical areas (ECAs), overseen by the DoE. This project, Integrated Protected Areas Co-management (IPAC), which ran through 2013, was CREL's immediate predecessor. An excellent examination of the challenges of co-management in Bangladesh can be found in *Protected Area*

¹¹ Government of Bangladesh, Planning Commission *Environment, Forestry and Biodiversity Conservation: Background Paper for Seventh Five Year Plan (2015-16 to 2019-20)* pg 29

Co-Management Where People and Poverty Intersect: Lessons From Nishorgo In Bangladesh ([DeCosse, et al, 2012](#)).

The CREL program continues these three experiences, adding a focus on building resiliency to climate risks and enhancing adaptation to climate change, with significantly increased support for improved livelihoods, on to the USAID community-based natural resources management (CBNRM) program that dates back 18 years. This generational collaboration between USAID and the government, civil society, and the people of Bangladesh has created a body of experience, an institutional framework, a network of relationships, and a reputation that is rare in the development assistance practice. CREL operates in 30 protected area sites in four regions of Bangladesh (see Figure 1).

In October 2012, USAID Bangladesh awarded a competitive five-year cooperative agreement to Winrock International for the CREL project. CREL's purpose is to:

- Provide high quality technical advisory services to co-management organizations and GOB environment, forestry and fisheries agencies to support the sound natural resource management and climate resiliency of protected areas and vulnerable populations;
- Improve governance of natural resources and biodiversity;
- Enhance knowledge and capacity of key stakeholders;
- Strengthen planning and implementation of climate-resilient resource management and adaptation; and
- Improve and diversify livelihoods that are environmentally sustainable and resilient to climate change.

This five-year, October 2012-September 2017, \$35.5 million cooperative agreement is funded by USAID (\$32.6 million, with \$2.9 million in cost-share from the implementing partners). It is being implemented by a consortium of international and Bangladeshi organizations led by Winrock International.¹² The bulk of the field work is conducted by Bangladeshi NGO members of the consortium, CNRS, CODEC, and NACOM, each of whom maintains a substantial field operation. CREL also works in close collaboration with national and local GoB agencies, particularly the Forest Department (FD), the Department of Environment (DoE), and the Department of Fisheries (DoF).

CREL is coordinating their activities with other international donor activities, such as the Feed the Future (FTF) program under the Presidential Global Hunger and Food Security Initiative (GHFSI) (e.g.,

CREL Implementing Partners

Winrock International, lead implementing partner

Bangladesh

- Bangladesh Centre for Advanced Studies (BCAS)
- Center for Natural Resource Studies (CNRS)
- Community Development Centre (CODEC)
- Nature Conservation Management (NACOM)

International

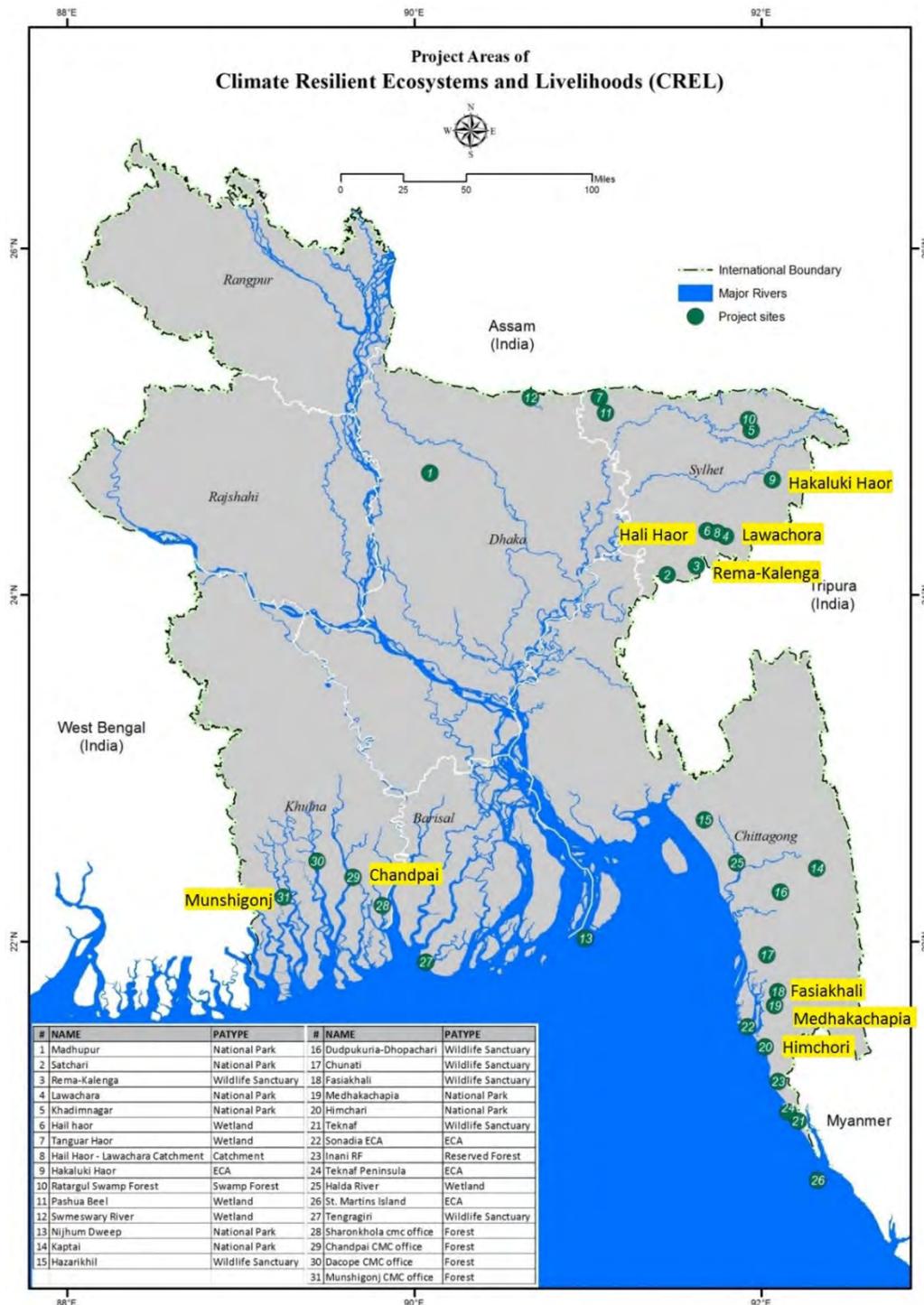
- WorldFish Center, Bangladesh
- TetraTech/ARD

Government of Bangladesh

- Ministry of Environment and Forests (MoEF)
 - Department of Environment (DoE)
 - Forest Department (FD)
- Ministry of Fisheries and Livestock (MoFL)
 - Department of Fisheries (DoF)
- Ministry of Land (MoL)

harmonization of indicators/data collection, and local service provider training).

Figure I: CREL Project Site Map



2.1 CREL DEVELOPMENT HYPOTHESIS

USAID has identified the following development hypothesis under its CDCS DO4: "Improved management of natural resources, livelihood diversification, climate risk management and enhanced capacity for low emissions development will address adaptation and mitigation of GCC, while providing sustainable economic benefits and clean energy resources for Bangladesh."

The CREL project addresses part of this hypothesis and specifies that “if community and government capacity for collaborative natural resource management is enhanced and complemented by support for responsible, equitable, climate-resilient economic growth in the same landscape areas, then this will contribute to achieving USAID’s DO4 results.”

2.2 CREL PROJECT COMPONENTS

The program’s four interrelated components are the IRs in the CREL Results Framework shown below.

IR 1: Improved governance of natural resources and biodiversity: Under this IR, the CREL project will improve governance by strengthening the legal framework for climate resilient co-management and build the capacity of local government officials (Upazila-level) to implement and enforce laws and policies. The CREL project will improve stakeholder knowledge and awareness in order to inform policy decisions, improve environmental governance practices, improve accountability of the government, and facilitate informed civil society participation in environmental governance.

Sub-IR 1.1: Strengthened Legal and Policy Framework for Co-Management.

Sub-IR 1.2: Increase Demand for Better Natural Resources Management.

IR 2: Enhanced knowledge and capacity of key stakeholders: Under this IR, the CREL project will improve the capacity of key stakeholders to develop skills relevant to natural resources co-management techniques and climate resilient livelihoods. Activities will build climate resiliency by increasing stakeholder knowledge and understanding the “drivers” of climate change and of adaptation.

Sub-IR 2.1: Improved Knowledge and Skills of Natural Resources Management Stakeholders.

Sub-IR 2.2: Strengthened Organizational Capacity of Natural Resources Management Institutions.

IR 3: Strengthened planning and implementation of climate-resilient natural resource management (NRM): The project activities that contribute to achieving this IR will strengthen and expand co-management of biologically diverse landscapes. This will be achieved by supporting local institutional development, protecting and restoring ecosystems, and incorporating climate change adaptation into management. To achieve this IR, the CREL project will improve management practices of CMOs for climate resilient NRM and identify financing mechanisms to maintain these activities beyond the life of the project.

Sub-IR 3.1: Increased Sustainable Financing of Co-Management Organizations (CMO).

Sub-IR 3.2: Improved Planning for Climate Resilient Natural Resources Management.

IR 4: Improved and diversified livelihoods that are environmentally sustainable and resilient to climate change: Households that are dependent on natural resources and vulnerable to the negative impacts of climate change need alternative and sustainable economic activities. To achieve this IR, the CREL project trains households in market-driven environmentally sustainable economic activities, which will lead to increased income and improve resilience to shocks through diversified income sources.

Sub-IR 4.1: Increased Investment in Eco-Friendly Enterprises.

Sub-IR 4.2: Increased Adoption of Environmentally Sustainable and Climate Resilient Livelihoods.

2.3 CREL STAKEHOLDERS: CO-MANAGEMENT ORGANIZATIONS

The hub of CREL’s work are co-management organizations (CMO) which combine in a single local organization representatives of the people and communities that reside in and near the 30 protected areas being address by CREL, government agencies sponsoring the CMOs, local government representatives as well as local leaders, and business elite. The CMOs have evolved from the MACH, NSP, and IPAC projects into three distinct groups each pertaining to a single GoB Department as shown in Table 3.1. (For a more complete description of CMOs see [Annex I, Figure 3.1](#))

CREL Results Framework

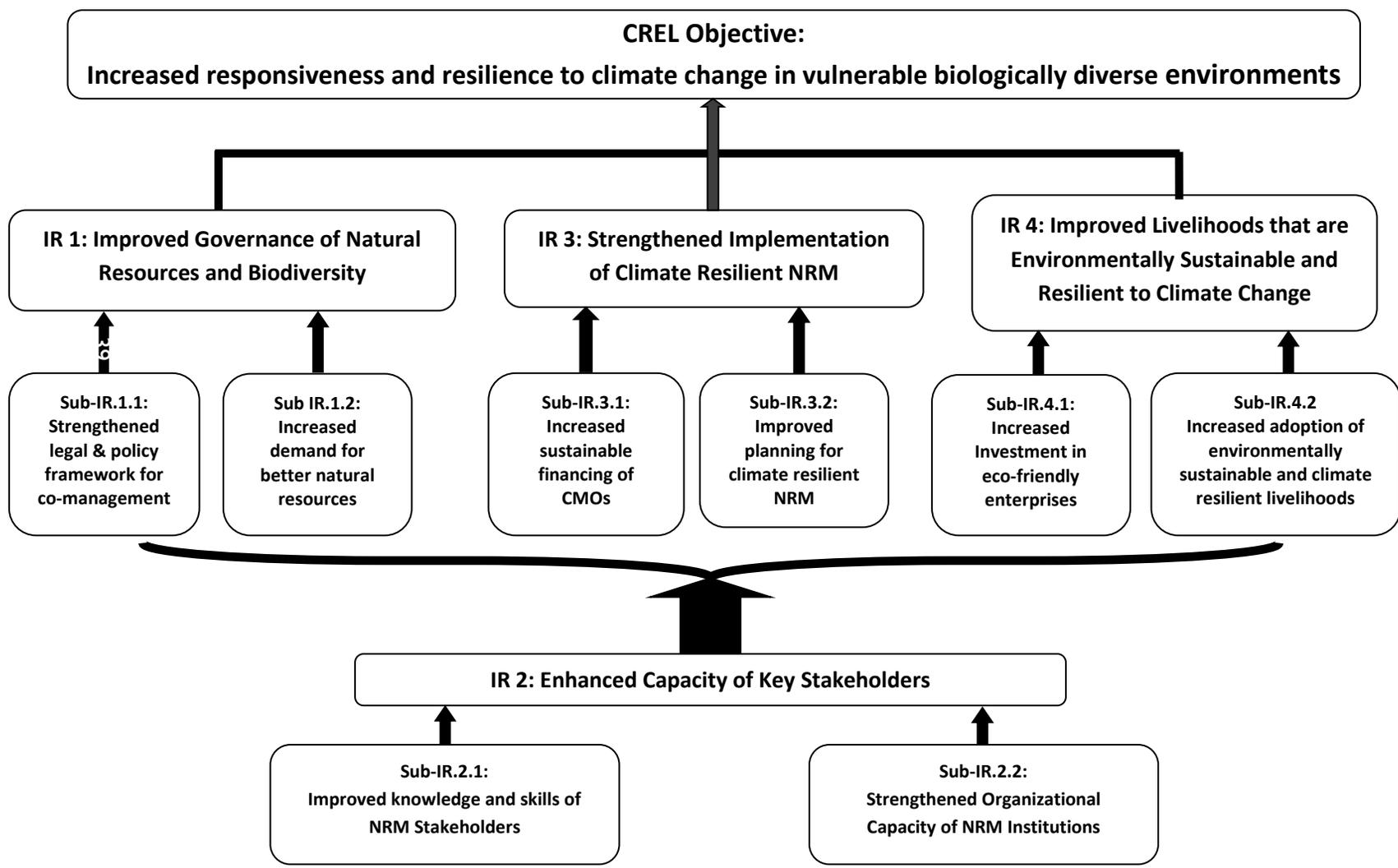


Table 2.1: Co-Management Organizations and Their Sponsoring GoB Agency

Location	GoB Institutional Affiliation	Oversight	Planning	Community Action	
Forests	Forest Department	Co-Mgt Council	Co-Mgt Committee	Peoples Forum	Village Conservation Forum
Wetlands (Jamohals)	Dept of Fisheries Ministry of Land	Upazila Fisheries Resource Committee	Resource Mgt Organization	Federation of Resource User Groups	Resource User Group
Ecological Critical Areas	Dept of Environment	Central ECA Coordination Committee	Union ECA Coordination Committee		Village Conservation Group

2.4 EVALUATION PURPOSE & EVALUATION QUESTIONS

The purpose of the Climate-Resilient Ecosystems and Livelihoods midterm performance evaluation (CREL-PE) is to assess the project’s progress toward its performance goals and to identify any challenges or opportunities that warrant adjustments. The evaluation was conducted at the end of the CREL project year 3, September – November 2015.

2.4.1 USE AND AUDIENCE OF THE EVALUATION:

Findings and recommendations will be used to gather lessons learned that can be used to improve implementation of the project and to inform USAID/Bangladesh and others when designing future projects.

USAID intends to disseminate the report widely to stakeholders such as USAID/Bangladesh, USAID/Washington, USAID implementing partners, GOB ministry partners, other sector-specific donors, and the Development Experience Clearinghouse (DEC).

2.4.2 OBJECTIVES AND QUESTIONS OF THIS EVALUATION

The specific objectives of the CREL mid-term performance evaluation are to:

1. Determine the extent to which the CREL project is on track (including process and outcomes) to meet its overall performance goals across the four major CREL components:
 - a. Improved governance of natural resources and biodiversity;
 - b. Enhanced knowledge and capacity of key stakeholders;
 - c. Strengthened planning and implementation of climate-resilient NRM and adaptation; and
 - d. Improved and diversified livelihoods that are environmentally sustainable and resilient in regard to climate change.
2. Identify constraints and opportunities associated with achievement of expected project results.
3. Provide specific recommendations for opportunities to take mid-course corrections. Enhance programmatic effectiveness and impact and strengthen the approach.
4. Determine the extent to which USAID investments in the CREL activity are likely to be sustained.

CREL Mid-Term Performance Evaluation Questions

1. In what ways has CREL integrated learning from past USAID biodiversity activities (IPAC, NSP, the MACH) to strengthen local governance structures for natural resources management? How effective is this approach in improving local governance of natural resources at targeted sites?
2. Is there evidence that the CREL project's training and capacity building activities have resulted in strengthened organizational capacity of NRM institutions? For example, have trainings resulted in improved capacity within co-management organizations to achieve sustainable financing and/or manage shared revenue from protected areas?

3. To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?
4. Is the CREL multidimensional integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?
5. How effective is CREL's engagement with national level GOB partners in building government ownership of the co-management approach and strengthening the legal and policy framework for co-management?
6. What opportunities exist to enhance and strengthen programmatic effectiveness such as adding, changing, rescaling, and/or removing activities to meet or surpass project targets/objectives and ensure sustainability?

2.5 EVALUATION METHODS & LIMITATIONS

2.5.1 EVALUATION METHODS

The CREL-PE relied on a mixed-methods evaluation approach including desk review, key informant and informal interviews, focus group discussions, direct observation, and a survey of livelihood beneficiaries.

Component 1: Desk Review: The desk review included (1) a literature review of published and unpublished literature on the project; (2) analysis of CREL performance and program data; and (3) third party reports and documentation. A bibliography is provided in Annex V.

The CREL mid-term evaluation methodology and work plan anticipated that the evaluation team's desk review would encompass only standard indicators that the Mission reports to USAID/Washington. After the field work debriefing the CREL COR asked the evaluation team to assess selected custom indicators in the interest of a more holistic assessment of and recommendations for the project.

Component 2: Site Assessments: The evaluation team traveled to selected CREL activity sites in the Sylhet, Khulna, and Cox's Bazar regions to assess CREL implementation. As the CREL-PE is descriptive and lacks control groups, the evaluation team employed purposeful cluster sampling as opposed to a random sampling.¹³

Site selection criteria included:

- Sites in three of the four project regions: Sylhet, Khulna and Cox's Bazar;
- Sites receiving higher amounts of USAID funding and/or conducting a larger number of CREL activities, whether successful or not;
- Sites that were logistically feasible to reach within allotted field time; and
- Sites that are exemplars of success and best practices.

The following three methodologies were applied during these field trips:

1. *Key informant interviews (KIIs)*. KIIs included USAID and CREL staff, CMO members, NGO leaders, and GoB officials. Key informants were identified based on discussions with USAID and CREL and

¹³ See USAID Learning Laboratory, undated. Comparing Probability, Purposive and Mixed Method Sampling Strategies. https://usaidlearninglab.org/sites/default/files/resource/files/mod16_comparing_probability_purposive_and_mixed_method_sampling_strategies.pdf

others were added as the evaluation progressed and the evaluation team learned of valuable informants in our initial round of interviews.

2. *Focus group discussions (FGDs)*. The evaluation team conducted FGDs with six distinct groups of CREL project stakeholders to assess differing perspectives among the groups to inform our assessment of the CREL-PE questions. The FGDs were coordinated by Ms. Islam, a native Bengali speaker.
3. *Direct observation*. The team used direct observation of activities at CREL project sites to validate the findings of documentation and interviews. Observation is useful to triangulate findings, identify anomalies, and ‘ground truth’ reported information.

Northeast Region	Khulna Region	Cox’s Bazar
Hail Haor wetlands	- Chandpai PA	- Fasiakhali WS PA
- Lawachara NP PA	- Monshigonj PA	- Teknaf WS PA
- Rema-Kalenga WS PA		- Himchari NP PA
- Hakaluki Haor ECA		- Medakacchapia NP PA

Component 3: Structured Participant Survey: The Accelerating Capacity for Monitoring and Evaluation (ACME) project asked its subcontractor, e.Gen, to conduct a survey of farmers and villagers to collect and analyze quantitative data to help address Evaluation Questions 3 and 4: CREL’s impact on livelihoods and inclusion of women and other vulnerable groups. The evaluation’s mixed-method evaluation approach included:

- A thorough literature review (see Annex V.I Bibliography)
- Interviews with 51 CREL staff, USAID officials, and other informed parties (Annex V.II)
- 28 key informant interviews with CREL beneficiaries
- 27 focus group discussions with CREL beneficiary groups
- 31 key informant interviews with GoB officials
- Direct observations of CREL activities at 10 of 30 protected area sites
- A quantitative survey of 352 CREL livelihood beneficiaries

2.5.2 LIMITATIONS

There are two primary limitations to this evaluation: 1) the selection of CREL sites for visits by the evaluation team was not random and 2) the difficulty in obtaining accurate information from CREL beneficiaries regarding their reduction in natural resource extraction, since this is an illegal activity.

Site selection: Given limited resources, the evaluation team chose to cluster the site selection for field visits. While purposeful (or purposive) sampling introduces the potential for bias from non-random selection, it can be used for qualitative sampling where resources are limited and sample size is small.¹⁴

The evaluation team conducted the purposeful site selection based on pre-established selection criteria, informed by expert judgment and based on information collected from interviews and literature review. CREL senior staff provided input on logistical feasibility and the evaluation team reviewed the final site

¹⁴ See USAID, undated Comparing Probability, Purposive and Mixed Method Sampling Strategies at https://usaidlearninglab.org/sites/default/files/resource/files/mod16_comparing_probability_purposive_and_mixed_method_sampling_strategies.pdf

selection with USAID. Splitting the evaluation team into three groups compensated for potential bias of purposeful sampling by increasing the number of activity sites visited and the number of beneficiaries and stakeholders interviewed.

Resource extraction: As mentioned above, in conducting interviews with more than 400 beneficiaries individually and in groups, the evaluation team encountered a social desirability bias when questioning beneficiaries about the change in their resource extraction as a result of CREL's livelihood activities. The team anticipated this problem, and to minimize this bias built in redundant questions into the survey on resource extraction to test for consistency. The team also crosschecked survey responses in their interviews with key informants, focus groups, and other informants regarding perception of current levels of resource extraction and trends over the past several years. By doing this, the evaluation team is confident that bias has been minimized. CREL and others are also monitoring biophysical changes in the project implementation areas. Results from this monitoring activity were not yet available. In summary, while the evaluation team is confident that they have correctly determined that the livelihoods program is having a positive impact in reducing resource extraction, they are not confident that the quantitative data we present in [Section 3.2.3](#) and in the Livelihoods Beneficiary Survey in [Annex IX](#) is reliably accurate. This is discussed further in Section 3.2.3.

3. FINDINGS AND CONCLUSIONS

3.1 PROGRESS TOWARD OVERALL PERFORMANCE GOALS

The CREL-PE scope of work included the specific objective to “determine the extent to which the CREL project is on track (including process and outcomes) to meet its overall performance goals across the four major CREL components.” CREL has 19 indicators and as of the end of PY3 (September 30 2015) it was on schedule for 11 and behind in eight of these. The CREL mid-term evaluation methodology and work plan anticipated that the evaluation team would review progress toward standard indicators that the Mission reports to USAID/Washington. After the field work debriefing the CREL, AOR asked the evaluation team to assess selected custom indicators in the interest of a more holistic assessment of and recommendations for the project. Thus this section reviews the status of CREL performance across its six standard indicators and seven custom indicators (see also [Annex I, Table I.1](#)).

Despite the problems with collaboration with the GoB and getting off to a slow start, technically and administratively, CREL has been well managed, and Winrock has effectively built and made use of the management capacity of its Bangladeshi NGO implementing partners in establishing an outreach capacity that has reached a large percentage of the households living in or near 30 widely dispersed protected areas with meaningful and effective community-based alternative income generation (AIG) and natural resources management (CBNRM) interventions.

CREL has succeeded in creating significant benefit for a large number of households living in or near 30 PAs in four widely-separated regions of Bangladesh. Some highlights of its accomplishments include:

- Nearly 180,000 people benefitted economically from sustainable natural resource management and conservation¹⁵
- Improved natural resource management on nearly a million hectares
- Reduced carbon emissions by over 600,000 metric tons of CO₂e
- Increased the capacity of nearly 44,000 people in more than 100 villages to adapt to the impact of climate variability
- Helped 31,500 farmers and others apply improved climate resilient agricultural technologies or management practices

3.1.1 Indicators Met or Exceeded

Table 3.1 shows the nine (from the 13 selected) indicators where CREL met (>80%) or exceeded its cumulative targets. CREL has met or exceeded, in some cases quite substantially, its targets related to beneficiary training and livelihoods and AIG activities. For example, it has exceeded over three-fold the number of farmers and others who have applied improved climate resilient technologies and management practices. The key to this is the success CREL has had in building a massive beneficiary training program to support climate resilient livelihoods, natural resources management, and biodiversity

¹⁵ CREL defines “Increased economic benefits” to include increased income, new employment, new enterprises, additional benefits from ecosystem services, etc. Economic benefits may be based on actual cash transactions or the economic value of other natural resources. This indicator measures the number of direct and indirect beneficiaries gaining statistically significant and attributable increased benefit, regardless of the number of sources or their aggregate value, from the baseline established at the outset of the activity.

conservation. It has substantially exceeded its targets for the number of persons receiving training and number of person hours of training.

Indicators		PY 3 (FY 15)		Cum LOP To Date			Target	Achievement
Standard Indicators		Target	Actual	Target	Actual	% of Tar	LOP Total	Yr 3 % of LOP
DO 4	F4.8-7: Quantity of greenhouse gas emissions, measured in metric tons of CO ₂ e, reduced or sequestered as a result of USG assistance	305,000	308,629	605,000	610,410	101%	1,230,000	50%
	F4.8.2-26: Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance.	15,000	33,931	25,000	43,872	175%	80,000	55%
	a) implementing risk-reducing practices (C13)	10,000	30,343	10,000	31,543	315%	65,000	49%
	b) using CC information (C4)	5,000	3,588	15,000	12,329	82%	30,000	41%
IR 1	F4.8.2-28: Number of laws, policies, agreements, or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of USG assistance.	11	10	14	14	100%	14	100%
IR 2	F4.8.1-29: Number of person hours of training in NRM and/or biodiversity conservation supported by USG assistance	22,000	38,553	34,000	75,707	223%	46,400	163%
IR 3	F4.8.1-26: Number of hectares (ha.) of biological significance and/or natural resources under improved NRM as a result of USG assistance.			-	-		-	
	a) biologically significant areas already under improved management	698,678	698,678	698,678	698,678	100%	698,678	100%
	b) Other NR areas (Landscape) with inherited sites	30,000	14,675	150,000	135,215	90%	150,000	90%
	c) New biologically significant areas added in CREL	26,000	18,773	43,000	42,084	98%	43,000	98%
	d) New other NR areas (Landscape) added in CREL	-	50,110	-	50,110		40,000	125%
Custom Indicators								
IR 2.1	C6: Number of co-management units with improved performance.	15	14	15	14	93%	50	28%
IR 2.2	C7: Number of people receiving training to build resilience to climate change	25,000	30,773	39,550	56,506	143%	50,000	113%
IR 3.2	C11: Number of villages implementing actions to sustain and/or enhance resilience of their NR base	10	84	120	106	88%	120	88%
IR 4.2	C13: Number of farmers and others who have applied improved technologies or management practices	10,000	30,343	10,000	31,543	315%	50,000	63%

CREL's USAID-funded predecessor projects, IPAC and NSP, had initiated income generating activities (IGAs) as a means of replacing income for people living in or near PAs whose livelihoods depended at least in part on illegal resource extraction and were being disrupted by improved enforcement of prohibitions of illegal resource extraction. However, the IPAC final evaluation criticized the project for a weak income generation program, which did not adequately compensate for lost income and found that most beneficiaries were continuing to use PAs more or less as unsustainably as before ([MacKensie, et al, 2012](#)). USAID's design for CREL placed livelihoods on a par with natural resources management and co-management elements. Winrock hired a higher percentage of staff experienced in agriculture and fisheries than the forester-dominated staff of IPAC, and NSP and CREL quickly established a vigorous IGA support network, building on village level conservation groups established under NSP and IPAC. At the same time, the FD collaboration issues meant that CREL's work inside the PA was put on hold further focusing CREL resources on livelihoods in the villages surrounding PAs, an activity that did not depend on FD collaboration.

3.1.2 Indicators Falling Short of Plan

Table 3.2 shows indicators where CREL fell short of its targets. CREL is falling short in two categories:

- Measures that depend on effective collaboration with the GoB (policies, lands assigned to co-management, and revenue sharing, IR 1, IR 1.1, and IR 3.1), and
- Targets that Winrock set on its own in the proposal.

Table 3.2: Performance Indicators where CREL Fell Short of Targets

Indicators		PY 3 (FY 15)		Cum LOP To Date			Target	Achievement
Standard Indicators		Target	Actual	Target	Actual	% of Tar	LOP Total	Yr 3 % of LOP
IR 4	F4.8.1-6: Number of people with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance.	225,000	149,322	250,000	179,222	72%	500,000	36%
Custom Indicators								
IR 1.1	C1: Number of legally defined public land units assigned long-term for co-management.	41	9	42	10	24%	50	20%
IR 3.1	C9: Funding leveraged from public and private sources contributing to improved natural resource management	\$5 MM	\$3.88 MM	\$5 MM	\$3.88 MM	78%	\$20.0MM	19%
IR 3.1	C10: Number of co-management organizations realizing improved revenue collection and/or sharing	7	1	10	1	10%	15	7%

As is more fully discussed in Section 3.2.1, CREL got off to a slow start with the GoB, especially the FD, which led to delays in policy development, which in turn led to shortfalls in declaration of new co-management sites and CMO ecotourism revenue sharing and other forms of CMO financing. The shortfall in IR 1.1, number of new CMO sites, was also attributable to slow progress with the adoption of a reform to the Wetlands Leasing Policy with the Ministry of Land (MoL). Many of the former MACH wetlands sites were lost during the closing days of IPAC, when the MoL conducted open bidding for MACH jamolhals CMO sites instead of abiding by the intent of the draft wetlands policy to reserve these jamolhals for co-management. Many of the openly bid jamolhals were lost to powerful commercial interests before an injunction was put into place to stop this. The new Wetlands Leasing Policy will restore these over time as their current leases expire, but progress is slow.

CREL also lags in meeting targets for the IR 4, number of people with increased economic benefits, and IR 3.1, amount of funding leveraged from public and private sources. While the shortfall as of the end of PY 3 is not overly great, these two targets increase exponentially in PYs 4 and 5. But the project plans and mechanisms for delivery of these results are not increasing sufficiently to meet the targets. The evaluation team finds that the increasing shortfall in these two targets for PYs 4 and 5 is more a function of Winrock’s overly optimistic originally proposed targets for these indicators as opposed to weakness in implementation. The evaluation team is concerned that in an attempt to try to reach these targets, CREL may cost the project progress toward other more important outcomes such as CMO financial sustainability and GoB management capacity.

3.2 EVALUATION QUESTIONS

This section presents summaries of the findings and conclusions for the six evaluation questions addressed by the mid-term review. A separate section following this summarizes the main recommendations of the evaluation team.

3.2.1 Integrating Learning from Past Activities

Evaluation Question 1: In what ways has CREL integrated learning from past USAID biodiversity activities (IPAC, the Nishorgo Support Project, and the MACH) to strengthen local governance structures for natural resources management (NRM)? How effective is this approach in improving local governance of natural resources at targeted sites?

CREL is the beneficiary of a long line of USAID Bangladesh support for CBNRM. Starting with the Flood Action Plan process in the early 1990s, the government and donors, including USAID, began to address the socio-ecological issues surrounding the use and management of seasonally-flooded inland wetlands. USAID initiated the Management of Aquatic Ecosystems through Community Husbandry (MACH) project in 1998 to promote the co-management of government-leased wetlands by poor communities living nearby as an alternative to the ‘highest bidder’ (and unsustainable extraction) leasing policies that then, as now, degrade these areas. (DeCosse et al, 2012).

In 2002, USAID Bangladesh adopted a strategic objective for environment and expanded its NRM program to include terrestrial ecosystems, particularly the protected upland forest areas. In addition to a second phase of MACH, in June 2003, USAID began support for a new program, originally called Co-Management of Tropical Forest Resources in Bangladesh, but later changed to Nishorgo Support Project (NSP). NSP, building on the co-management experience of MACH, was designed to work with the GoB and NGOs to provide environmental services, reduce extraction of natural resources from PA, and to safeguard and restore PAs' role as a restorer of habitat for tropical forest biodiversity.

As MACH and NSP came to a close. USAID Bangladesh initiated the five-year (2008–13) co-management Integrated Protected Areas Co-management (IPAC) project, incorporating both MACH and NSP sites, organizations, and co-management approaches to:

- Integrate wetlands, forests, and (a new ecotype) ecologically critical areas (ECA) into a single system,
- Further strengthen the legislative and financial foundations of the integrated co-management system,
- Build institutional capacity at the local and central levels, and
- Expand the national network of co-managed protected areas.

The CREL program has effectively built on these experiences, but with key differences: a focus on building resiliency to climate risks, enhanced adaptation to climate change and support for improved livelihoods, and successful management of critical ecosystems in priority regions of the country. In short, the CREL program adds a specific climate resilience and adaptation lens on the USAID CBNRM program and substantially expands the livelihoods activities that date back to MACH and NSP.

There are multiple documents providing dozens of lessons and recommendations from MACH, NSP, and IPAC. The evaluation team chose five of the most important and relevant lessons that synthesize consensus among these reports and also confirm what the team heard from our interviews.

- From MACH: Co-management is working well and appears to have distinct advantages over previous approaches in the sector ([Whitford, et al, 2006](#)).
- From NSP: Formal collaboration is a necessity, not an option (DeCosse et al, 2012); From IPAC: CMO stakeholder collaboration and governance are extremely important and should be supported by focused organizational development ([Mackenzie, et al, 2013](#)).
- From IPAC: Environmental governance initiatives like co-management need a coordinated inter-ministerial approach (Mackenzie, et al, 2013).
- From IPAC: Organizations need a strong purpose and financial support in order to develop their capacity and function in the longer term (Ibid).
- From NSP: The greatest threats to forest PAs come not from the neighboring poor, but from powerful socio-political interests ([DeCosse, et al, 2012](#)).

Co-management is working well: MACH was USAID Bangladesh's first major co-management activity and the 2006 RAISE evaluation of the project found that co-management was an appropriate tool for improving resource productivity and social welfare. Seven years later, the evaluation of IPAC, CREL's immediate predecessor project, citing concerns with the project's approach to implementing co-management, questioned whether the co-

Co-management — a situation in which two or more social actors negotiate, define, and guarantee among themselves a fair sharing of the management functions, entitlements, and responsibilities for a given territory, area, or set of natural resources. ([Borrini-Feyerabend, 2007](#))

management process had a sufficient appeal to villagers or buy-in from the GoB to be sustainable. The evaluation team finds that CREL has addressed the IPAC issues, is making excellent progress in strengthening the organizational capacity of CMOs, and that the majority of CMOs supported by CREL are implementing their work effectively, making progress toward expected outcomes. As detailed in Section 3 and shown in [Annex I, Table 3.4](#), CMOs' organizational capacity assessment scores have increased from a baseline of 44 in 2013 to 61 in the 2015 assessment. This confirms both the MACH evaluation lesson that co-management is an appropriate tool and the IPAC evaluation finding that a successful co-management strategy leads to substantial benefits for households and effective participation in CMO decision making processes.

Collaboration is a necessity, not an option: The evaluation team heard from all parties – USAID, its implementing partners, GoB officials, CREL staff, and local beneficiaries – reports about the difficulties of collaboration. Partners gave at least an equal amount of praise and respect about each other. This is not surprising, nor is it a particularly unhealthy state of affairs, but there is a continuing need on everyone's part to work on the partner collaboration.

The issue of Development Project Proformas (DPP)¹⁶ came up early in CREL when the FD refused to cooperate with CREL citing the absence of a DPP. DPPs are a GoB document that lays out project objectives and detailed funding line items and costs for both the GoB and the donor. They provide the official mandate for a government agency to work with the donor funded projects that provide direct project funding (i.e., cash transfers from the donor to the cooperating country). USAID is unable to provide direct project funding to cooperating countries under most circumstances. A second problem is that USAID considers the line item input and cost information as source selection information and was not willing to share it externally to maintain procurement integrity. For its part the FD had for many years received local currency funding from USAID under the PL 480 program to cover some of its counterpart contribution costs. This funding source had ended in the waning days of IPAC and the FD argued that direct funding should replace this.

As a result when the CREL COP met with the Chief Conservator of the FD shortly after the award in October, 2012 the Chief was not in a position to formally work with CREL. This proved to be a significant obstacle to collaboration. At the level of line ministries, the DPPs were, simply put, standard requirements for them to properly align their programs and budgets with donors. USAID, for its part, had its Development Objective Agreement (DOAG) with the Ministry of Finance and felt that agreements with line ministries flowed from that. Winrock was stuck in the middle and despite considerable efforts on its part was not in PY 1 able to (a) move the parties to resolution or (b) foster collaboration with the line ministries. In PY 2, the GoB conceded that direct project funding would not

¹⁶ TPPs are GoB standard documents that list for donor funded projects planned project activities and budget line items showing donor and GoB contributions.

be a requirement for its collaboration and FD and other GoB department collaboration with CREL could move ahead under the authority of a Technical Project Proforma (TPP) which did not require direct project funding. The GoB TPPs require a year or more under normal circumstances to finalize. In the case of CREL, TPPs were signed in 2015 (PYs 3 and 4). Only then was full collaboration between CREL and the GoB possible, though collaboration had improved steadily through late PY2 and PY3.

This weakness in collaboration hurt the implementation of CREL in numerous small and larger ways. For example, the FD would not allow CREL to support significant work inside of PA boundaries, as was planned. The PAs provide ample opportunity for a win-win of activities, both generating employment and forest restoration. Additionally, field level FD officers were limited in the collaboration they could provide CREL. CREL did not do as much as needed to build the capacity of their officers in co-management approaches and support for CMOs. It is interesting to note that CREL's livelihoods program, which is not dependent on FD collaboration, far surpassed its targets (see Table 1.2, indicators C.7 and C.10). As a result, the balance between NRM and livelihoods, at issue since the early days of NSP ([DeCosse, et al, 2012, p. 58](#)), may have tilted toward livelihoods.

Co-management needs a coordinated inter-ministerial approach: MACH and NSP had a single line ministry as their implementing partner. IPAC absorbed both MACH's and NSP's sites, partners, and CMOs and added the DoE and several new sites. With three line ministries and the Ministry of Land influencing ultimate control over IPAC's wetland sites, it is not surprising that the IPAC evaluation team recommended improved inter-ministerial coordination. The fact that in the waning days of IPAC, the Ministry of Land partially undid the successes of MACH by openly bidding leases that had been set aside for co-management groups under MACH was a case in point.

While inter-ministerial collaboration is a desirable goal, despite reasonable efforts, CREL has had limited success in national level inter-ministerial collaboration. Each of CREL's three GoB counterpart departments required a TPP for formal participation in CREL. As of the end of PY3 only the Department of Fisheries (DoF) TPP had been signed, though the FD was signed in early PY4. The three TPPs each establish an inter-ministerial steering committee to guide the collaboration between the Department and CREL. These also provide a measure of coordination between government agencies but inter-ministerial coordination is not a feature of the GoB culture. The DoF and FD steering committees held their inaugural meetings early in PY4. For example, CREL has not been successful in creating a functioning inter-ministerial steering committee, nor has the government made satisfactory progress in integrated co-management policy development across ministries.

However, CREL has had success with inter-ministerial coordination at the local level. A good example of this is the Hakaluki Hoar Management Plan. The evaluation team witnessed the Moulivbazar District Commissioner preside over a multi-stakeholder review of the management plan, organized by the CREL Regional Coordinator. The meeting resulted in the plan being approved and forwarded to Dhaka for final approval. Local level inter-ministerial collaboration functions because the GoB administrative officers oversee local line ministry officials and can serve as a focal point for coordination between them.

CMOs need a strong purpose and financial support: The IPAC evaluation team found that "...it is not entirely clear whether most IPAC CMOs have a sufficient *raison d'être* in order to be sustainable... once donor support ends." The discussion of this finding cited elite capture of CMO operations, lack of sufficient alternate income generation opportunities to offset resource extraction, lack of funds, strategic vision, and practical consensus-based plans.

CREL has admirably addressed this lesson learned. In the CREL RFA, USAID established the objective for CREL to "focus on graduating [assistance] activities as soon as feasible to avoid a dependent relationship." CREL has substantially redesigned the approach to CMO organizational capacity building from IPAC. After conducting an assessment of CMO organizational capacity early in PY1, CREL triaged several sites with dysfunctional CMOs and began an intensive program of training, funding, and

restructuring. CREL substantially improved the FD relationship and appreciation of forest-based CMOs resulting in joint FD and CMO planning and improved cooperation in implementing co-management activities. CREL has organized two follow-up assessments, which showed steady improvement in CMO organizational capacity. (see Annex 1, Table 3.4). The program change CREL instituted that has captured the attention and interest of the CMOs, governments, and villagers is a greatly expanded livelihoods program.

One aspect of this lesson that has not been resolved is sustainable financing. CREL has provided small grants funding to CMOs, the CMOs have hired accountants, and CREL has trained CMO members in planning, budgeting and funds management. Most CMOs have successfully demonstrated their ability to handle funds sufficient to supporting their operations and modest program activities. However, CREL will soon be making its final round of grants, which will be completed mid FY 2017. As discussed in Section 3.2.5, there are positive indications that some FD CMOs will receive funds from an improved revenue sharing policy. But this is the only option for sustainable CMO financing that CREL is actively pursuing. The new PA Rules will not affect financing for wetlands and ECA CMOs (CREL Year 3, Annual Report, p 48).¹⁷ CREL had proposed establishing an endowment fund to USAID, but this was rejected. CMO funding options are proposed in Section 4.

The greatest threats to PAs come from powerful socio-political interests: This is one of the stronger and more interesting findings addressed in the Lessons from Nishorgo publication (DeCosse, et al, 2012). The authors challenge the theory that “In order to conserve the forest, you need to offer alternative incentives to those neighboring poor that enter the forest.” They go on to say, “It is indeed true that many thousands of poor survive from the forest Protected Areas in Bangladesh, but if the only extraction from the forest was for the immediate needs of the neighboring poor, the conservation challenge would be quite manageable. The deeper and greater threat to the forests is not these neighboring poor acting to meet their immediate livelihood needs, but well-organized commercial demands placed on the forests from a network of powerful economic and political actors.”

While the CREL RFA is explicit about expectations for natural resources conservation and reduced illegal extraction, it does not specifically address the issue of powerful socio-political drivers of unsustainable resource extraction, but rather the RFA seems to buy into what DeCosse, *et al* term “the ‘default’ position for many key policy-makers and conservationists in Bangladesh” when the RFA states: “the program will focus on creating economic incentives for sustainable resource use and conservation, leading to more productive, diversified, and resilient livelihoods.” In USAID Bangladesh’s current CDCS it does generally recognize the pernicious effect of corruption in the country and (pg 10) suggests approaches to addressing it, including promoting policy and budget reforms, citizen participation in the government, citizen awareness of the right to information, demand for investigative journalism, and increased accountability and transparency (USAID, 2011).

The evaluation team does not find fault with CREL’s livelihood/alternate income generation program. As stated above, the evaluation team feels that the livelihoods program gave real impetus and a *raison d’être* for CMOs. However, in addition to IGAs, CREL needs to directly identify and address the resource extraction by well-organized commercial interests. This issue is addressed below.

¹⁷ CREL also attributes the funds leveraged to progress toward sustainable CMO financing, however little of the leveraged funding being applied for ongoing CMO operating costs the primary requirement for CMO sustainable financing.

3.2.2 NRM Institutional Training and Capacity Building

Evaluation Question 2: Is there evidence that the CREL project’s training and capacity building activities have resulted in strengthened organizational capacity of NRM institutions? For example, have trainings resulted in improved capacity within co-management organizations to achieve sustainable financing and/or manage shared revenue from protected areas?

Summary Finding: CREL has trained more than 56,000 people in climate resilient awareness and practices, more than a 1,000 government officials in co-management theory and practice, conducted hundreds of training workshops, seminars, courses, presentations, study tours and field demonstrations. CREL has monitored improved capacity outcomes of some of its training programs, e.g., CMO capacity building, women’s financial literacy, NGO transition grant training, and used this to improve these components.

However, CREL has not effectively monitored the impact of its training for livelihoods beneficiaries or GoB staff, two major training target groups. CREL has also not prepared a meaningful training needs assessment or a training strategy. This is not to say that CREL’s training program is not strategic. It is tied closely to annual work plans and these in turn are clearly linked to CREL intermediate results.

Summary Conclusion: Without clearly identified training objectives, baseline and post-training assessment, expected training outcomes, and consistent monitoring it is difficult to demonstrate the effectiveness of the training program and make appropriate mid-course adjustments. Though CREL’s training accomplishments have been impressive, it is not clear how decisions about adjustments in training plans will be made that effectively meet evolving training needs.

Below CMOs and GoB capacity building are separately addressed.

Co-Management Organization Training and Capacity Building

Findings: CREL has succeeded in enabling CMOs to plan, budget, and account for operational financing. Over three-quarters (77%) of 34 CMOs surveyed by CREL showed an average 38 percent improvement (PY3 compared to baseline) in their internal organizational management capacity. As noted above, sustainable CMO funding remains to be resolved. However, CREL has made progress in promoting ecotourism revenue sharing rules with the FD. More importantly, over the course of CREL the FD had come to view the CMOs as partners in forest protection and management, largely due to their increased capacity to plan and implement annual activities including budget and financial management.

CREL has not documented a training strategy or multi-year training plan. The only project wide training plan is contained in CREL’s annual work plan, however this is more of a list of training elements than a plan. It does not specify target audiences, training objectives, responsibilities, timing, and only a few of the larger training events. CREL is also not formally monitoring the outcomes of its training.

Conclusion: Most of CREL’s field staff time is spent on preparing for, delivering, and reporting on hundreds of trainings every year and reaching over 56,000 participants largely in PYs 2 and 3 ([Annex I, Table I.1](#)). CREL prepared a training needs assessment (TNA) in Y1Q2 (CREL, 2013). The evaluation team found that the TNA was heavily oriented toward climate change awareness and did not cover practical field-based training needs well. It did not address livelihoods training needs.

As shown in Table 3.8, at the end of FY 2015 CREL was supporting 30 co-management sites and 51 CMOs associated with them (see [Annex I, Table 3.3](#) for details). As the IPAC project ended, CREL took responsibility for 20 sites and 33 CMOs that had been supported by IPAC. Since then CREL has added 10 new sites and 18 new CMOs. Of these, during PY3 CREL assumed responsibility for one site, Hakaluki Haor, and its eight CMOs that had previously

Table 3.8: Number of CREL Supported Co-Management Sites and

Ecotype	Sites	CMOs
Forest	5	12
ECA	22	28
Wetlands	3	11
Total	30	51

been supported by a UNDP/DoE project. The new CMOs are in various stages of CREL capacity building.

Finding: CREL has substantially strengthened organizational capacity of CMOs. They are steadily improving and approaching sustainability, however, there are still gaps and weaknesses limiting their effectiveness as co-management organizations, in particular financial sustainability in the form of revenue generation remains elusive. In an assessment performed by CREL, scores for various managerial functions (legitimacy, governance, resource mobilization, adaptive management, etc.) improve from 2014 to 2015, however there is still room for improvement.

Conclusion: Co-management, by definition, involves the government and communities under a single organizational structure conducting joint resource stewardship. USAID began supporting co-management in 1998 and the Bangladesh co-management experience has evolved organically as new sites, government agencies, and stakeholders adopted co-management approaches. Over the course of the past 18 years, USAID and other donors have assisted the GoB in developing a set of regulatory and institutional arrangements tailored to three ecotypes: forests, wetlands, and ECAs.

In a unitary state such as Bangladesh, co-management is challenging given limited local flexibility to accommodate site specific social and environmental contexts. However, the lessons of resource co-management in Bangladesh have been learned, the organizational details have been refined, and the policy and legal arrangements, although incomplete, are making progress. Resource co-management efforts should continue to strengthen and build on the existing CMO structure.

A key CREL objective is to “leave a set of self-sustaining local co-management institutions” ([USAID, 2012](#)). CREL conducted a baseline assessment of CMO organizational capacity in PY1 and follow-up assessments in both PY2 and PY3. In the latter two assessments, which used simplified assessment indicators, the CMOs contributed with self-assessments. The follow-up assessments used 17 indicators of the following five criteria for sustainability:

- Legitimacy: recognized responsibilities and linkages, GoB recognition, community representation, respect for CMOs;
- Organizational functioning: transparency and efficiency in organizational operations, e.g., timely meetings, record keeping, sound financial management;
- Governance and inclusiveness: accountability and responsiveness to the needs of NRM users, e.g., election process, gender inclusivity, fair access to resources;
- Adaptive participatory management: planning and learning (e.g., participatory management plan preparation and review), conflict resolution, monitoring; and
- Resource mobilization (finance): sufficient funds and in-kind support (e.g., business plan and proposal writing) and regular fund collection (e.g., entry fees, fishing fees).

The results of these assessments are summarized in [Annex I Table 3.4](#). These data demonstrate:

- CMOs on the whole have been making steady progress under CREL. Their organizational capacity scores have on average increased 38 percent from a baseline score of 44 (out of a total possible 100) to 61 in the 2015 assessment. CREL considers a score of 70 as an indication that a CMO is eligible for graduation from external assistance.
- Change in organization capacity is not always positive. Seven of 34 (21%) CMOs showed a decline in 2015 scores as compared to their baseline score. This is due in part to turnover in CMO members and leaders as required by GoB regulation.
- Based on the results of the 2015 assessment, our interviews with CMO leadership including treasurers, and our examination of several CMO accounts indicated that the CMOs are generally well prepared to handle their own finances at typical current funding levels (\$20,000 – \$30,000 per year). Proper management of increased funding levels is possible if accompanied by close monitoring and ongoing capacity building.

- Nine of the 34 (26%) CMOs assessed received scores above 70 points.
- Only one CMO is generating sufficient funds from FD revenue sharing to cover operating costs.

In [Annex I, Table 3.5](#), the evaluation team provides detailed information for nine CMOs from the 2015 assessment. The table demonstrates the organizational functionality of these CMOs in terms of indicators such as holding meetings and elections, gender inclusivity, and ability to handle funds. While CMOs are experienced with annual development planning, they lack capacity for longer-term vision and planning. Given the general unreliability of their funding, this is not surprising, but longer-term planning will be an important capacity for sustainable CMOs. The FD co-management committee (CMC) annual development plans are in part funded by the FD through annual budgetary allocation and in part by CREL small grants. Most of the CMC FD allocation expenditures are non-discretionary and dedicated to ongoing costs such as Community Patrol Group stipends, maintenance, etc. The CMC has discretion over CREL funds and communities have a voice in how those funds are used.

The progress in CMO organizational capacity is a result of CREL’s impressive CMO training and capacity building program, the project’s second largest training element after livelihoods. On average, CREL has provided each CMO with more than six capacity building trainings ([Annex I, Table 3.4](#)) and has delivered more than 1,400 trainings to CMO members ([Annex I, Table 3.6](#)). CREL has and continues to enhance the CMO capacity building training offerings as the CMOs’ organizational sophistication grows.

Financial Sustainability of CMOs: By far the largest obstacle to CMO sustainability is lack of sustainable sources of finance. All CMOs depend on CREL for financial support despite the modest cost of basic CMO operations (Table 3.9). The evaluation team estimates that the total annual costs to sustainably fund the 30 CMOs would be \$600,000 - \$800,000.

Expense Items	Annual Budget (USD)	% Total
Accounts & administrative assistant salary	1,950	10%
Travel and Per-diem (meetings, trainings)	1,775	10%
Annual Development Plan Program Activities	14,238	76%
Office overhead cost	788	4%
Total	18,750	100%

Beginning under the NSP, the FD has operated an ecotourism revenue sharing program, which has potential for success but has not met its goals. This has been acknowledged by the FD and the CCF has proposed reform measures (see Revenue Sharing text box next page). Given the weakness of revenue sharing over the past decade, the evaluation team concludes that revenue sharing will not be a solution to sustainable financing of CMC prior to the completion of CREL. If revenue sharing funds increase, they can be used for expanding employment generating program activities such as PA protection, restoration, and enhancement of ecotourism facilities. In the meantime, more reliable sources of funding need to be developed.

The new PA Rules include a clause that authorizes the FD to include a budget line item for direct funding to CMOs. This could be a more reliable source of funds than revenue sharing but as of this writing, the inter-ministerial vetting process has challenged this and it has not yet been approved.

The more intractable financial sustainability problem is for wetlands and ECA sites, home for 23 of 51 (45%) CREL CMOs. Progress on sustainable financing for these sites is even less advanced. Several have ecotourism potential and wetlands CMOs have the option of income (even forming a cooperative) that could be self-sustaining. However, by design CREL is more focused on improving management rather than revenue generation for the financial sustainability of these CMOs.

CREL is preparing to award a last round of CMO grants in mid-FY16 that will carry CMOs through the end of the project. The award criteria for this round will encourage CMOs to generate a portion of their funding needs. Whether bridging or lasting, a solution for financial sustainability will need to be developed by the end of this round of grants in order to sustain the CMO structure.

Government of Bangladesh Training and Capacity Building

CREL's program for building government co-management capacity relies on three pillars: policy development, training, and practical field experience.

Findings: GoB CM capacity is improving steadily, though field level officer capacity remains inadequate to carry on a vital co-management program in the absence of external support. CREL's GoB capacity building component was adversely affected by the collaboration issue. Being unable to formally engage with the FD, CREL's efforts at building GoB co-management capacity lacked a clearly articulated training plan and activities were not well focused on meeting project objectives. Despite this, CREL has established a substantial training program and awareness-raising events for local government institutions that is paying dividends in building a local constituency for co-management. One positive outcome of the training program is the overall success CREL has had in engaging support for co-management of the field staff of its primary implementing partners and many other local government and line ministry officials.

Co-Management Eco-Tourism Revenue Sharing

Revenue sharing refers to the FD policy of allocating a portion of revenues from ecotourism to the CMC operating in the PA from which the revenues are generated. The hypothesis is that shared tourism revenue would generate income for the CMC operations and enhance both tourism opportunities and natural resource protection. The concept was first promoted more than 10 years ago during NSP, though the concept of sharing of revenue from government owned lands was contrary to “widely held understanding amongst government officers that neither individuals nor organizations can derive direct economic benefit from forest PA lands” (DeCosse, et al, 2012). This understanding has proven resistant to change. The key issue then, as now, was the cumbersome legal requirement to submit all revenue from GoB lands to the treasury, which would then allocate the revenue share through the budgetary process.

Since CREL’s inception, 11 CMCs have generated just under \$500,000 of tourism revenue, 76% of which came from s Lawachara in Sylhet (21%) and Chandpai in the Sundarbans (55%). However, only \$83,224 (17%) of the revenue was shared with the CMCs, as the FD decided to exempt the Sundarbans (the country’s largest source of ecotourism revenues) from the revenue sharing policy. The new PA rules currently being vetted by the MoEF will reform the revenue sharing process for PAs and, significantly, make revenue from the Sundarbans available at least to CMCs in the Khulna circle.

CREL’s experience in the Sylhet region shows that ecotourism revenue sharing can work. As shown in Annex 1, Table 3.7 revenue sharing at three sites has functioned as intended. However, having an established revenue sharing agreement with the Forest Department is only the first step, the potential for ecotourism is highly variable from site to site. Only the Lawachara National Park is covering basic operating costs of the CMC. Rema-Kalenga Wildlife Sanctuary CMC’s revenue is not enough to cover the salary of their ticket taker. With the exception of the Sunderbans the bulk of the tourism revenue from protected areas is from domestic visitors. Tourism as a whole in the country has not been a development priority and the ecotourism infrastructure at more than a handful of protected area sites will require considerable investment in transportation, roads, lodging, restaurants, etc. to support visitors.

NSP and IPAC invested in tourism infrastructure but the collaboration issue has hampered effective CREL engagement with the FD in promoting ecotourism. Recently the CCF authorized renewal of ecotourism infrastructure development. CREL has reached out to tourism operators and helped them to recognize the value of these sites and provided some print material communications support. CREL should do more to promote domestic ecotourism using modern communications technology and social media (tweets and blogs) to publicize ecotourism opportunities. CREL should also ensure that CMOs targeted by the FD for infrastructure support have the capacity to take advantage of this opportunity. The new PA Rules hold promise to resolve some of these constraints by allowing onsite revenue retention and authorizing Divisional Forest Officers to distribute revenue among all CMCs under his jurisdiction. It is not known when the new PA rules will take effect, what the final shape of revenue sharing will be, and how it will play out in implementation. However, eco-tourism demand is limited and ecotourism is not likely to be more than an adjunct to CMO financing at the majority of the sites.

Conclusions: There is a significant risk that the CREL’s GoB implementing partners will not have adequate commitment, institutional capacity, or mechanisms to support CMOs in implementing evolving co-management policy, or to carry forward a vigorous co-management program at the end of CREL. While numerous CREL training events included government officials, the events were more ad hoc and generic than strategic and needs based.

As mentioned, CREL’s GoB primary implementing partners (FD, DoF, DoE) are the logical choice to shoulder the responsibility for ongoing CMO capacity building. With CREL assistance, all three are also developing new policies that, while they hold promise for improving co-management, will need a substantial amount of support to effectively initiate implementation (see Section 6). These new policies will require time and work, including:

- Capacity building for government and communities, including new/modified trainings, training modules, and trainers;
- Obtaining buy-in for and negotiating the details of the policies among government officials and local elite, who may not see the benefit of the new policies;
- Developing and putting into place new procedures to implement and/or comply with the policies; and
- Communications to transparently raise awareness of the new policies and the opportunities and responsibilities that they engender.

Very few GoB officials (2 out of 21) did not support co-management. While courtesy may have been a factor, many expressed enthusiasm for co-management approaches. Their ability to engage in a thoughtful conversation about co-management and the value of their observations and suggestions are evidence of a relatively well developed understanding of the subject. This general understanding and appreciation of co-management theory and practice is a positive foundation for building institutional capacity. CREL has not conducted an institutional capacity assessment for its three main implementing partner departments. Training needs and curricula development are based on the assessment by CREL and GoB staff and CREL is not measuring progress in building GoB staff capacity.

While personal relationships, one-on-one capacity building, and on-the-job experience have been effective in bringing these officials to a certain level of proficiency, many of these officers will soon rotate. There is an ongoing need to introduce and train new officers on co-management theory and practice. CREL has not created the capacity within the government to systematically develop the co-management skills of their own officers and field staff.

CREL trained 1,267 (see [Annex I, Table 3.6](#)) government officers with a total GoB officer attendance in excess of 1,400 person-events (some officers received more than one training). CREL did extensive work with lower level government staff, including FD Beat Officers and elected Union Parishad members. Training was also provided for Upazilla level officials, FD Range Officers, and District Officers from line ministries such as Fisheries and Agriculture. These officials reciprocated by providing training to CMOs, CBOs, and LSPs. There were several notable training events oriented geared in part to GoB officials, including:

- An overseas study-visit program in Indonesia, 3-9 June 2015;
- A co-management study tour for CMC members and local FD officers to West Bengal, India;
- Training in natural resources policy for Union Parishad staff and members in collaboration with the USAID Strengthening Democracy and Local Government (SDLG) Project, June 2014; and
- CREL has launched a three-week certificate co-management training of trainers course to train 20 government and national NGO staff as master trainers, who will be expected to orient newly-elected CMO members and newly-posted government officers on co-management.

One strategic component of the CREL GoB training program is its multi-year effort to develop a co-management and climate resilience curriculum for use by Bangladeshi universities. The curriculum has been prepared and CREL is making progress with several universities to adopt the curriculum. Adoption is proving to be difficult as the universities' curricula approval process is bureaucratic and relatively inflexible. In hindsight, CREL believes that it would have been better to focus on working with a smaller number of universities that train the majority of the government officers working with co-management.

Communications and Outreach

The primary objective of CREL's communication strategy is to change peoples' attitudes and behavior in order to promote climate resilient livelihoods and ecosystems. The project does this through policy advocacy, a campaign to increase public awareness of adaptive co-management through media and social media, developing communications materials to inform populations of project landscapes, orienting

journalists about good governance issues in co-management and climate change, and collaborating with government and other institutions to promote sound protected area management.

Findings: CREL's communications activities are not strategically aligned with program objectives—policy, public awareness, and GoB buy-in—and do not employ creative, innovative, or modern communications tools. CREL's branding and signage program is not being used effectively to enhance GoB and local ownership of field activities.

Conclusion: CREL's communications program should be a strong element in support of the project's policy, natural resource protection, livelihoods and organizational capacity results. The evaluation team found that the communication program has a poorly defined strategy, target audience, and purpose. The program is more reactive than proactive, spending much of its effort responding to demands for communications products from operations staff and USAID rather than proactively engaging in ongoing communications strategies. It over relies on traditional communications tools and methods and does not take full advantage of modern technologies such as social media, SMS, and the Internet.

Most of the communications planning takes place centrally, in Dhaka, for implementation that is regional. Regional staff are not experienced in communications and the result is an inconsistency between the design and delivery of communications products and development of poorly-targeted products that do not meet regional messaging priorities.

Likewise, the communications program has not been focused on messages and audiences to promote the success of CREL-supported activities such as ecotourism, new seed varieties, or improved cook stoves. The project has not established a feedback mechanism to collect public opinion or assess the effects of communications and awareness programs. Primary plans to form a technical advisory committee, ministerial advisory committee, and policy advocacy groups, as stated in the communications strategy, were not initiated.

Lack of visibility in mainstream media and other national events has prevented the project from reaching influential audiences living outside of PAs. CREL's third annual report shows that CREL's 38 media engagement events (site visits, awareness raising, consultations) with 587 journalists resulted in one documentary, four television stations' coverage of CREL events, and 48 print news articles. Major media events could be used to promote GoB buy-in and ownership of co-management activities. Ministers, secretaries, and director generals captured for television at seminal CREL events are win-win activities which, while requiring a relatively high degree of media sophistication, are certainly within CREL's reach. Also, several Bangladeshi television stations have popular exposés of public grievances, which could also address illegal natural resources extraction. CPGs and others could be equipped with an SMS application to enable real time reporting of illegal resource extraction.

CREL's national NGO implementing partners are ideally situated to network with Bangladesh's healthy environmental advocacy community and could conceivably foster champions for co-management. Supported with a top tier media program, these partners could sway public opinion against illegal resource extraction by powerful political elites. Similarly, regional and site level communications and training programs should include objectives of enhancing personal integrity, transparency, and social-environmental justice. CREL communications activities should also be aligned with the project's efforts at leveraging funds via commercial company engagement.

CREL has promoted eco-tourism solely through printed materials. More work could be done to collaborate with local media and tourist organizations and link CMOs with ecotourism internet sites and social networks.

CREL Marking and Branding

The evaluation team encountered dozens of CREL project signs during our field assessment. The evaluators appreciate that USAID branding and marking requirements are specific and rigorous; however, the evaluation team feels that CREL signage, and perhaps other branded products, in the interest of USAID Forward principles, could be better designed to recognize ownership by USAID's principal GoB partners. In a Village Conservation Forum (VCF) village near the Fasiakhali Wildlife Sanctuary, the evaluation team noted a CREL sign did not include mention of the GoB partner supporting a site (see picture). The team believes in the interest of local ownership, it might be advisable to eliminate the Winrock logo from site signage. In fact, it might be appropriate for USAID to waive co-branding rules and recognize the substantial contributions of CREL's national NGO partners who have been doing the site level work.



3.2.3 Livelihoods-Impact on Protected Areas, Income and Household Climate Resilience

Evaluation Question 3: To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?

Livelihoods activities, the largest CREL program component, are founded on the hypothesis that a positive relationship exists between economically attractive, climate resilient livelihoods for households living near protected areas and the protection of the natural resources of those areas. As stated in the CREL Livelihoods Framework, “by creating additional income of resource dependent households in villages near protected areas through market development and value chain approaches, the project will reduce pressure on natural resources and increase [beneficiaries’] ability to survive the effects of climate change.” (CREL, 2013).

Therefore, CREL's livelihoods activities were designed to improve and scale-up diversified livelihoods alternatives that are environmentally sustainable and resilient. Resilience is achieved through climate adaptive agriculture practices, income diversification, and increased income. The livelihoods program is targeted for poor, landless, natural resource-dependent individuals, and other vulnerable groups living near a CREL PA. Most co-management programs include some form of livelihoods support, often based on sustainable natural resource extraction. As the forest PAs are off-limits to any form of extraction, CREL and its predecessors have developed IGAs that do not rely on PA resources. The IGA program under IPAC was insufficient to offset extraction income, thus CREL placed a greater emphasis in this area. The livelihoods program grew faster than planned in part because the NRM component was bogged down in Dhaka.

Overall Livelihoods Program Findings and Conclusions

This section draws heavily on a survey conducted October 18 through 31, 2015, by ACME's sub-contractor, eGen, of 352 CREL beneficiaries in ten sites. The executive summary of this report is attached as [Annex IX](#) and the full report is provided as a separate attachment.

Finding: CREL's livelihoods and IGA program is doing the job it was designed to do.

- It has promoted market-driven IGAs for nearly 44,000 direct participants, 75% above the PY3 target (see [Annex I, Table 4.1](#)).
- The program is very popular, widely adopted, generating substantial income, and enhancing household resilience to climate change-induced shocks.
- CREL's livelihoods program has become an important pillar of the co-management program, providing a strong incentive for households to participate with the co-management program as a whole, including natural resources protection.

Conclusion: CREL livelihoods activities are responsive to beneficiaries' needs. They incorporate a value chain approach and provide need-based skills and knowledge transfer. The IGAs are having a positive effect on income for beneficiaries, whether they are used as a primary or supplementary source of income. This is substantiated by the survey of beneficiaries, which showed that their income had increased by an average of 42% above what they earned prior to CREL's launch.

Finding: The evaluation team's survey found more men are engaged in resource extraction as a primary IGA and they earn higher income than women from natural resource extraction. Before the project, 113 (21%) of 528 household members were involved in natural resource extraction as a primary IGA, of which 99 (88%) were men. Average income from extraction for men was Taka 23,739, 1.8 times the Taka 13,000 average income for women. Currently, 58 (11%) household members reported being involved in NR extraction, of which 50 (86%) are men with an average extraction income of Taka 19,070, which is 2.6 time greater than the Taka 7,444 average extraction income for women. The reduction in resource extraction income may be attributed to CREL's IGA activities. While nearly 75% of CREL livelihoods beneficiaries are women ([CREL, 2015](#)), men are responsible for more natural resources extraction than women.

Conclusion: CREL's livelihoods program may have a greater impact on the protection of natural resources if livelihoods beneficiary selection was targeted to significant resource extractors, the majority of whom are men. The evaluation team did not find significant evidence that CREL-induced improvement in female household members' income led to a decrease in resource extraction by the men of the same households. Whether the CREL offerings are sufficiently attractive to draw men away from resource extraction merits testing. Men may need different or more lucrative opportunities than women, such as cash for work and commercial agriculture.

Given strong evidence (see also [Section 3.2.4, Gender](#)) that CREL's livelihoods program is more attractive to women, the evaluation team concludes that the CREL's IGAs are having less impact on natural resource extraction than they could if more men were involved. CREL itself has already recognized this and has initiated affirmative action to recruit more men, including resource dependent member(s) from participating villages. CREL has started to place observers near the main paths used by resource extractors to identify people for potential IGA participation.

Finding: The level of benefit from IGAs will likely decline in the absence of CREL's support, potentially resulting in a renewal of resource extraction. With the exception of the DoF in wetlands and some ECA sites, CREL has no well-established institutional partnership with government agencies or capable NGOs, other than the CREL sub-recipients, to sustain the livelihoods program after CREL and provide ongoing support to existing households and to scale up in new households, villages, and sites. In the

absence of a continued support to livelihood beneficiaries it is likely that CREL livelihood beneficiaries' current levels of income will decline and potentially lead to a renewal of resource extraction.

Conclusion: CREL expects to reach 50,000 producers by the end of the project. Other than fisheries, the livelihoods program is developed independent of a formal GoB or other partner agreement.¹⁸ Many livelihoods beneficiaries requested additional IGA training, help with value chains, new IGAs, and financing, which leads the evaluation team to conclude that once CREL ends continued support for IGAs will be necessary just to maintain the gains that CREL has realized.

CREL estimates that it is reaching 35 to 50 percent of the households proximate to the PAs. By the end of the project, this may increase to 60% of nearby households, while this is a remarkable accomplishment; it leaves thousands of households untouched by CREL, many of whom will be likely resource extractors. Continued institutional livelihoods support will be needed to reach a larger share of these to maintain gains in AIG and reduced resource extraction. Some options include:

- CREL is using a value chain approach to IGA and market forces will drive some measure of sustained IGA benefits and participation. CREL has initiated a local service provider program (see text box) that relies on market mechanisms to provide ongoing IGA services and LSPs will provide some measure of IGA sustainability but only for a small portion of CREL livelihood beneficiaries.
- CREL should seek out NGOs and other donor funded projects (e.g., USAID Feed the Future activities) that are already supporting livelihoods and encourage them to also support CREL beneficiaries. CREL's partnership with Hathay Bunano (Pebbles) is an excellent model that CREL should seek to replicate with other AIGs.
- CREL has an ambitious leveraging target and for some time has been reaching out to other donors, NGOs, entrepreneurs, etc. to network and collaborate on IGA activities. These should be pursued with a focus on building sustainable support for livelihoods activities as long as the benefit in terms of livelihoods support merits the often high transactional costs of these partnerships.
- Ultimately, the evaluation team concludes that USAID will need to continue funding livelihoods support, perhaps through transition grants to Bangladeshi NGOs, to ensure that gains under CREL are secure.

¹⁸ We understand that CREL's national NGO sub-recipients are partners but the evaluation team is at this point referring to non-USAID funded partners.

Local Service Providers (LSP)

Local service providers (LSP) are local traders, entrepreneurs, and lead farmers who are trained by CREL to provide technical advice, inputs, and market outlets to beneficiaries who cannot routinely access these services because the scale of their production is not sufficient to economically support the transactional costs of obtaining inputs or marketing produce. LSPs are a valuable adjunct to the CREL livelihoods program extending IGA while generating income from the services they provide.

Table 3.1: Number of Local Service Provider Types by Region

	Chittagong	Coxs Bazar	Khulna	Sylhet	Total
Agriculture	30	49	92	39	210
Fisheries	7	12	101	28	148
Livestock	12	2	2	33	49
Total	49	63	195	100	407

The table above shows the total number of LSPs is highest in Khulna due to the large number of beneficiaries in this region. CREL has decided to not increase the number of LSPs in PY 4 and is focusing instead on improving the quality of service provision and business management of the existing LSP cadre. The downside of this is that CREL plans to continue to increase the number of beneficiaries participating in the livelihood program. While the LSP to beneficiary ratio may be stretched a bit with improved performance, it will not be enough to keep up with expected increases in participating beneficiaries and the quality of AIG benefit to livelihood beneficiaries may suffer.

The following sections address the three sub questions of evaluation question three.

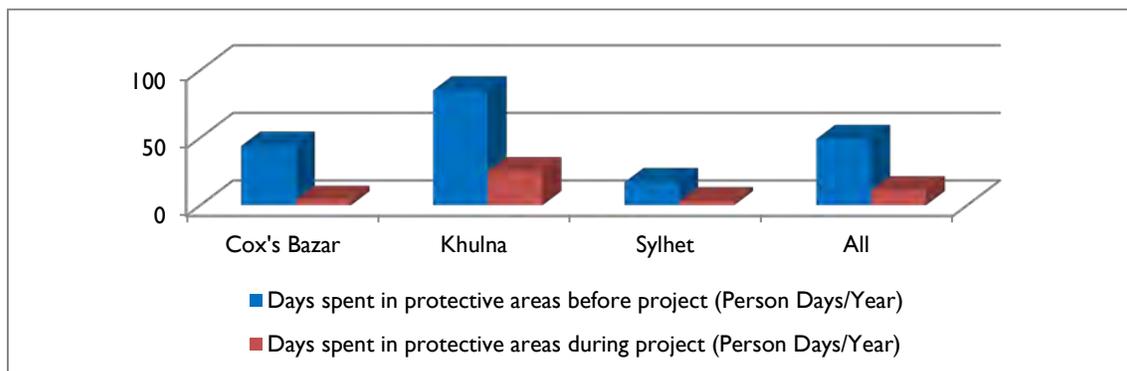
Livelihoods and Natural Resources Protection

To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas?

Finding:

The evaluation team found that there is a positive relationship between livelihoods activities and reduced illegal natural resource extraction. The survey found that the households engaged in the CREL livelihoods program are indeed reducing their extraction. CREL uses days spent in PAs as a proxy indicator for actual quantity of resource extraction. The survey found substantial reduction in this indicator across all regions (see Figure 3.2).

Figure 3.2: Number of days spent in protective areas by the respondents



The livelihoods beneficiary survey, although not statistically significant, provides positive data for reduced resource dependence and extraction. However, it can be seen from some inconsistencies in the data that respondents are underreporting their resource extraction and that the evaluation team is not highly confident in the reliability of these data. The evaluation team was unable to identify a way to objectively verify the magnitude of resource extraction.

The consistency of this finding internally within the survey and more widely across the interviews and group discussions, however, gives the team confidence the core finding that resource extraction appears to be reducing. Responses were consistent across multiple survey questions addressing the change in beneficiary resource extraction behavior. None of the 86 interview and group discussion informants told us that resource extraction had increased during the CREL project period. Regression analysis of our interview and focus group respondents confirmed reduced resource extraction and gave numerous anecdotal examples of this.

Focus group discussions lent further evidence to CREL's success in changing key behaviors. Informants revealed that regular village meetings and trainings have strengthened local commitment to preserving forests and wetlands primarily due to the understanding that management of resource extraction will protect against challenges of climate change, increase biodiversity, and provide other tangible benefits from programs like social forestry. As Abdul Hai, a member of a livelihoods group in Chunarghat, Rema Kalenga, noted, *"I was once a tree thief, before people used to see us taking trees through villages. Now I don't cut trees, even if I do I will get caught by the patrol group. Stealing has stopped completely in this area at least openly; I got training on livestock from CREL and now make money selling vaccines instead."* The survey found that the number of days that respondents spent in PAs decreased by 78 percent from 49 to 11 days per year per person, further illustrating this change in mindset.

Finally, as discussed in Section 2, the evaluation team must take into account that the poverty and vulnerability of people living near PAs are not the only and, compared to powerful commercial interests, probably not the major driver of PA resource degradation. Therefore, access to alternate livelihoods for poor women will not be a dominant determinate in reduction of resource degradation, though it is part of an integrated solution for resource protection.

CMOs provide coordination for the CREL livelihood program and serve as a forum for representatives of the livelihood beneficiaries. Integration of the CMOs and the livelihoods beneficiaries is having a positive effect on the communities' regard for the CMOs.

Conclusion: Given the survey limitations, the evaluation team judges that the quantitative data on reduction of resource extraction are likely overstated. While CREL is monitoring several proxy indicators for biophysical change (bird inventories, fish catch monitoring, beneficiary per-days collecting natural resources in protected areas), the analyses of these data had not been completed at the time of the evaluation.

CREL could adjust the focus of its IGAs toward the larger resource extractors, predominantly men. Several CREL-promoted IGAs (aquaculture and open water fishing, LSPs, some animal husbandry) are attractive to men, but barriers to voluntary male enrollment and incentives to encourage their participation must be considered before outreach strategies and IGAs can be designed to increase male participation. Mining CRELLink data for insight into gender and participation in the CREL livelihoods program is a common sense first step.

CREL's results framework places equal emphasis on climate resilient natural resource management and improved livelihoods. The CREL partners, including the GoB and USAID, must balance the cost of increasing male participation with the likely improvements in the biophysical status of neighboring ecosystems. The evaluation team did not find data to support a hypothesis that significantly increased male resource extractor enrollment in IGAs would result in a cost effective reduction in resource degradation. It is possible, but it is unclear where the funds would come from and what trade-offs would be necessary. A logical, low cost strategy would be for CREL to enroll more male resource extractors by identifying those with motivation and a sincere interest in changing their source of income.

Alternative vs. Supplementary Income

Are CREL livelihood activities a supplementary source of income or an alternative source of income?

Finding: CREL’s livelihoods program is creating both alternative and supplementary income. The program has shifted income generation from extraction to IGAs (alternative) and is providing supplementary income to households that remain resource extractors as well as households that have not had, and do not have, significant income from resource extraction.

Conclusion: Creation of both alternative and supplementary income sources are desirable CREL outcomes. CREL is correctly intensifying its efforts to recruit resource extractors for its livelihood program. Supplementing resource extraction with a CREL-supported IGA is just a short step away from switching to an alternative source of income. The distinction between these two aspects of income generation should not be a significant driver of CREL’s livelihoods program management.

The CREL-PE survey results indicate that there was a substantial switch to alternative income and supplementary income for beneficiaries (see Figure 3.3). The survey found that 36% of the total 528 beneficiaries have switched their primary income generating activity to a CREL-supported IGA (alternative) while 70% of beneficiaries report engaging in CREL-supported IGAs for supplementary income.¹⁹ Group discussions suggested that the majority of CREL livelihoods activities are a supplementary source of income for households, as the majority of participants are women, who contribute a lesser proportion of their household income than their husbands. For men, the livelihoods activities such as vegetable and fish farming, which are seasonal in nature, are not enough to meet the yearly expenses of the whole household. These men engaged in other work, such as day labor, share cropping, and forests resource extraction to meet their income needs throughout the year.

The two figures below show the significance of the impact of CREL’s livelihoods program on beneficiary income as reported by survey respondents. The first shows a nearly 50% increase in household income across the project regions and the second shows a nearly 75% decline in the proportion of household income derived from resource extraction. Factoring both together results in an average 32% decline in income from natural resource extraction. Our focus group informants indicated that resource extraction—collecting wood, Non Timber Forest Products (NTFPs), shrimp pre-larvae—is hard and somewhat dangerous work. Given a lucrative alternative source of income, people will quickly adopt it instead of, not just in addition to, resource extraction (Figure 3.4).

Alternative and Supplementary Income Generation

Primary IGAs are defined as economic activities that generate the largest portion of individual or household income.

- An **alternative** income generation activity is one in which a beneficiary reported that s/he had changed the source of primary income either at the individual or household level.
- **Supplementary** IGAs are any source of income resulting from a CREL intervention that did not become a primary source of income. It is synonymous with secondary IGAs.

¹⁹ A total greater than 100 percent stems from the fact that alternative and supplementary IGAs are not mutually exclusive.

Figure 3.3 Total income of the surveyed households

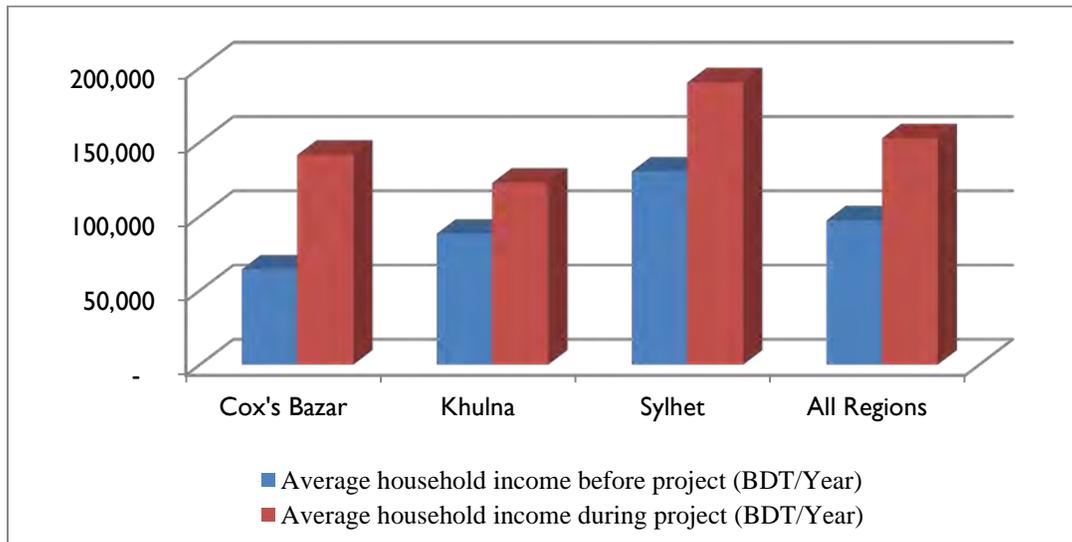
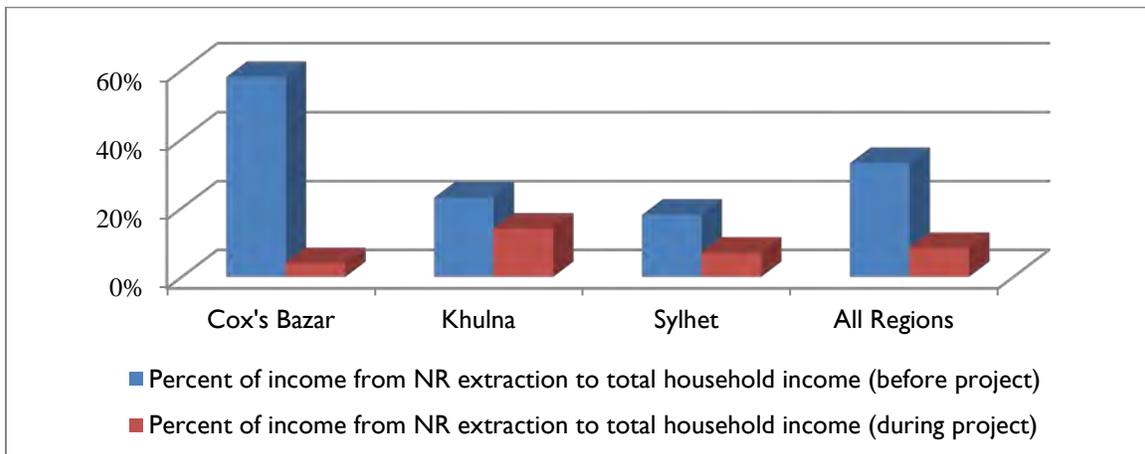


Figure 3.4: Percentage of total household income from NR extraction (before and during project)



Livelihoods like doll-making and cap-making are appreciated by women, given a guaranteed purchase of completed products and year-round income. Beneficiaries also appreciate the introduction to horticulture and vegetable production in their home gardens. As one VCF member in Himchori stated, “Before people had their empty courtyard around their home but they didn’t know how to use that land but now all of them do homestead gardening there.” The knowledge has increased availability of vegetables for household consumption and generated income from sale of the produce. Training on livestock, such as duck rearing, has been successful in certain places. “Before majority of my chicken used to die of disease now I know what medicine to give them, I apply vaccine regularly, and contact the local animal doctor when required,” said a beneficiary in Jhingmonkhali, Cox’s Bazar. However, at some sites (such as Alim Nagar, Hakaluki Haor and Rema Kalenga) it was observed that livestock raising has been initiated without considering local factors that make these activities successful, such as availability of a proper body of water for duck rearing.

Moreover, vegetable gardens and duck-rearing were difficult for some beneficiaries to establish due to upfront costs. Beneficiaries can form savings and loan groups (SLGs) to purchase inputs and provide a sustainable solution to this challenge (as discussed in the box below). Overall, almost all livelihoods beneficiaries requested additional training and support on sewing and livestock.

Savings and Loan Groups

SLGs are groups, predominantly women, that pool savings to provide small loans to members. CREL is helping its livelihood groups organize SLGs as a low input, low risk means of enabling beneficiaries to fund IGAs and other small, short term cash needs of its members. The evaluation team interviewed several livelihood groups with SLGs; they were uniformly positive about their SLG experience. Members reported they had used their loans to make initial investments toward their livelihoods activities and cope during crises. As loan amounts are small, repayment periods short, and the commitment to repay is high among family and neighbors, SLGs tend to have fewer repayment failures than other micro-credit schemes. One SLG member, Laboni Begum of Hoglabunia in Chandpai stated, “I used the loan money to buy a “Tom Tom” [powered three wheeler] for my husband. Now he drives this for a living and has stopped going to the forest to collect wood.”

Household Resilience

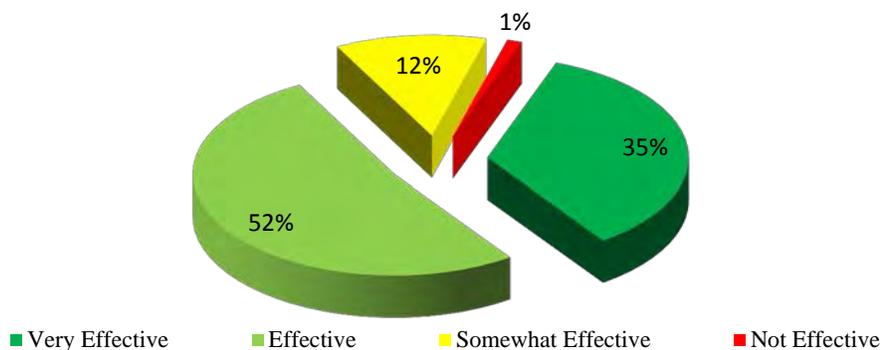
Is there evidence of improved household resilience resulting from diversified livelihoods or income?

Finding: Although the evaluation team did not perform a separate resilience assessment, the team found that CREL’s livelihoods approach offers diversified climate-resilient livelihoods. These livelihoods, if sustained, should reduce risks due to climate change among beneficiary households.

Conclusion: Building household resilience to climate shocks in the PAs is feasible, however, it requires a broader set of enabling conditions, including raising awareness of climate change.

The survey found that a significant number of CREL beneficiaries regularly face financial and other losses due to natural calamities. Some of them will be unable to cope with future shocks, though a large portion have adapted by changing their sources of income and food. A substantial majority of respondents believe that CREL activities are helping them to prepare for shocks (as shown in Figure 3.5), and many report that they have already taken steps to improve their resilience—a clear sign of the success of CREL livelihoods and climate awareness activities.

Figure 3.5 Survey respondents' perception of CREL alternative IGA effectiveness in enabling their ability to mitigate financial loss they have previously faced



3.2.4 Integration of Women and Vulnerable Populations

Evaluation Question 4: Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?

Gender is a crucial cross-cutting issue that affects most parts of the CREL project planning and implementation. From the very beginning, CREL has adopted an approach to equitably engage women in its activities and to ensure that gender equality and women's empowerment are mainstreamed into all policies and initiatives.

The project has made good progress in promoting women's role in decision making at the village (VCF) and site (CMO) level through activities such as: promoting the inclusion of women in CMCs; providing livelihoods solutions that are responsive to women's needs; and providing training on gender issues, finance, and literacy predominantly to women. However, CREL has not set a very good example of integrating women within its own staff. They employ a very small number of women, both in field and offices.

The mobility of women was found to be limited to the village only. Most women reported visiting the market to buy household or personal goods whereas men went to markets for business.

Findings:

- **Men are primary resource extractors:** There is a predominance of women in all CREL livelihood activities, but they are not the primary resource extractors
- **Ethnic groups are not targeted:** The inclusion of ethnic groups and minorities is limited to their existence in the project target sites
- **Low participation by youth:** CREL does not facilitate extensive youth participation in their interventions.

Conclusions: CREL activities have integrated women in all sectors, however, this approach may have reduced the project's effectiveness in reducing natural resource extraction, as well as outreach to other vulnerable communities such as ethnic minorities and youth.

Men are primary resource extractors: As mentioned in Section 3.2.3, CREL livelihoods activities are skewed toward women, even though the most damaging resource extraction is done by men, often in the employ of powerful local elite. Women's extraction activities mainly involve the collection of fuel wood and shrimp; as they generally rely on natural resources to meet family needs of food and water. According to CREL staff, women are chosen mainly because they are more available for trainings and they are seen as an influencing member of the household so they can influence men not to go for resource extraction and thus reduce resource dependency in these communities. A CREL Livelihood manager stated, "*Most men recommended that women participate in the FELC trainings because women have the time to study, and they can pass on this education to their children.*"

Ethnic Groups: The evaluation team's research found that ethnic people, although not targeted by CREL per se²⁰, feel privileged and represented, if they are included as CMO members through a

²⁰ CREL's mandate was to serve poor, resource-extracting, households living in or near selected protected areas. The distribution of ethnic minorities tends to be higher in CRELs area and it is working with them but not specifically selecting for ethnic participants.

guaranteed quota in sites where there is an ethnic population. Lokhi Rani Munda, an ethnic member in Satkhira CMC, stated, *“I feel proud to be a CMC member, we get to meet forest officials they know us by name. I have been working in my area to make people aware of climate change and protecting the forests.”*

Empowering Women

Findings: Livelihoods beneficiaries are predominantly (~75%) poor women (CREL, 2015 Y3 Annual Report). CREL provides these women with skills trainings, linkage to markets, and access to finance in certain areas. Some of CREL’s livelihoods activities such as cap making and Pebbles are targeted exclusively to women.

Conclusion: CREL has empowered women both socially and economically through offering livelihoods solutions for communities that are responsive to the differing needs of women. Income from these activities improved family living standards and increased the socioeconomic status of participating women. In the beneficiary survey, respondents showed a marked increase in access to assets, improved income earning opportunities, and increased decision-making power.

The promotion of gender equity and female empowerment is a key component of the livelihoods program. CREL has provided women with jobs through private sector agencies such as Pebble.²¹ Other activities such as handicrafts, cap-making, and basket-making address the specific needs and skills of women in many areas. These activities allow women to engage in income generation from home, after having completed their household work. In most cases, women are able to sell their products from their homes, either through designated buyers or LSPs.

Adoption of livelihood activities has increased household income, as more women are able to contribute to family expenses, this has given them respect and voice in the society. As stated by a livelihood beneficiary in Alimnagar, Hakaluki Haor, *“Initially we were prevented to attend meetings and trainings by our husband and mother-in-law. Now they are happy with the benefits we are getting. Now we have gained confidence, our families consult us to make decisions. We can directly talk to doctors and livestock officers. We can help our children in studies, provide for their education and help our husbands with money.”*

The evaluation team found evidence that CREL interventions are being replicated or scaled up within communities, as beneficiaries are training neighbors and even their children to make dolls and caps. Young girls were seen walking around villages with a knitting needle and an incomplete cap in their hands. The linkage to the market has provided lucrative motivation for all these communities to engage in these IGAs. A Pebble worker at Ringbong, Teknaf stated, *“Before other women were not interested to go for training, but when they saw the huge benefit we are getting from Pebble they got interested to make dolls and asked us to train them.”* Some women, like Kamrun Nahar from Ringbong, Teknaf and Munira from Borochara, Himchori, who are good at making dolls, get employed as official trainers for Pebble and earn Tk 3000, plus transportation allowance for each training.

Gender in Trainings

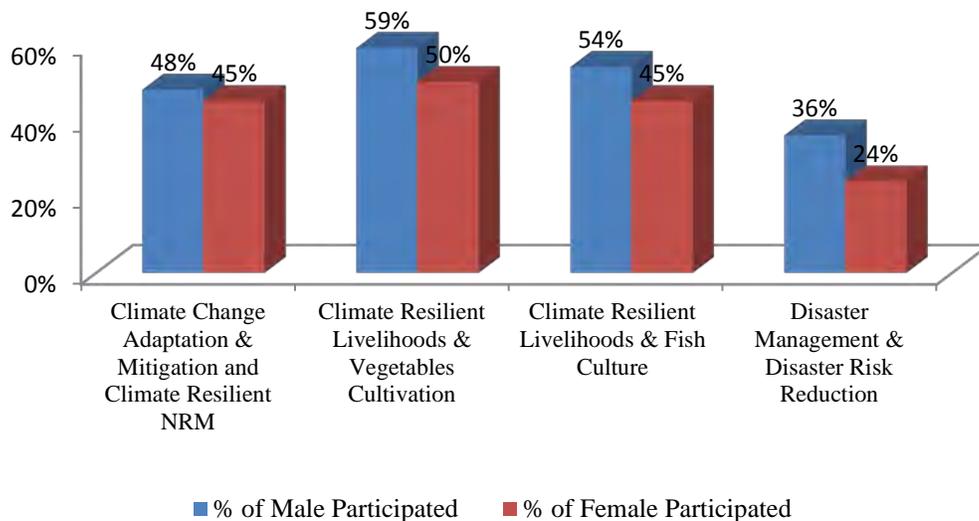
Findings: Women have been prioritized in all CREL trainings. Participation in Financial and Entrepreneurship Literacy Center (FELC) and SLGs has built women’s ability to grow their livelihoods and promote social capital, thus increasing participation in household decision making.

²¹ Pebble trained and contracted women from CREL sites to make high-end soft toys for export based on a guaranteed buy-back insurance system.

Conclusion: Gender considerations are well integrated into trainings and other awareness raising activities aimed at developing literacy and business skills, improving attitudes and practices on biodiversity and natural resource management, and ensuring equity in household decision making.

The survey found a similar ratio of males and females in training activities, as shown in Figure 3.6. Activities include training on new techniques for efficient vegetable production around homes, fish farming in existing ponds, and climate resilient varieties and high-value crops such as fruit trees. The team also found women successfully engaged in duck and livestock rearing.

Figure 3.6: Comparative Participation from Male and Female in Different Trainings



During discussions with participants from livelihoods and FELC groups who either have completed or are about to complete their course, the team observed a significantly higher level of confidence among the women regarding management of household assets and influencing important household decisions (e.g., borrowing, investment decisions, and sending children to school). During FGDs, FELC participants stated that they can now keep track of their household income and expenditures, are able to estimate market prices, make proper calculations, and profit on rearing duck and poultry.

Women have also formed SLGs, which help create financial independency, a sense of companionship among members, and confidence to support each other during crises.

Financial and Entrepreneurship Literacy Centers (FELCs)

FELCs run seven month-long courses held two hours per day, six days a week. Through this training, illiterate livelihood beneficiaries learn basic literacy and numeracy skills (e.g., calculations to keep basic accounts), use of credit and savings services, capital investment, and facts about debt and repayment, along with life skills and entrepreneurship. Students are also exposed to natural resource management and climate change-related topics, the importance of gender equality and women’s economic empowerment, climate change-resilient livelihoods, and adaptation practices. FELC groups are typically all women with a female instructor, or all men. Each FELC is run by a learning facilitator selected from the community. Nearly all FELC participants are women (95%). During FY 2015, 165 currently operating centers completed their courses of instruction for 240 male and 2,380 female participants. During Year 3 1,818 enrolled in the program and 2,906 people who started in Year 2 graduated. Based on stakeholder demand and project feedback, the CREL team launched 131 new courses that will conclude in FY 2016.

Women in Leadership Roles

Findings: Women feel privileged with the various roles such as CPG guard and Nishorgo Shahayaks (NS) that they have been given under this project. These positions give them authority and responsibility to undertake tasks side by side with men.

Conclusion: Leadership roles in designated positions have empowered women and increased their confidence and status in the community.

Women's participation as a NS (a role which was assigned during IPAC) has provided a platform where they regularly arrange and hold meetings in collaboration with CREL staff and make local people aware about preservation of natural resources. Sajeda from Satkhira stated, *"When we first got training as Nishorgo Shahayak people in our area didn't like me, they used to say they need the forest for their livelihood and I am asking them not to go to there. I spent several months sitting with them discussing about NRM and protection of our forest and climate change, now they respect me for what I do and recognize it's for a good cause."*

At the same time, female CPG members are engaged in the protection of natural resources in PAs and work alongside FD officials regularly. They wear uniforms and patrol their designated areas and feel proud with the sense of power they possess as a CPG to help prevent illegal activity. One CPG member stated, *"Villagers ask us about our activity and we make them aware about conservation of nature, now they respect us as we are doing welfare to the society"*. Another female CPG in Lawachara noted that she thinks she could be more effective than a male CPG because it is easy for her to enter houses (in search of illegal fuel wood storage), communicate with women, and counsel them against illegal activity.

Most men in FGDs accepted women positively in their leadership roles such as CPGs and NS and sat side by side them during discussions with the evaluation team. CMC members in Wykong, Teknaf stated, *"Women in this area have come a long way, before it was difficult to see women on the road, as they would hardly come out of their houses. Now they are attending meetings, and working outside as CPGs."*

Forest officers also acknowledged the help they get from NS and CPGs. A beat officer in Himchori stated, *"CPGs provide us useful information on illegal activities. They help us monitor far away areas, which was not possible before. We call them when we need assistance to handle problems and they always respond to our calls."* Range officer, Lawachara stated, *"Before I had one hand and now I have 100 hands to save the forest, CMCs have helped local people gain confidence and strengthened our hand. Even if CREL leaves, the orientation and awareness the local people have regarding conservation will be there and will not go away. Nishorgo Shohayoks (NS) are also very helpful in conservation. Thanks to CREL."*

Women and CMO Membership

Findings: CREL is exceeding expectations in incorporating women as CMO members, however women remain under-valued for their contributions to co-management and under-represented in CMO leadership.

Conclusion: The mandatory inclusion of women in CMO membership has not been sufficient to empower women to participate in decision-making and leadership. Women can make greater contributions to the sustainable management of critical ecosystems, but lack the leadership training and social acceptance to fulfill that promise.

Women participate in CMOs through quotas. The proportion of female members are more than 50% in VCF, 23% in CMC (council), 17% in CMC (committee), 40% in PF and 30% in Resource Management Organizations (RMOs). Women account for 40% of executive or office-holder positions in PF and VCFs. At the village level, women attend VCF meetings and receive training on gender, climate change, and protection of natural resources. They counsel their family and neighbors on these issues and feel important that they are part of a cause—a bigger movement. Some women also write resolution books in meetings. Women CMC members also get the opportunity to participate in sub-committees. During

discussions, CMC members unanimously stated that the women are getting more attention through their attendance in meetings and inclusion in other activities of CMC.

Nevertheless, the quota for women in CMOs does not ensure that there are women in leadership roles. The team observed that despite sitting in the front rows of CMC meetings, women did not speak voluntarily, engage actively in decision-making, or take leads in the meetings. Even during FGDs, they only spoke when spoken to about the functions of CMC. This indicates that more work needs to be done to ensure substantial and meaningful integration of women in the CMOs.

3.2.5 Engaging National Level GOB Partners and Strengthening Policy Framework

Evaluation Question 5: How effective is CREL's engagement with national level GOB partners in building government ownership of the co-management approach and strengthening the legal and policy framework for co-management?

The CREL Request for Assistance (RFA) clearly established a process for engagement with national level GoB partners and for strengthening the legal framework for co-management as priorities. CREL objectives include:

- Provide high quality technical advisory services to co-management organizations and GOB environment, forestry, and fisheries agencies; and
- Improve governance of natural resources and biodiversity.

Engaging National Level GOB Partners

Finding: USAID and GoB internal processes collided over CREL project authorizing documentation and resulted in the FD pulling back from full participation in CREL, significantly delaying CREL implementation in PAs and undermining FD ownership of the co-management approach. Since the resolution of this problem, the FD has shown increasing engagement with CREL. While a similar problem existed with the DoF and DoE, they chose to continue collaboration without such significant disruption in collaboration, indicating a degree of choice by the FD.

Conclusion: While this problem was not formally resolved until early in PY4, the collaboration with FD had improved substantially during PY2. However, this impasse caused a number of difficulties including:

- Delay in issuing CREL small grants to CMCs,
- Disengagement of local FD and Upazilla officials in CREL activities,
- Inability of CREL to effectively support activities within PA boundaries,
- Expenditure of significant CREL staff time seeking resolution to the impasse,
- Lack of ministerial and departmental steering committee meetings, and
- Slow progress in GoB organizational capacity building.

CREL embraced collaborative engagement from the onset, saying in its first quarterly report, “Establishing a strong relationship with and support from the Government of Bangladesh (GoB) Departments and Ministries is critical to the success of the project.” Each successive CREL progress report lists dozens of meetings CREL staff conducted with GoB staff in various ministries and departments. CREL first acknowledged in its third quarterly report that there was a problem, noting the Chief Conservator of Forests (CCF) had broached the issue of the lack of Development Project Proforma (DPP) in CREL’s first meeting with him in October, 2012 less than two weeks after CREL began. The DPP is an internal GoB document that lays out activities and budget, for both the government and the donor, and the CCF stated that CREL would be required by the GoB to prepare a DPP before the FD could recognize CREL as an authorized development partner. He also said it would take roughly a year to prepare.

USAID, for its part, took the position that the Development Objective Agreement (DOAG) it had signed with the Minister of Finance fully authorized CREL. Despite a letter midway through PY1 from the USAID Mission Director to three ministers, collaboration with the FD continued to lag, particularly

after USAID made it clear that USAID would not be providing funds directly to the GoB for CREL implementation. Early in PY2, a compromise was reached and a new GoB form was introduced, the Technical Project Proforma (TPP), which did not come with an expectation of direct funding to the GoB. In its first quarterly report of Y2, CREL stated that good progress was made toward development of the TPPs for all three departments. By the end of PY2, through regular meetings and capitalizing on personal relationships, CREL had fully engaged with all three departments. However, the CCF's estimate of 12-months for approval proved to be optimistic; it took until October 2015, two years, for the FD's TPP to be fully executed.

During the process, CREL worked hard to maintain collaboration. CREL employed former GoB officials, including a former CCF and a former secretary to guide the project through the GoB processes. It met frequently with various departmental counterparts, prepared the TPPs and supporting documents on behalf of the government, and, as part of the compromise, agreed to procure vehicles for the government. In the field, the local FD officers and CREL staff quickly re-established effective collaboration. Reports from CREL staff of lasting effects of the DPP/TPP impasse include lost opportunities to:

- Build capacity in local FD officials;
- Establish a vigorous natural resources management program, especially in PAs;
- Firmly embed a capacity to support the VCF livelihoods activities in the FD; and
- Have more time to solidify FD ownership of the CREL approach to co-management.

CREL staff reported that two subsequent USAID environment-related projects, BAGH with the FD and *ECOFISH^{BD}* with the DoF, have mostly avoided collaboration difficulties and delays through early initiation of the TPP. Still, the TPP takes months to be approved and there is an ongoing risk that informal collaboration may not suffice for fully effective project implementation.

Strengthening Policy Framework

Since the beginning of USAID Bangladesh's community-based natural resource management activities, a major objective has been to align GoB co-management policies with equitable, sustainable, and now climate-resilient livelihoods and ecosystems. Investment by USAID, the GoB, and others has been substantial; when the payoff will come is an open question.

Finding: CREL's support to GoB policy development, essential for sustainable co-management outcomes, is beginning to meet milestones that should have already been passed. Key elements in CREL's policy work such as the PA Rules, ECA Rules, and the Wetlands Leasing Policy, are not on pace to be securely concluded by the end of the project.

Conclusion: CREL's policy development activities build on work done by predecessor USAID projects, national government and NGOs, and collaboration with other donors. Countless person hours of senior professional staff have gone into relatively few pages of few, but very important, documents. Progress has been made. The key policy documents have been drafted, agreed to, and are under various stages of deliberation by the GoB, largely beyond the direct control of CREL. The policy work that USAID has been supporting for so long is at a critical juncture. The evaluation team believes the next few months could be a turning point in the history of co-management policy in Bangladesh or could lead, if the Government fails to act, to a much longer delay as CREL starts to wind down. Though the documents are in the hands of the government, CREL and USAID still have an important, if indirect, role to play in the vetting process.

Table 3.10 shows the status of the development of 14 policies selected by CREL in consultation with its GoB implementing partners during PY1. The four policies that have reached stage 4 (adopted) are all site specific. While they are important, they have little significance beyond the boundaries of a particular PA or Union. Others, however, are important for co-management broadly. CREL staff identified several priorities among the 14, which are shown in bold in the table and in the text box. One policy, the Forest

Protected Area Rules, incorporates three others as shown in the group in the text box. The PA Rules, the ECA rules, and the Wetlands Leasing Policy form a set of three priority policies covering the three co-management ecotypes where CREL works, which can make a substantial difference to co-management in Bangladesh.

CREL's slower-than-expected policy development was one of the more important problems caused by the DPP/TPP issue. With the exception of the four site specific policies, the other 10 policy development activities are behind schedule. One reason for this is that much of the staff time, for both CREL and the GoB, which was spent on getting past the DPP/TPP issue, would have otherwise been dedicated to policy development. The GoB must enact key policies soon if CREL is going to have any opportunity to work with the GoB partners in implementing them. Effective implementation will require time and resources from all partners and both are in short supply.

There are reasons for optimism, however. The PA Rules were under active deliberation during the evaluation, and in early October the CCF approved them and forwarded them to the Secretary of the MoEF, who promptly held an inter-ministerial committee meeting to vet them. The committee rejected a key clause establishing a line item in the FD annual budget for CMC funding, though the CCF lobbied to have it put back in.

Table 3.10: Status of CREL-targeted policies (CREL, 2015)

	Identified policy focal areas	1 Analyzed	2 Drafted	3 Submitted	4 Approved	5 Implem.
1	Wetland leasing policy	3/9/2013	3/16/2015	7/27/2015		
2	Guidelines for permanent wetland sanctuaries	7/11/2014	3/19/2015	8/2/2015		
3	Guidelines for wetlands co-management	9/17/2015	9/30/2015			
4	Additional permanent wetland sanctuaries	1/23/2014	4/29/2014	5/18/2014	9/21/2015	
5	ECA policy/rules on co-management for NRM	2/27/2014	3/25/2014	4/23/2014		
6	Improved revenue sharing for forest PAs	9/28/2014	12/4/2014	3/5/2015		
7	Declaration of new forest PAs	5/22/2014	12/21/2014	4/7/2015	5/31/2015	
8	Revised CMC structure in forest PAs	9/28/2014	12/4/2014	3/5/2015		
9	CMO representation in UP Standing Committees	6/10/2013	7/20/2013	7/20/2013	9/30/2013	9/30/2013
10	Forest Protected Area Rules	9/28/2014	12/4/2014	3/5/2015		
11	NTFP revenue sharing in Sundarban	9/28/2014	12/4/2014	3/5/2015		
12	Climate change inclusion in Union Development Plans	11/17/2014	1/31/2015	2/28/2015	5/31/2015	
13	Designation of Ramsar sites and/or ECAs	9/20/2015				
14	Legal instrument formalizing fish sanctuaries and co-management					

3.2.6 Opportunities to Enhance and Strengthen Programmatic Effectiveness

Evaluation Question 6: What opportunities exist to enhance and strengthen programmatic effectiveness such as by adding, changing, re-scaling and/or removing activities to meet or surpass project targets/objectives and ensure sustainability?

Introduction

The evaluation team is keenly aware that the current CREL end date is September 30, 2017, that project close out process has to begin well before then, and that time is a significant constraint to the opportunities CREL has to make needed, meaningful mid-course adjustments. The evaluation team has been careful to identify opportunities and make recommendations that can be implemented during the time remaining in CREL. These opportunities are tactical and will help preserve CREL's significant successes and increase the likelihood that they will be sustained after CREL. In Section 7.2 the evaluation team looks beyond the CREL identifies opportunities for what might follow the CREL end date.

The evaluation team believes that CREL has achieved a turnaround of USAID's support to co-management in Bangladesh. The IPAC evaluation was quite blunt in saying, "In short, it is not entirely clear whether most IPAC CMOs have a sufficient *raison d'être* in order to be sustainable." This report counters with:

Now is the time to stay the course of resource co-management in Bangladesh and strengthen and build on the existing CMO structure.

Opportunities for Enhancing and Strengthening CREL Effectiveness

The team proposes six interrelated areas where CREL can make program adjustments to enhance its effectiveness.

Policy Development

Finding: CREL's has invested considerable senior staff effort in policy development program and, while behind schedule, it is beginning to show results. Now that the GoB collaboration documents (Technical Project Proforma) have been approved, CREL and the GoB have a singular opportunity to facilitate the formal adoption of these policies and establish an improved policy context for co-management in Bangladesh. The evaluation team finds the most important of these policies are:

- PA Rules (FD)
- Wetlands Co-Management Guidelines (DoF)
- Wetlands Leasing policy (MoL), and
- ECA rules (DoE)

Conclusion: USAID, CREL, and GoB partners could work together in early 2016 to develop a **clear and focused roadmap**—with actions, responsibilities, milestones, and deadlines—to rapid approval of these policies. Capitalizing on USAID's ability to reach high level political officials would streamline this process.

It would also be opportune to begin planning for and developing the capacity to implement these policies. CREL and the GoB could, in advance of formal approval, test implementation protocols and processes, adjust management structures, identify stakeholder organizational capacity needs, and begin building and applying the capacity building tools to meet those needs.

CMO Funding

Finding: There is no mechanism in place to finance CMO operations once CREL's last round of small grants is completed. The new PA Rules, when enacted, are intended to help resolve this issue for FD CMCs, but the timing of approval and the final form of the revenue elements, are by no means certain. In addition, nearly half of the CMOs supported by CREL are not under the FD. Novel and classic approaches to sustainable CMO financing could be explored. These need to recognize the differences between various types and locations of CMOs.

Conclusions: Opportunities include:

- MACH established endowment funds by creating fixed deposit accounts; interest from some of these accounts are still funding several RMOs. CREL has developed a concept paper to create an

endowment fund, which, while not suitable for USAID funding, could be supported through alternate sources. This might take the form of ‘co-management foundation,’ consistent with Bangladesh law and practice. The foundation could be co-managed by representatives of the GoB, CMOs, NGOs, private sector entrepreneurs, and donors. It should be designed to receive funds from a variety of sources (donors, private sector, GoB, the general public) and make small grants to support CMOs and the livelihoods activities of VCFs and RMOs.

- CREL could support the initial feasibility work and channel initial operating funds to the foundation. The Nishorgo Network, which lapsed in the first year of CREL, was created under IPAC to provide regional and national CMO representation and coordination, could be reconstituted to serve as a mechanism to channel funds. This role would also enhance the legitimacy of its role in representation and coordination. Alternatively, the Arannayk Foundation, established by USAID and now supported by several donors, might serve as an institutional home for an endowment fund.
- Donor funding is, of course, another opportunity. CREL’s Bangladeshi sub-recipients have proven expertise in supporting CMOs and CREL. Two of them, as well as another Bangladeshi NGO are eligible with CREL’s assistance, to compete for USAID Bangladesh transition grants. This is a good opportunity for matching proven field capability with new, sub-nationally tailored programs.
- CMO cooperatives might work for some wetlands CMOs. Cooperatives have the advantage of being able to generate their own sources of funding, as well as GoB institutional support through the GoB’s Department of Cooperatives. One Hail Haor fishery-based RMO is also a duly registered cooperative and generates its own funds. As a cooperative the MoL recognizes it as professional fishers group; it has successfully competed for fishing rights.

Livelihoods Program Sustainability

Finding: CREL’s livelihood program lacks a local partner to continue the component after CREL. While some individuals have the capacity to successfully sustain their IGAs, many do not. There are multiple options for continuing ongoing technical assistance, training, and financial support. It is likely that several of these methods will be needed to meet the needs of CREL livelihoods beneficiaries.

Conclusions: Opportunities include:

- Beneficiaries engaging in profitable, well established value chains, such as aquaculture or handicrafts will have different support needs than those engaged in producing gardening or small animal husbandry. Therefore a more targeted support will move these CREL beneficiaries forward. CREL’s LSP program has shown promise for the addition of heavy value chains such as aquaculture.
- Many VCFs have the organizational capacity to support extension services for home-based enterprises. This includes group organization, linkages with government service providers, knowledge sharing, and conduit for financial support. CMOs have provided some of the financial support for VCFs and this role could be a factor in the calculation of CMO financial sustainability.
- The fair trade handicraft company Hathay Bunano (Pebbles) will likely continue support to several CREL supported women’s handicraft groups. This could be expanded and replicated with other handicrafts and other intermediaries.
- Expansion of livelihoods programs to communities not currently in the CREL livelihoods program will require a full range of support from awareness raising, promotion, group organization, technical assistance, training, input supply, and marketing. Traditional project assistance is likely to be the most efficient means of performing this.
- CREL estimates that it has reached about half of the households in the communities where it currently works. Given the proximity of CREL’s existing programs, IGA infrastructure,

awareness and value chains, a more complete coverage is best accomplished through the full services of traditional project assistance.

- Employment generation would be a viable means to increase involvement of men in IGAs, particularly those who are heavy resource extractors. Work in forest restoration would have the dual benefit of income generation and resource protection. The FD is well able to organize these activities.

Capacity Building and Training

Given CREL's substantial investment in capacity building and training, the momentum the training program built, and the clear benefits it is generating, it is neither advisable nor desirable to attempt fundamental change. However, CREL has an opportunity to leave behind a well-developed understanding of training accomplishments, needs, and plans for follow on training and capacity building of key target groups. CRELLink has a wealth of relatively untapped data about training and CREL is conducting surveys of livelihoods impact. These could be assessed to determine the correlation between training and livelihood impact addressing questions such as:

- What is the correlation between specific training and how many trainings and income increase?
- What are the limiting factors besides training to increased income?
- What IGAs are working well in various regions?

The evaluation team finds that the most valuable opportunities for capacity building will be those that support the transition to a post-CREL program, focusing on the key outcomes of CMO sustainability and GoB support to them.

Communications

CREL has an important opportunity to adopt innovative communications technology and match it with a communications approach that strategically supports CREL outcomes:

- GoB collaboration and buy-in,
- Policy adoption and implementation,
- Generating public awareness and support for eco-tourism, handicrafts, and other livelihood activities,
- Building public awareness of and resistance to politically powerful drivers of illegal resource extraction, and
- Support CMO financial sustainability through fund-raising efforts of the proposed co-management foundation among the public and corporations.

Specific opportunities will have to be defined by CREL staff and partners based on component objectives and priorities, and time remaining versus time needed to adopt new communications approaches.

Examples of how modern communications technology might be used in CREL include:

- Social media support for ecotourism: tourists, CREL staff, CMOs could be encouraged to use Facebook, Twitter, TripAdvisor and other outlets to increased awareness of tourism opportunities.
- Host a major media event to mark a co-management milestone such as the authorization of the new PA rules where senior GoB officials were recognized for their contributions. Use interactive technologies to make the event more engaging than standard 'talking heads' approach.
- Create an SMS application to support CPG, forest guards, and others with real time, georeferenced reports of illegal resource extraction.
- Television news could be directed to and supported in reporting cases of illegal resource extraction.

Inter-ministerial coordination

CREL could pilot landscape level integrated resource management. In the Northeast, given widespread concern about wetland siltation and recognition of the watershed drivers of that, CREL has an opportunity to implement the Hakaluki Hoar management plan, which was based on an inter-ministerial process. In the southwest, concern for storm surge protection and salt water intrusion is a solid foundation for inter-ministerial work with Sunderban ECA stakeholders on a landscape level, integrated co-management programs. These opportunities could be initiated now through a specific CREL subproject activity and implemented by one of CRELs sub-recipients. USAID could fund a stand-alone, follow-on transition grant at the end of CREL, if the project was showing promise.

Opportunities for Continuing USAID Support for Co-Management in Bangladesh

Funded Extension of CREL

The evaluation team concludes that the momentum CREL has achieved in areas such a policy development and building GoB and CMO organizational capacity during PY3, is not likely to have sufficient time to realize its potential by the end of CREL. Especially, given that an appropriate closeout process should be underway no later than April 2017. While the team supports a handover of most field operations by the end of September 2017, there are several CREL components that it believes the national sub-recipients are not well suited or prepared to conduct. This includes policy development, GoB capacity building, and support to USAID functions such as the recent COMACON conference. The specific rationale for this conclusion is based on the following:

- At the onset of the project, the FD, citing internal GoB requirements and reflecting a disagreement with USAID over direct funding of the department, declined to collaborate fully with CREL. Resolution of this problem took a large amount of time for CREL senior managers and experts and full collaboration was not achieved until well into PY 2. This delay had a substantially impacted several important CREL results areas and an additional year for CREL will help correct these shortfalls and cement USAID's investment in the project. Given the short time frame extending CREL will allow time to bring to take advantage of the momentum on key fronts (discussed below) that has been gained since the TPPs have been signed.
- CREL's policy development activities, most of which began before CREL, are beginning to show real progress. While key policy documents are now out of CREL's direct management control, there is still much CREL can do to support the difficult and time consuming process of enacting these policies and the substantial work of initiating policy implementation. An additional year of CREL, with a focus on finalizing priority policy objectives and initiating work on implementing them, would go a long way to secure the desired co-management policy outcomes.
- CREL's success in strengthening CMOs has created a unique opportunity in the decade-long search for CMO financial sustainability. Many CMOs are increasingly able to plan and manage operations and finances and are close to being fully sustainable, except for the lack of an ongoing source of financing. The evaluation team identified several opportunities for sustainable CMO financing, more than one of which should be implemented to support various types of CMOs. The evaluation team concludes that an extension will be needed to reach consensus on the mechanisms, establish them, and initiate operations.
- While CREL's livelihood program has been a standout accomplishment there is no institutional mechanism in place to continue support and build on CREL's success. While transition grants are a logical choice for resolving this problem, an additional year for CREL will reduce the uncertainties that these mechanisms will be in place and functioning effectively when CREL support ends.

While a one-year extension may not be sufficient to accomplish all of CREL's desired outcomes, the promise of achieving an effective co-management policy environment and at least partial resolution of sustainable CMO financing would be a substantial payoff for the additional USAID investment. It would

also fundamentally change the co-management context in Bangladesh and open novel opportunities for subsequent USAID investment in climate resilient livelihoods and natural resource co-management.

Transition Grants

CREL has successfully built the capacity of three national NGOs who are now certified and qualified to receive substantial direct funding from USAID. The team recommends that USAID quickly start the process of awarding grants to these NGOs to take over field operations in all four CREL regions, focusing on ongoing support to CMOs and livelihoods activities. In this too, the evaluation team concludes that another year for CREL would help secure USAID's investment in these programs.

- The award process and mobilization may require a year or more. CREL can provide support to these NGOs along the way and progressively hand over responsibility for implementing field operations. However, the evaluation team believes it would be risky for USAID to assume that the successful completion of the handover of field activities to the NGOs can be accomplished by September, 2017. An extension would serve as a fallback mechanism should the NGO implementation process not meet expectations.
- The national NGOs are not well suited to implement USAID's program with the GoB in ongoing policy development and departmental capacity building. CREL would continue to be the principle point of contact with the GoB national offices on policy development and GoB capacity building.
- Transition grants could also be used to pilot activities that this evaluation has identified, including: co-management involving inter-ministerial cooperation in a select landscape, and establishing a non-project mechanism for sustainable funding of CMOs.

Post CREL International Technical Assistance

In the event that the GoB requests continued USAID support for co-management beyond the scope or capacity of the national NGO program, USAID could consider awarding a relatively small, multi-year contract through an acquisition process to provide policy and cross-cutting capacity building support to the GoB, NGO co-management activities, and the USAID environment and natural resources program more broadly.

4. RECOMMENDATIONS

4.1 Indicators Falling Short of Plan

CREL and USAID should acknowledge that there will be a shortfall in meeting PY 4 and 5 targets for two Intermediate Results:

- IR 4: Number of people with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance, and
- IR 3.1: Funding leveraged from public and private sources contributing to improved natural resource management.

USAID and CREL should avoid the temptation to increase spending to accomplish these results which would require diverting scarce project resources from more important activities such as policy development, communications support redesign, and capacity building. The evaluation team recommends that USAID and Winrock work together to devise new targets that balance priorities between activities and can be feasibly reached.

4.2 Question 1: Integrating Learning from Past Activities

4.2.1 Co-management is working well and appears to have distinct advantages over previous approaches in the sector.

The experience under CREL has demonstrated to the evaluation team, beneficiaries, staff, and government officials that the overwhelming consensus is that co-management is a valuable tool to involve communities in natural resources management.

Recommendation: USAID should continue its support for co-management. The advances made during CREL and over the past 18 years have been substantial. Co-management approaches have been largely accepted by the GoB and households living in and near the protected areas. However, this progress could be undone without external resources to continue to institutionalize co-management within the government and to secure financial sustainability of the CMOs.

4.2.2 Formal collaboration is a necessity, not an option.

The failure of GoB-CREL-USAID collaboration at the outset of CREL significantly hampered progress. CREL was caught in the middle of an institutional misalignment between USAID and the GoB. The evaluation team understands that this problem has continued more recent USAID project starts.

Recommendation: USAID, the American Embassy, and ranking officials of the GoB should formally reconcile the TPP and DOAG mechanisms to avoid repetition of the TPP problem that CREL faced. In addition, the issue of timeliness of TPP execution should be mitigated by USAID maintaining close working relationships with counterpart implementing agencies during project design.

Recommendation: USAID and the GoB Ministry of Planning CREL should take full advantage of the signed TPP to assess and plan activities for the remainder of the program that meet mutual priorities.

4.2.3 Environmental governance initiatives like co-management need a coordinated inter-ministerial approach

Inter-ministerial coordination is not the norm for GoB agencies neither between ministries nor in some cases even within a single ministry. At the Upazilla level the administrative branch of the GoB serves as a fairly effective coordinator.

Recommendation: For the remainder of CREL and during the CREL follow-on activities USAID's co-management program should emphasize inter-ministerial cooperation at the Upazilla level and work on activities such as integrated management plans. At the national level, inter-ministerial coordination is showing promise through TPP steering committees and on some discrete policy issues. USAID should

build on these opportunities and forgo more ambitious efforts to obtain inter-ministerial coordination until there is a clear demand for this from the GoB.

4.2.4 CMOs need a strong purpose and financial support

CREL has made substantial strides in building the capacity of the CMOs and creating and understanding of and appreciate for their worth within the GoB. While there is promise that a partial solution for financial sustainability of CMOs will be in place by the end of CREL it is nearly certain that this will fall short of the objective of fully ensuring financing for the majority of CMOs supported by CREL.

Recommendation: CREL should continue and refine its efforts in building CMO capacity. This is further addressed below.

4.2.5 The greatest threats to forest PAs come not from the neighboring poor, but from powerful socio-political interests

The evaluation team heard numerous examples of powerful elite continuing to illegally extract resources from protected areas. Other than in a few indirect ways USAID's design for CREL did not address this issue.

Recommendation: During the remainder of CREL the implementing partners should work on potential solutions that, without increasing risk of harm to project staff or stakeholders, might be piloted during CREL and expanded in a follow-on program. USAID Bangladesh's Democracy and Governance program and other agencies are working on corruption issues and may have useful approaches. The power of modern technology and media is one promising avenue.

4.3 Question 2: NRM Institutional Training and Capacity Building

Considering the magnitude of the resources CREL invest in training and capacity building, it was not solidly based on a foundation of training strategy, plans, and (for some components) adequate objective measures of success, results monitoring, and iterative process improvement.

Recommendation: The evaluation team recommends that CREL do a stock taking of its training program, including an assessment of the outcomes of various elements of the training. The stock taking would likely identify some trainings, such as generic awareness raising, that have outlived their usefulness and the resources could be better used on building capacity for sustainability. It is necessary to build the capacity of the GoB implementing partners' capacity to train their own staff in the key elements of co-management and enable them to build the co-management capacity of CMOs. CREL could expand its co-management master trainer program and ensure that the master trainers have the financial and institutional support they need to apply what they've learned. Building stakeholder capacity to implement the new set of co-management policies, rules, and guidelines is a priority. CREL should leave the follow-on activities with a well-structured training strategy based on this stock taking to facilitate the path forward.

4.3.1 CMO Capacity Building

CREL has made substantial progress in building the capacity of CMOs. CMOs have made steady progress during the project in being able to handle planning, budgeting, financial management and activity implementation. Unfortunately, although some progress has been made, CREL and the GoB have not yet come up with a demonstrable plan for sustainable CMO financing. In addition, several of the policy initiative, e.g., PA Rules, Wetlands Leasing Policy, and ECA Rules, have important elements that will enhance the legal standing and financing for CMOs.

Recommendation: CMOs will continue to need ongoing organizational capacity training. A mechanism for providing ongoing capacity support to CMOs should be put into place before the end of CREL. There are multiple ways to do this. Building GoB capacity to provide these services is the obvious choice, but it is not straightforward nor is it evident at this point that the GoB would embrace this

responsibility or have the resources to undertake it. CREL and the GoB should make a concerted effort to move in this direction. At the same time, USAID should consider alternative mechanisms and sources of support for continuing its funding for CMOs.

The GoB, USAID, and CREL need to make a focused effort to address sustainable financing of the basic CMO operating and program funds. It is likely that a variety of business models will be needed for sustainable (non-donor) funding of the diverse types of CMOs. CREL and its partners should assess the feasibility of and develop multiple lines of financing. These range from routinized GoB funding, to cooperative like business ventures, to ecotourism revenue sharing.

4.3.2 Government of Bangladesh Training and Capacity Building

CREL's efforts to build capacity, hampered by the TPP and the failure of early collaboration, were not developed strategically to support a cadre of field level officers that are needed to support CMO operations and implement policies, rules, and regulations that are in the pipeline. While an optimum level of government capacity will not be achievable under CREL, it is not too late to begin a strong initiative to lay the foundation for this in CREL follow-on activities.

Recommendations: A clear set of objectives and plans for identifying needs and developing GoB organizational capacity building on ongoing efforts and focused on field managers should be jointly prepared. Indicators should be developed and tracked that look at training effectiveness, primarily targeting the different behaviors that the training programs are targeting. CREL should also continue to focus on introducing a co-management curriculum with a few key higher education institutions, especially those that are closely aligned with the line ministries. The evaluation team further suggests that CREL work closely with the relevant human resources offices of the GoB to ensure that in-service training plans include co-management modules where needed.

4.3.3 Communications

CREL's communications activities are not strategically aligned with program objectives—policy, public awareness, and GoB buy-in—and do not employ creative, innovative, or modern communications tools. Communications can and should be a strong pillar fully integrated with and supporting CREL's regional offices with regionally defined programs and collaborating with the projects.

Recommendation: CREL should critically assess current communications objectives and strategy and redesign the communications plan, making greater use of creative messaging and innovative communications methods and channels to be more strategic and align with key project objectives.

4.4 Question 3: Livelihoods-Impact on Protected Areas, Income and Household Climate Resilience

Perhaps the most significant distinguishing element of CREL as compared to its predecessor USAID CBNRM projects is its livelihoods program. It is remarkable in terms of the diversity of activities, substantial outreach, and success in accomplishing meaningful change in poor household livelihoods. The evaluation team is concerned that without a sound institutional structure in place at the end of CREL, most likely funded by USAID, the gains made will be quickly reversed and the beneficiary households will renew their former illegal resource extraction.

Recommendations: The evaluation team's overall recommendation is that USAID recognize that IGAs introduced by CREL are a valuable pillar of co-management of PAs in Bangladesh and should be continued. This includes finding a viable mechanism for continuing support for livelihoods beneficiaries and IGAs after September 2017.

Related recommendations include:

- CREL should identify and increase participation in the livelihoods program of persons whose primary source of income is resource extraction, most of whom will be men.

- Men may not find the current set of livelihood activities to be sufficiently lucrative and CREL should seek to add IGAs that meet the needs of this target group.
- As women gain experience with income generation, their demand for new IGAs will increase and CREL should examine new IGAs to meet the increase demand.
- CREL should expand its SLG program, as financing is a key limiting factor for successful IGAs.
- CREL should expand the LSP program to keep pace with the growing number of livelihood participants engaging in agriculturally-related activities. This should include an assessment of the effectiveness of LSPs, application of lessons learned, and revised approaches as needed.

Recommended Priority Co-Management Policies

- Forest PA Rules
- Wetlands Co-Management Guidelines
- Wetland leasing policy
- ECA policy/rules on co-management

4.5 Question 4: Integration of Women and Vulnerable Populations

CREL has exceeded plans for integration of women in its livelihoods program. This is to be expected given the design of the livelihoods activities which largely avoided commercial agriculture and because of the planned employment opportunities in restoring degraded PA forest land (which would be male oriented) was blocked by the FD because of the TPP impasse with the FD who excluded significant CREL activities from within the boundaries of the PAs.

Recommendations:

- While retaining strong female participation in livelihoods program, take steps to increase male resource extractor participation by, among others, including IGAs such as employment generation and commercial agriculture.
- Continue to empower women in their existing leadership positions in CPG, NS and CMC by providing leadership trainings and speaking opportunities in order to help build confidence.
- Set up a mechanism to measure women’s empowerment in CMOs, CPGs, and other livelihoods groups, monitor change in women’s empowerment, and take steps to improve it when problems are detected.
- Increase outreach to men about gender issues, as changes in men’s perceptions of the value of women are crucial in raising women’s status. Place greater emphasis on the role of women in co-management and CMO leadership from the Community-Based Organization (CBO) level up.

4.6 Question 5: Engaging National Level GoB Partners and Strengthening Policy Framework

4.6.1 Engaging National Level GoB Partners

The evaluation team’s recommendations on this have been provided above. However it should be noted that the GoB TPP cycle is set to a three-year planning period. The recently signed TPPs have been back dated to allow the GoB to properly align the resources it did provide as part of its participation in CREL. As a result the TPPs will expire prior to the current end date of the CREL period in force.

Recommendations: USAID and the GoB Ministry of Planning should formally reconcile the TPP and DOAG mechanisms to avoid repetition of the problem that CREL faced. USAID should begin discussions now on CREL follow-on activities to prepare for a quick finalization of the TPP when the new activities are awarded.

Recommendation: CREL, USAID, and the GoB should take steps to extend the current TPP to cover at least CREL and if possible the initial year of the CREL follow-on period. This should be the point of entry for discussions regarding the TPP for the entirety of the follow-on period.

4.6.2 Strengthening Policy Framework

Largely due to the delays related to the TPP issue early in the CREL project, policy development work is well behind schedule. In PY 3 and especially in PY 4, the policy dialogue has progressed significantly, although it is too early to determine if this will continue apace. The risk is that the momentum behind the policy development will fall off once CREL is completed. Even if several key policies such as the FD Protect Area Rules and the Wetlands Leasing Policy are approved, there will be much to do in getting the operational details worked out, public awareness raised, and the institutional capacity developed to implement them. It is imperative that CREL and the GoB work effectively with a sense of urgency to complete priority policy goals. A few early policy 'wins' should encourage lagging policy processes, especially if the benefits of these success in the field and institutions are clearly demonstrated.

Recommendations:

- CREL should work with the GoB implementing partners to agree on policy priorities (see text box), a timeline, and a detailed work plan for enacting priority co-management policies and focus further work according to an agreed upon schedule.
- CREL partners should increase and enhance their efforts to move the policy development forward including actions such as embedding CREL staff in ministerial offices, publicizing policy accomplishments to build a constituency for reform, and supporting civil society advocacy for co-management.
- The GoB and CREL should pilot policy implementation at select sites to test implementation modalities and refine them prior to wider scale implementation.
- USAID should be proactive in the policy dialogue using its comparative advantages of access and ability to be heard at the right levels of the GoB to ensure that barriers to the policy approval are addressed and to visibly demonstrate Mission commitment to the reform.

4.7 Question 6: Opportunities to Enhance and Strengthen Program Effectiveness

To protect the investment that USAID has made in co-management under CREL, and increase the likelihood of successful attainment of CREL outcomes, the evaluation team has two interrelated overall program design recommendations to support the key recommendation above. USAID should:

- Provide Winrock with a one-year funded extension to carry on key functions covered by the transition grants and support the effective transition to direct funding of national organizations.
- Start the process of awarding transition grants to eligible Bangladeshi NGOs to initiate projects that complement CREL and build sustainability of key components in a post-CREL environment.

ANNEXES

- Annex I. Additional Data
- Annex II. Evaluation Scope of Work
- Annex III. Evaluation Methods and Limitations
- Annex IV. Data Collection Instruments
- Annex V. Sources of Information
- Annex VI. Bibliography
- Annex VII. Evaluation Itinerary
- Annex VIII. List of Persons Interviewed
- Annex IX. CREL-PE Beneficiary Survey Report

ANNEX I: ADDITIONAL DATA

Table 1.1 CREL Progress toward Standard and Selected Custom Performance Indicators

Figure I CREL Project Site Map

Figure 3.1 Co-Management Organization Structure and Roles

Table 3.3 CREL Sites and CMOs by Region

Table 3.4 Scores from CREL's Organizational Capacity Assessment of CMOs

Table 3.5 Details of the Project Year 3 Organizational Capacity Indicators of CREL CMOs Visited by the Evaluation Team

Table 3.6 CMO and GOB Persons Trained

Table 3.7 Revenue Sharing for Three CMOs in the Sylhet Region

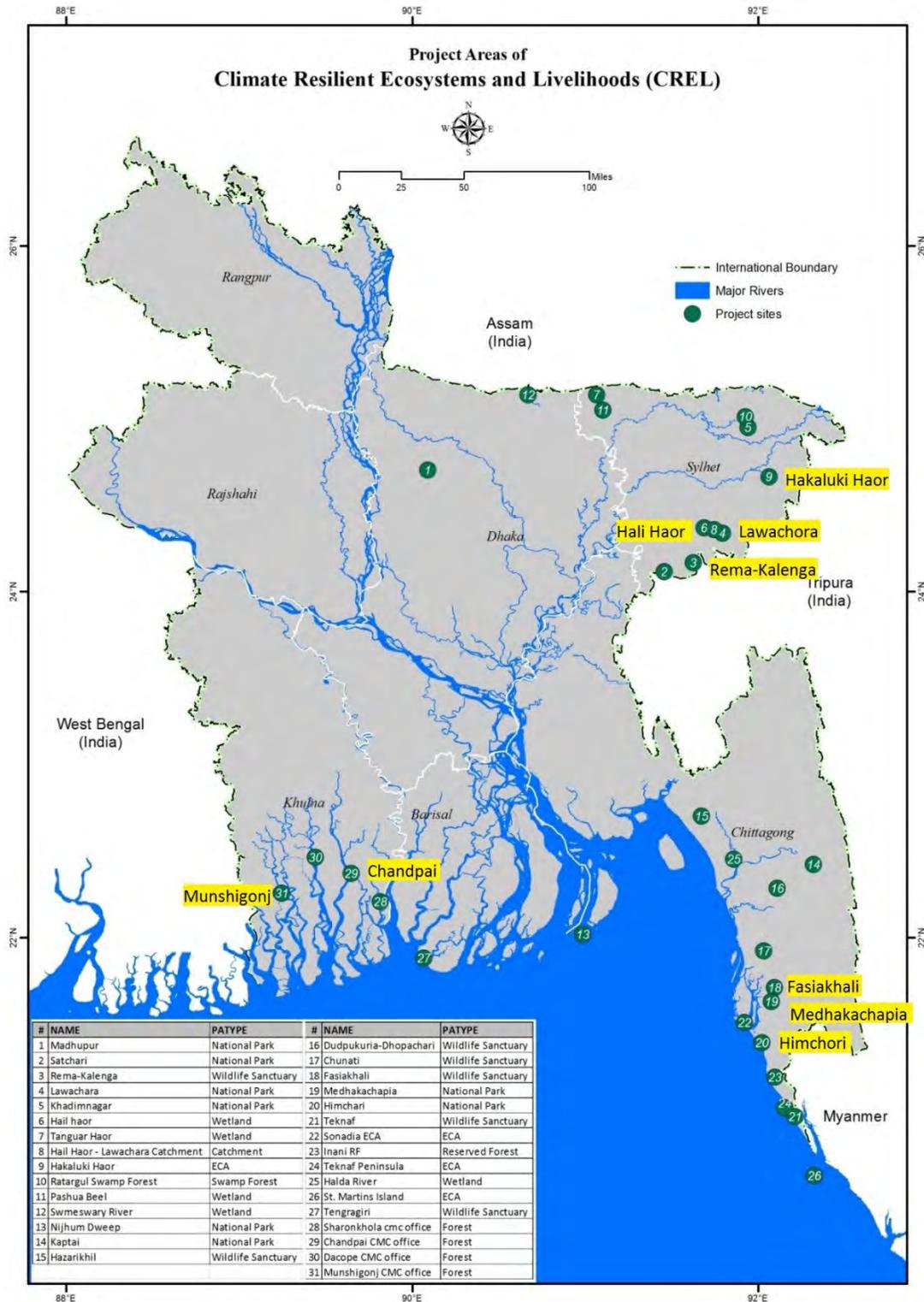
Table 4.1 CREL Livelihoods Program Participants by Trade and Location

Table I.I: CREL Progress toward Standard and Selected Custom Performance Indicators

Table 1.1: CREL Progress toward Standard and Selected Custom Performance Indicators

Indicators		PY 1 (FY 13)		PY 2 (FY 14)		PY 3 (FY 15)		Cum LOP To Date		
Standard Indicators		Target	Actual	Target	Actual	Target	Actual	Target	Actual	% of Tar
DO 4	F4.8-7: Quantity of greenhouse gas emissions, measured in metric tons of CO2e, reduced or sequestered as a result of USG assistance	-	-	300,000	301,781	305,000	308,629	605,000	610,410	101%
	F4.8.2-26: Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance.	-	-	10,000	9,941	15,000	33,931	25,000	43,872	175%
	a) implementing risk-reducing practices (C13)	-	-	-	1,200	10,000	30,343	10,000	31,543	315%
	b) using CC information (C4)	-	-	10,000	8,741	5,000	3,588	15,000	12,329	82%
IR 1	F4.8.2-28: Number of laws, policies, agreements, or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of USG assistance.	-	1	3	3	11	10	14	14	100%
IR 2	F4.8.1-29: Number of person hours of training in NRM and/or biodiversity conservation supported by USG assistance	-	-	12,000	37,154	22,000	38,553	34,000	75,707	223%
IR 3	F4.8.1-26: Number of hectares (ha.) of biological significance and/or natural resources under improved NRM as a result of USG assistance.							-	-	
	a) biologically significant areas already under improved management	698,678	698,678	698,678	698,678	698,678	698,678	698,678	698,678	100%
	b) Other NR areas (Landscape) with inherited sites	-	-	120,000	120,540	30,000	14,675	150,000	135,215	90%
	c) New biologically significant areas added in CREL	-	-	17,000	23,311	26,000	18,773	43,000	42,084	98%
	d) New other NR areas (Landscape) added in CREL	-	-			-	50,110	-	50,110	
IR 4	F4.8.1-6: Number of people with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance.	-	-	25,000	29,900	225,000	149,322	250,000	179,222	72%
Custom Indicators		Target	Actual	Target	Actual	Target	Actual	Target	Actual	% of Tar
IR 1.1	C1: Number of legally defined public land units assigned long-term for co-management.	-	-	1	1	41	9	42	10	24%
IR 2.1	C6: Number of co-management units with improved performance.	-	-	-	-	15	14	15	14	93%
IR 2.2	C7: Number of people receiving training to build resilience to climate change	2,550	10	12,000	25,723	25,000	30,773	39,550	56,506	143%
IR 3.1	C9: Funding leveraged from public and private sources contributing to improved natural resource management	-	-	-	-	\$5 MM	\$3.88 MM	\$5 MM	\$3.88 MM	78%
IR 3.1	C10: Number of co-management organizations realizing improved revenue collection and/or sharing	-	-	3	-	7	1	10	1	10%
IR 3.2	C11: Number of villages implementing actions to sustain and/or enhance resilience of their NR base	-	-	110	22	10	84	120	106	88%
IR 4.2	C13: Number of farmers and others who have applied improved technologies or management practices	-	-	-	1,200	10,000	30,343	10,000	31,543	315%

Figure I: CREL Project Site Map

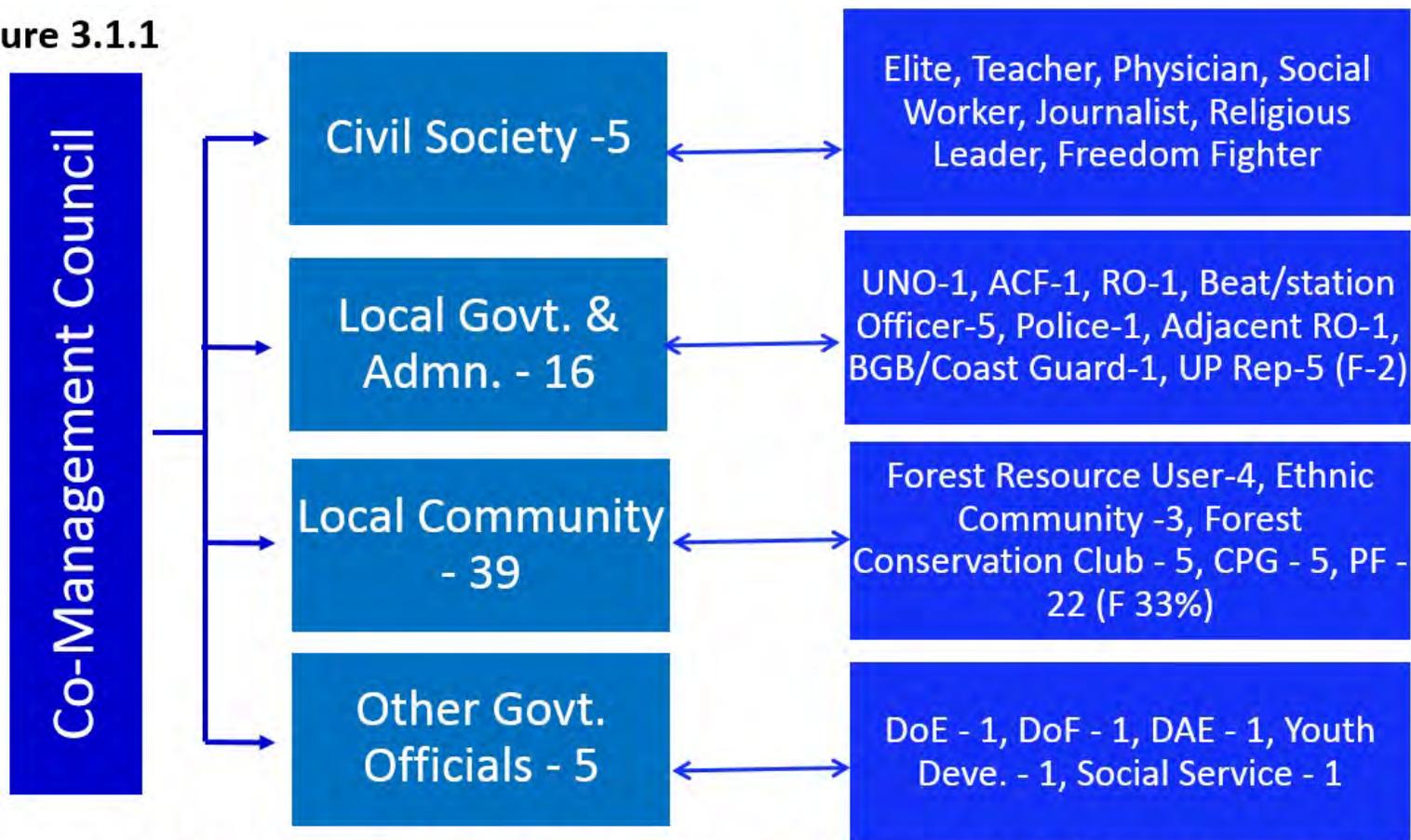


The sites with yellow labels were visited by the evaluation team

FIGURE 3.1: CO-MANAGEMENT ORGANIZATION STRUCTURE AND ROLES

- Figure 3.1.1: Co-Management Council Composition (FD)
- Figure 3.1.2: Co-Management Committee Composition (FD)
- Figure 3.1.3: Peoples Forum Composition (FD)
- Figure 3.1.4: CMO Structure for Wetlands (MoL, DoF)
- Figure 3.1.5: Village Co-Management Group Composition (DoF)
- Table 3.1.6: CMO Structure and Role by Ecotype

Figure 3.1.1

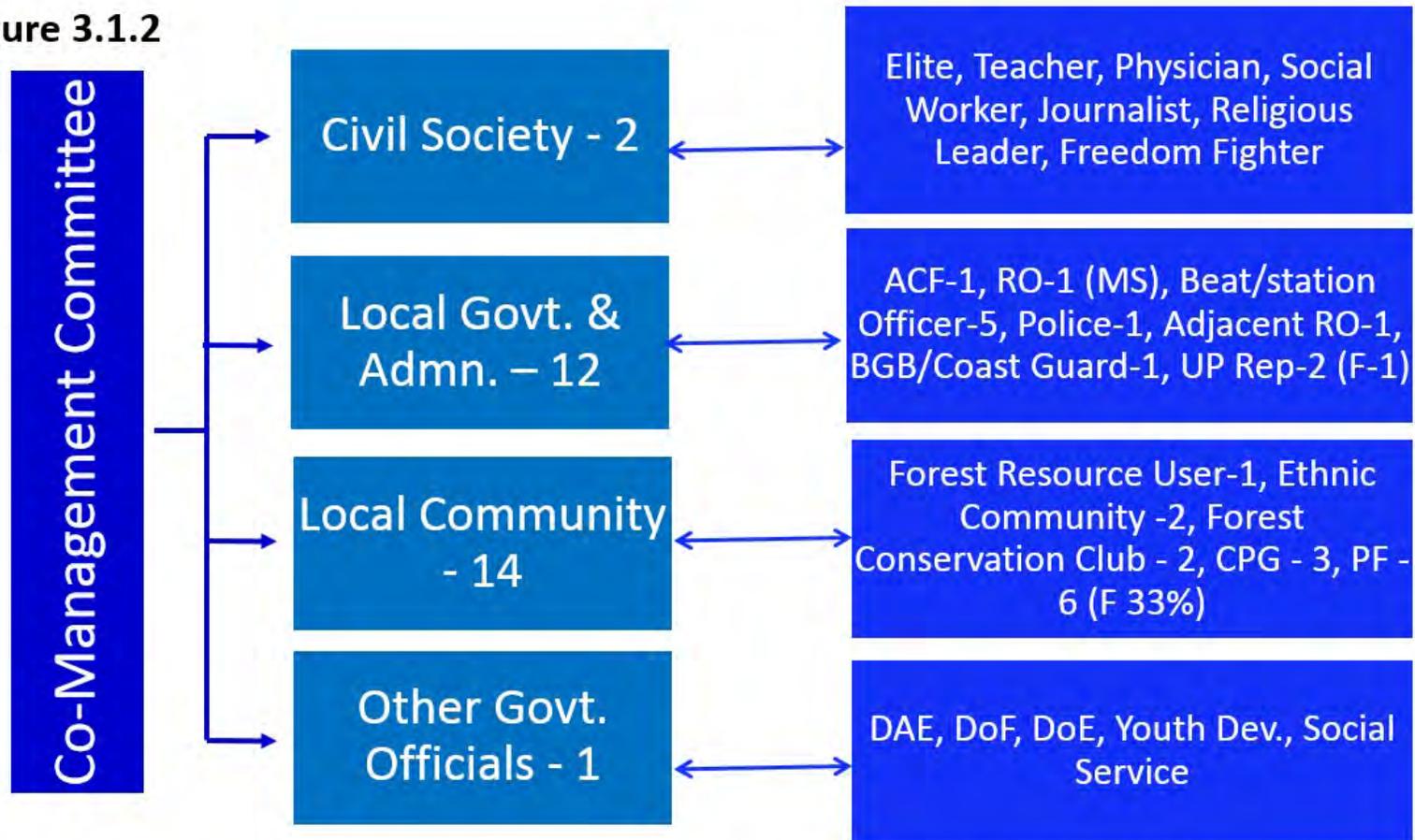


Maximum Member of Co-Management Council: 65 (Female: Min 15)

Advisors:

- Member of the Parliament – 1
- Upazila Chairman – 1
- Divisional Forest Officer - 1

Figure 3.1.2



Maximum Member of Co-Management Committee: 29 (F: Min 5)

Advisors:

UNO – 1

Divisional Forest Officer – 1

People's Forum

Figure 3.1.3

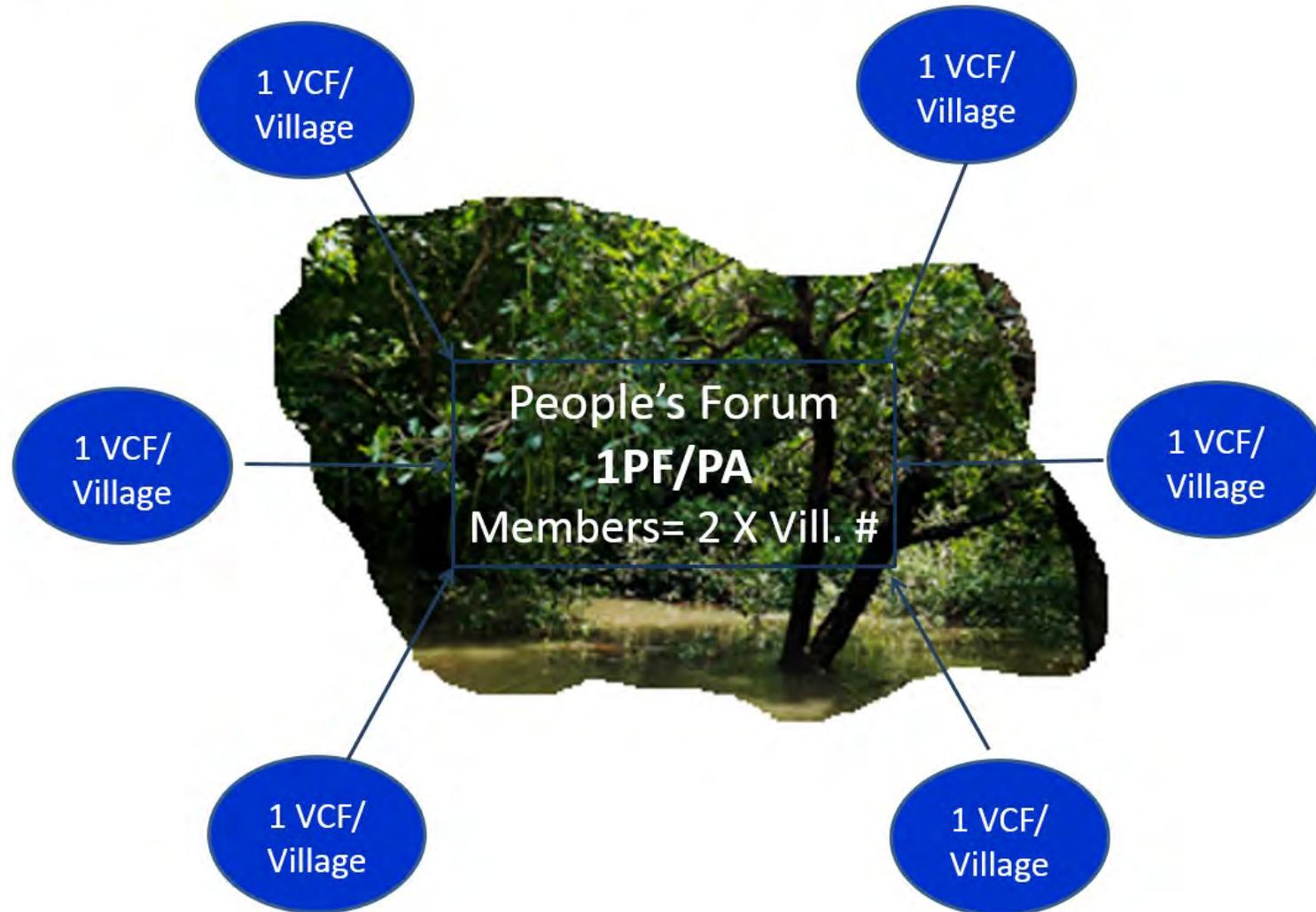


Figure 3.1.4

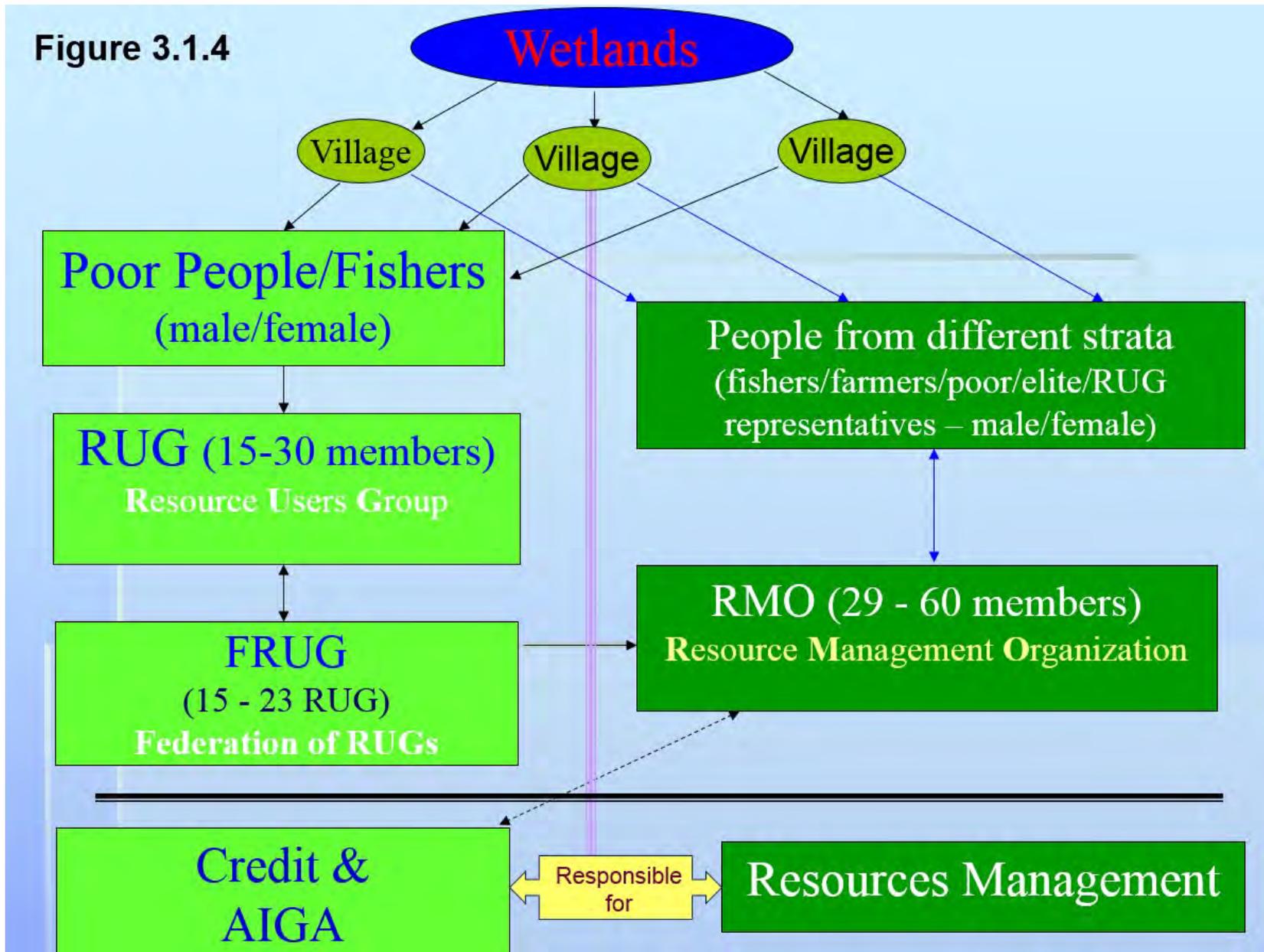
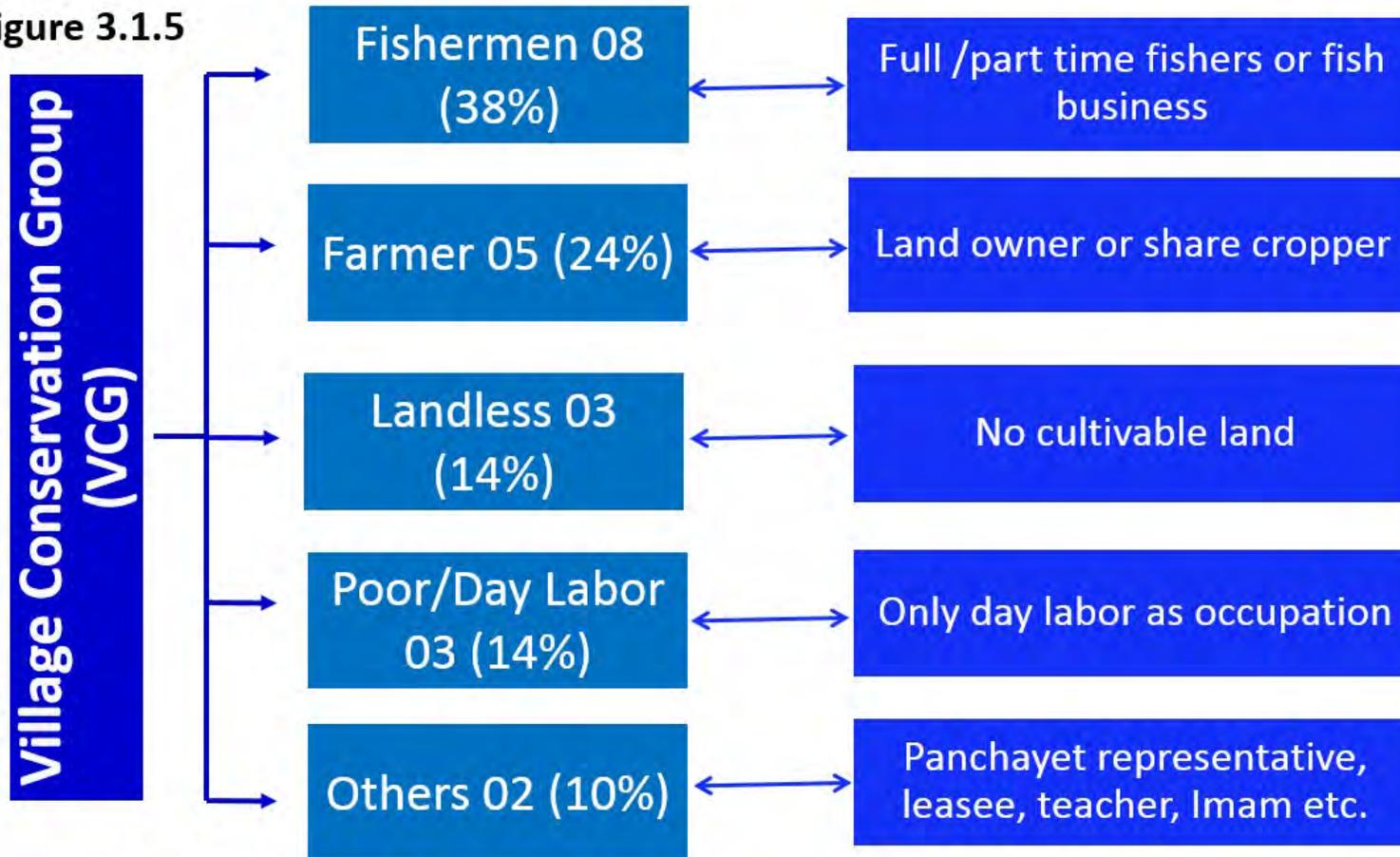


Figure 3.1.5



Minimum Member of VCG: 21

Advisors: 5 – 7 members

- Respective Union Parishad member (Male & Female)
- Head of Panchayet
- Imam
- Non VCG Elite persons

Table 3.1.6: CMO Structure and Role by Ecotype

Forest Protected Areas	Wetlands	Ecologically Critical Areas
<p>Co-Management Council</p> <p>Role: The Co-Management Council is the topmost tier responsible for overall coordination and guidance for Co-Management in Forest PAs. This 65 member Council ensures participation of local government, administration and civil society representatives in planning, approving budget, implementation, monitoring and evaluation of Co-Management plans. The Council acts as a supervisory body of the Co-Management Committee and led by Upazila Nirbahi Officer (UNO) and the concerned Protected Area Range Officer as the President and Member Secretary, respectively. It has representation of 8 government officials, at least 15 female members, federation members of the forest resources user groups, government agencies and local leaders. At least twice a year the Council meets to review the status of CMOs and PA management.</p> <p>Frequency of meetings: Half Yearly</p>	<p>Upazila Fisheries Resource Conservation and Development Committee</p> <p>Role: Monitoring body for conservation activities. They approve the RMO plan allocate budget.</p> <p>Frequency of meetings: Monthly</p>	<p>Upazilla ECA Committee</p> <p>Role: The committee is responsible for Upazila level coordination in ECA management, awareness raising, supervising Village Conservation Groups (VCG) activities, and carry out conservation activities utilizing endowment fund.</p> <p>Frequency of meetings: Quarterly</p>
<p>Co-Management Committee</p> <p>Role: The principal function of the CMC is to organize, coordinate, and develop management actions, regular monitoring and resolve conflicts related to PA core zones and buffer zones. It receives funding (e.g. CREL grants and shared revenue from ecotourism and prepared Annual Development Plans (ADP) for approval by the CM Council. Co-management of the forest PAs includes protection and restoration activities conducted by community voluntarily and paid. The Committee also ensures participation and transparency of the Forest Department and other stakeholders to achieve the PA co-management objectives</p>	<p>Resource Management Organization</p> <p>Role: Preparing plan for conservation and implementation body for wetland.</p> <p>Frequency of meetings: Monthly</p>	<p>Union ECA Committee (multiple)</p> <p>Role: The main responsibility of this 9 member committee include awareness raising, provide local level support in ECA management, supervising and guiding activities of VCGs. It is led by the Union Parishad Chairman and includes government officials in either land administration or agriculture being the Member Secretary.</p>

Forest Protected Areas	Wetlands	Ecologically Critical Areas
<p>and to properly distribute training and in-kind goods and services among the involved stakeholders.</p> <p>Frequency of meetings: Monthly</p>		<p>Frequency of meetings: Bi-Monthly</p>
<p>People's Forum</p> <p>Role: The People's Forum (PF) is formed by election of representatives from villages and local communities within the Protected Area landscape. It comprises 22 members and has an executive committee comprising 11 members for implementing activities. All key stakeholders are represented, particularly women, the youth, lower income households, and important resource user groups with 50% females. PFs elect members who represent community interests in the Co-Management Committee and implementation of Protected Area Co-Management plans. PF provides recommendation, guidance and support for protecting the natural resources and biodiversity of the Protected Area. It assists the Forest Department and Co-Management Committee in implementing tree plantations, protection, reforestation, habitat restoration, nature tourism activities and other management activities.</p> <p>Frequency of meetings: Monthly</p>	<p>Federation of Resource User Groups</p> <p>Role: This group provides interest-based loans created by a revolving fund mechanism for the grassroots wetland people called the Resources Users Groups (RUGs). The loans are provided for developing local small business and enterprises.</p> <p>Frequency of meetings: Monthly</p>	
<p>Village Conservation Forum</p> <p>Role: For each designated village, there is one Village Conservation Forum (VCF) with the participation of forest resource users in village households. The number and size of VCF for a PA vary based on the population, location and degree of forest resource dependency. Two representatives, one male & one female are elected for the Peoples' Forum and often these PF members are commonly represented in</p>	<p>Resource User Group</p> <p>This group is similar to the VCFs of Forest PAs where local people depend and benefit directly or indirectly from the wetland resources. Most of the villagers in these groups are connected to FRUGs for livelihood based loans</p>	<p>Village Conservation Group (multiple)</p> <p>Role: Responsible for planning and implementing conservation activities in ECAs.</p> <p>Frequency of meetings: Monthly</p>

Forest Protected Areas	Wetlands	Ecologically Critical Areas
<p>the Council. The VCF meets every month organized by a local person called Nishorgo Sahayak. According to the principle of Co-Management, these large grass-root groups generate the demand for management of natural resources in the buffer and landscape areas. Socio-economic well-being of the villagers are the main concern of VCF members and thereby, reducing excess pressure on forest resources.</p> <p>Frequency of meetings: Bi-Monthly</p>	<p>and local commercial demands.</p> <p>Frequency of meetings: Weekly</p>	

Table 3.3: CREL Sites and CMOs by Region

No	Region	Ecotype	Co-Management Site	Co-Management Organization	Started by
1	Central	Forest	Modhupur NP	Rasulpur CMC	IPAC
2	Central	Forest	Modhupur NP	Dokhola CMC	IPAC
3	Chittagong	Forest	Kaptai NP	Kaptai NP	IPAC
4	Chittagong	Forest	Kaptai NP	Karnafuli CMC	IPAC
5	Chittagong	Forest	Dudpukuria-Dhopachari WS	Dudpukuria CMC	IPAC
6	Chittagong	Forest	Dudpukuria-Dhopachari WS	Dhopachari CMC	IPAC
7	Chittagong	Forest	Chunati WS	Chunati WS	NSP
8	Chittagong	Forest	Chunati WS	Jaldi CMC	NSP
9	Chittagong	Forest	Hazarikhil WS	Hazarikhil CMC	CREL
10	Chittagong	Forest	Nijum Dwip NP	Nijum Dwip CMC	CREL
11	Chittagong	Forest	Baraiya dhala WS	Baraiya dhala CMC	CREL
12	Chittagong	Wetland	Halda River	Halda River RMO	CREL
13	Cox's bazar	ECA	Sonadia ECA	Moheshkhali ECA Committee	CREL
14	Cox's bazar	ECA	Teknaf Peninsula ECA	Teknaf Peninsula ECA Committee	CREL
15	Cox's bazar	Forest	Fasiakhali WS	Fasiakhali CMC	IPAC
16	Cox's bazar	Forest	Medakchapia NP	Medakchapia CMC	IPAC
17	Cox's bazar	Forest	Himchari NP	CMC	IPAC
18	Cox's bazar	Forest	Inani Forest Reserve	Inani CMC	IPAC
19	Cox's bazar	ECA	St. Martin Island ECA	St. Martin ECA Committee	CREL
20	Cox's bazar	Forest	Teknaf WS	Teknaf CMC	NSP
21	Cox's bazar	Forest	Teknaf WS	Whykong CMC	NSP
22	Cox's bazar	Forest	Teknaf WS	Shilkhali CMC	NSP
23	Khulna	ECA	Sundarbans ECA	Sundarbans ECA Committee	IPAC
24	Khulna	Forest	Sarankhola Site	Sarankhola CMC	IPAC
25	Khulna	Forest	Chandpai Site	Chandpai CMC	IPAC
26	Khulna	Forest	Dacope-Koyra Site	Dacope-Koyra CMC	IPAC
27	Khulna	Forest	Monshigonj Site	Monshigonj CMC	IPAC
28	Khulna	Forest	Tengragiri WS	Tengragiri CMC	CREL
29	Sylhet	Wetland	Hail Haor	Agari RMO	MACH
30	Sylhet	Wetland	Hail Haor	Balla RMO	MACH
31	Sylhet	Wetland	Hail Haor	Baragangina RMO	MACH
32	Sylhet	Wetland	Hail Haor	Dumuria RMO	MACH
33	Sylhet	Wetland	Hail Haor	Jethua RMO	MACH
34	Sylhet	Wetland	Hail Haor	Kajura RMO	MACH
35	Sylhet	Wetland	Hail Haor	Ramedia RMO	MACH

No	Region	Ecotype	Co-Management Site	Co-Management Organization	Started by
36	Sylhet	Wetland	Hail Haor	Sananda RMO	MACH
37	Sylhet	Wetland	Hail Haor	Sreemongol UFDC	MACH
38	Sylhet	Forest	Lawachara NP	Lawachara CMC	NSP
39	Sylhet	Forest	Satchari NP	Satchari CMC	NSP
40	Sylhet	Forest	Rema-Kalenga WS	Rema-Kalenga CMC	NSP
41	Sylhet	ECA	Hakaluki Haor ECA	Noagaon VCG	CBAECA
42	Sylhet	ECA	Hakaluki Haor ECA	Hakaluki VCG	CBAECA
43	Sylhet	ECA	Hakaluki Haor ECA	Halla VCG	CBAECA
44	Sylhet	ECA	Hakaluki Haor ECA	Hakaluki Jagoroni VCG	CBAECA
45	Sylhet	ECA	Hakaluki Haor ECA	Judhistipur-Badedeuli VCG	CBAECA
46	Sylhet	ECA	Hakaluki Haor ECA	Akota VCG	CBAECA
47	Sylhet	ECA	Hakaluki Haor ECA	Borodol VCG	CBAECA
48	Sylhet	ECA	Hakaluki Haor ECA	Borolekha Upazilla ECA Committee	CBAECA
49	Sylhet	Forest	Khadimnagar NP	Khadimnagar CMC	IPAC
50	Sylhet	Forest	Ratargul SCA	Ratargul CMC	CREL
51	Sylhet	Wetland	Someswary River	Someswary River RMO	CREL

Table 3.4: Scores from CREL's Organizational Capacity Assessment of CMOs

Region and CMO	2013 Baseline (complete)	2014 Assessment	2015 Assessment	% Change Baseline/2015	Number of Trainings
Cox's Bazar					
Teknaf CMC	51	50	65	28%	7
Whykong CMC	47	53	65	37%	7
Himchari CMC	47	65	62	32%	6
Fasiakhali CMC	53	56	79	50%	6
Shilkhali CMC	44	56	65	48%	7
Medakacchapia CMC	45	50	79	75%	6
Inani CMC	0	41	27	-36%	6
CB Regional Averages	48	62	74	54%	6.43
Sreemongal					
Lawachara CMC	57	71	82	44%	7
Rema Kalenga CMC	62	53	56	-9%	6
Satchari CMC	55	68	77	39%	6
Khadimnagar CMC	31	41	50	59%	5
Dokhola CMC	0	47	47	0%	7
Rasulpur CMC	0	53	47	-11%	7
SubReg Averages (CMC)	51	55	60	20%	6.33
Barangina RMO	58	88	91	56%	4
Dumuria RMO	41	71	71	74%	2
Balla RMO	50	56	47	-5%	2
Sananda RMO	35	53	56	59%	2
Kajura RMO	14	53	41	188%	2
Agari RMO	16	27	41	156%	2
Ramedia RMO	42	29	41	-3%	2
Jethua RMO	30	24	50	66%	2
SubReg Averages (RMO)	36	40	46	29%	2.00
Sreemongal Regional Averages	44	48	53	21%	4.2
Khulna					
Chandpai CMC	39	38	62	59%	8

Region and CMO	2013 Baseline (complete)	2014 Assessment	2015 Assessment	% Change Baseline/2015	Number of Trainings
Munshigang CMC	38	44	59	57%	8
Sarankhola CMC	26	44	62	134%	8
Dakop-Koyra CMC	32	35	71	122%	8
Khulna Regional Averages	34	40	63	88%	8.0
Chittagong					
Chunati CMC	49	59	74	52%	9
Jaldi CMC	52	41	82	60%	9
Dudpukuria CMC	46	65	53	15%	7
Dhopachari CMC	52	59	68	30%	8
Kaptai CMC	52	50	38	-26%	1
Karnafuli CMC	55	50	32	-41%	1
Hazarikhil CMC	0	18	38	117%	7
Nijhum Dweep CMC	0	18	41	134%	7
Baraiya dhala CMC	0	21	50	143%	5
Chittagong Regional Averages	51	42	53	4%	6
Project Averages	44	48	61	38%	6.1

Table 3.5: Details of the Project Year 3 Organizational Capacity Indicators of CREL CMOs Visited by the Evaluation Team

Name of CMOs/RMOs	No of Meetings & Members' Attendance			Executive Committee Membership			Last Election (Leadership Rotation)	Annual Budget (USD)	Annual Expenditure (USD)	CREL Grants (USD)	Last Annual Genl Mtg Date	No. of VCF	2015 Org Cap Score
	# of Meetings	Members Attending	% Attended	Female	Male	Total							
Teknaf CMC	10	173	60%	5	24	29	22/05/2015	23,906	19,125	23,906	13/10/2015	49	65
Whykong CMC	9	166	64%	7	22	29	22/05/2015	23,902	14,341	23,902	13/10/2015	39	65
Himchari CMC	10	246	85%	4	25	29	14/9/2015	23,905	19,124	23,905	14/9/2015	37	62
Fasiakhali CMC	12	251	72%	9	20	29	12/1/2015	22,546	13,528	22,546	3/9/2015	30	79
Lawachara CMC	11	229	69%	5	25	30	26/10/2013	23,068	13,841	23,068	18/1/2015	30	82
Rema-Kalenga CMC	9	165	61%	3	27	30	30/4/2013	23,874	14,325	23,874	30/4/2013	46	56
Satchari CMC	8	146	70%	6	21	26	17/8/2014	4,774	3,819	4,774	29/12/2014	76	77
Barangina RMO	10	122	81%	3	12	15	5/9/2013	3,871	2,581	3,871	17/12/2014	28	91
Chandpai CMC	9	140	62%	5	19	25	17/5/2015	4,765	3,812	4,765	17/5/2015	36	62

Table 3.6: CMO and GoB Persons Trained in Non-Livelihoods Topics

(see note)

	CMO			GOB		
Region	Female	Male	Total	Female	Male	Total
Central	38	94	132	1	33	34
Chittagong	47	205	252	3	374	377
Cox's Bazar	165	342	507	2	414	416
Dhaka			-	3	23	26
Khulna	67	301	368	2	228	230
Sylhet	31	128	159	5	179	184
Total	348	1,070	1,418	16	1,251	1,267
	CMO			GOB		
Training Type	Female	Male	Total	Female	Male	Total
Climate Change Adaptation & Mitigation	96	226	322	3	339	342
Climate Change and NRM	112	282	394	9	374	383
Climate Resilient Livelihood	5	33	38			-
Institutional and Financial management	108	376	484	2	313	315
NRM and Bio-diversity Conservation	26	153	179	2	225	227
Total	348	1,070	1,418	16	1,251	1,267

Note: This is a count totaling attending trainings. Some individuals may have attended and received multiple trainings.

Source: Crel-Link report, Dec 13, 2015

Table 3.7: Revenue Sharing for Three CMOs in the Sylhet Region

Name of PA	Financial Year (Jul - Jun)	Entry Fee Collected (USD)	Received from FD (USD)	When Received (mm-yy)	Spent by the CMC (USD)	Expenditures
Lawachara National Park (LNP)	2011 - 2012	32,786	16,309	January, May, July 2013	17,510	Staff salary, travel, meeting expense, computer repair, entertainment, daily labor, office supplies, bank charges, dormitory and toilet repair, electric bill, Tax&Vat, CPG honorarium, ticket book printing, CPG materials purchased, festival allowance, trail repair, expense of mass gathering.
	2012 - 2013	28,187	13,980	April 2014	14,026	
	2013 - 2014	30,849	15,453	March, June 2015	12,868	
	2014 - 2015	33,905	16,943		-	
LNP Total		125,727	62,685		44,404	
Satchari National Park (SNP)	2011 - 2012	11,610	5,859	August-12	5,859	Supervisor salary, AIG support, fencing, sapling distribution, stage renovation, picnic spot renovation, shed renovation, signage, emergency assistance, CMC honorarium, CPG stipend, stationary, audit fee, wildlife rescue, exposure visit, etc.
	2012 - 2013	2,133	6,106	September-13	6,106	
	2013 - 2014	9,419	4,710	December-14	4,347	
	2014 - 2015	7,353	3,676		-	
SNP Total		40,515	20,350		16,312	
Rema-Kalenga Wildlife Sanctuary (RKWS)	2011 - 2012	396	-		-	
	2012 - 2013	143	63	August-13	63	Ticket Supervisor's salary
	2013 - 2014	107	126	December-14	126	Ticket Supervisor's salary
	2014 - 2015	145	-		-	
RKWS Total		791	189		189	

Table 4.1: CREL Livelihoods Program Participants By Trade and Location

Region - Sites	Fish Culture		Handicrafts		Horti-Vegetable		Poultry-Livestock		Other		Grand Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Chittagong											
Chunati WS					29	21				4	54
Dudpukuria-Dhopachari WS		11	90	1	279	445	71	52		5	954
Halda River Basin		207			2	94	15	9			327
Hazarikhil WS					5	77		1			83
Kaptai NP			161	1	316	625	137	145	11	14	1,410
Nijhum Dweep NP	49	17			63	3	12	7			151
Total Chittagong	49	235	251	2	694	1,265	235	214	11	23	2,979
Cox's Bazar											
Fasiakhali WS			257	5	635	72	80	6		3	1,058
Himchari NP			170	15	739	141			4	4	1,073
Inani Reserved Forest										8	8
Medakachapia NP			279	8	302	32	63	3	6	5	698
Teknaf WS			823	88	1,075	1,127	187	61	1	42	3,404
Total Cox's Bazar			1,529	116	2,751	1,372	330	70	11	62	6,241
Khulna											
Chandpai	2,441	811	34		415	62	1,503	132	11		5,409
Dacope-Koyra	3,310	597			3,512	522	1,001	290	177	49	9,458
Munshigonj	4,931	433	113	2	2,555	162	809	8	42	28	9,083
Sarankhola	1,497	532			344	316	369	33	3		3,094
Total Kulna	12,179	2,373	147	2	6,826	1,062	3,682	463	233	77	27,044
Sylhet											
Hail Haor	37	240	3		124	231	371	87			1,093
Hakaluki Haor	33	61			199	490	387	267			1,437
Khadimnagar NP	14	34			89	53	625	311			1,126
Lawachara NP	75	91	2	1	384	404	110	75	22	27	1,191
Rema-Kalenga WS	70	210			67	323	464	287			1,421
Satchari NP	177	70			357	176	400	55			1,235

Region - Sites	Fish Culture		Handicrafts		Horti-Vegetable		Poultry-Livestock		Other		Grand Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Total Sylhet	406	706	5	1	1,220	1,677	2,357	1,082	22	27	7,503
Grand Total	12,634	3,314	1,932	121	11,491	5,376	6,604	1,829	277	189	43,767

Annex II: Evaluation Scope of Work

Scope of Work (SOW) for the Climate-Resilient Ecosystems and Livelihoods (CREL) project Mid-Term Performance Evaluation

USAID/Bangladesh Economic Growth Office Environment Team

PROJECT TO BE EVALUATED	
Project Name	Climate-Resilient Ecosystems and Livelihoods (CREL)
Cooperative Agreement Number	Agreement No. AID-388-A-12-00007
Original Project Dates	October 2012 - September 2017
Original Funding	\$35,546,884
Implementing Partner	Winrock International

V. EVALUATION METHODOLOGY

The M&E contractor for the USAID Bangladesh Economic Growth (EG) office, Accelerating Capacity for Monitoring and Evaluation (ACME), will carry out this evaluation. The ACME contract has provisions for conducting 12 performance evaluations for the EG office and CREL mid-term evaluation has been included and budgeted. Based on the SOW from USAID, ACME will recruit and manage the evaluation team. The evaluation work plan and evaluation protocol drafted by the evaluation team will be reviewed by USAID and approved by ACME COR.

The evaluation team will work in close consultation with USAID/Bangladesh. Prior to the start of data collection, the evaluation team must develop and present an evaluation design methodology that will detail the data collection and analysis method that will be used to collect data for each of the evaluation questions. This will include details on what procedures are proposed to be used to collect and analyze qualitative and quantitative data from such methods as key informant interviews, stakeholder interviews/mini-surveys, and focus group discussions with project beneficiaries. The evaluation design methodology will present how the evaluation will weigh and integrate qualitative data with quantitative data from the Monitoring and Evaluation (M&E) plan and project performance records. The evaluation team should develop the best evaluation design methodology in light of the evaluation questions, timeframe, budget, data collection requirements, quality of existing data sources, and potential biases. It is recommended that the evaluation team consider a mixed-method evaluation approach. The methodology should combine a review of quantitative data and application of qualitative and quantitative evaluation techniques to obtain information, opinions, and data from relevant stakeholders. The approach should be participatory, involving project beneficiaries as much as possible in the fact finding, as well as iterative (i.e., being flexible enough to adjust to opportunities and constraints) so as to integrate a mixture of methods and learning at various stages of the evaluation. The evaluation methodology should yield gender disaggregated data and reflect attention to gender relations such as the participation of women in livelihood activities, beneficiary training, and co-management institutions.

Performance evaluation data collection methods may include:

- **Literature Review:** Readily available published and unpublished literature on the project will be reviewed. This information may include but is not limited to quarterly and annual activity progress reports, performance monitoring and evaluation plan, baseline reports and analysis, etc. These documents will provide valuable background on project design and progress.
- **Performance Monitoring Data:** Analysis of performance or program data is an excellent source of data and can be used to assess how the project is performing and helps answer questions on progress of the project toward its objectives.
- **Structured Surveys:** These are important data collection techniques for performance evaluations. They can include household surveys which can provide socioeconomic and

demographic information over large areas. These surveys can provide data on important aspects of income generation. Structured surveys provide robust data for more complex analysis, especially when compared to baseline data.

- **In-Depth Key Informant Interviews (KII):** In-depth KIIs are intensive individual interviews with a selected group of respondents to dig deeper into their perspectives and opinions on a particular question or idea. The KIIs are intended to provide more detailed information than available from other data collection methods and will help examine program processes and outcomes.
- **Focus Group Discussions (FGD):** FGD (small group of 6 to 10 people) can be used to lead open discussion through a skilled moderator to gather semi-structured qualitative data. The preselected participants will discuss issues and concerns based on a list of key items drawn up by the moderator. No more than 10 questions will be addressed by a group. These sessions will encourage free flowing discussion about the activity.

Methodological limitations and challenges for this evaluation are expected to include:

- Ensuring that samples of interview sources are sufficient to support evaluation findings;
- Taking systematic actions to counter any biases in (a) reporting by data collection sources and (b) interpretations of collected data by the evaluation team; and
- Ensuring “actual” results can be measured, which will only be possible if data can be gathered and analyzed beyond respondent perceptions.

VI. EXISTING SOURCES OF INFORMATION

The evaluation team should consult a broad range of background documents apart from project documents provided by USAID/Bangladesh. USAID and the CREL project will provide the assessment team with a package of briefing materials which will include, but not be limited to, the documents listed below. Many of the documents can be found on the Development Experience Clearinghouse (DEC).

- CREL M&E Plan, baseline data, progress towards targets, and DQA reports
- Project quarterly and annual reports, work plans, and management reviews
- The Statement of Work for the CREL project
- Project Indicator Reference Sheets (PIRS)
- USAID/Bangladesh Country Development Cooperation Strategy 2011-2016 (Public version)
- CREL February 7, 2012 Project Appraisal Document (PAD)
- USAID Bangladesh DO4 Performance Monitoring Plan
- CREL technical assessments and reports
- CREL success stories

Outside relevant documents include:

1. GIZ and Center for Natural Resources Studies. Study on Co-management for Good Governance in Natural Resources Management (NRM) in Bangladesh. November 2014. Bangladesh.
2. U.S. Agency for International Development. Performance Evaluation of the Integrated Protected Areas Co-management (IPAC) Project: Democracy and Governance components. September 2014.
3. Decosse, Philip J., et al (editors). *Protected Area Co-Management Where People and Poverty Intersect: Lessons from Nishorgo in Bangladesh* (<http://www.nishorgo.org/?id=48>). 2012.

VII. EVALUATION TEAM COMPOSITION

The evaluation team must be qualified and be sufficiently respected so that its recommendations will be authoritative and influential. The evaluation team should be composed of four consultants with significant experience in environmental governance, particularly CBNRM, and evaluation of large, multi-year international natural resource management projects. The team members will also include one

Bangladeshi national with extensive experience and contacts in the natural resources management sector in Bangladesh.

Team Leader

The team leader should be a seasoned international evaluation leader with at least a Master's degree (PhD, preferred) and significant experience in leading an international team of natural resource management specialists in a developing country context and at least eight years of experience in conducting evaluations or assessments of natural resource governance programs. S/he must have a demonstrated record of providing overall leadership and be culturally sensitive particularly when interacting with a range of stakeholders, from high level government officials to community members. S/he will lead the design of the evaluation methodology, data collection instruments, and data analysis plan; lead overall coordination of the evaluation process including data collection and analysis; provide overall thought leadership in developing and consolidating the key evaluation findings and recommendations to USAID/Bangladesh; and coordinate the process of assembling the findings and recommendations into a high quality report. The ability to produce a high quality evaluation report in English is essential.

Local Consultant

The local consultant must have a Master's degree in natural resource management and at least eight years of experience working on natural resource management projects with international organizations, civil society, or the GOB. S/he will provide key insight into the local Bangladesh context, coordinate activities, arrange meetings, support data collection and translation, and provide input into key findings and recommendations.

Subject Matter Specialists

The additional two team members (one local and one international technical specialist) must have a Master's degree, at least five years of experience, and a combination of the following skills:

- Livelihoods development, particularly market driven livelihood approaches and private sector engagement associated with agriculture/fisheries and non-agricultural livelihood activities.
- Policy development and reform associated with natural resources management (e.g., land tenure, wetland leasing, and community revenue sharing) and agriculture.
- Environmental governance, particularly CBNRM.
- Sustainability of conservation and development projects, including institutional and policy approaches and financial approaches such as government/community co-management and revenue sharing, endowment funds, fee for environmental services, and private sector partnerships.
- Human and institutional capacity development design and evaluation.
- Extensive work in South Asia working with national and local governments.

Conflict of Interest

All evaluation team members will provide a signed statement attesting to a lack of conflict of interest, or describing an existing conflict of interest relative to the project being evaluated. USAID will provide the conflict of interest forms.

VIII. DELIVERABLES

All deliverables are internal to USAID and the Evaluation Team unless otherwise instructed by USAID. Evaluation deliverables are indicated below.

Work plan: The Contractor will prepare a detailed work plan that includes a task timeline, a description of the methodology to answer each evaluation question, team responsibilities, document review process, key informant and stakeholder meetings, site visits, and draft and final report writing.

The work plan will be submitted to the evaluation POC at USAID/Bangladesh for approval no later than the fifth day after commencement of the evaluation.

Evaluation Design Methodology: A table that lists each evaluation question and the corresponding information sought, information sources, data collection sources, and data analysis methods and limitations. The matrix should be finalized and shared with USAID/Bangladesh before evaluation field work starts.

Data Collection Instruments: Development and submission of data collection instruments to USAID/Bangladesh will be during the design phase and updated as needed throughout the data collection process.

Debriefing with USAID: The Contractor will present the major evaluation findings to USAID/Bangladesh before the team's departure from country. The debriefing will include a discussion of achievements and issues as well as any preliminary recommendations. The team will consider USAID comments and incorporate them in the Draft Evaluation Report and debriefing with partners.

Oral Presentation and Debriefing with Partners – The team will present the major findings from the evaluation to USAID partners (as appropriate and as defined by USAID) through a PowerPoint presentation prior to the team's departure from the country. The debriefing will include a discussion of achievements and activities only, with no recommendations for possible modifications to project approaches, results, or activities. The team will consider partner comments and incorporate them appropriately in drafting the evaluation report.

Draft Evaluation Report: The Evaluation Team will analyze all data collected during the evaluation to prepare a draft performance evaluation report and submit the report within 15 working days after the departure of international team members from Bangladesh. The draft report must be of a high quality with well-constructed sentences, and no grammatical errors or typos. The report should answer ALL the evaluation questions and the structure of the report should make it clear how the evaluation questions were answered. The draft report must meet the criteria set forth under the final report section below. USAID will provide comments on the draft report within 10 working days of submission. The evaluation team will in turn revise the draft report into a final performance evaluation report, fully reflecting USAID comments and suggestions.

Final Evaluation Report: The Contractor will submit a Final Evaluation Report that incorporates Mission comments and suggestions no later than ten working days after USAID/Bangladesh provides written comments on the Draft Evaluation Report. The format of the final report is provided below. The report will be submitted electronically in English.

The final report must meet the following criteria to ensure the quality of the report:

- The evaluation report must represent a thoughtful, well-researched, and well-organized effort to objectively evaluate what worked in the project, what did not, and why.
- The evaluation report should address all evaluation questions included in the scope of work.
- The evaluation report should include the scope of work as an annex. All modifications to the scope of work—whether in technical requirements, evaluation questions, evaluation team composition, methodology, or timeline—need to be agreed upon in writing by the technical officer.
- Evaluation methodology shall be explained in detail and all tools used in conducting the evaluation such as questionnaires, checklists, and discussion guides will be included as annexes in the final report.
- Evaluation should include tables, graphs, and maps as necessary.
- Evaluation findings will assess outcomes and impact on males and females.

- Limitations to the evaluation shall be disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
- Evaluation findings should be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay, or the compilation of people’s opinions. Findings should be specific, concise, and supported by strong quantitative or qualitative evidence.
- Sources of information need to be properly identified and listed in an annex.
- Recommendations need to be supported by a specific set of findings.
- Recommendations should be action-oriented, practical, and specific, with defined responsibility for the action.

The total pages of the final report, excluding references and annexes, should be no more than 30-pages. A second version of the evaluation report, excluding any potentially procurement-sensitive information, will be submitted to the Development Experience Clearinghouse (DEC) and disseminated among implementing partners and other stakeholders within ten days following approval from USAID.

The following content should be included in the report:

1. **Table of Contents**
2. **Executive Summary:** Concisely state the project purpose and background, key evaluation questions, methods, most salient findings and recommendations.
3. **Introduction:** Describe the context in which intervention took place, including a summary of any relevant history, demography, socio-economic, status, etc.
4. **The Development Problem and USAID’s Response:** Provide a brief overview of CREL project, USAID program strategy, and activities implemented in response to the problem.
5. **Purpose of the Evaluation:** State the purpose of the evaluation, describe the intended audience, and summarize the evaluation task.
6. **Methodology:** Describe evaluation methods used.
7. **Findings/Conclusions:** Describe and analyze the findings associated for each evaluation question. Make use of graphs and tables as appropriate. Findings should be specific, concise, and supported by strong quantitative and qualitative evidence.
8. **Lessons Learned:** Concisely state the lessons learned.
9. **Recommendations:** The recommendations should be prioritized for each evaluation question. They should be separate from conclusions and be supported by clearly defined set of findings and conclusions.
10. **Annexes:** The Annexes should include the statement of work, documents reviewed, evaluation methods, data generated from the evaluation, tools used, interview lists, tables, references, meeting notes, interviews, and focus group discussions. They should be succinct, pertinent, and readable. The Annexes should also include, if necessary, a statement of differences regarding significant unresolved difference of opinion by funders, implementers, or members of the evaluation team on any of the findings or recommendations. The evaluation design methodology must be presented as an annex to the report.

All quantitative data gathered should be:

1. Provided in an electronic file in easily readable format;
2. Organized and fully documented for use by those not fully familiar with the project or the evaluation; and
3. Owned by USAID and made available to the public barring rare exceptions. A thumb drive with all the data could be provided to the CREL AOR.

The final report will be edited and formatted by the Contractor and provided to USAID/Bangladesh ten working days after the Mission has reviewed the content and approved the final revised version of the report.

IX. TIMELINE & LEVEL OF EFFORT

Work will be carried out over a period of approximately ten weeks, beginning in August 2015, with field work completed in late August or early September 2015 and a final report and close out concluding in October 2015. Below is an estimate of the evaluation level of effort (LOE) by task deliverable. The consultants should plan for holidays, such as Eid-al-Adha, and the possibility of hartals, which can disrupt travel within Bangladesh.

Task/Deliverable	1 Team Leader	2 Technical Specialists	Local Consultant
Preparatory Work			
Comprehensive document collection and review.	3 days	3 days	3 days
Travel to Bangladesh	2 days	2 days	2 days
Team planning meeting and meeting with USAID/Bangladesh.	1 day	1 day	1 day
Development of evaluation work plan (concurrent with document review and initial meetings).	2 days	1 day	1 day
Develop preliminary interview instruments and begin scheduling key interviews.	3 days	3 days	3 days
Data Gathering			
In-country information and data collection. Includes interviews with key informants (stakeholders and USAID staff) and site visits.	18 days	18 days	18 days
Data Analysis/Drafting Report			
Data analysis in preparation for presentations	2 days	2 days	2 days
In-country discussion with USAID and presentation of preliminary analysis and draft of final report.	1 day	1 day	1 day
Presentation of preliminary results and recommendations to the USAID/Bangladesh Mission and relevant stakeholders.	1 day	1 day	1 day
Travel from Bangladesh	2 days	2 days	2 days
Analysis of data and draft of final evaluation report. Draft must be submitted within 15 working days after the departure of international team	10 day	5 days	5 days
Evaluation team has ten days to update and finalize final evaluation report.	2 days	1 day	1 day
Total Estimated Level of Effort	47	40	40

ANNEX III: EVALUATION METHODS AND LIMITATIONS

Evaluation Design Methodology

The purpose of the CREL mid-term performance evaluation (CREL-PE) is to assess the extent to which the CREL project is on track to meet its overall performance goals and to inform management of any challenges or opportunities that warrant adjustments to ensure the achievement of those results. Findings and recommendations were used to gather lessons learned that can be used to improve implementation of the project and inform the USAID/Bangladesh staff and others when designing other relevant projects.

The CREL-PE scope of work requires the evaluation team to address [six evaluation questions](#). In addressing these questions the team assessed progress toward all CREL standard indicators.

To assess the performance of the CREL project, the team implemented a three-tiered approach that provides analytic breadth and depth.

- **Desk Review:** The evaluation team conducted a desk review of the full breadth of the CREL project and its activities, drawing on secondary data routinely produced by CREL such as progress reports, monitoring data, baseline surveys, and other CREL deliverables and documents. The desk review included: a literature review of published and unpublished literature on the project; analysis of CREL performance or program data; and, third party reports and documentation. The team has included select documents from the desk review in a bibliography attached to the final evaluation report.
- **Site Assessments:** The evaluation team traveled to selected CREL activity sites in the Sylhet, Khulna and Cox's Bazar regions to assess CREL implementation process and progress. The following three methodologies were applied during these field trips:
 - Key informant interviews
 - Focus group discussions
 - Direct observation
- **Structured Participant Survey:** ACME asked its subcontractor, e.Gen, to conduct a quantitative survey of farmers and villagers to help address Evaluation Questions 3 and 4: CREL's impact on livelihoods and inclusion of women and other vulnerable groups.

Component I: Desk Review

Under this component the CREL-PE team conducted an ongoing desk review of secondary data to:

- Provide data and input to address the evaluation questions and comply with other requirements for substantiating our evaluation findings; and,
- Compile and compare planned versus actual outputs and project level outcome data.

Mr. Ortiz led the desk review with support from Ms. Islam for collection and analysis of CREL performance and program reports and deliverables. They collected and reviewed secondary data and documents and collate, extract, analyze, summarize, and present data in tables, charts and figures. Each CREL Intermediate Result has its own set of measurable indicators. To the extent possible, the evaluation team relied on routine project documents (esp., quarterly and annual reports) and followed standard work plan monitoring processes such as benchmarks for achieving work plan objectives or elements of a performance management system (USAID, 2010).

Mr. Ortiz and Ms. Islam focused on elements relevant to their specialties (Ortiz: climate change, natural resources management, and governance; Islam: livelihoods and women/minority inclusion) and then integrated their analysis across specialties. Mr. Kramer focused on policy and climate change. The team as a whole dealt with Community Management Organizations (CMO) sustainability and

recommendations for future programming. The Team Leader summarized the team's findings. During the USAID debrief Mr. Kramer discussed how these desk review data findings can be used:

- as input into CREL's adaptive management process,
- to guide future data collection and analysis, and
- to consider the adjustment of performance indicators.

Component 2: Site Assessments

The Team Leader, Mr. Kramer, led the site assessments, working closely with USAID and CREL to select sites. As the CREL performance evaluation is descriptive and lacks control groups, the evaluation team employed purposeful cluster sampling as opposed to a random sampling mode. Site selection criteria included:

- Sites in three regions Sylhet, Khulna and Cox's Bazar;
- Sites receiving higher amounts of USAID funding and/or conducting larger number of CREL activities, whether successful or not;
- Sites that are exemplars of success and best practice;
- Sites that have not performed as well despite reasonable investment of CREL resources, and
- Review and approval of sites by USAID prior to departure.

Given the dispersed location of the CREL field projects, the evaluation team carefully balanced the mix of labor and travel to optimize cost effectiveness. Remote modalities of data collection (e.g., self-administered surveys, Skype meetings) to reduce travel time and costs and maximize the labor available to conduct the monitoring and evaluation tasks.

After sites were selected the evaluation team iteratively and progressively examined available data and conducted in-person interviews with CREL staff to determine which data collection methodologies were best suited to a given site and tailored these methodologies to specific sites. The following site assessment data collection methodologies (USAID, 2011) were used:

- CREL staff interviews,
- Key informant interviews with CREL beneficiaries and GoB officials,
- Focus group discussions with members of a range of different CREL beneficiary groups, and
- Direct observation.

A. Key Informant Interviews

Key informant interviews (KIIs) included USAID and CREL staff, CMO members, NGO leaders, and GoB officials. Over 50 key informants were identified based on discussions with USAID and CREL and added others as the evaluation progressed and learned of valuable informants in our initial round of interviews.

The evaluation team used interview best practices and standard guidelines to ensure that the questions were worded clearly, sequenced effectively, and asked in a neutral manner to elicit valid and reliable responses from the interviewees. The evaluators documented the interviews by taking detailed notes.

B. Focus Group Discussions

The focus group discussions (FGDs) were coordinated by Ms. Islam, a native Bengali speaker. Mr. Kramer and Mr. Ortiz participated through simultaneous translations for those groups that were not comfortable with English.

During the FGDs, the evaluation team observed social attributes and conducted open-ended discussions with focus groups to identify first-hand findings and accumulate relevant field data. Each category of focus group had its own open-ended question checklist. Each checklist had more questions than the team needed to use in the event that there was a different than expected group of participants. For

example, if the Evaluation Team had a CMO focus group interview without any government officials, questions related to government motivation and cooperating with CREL would have become irrelevant to that particular focus group interview.

The evaluation team conducted focus group discussions with six distinct groups of CREL project stakeholders to assess differing perspectives among the groups to inform our assessment of the CREL-PE evaluation questions. However, the evaluation team recognized that there are overlaps between FGDs, e.g., the focus group discussion with village co-management stakeholders may also address AIG livelihood practices. Thus, the team recognized cross-over between groups and used it to assess validity of responses. The preliminary selection of focus group types and the primary evaluation questions these interviews addressed are:

1. CMO representatives: Evaluation Question 2
2. Representatives of AIG livelihoods groups: Evaluation Question 3
3. Women: Evaluation Question 4
4. Other vulnerable populations (e.g., ethnic groups and landless): Evaluation Question 4
5. Village co-management stakeholders: Evaluation Question 5

Note: for women and other vulnerable populations, FGDs are useful as these groups may feel more comfortable amongst themselves during these discussions. As a result, they may be more likely to voice their concerns, such as resource rights, women's empowerment, access to project related training and financial resources. Ms. Farin conducted the bulk of the FGDs especially those with women's groups.

To verify our notes and findings, the team also transcribed the focus group interviews through a field interpreter and note-taker who accompanied our team to field visits.

C. Direct Observation

The team used direct observation of the implementation of project activities at CREL project sites to validate project accomplishment findings derived from documentation and interviews. Observation is useful to triangulate of findings using the expert judgement of the evaluators to identify anomalies and 'ground truth' reported information.

Component 3: Structured Participant Survey

ACME executed a purchase order with its USAID-approved subcontractor e.Gen, a local firm experienced with surveys in Bangladesh, to conduct a survey of CREL to collect quantitative data, analysis, and analytical reports to assist with the responses to the CREL-PE scope of work Evaluation Questions 3 and 4:

- Evaluation Question 3: To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience?
- Evaluation Question 4: Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?

CREL-PE Evaluation Design Matrix

In Table I below the evaluation team presents the preliminary Evaluation Design Matrix for CREL.

TABLE 1: CREL-PE EVALUATION DESIGN MATRIX

	Evaluation Question	Evaluation sub-questions	Data Source (Organization/Individual)	Data Collection Method
1.	In what ways has CREL integrated learning from past USAID biodiversity activities (IPAC, the Nishorgo Support Project, the MACH) to strengthen local governance structures for natural resources management? How effective is this approach in improving local governance of natural resources at targeted sites?	How has CREL integrated learning from past USAID biodiversity activities to strengthen local governance structures for natural resources management?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews
		How effective is this approach in improving local governance of natural resources at targeted sites?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews
		What are the lessons learned from CREL integration of past USAID biodiversity activities to strengthen local governance structures for natural resources management?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews
		What are recommendations for upcoming projects that integrate past USAID biodiversity activities to strengthen local governance structures for natural resources management?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews
2.	Is there evidence that the CREL project's training and capacity building activities have resulted in	Have NRM institutions experienced strengthened organizational capacity as a result	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs 	<ul style="list-style-type: none"> • Literature Review • Key Informant

	strengthened organizational capacity of NRM institutions? For example, have trainings resulted in improved capacity within co-management organizations to achieve sustainable financing and/or manage shared revenue from protected areas?	of CREL?	<ul style="list-style-type: none"> • CREL Management and staff • USAID • GoB 	<p>Interviews</p> <ul style="list-style-type: none"> • Focus Group interviews • Site Visits
		Are NRM institutions able to continue effective financial management, such as sustainable financing and managing shared revenue, following conclusion of CREL?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews • Focus Group interviews • Site Visits
		Are NRM institutions able to continue execution of natural resource management plans following conclusion of CREL?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews • Focus Group interviews • Site Visits
		Are NRM institutions able to continue climate change resilience following conclusion of CREL?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews • Focus Group interviews • Site Visits
		Are NRM institutions able to continue monitoring of biodiversity indicators following conclusion of CREL?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews • Focus Group interviews • Site Visits
3.	To what extent have CREL climate-resilient livelihood	How has CREL climate-resilient livelihood activities achieved a	<ul style="list-style-type: none"> • CREL documentation • CREL Link database 	<ul style="list-style-type: none"> • Literature Review

	activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?	direct and measurable impact on the protection of natural resources in protected areas?	<ul style="list-style-type: none"> • CMOs • CREL Management and staff • USAID 	<ul style="list-style-type: none"> • Focus Group interviews • Stakeholder Questionnaire • Site Visits
		Are CREL livelihood activities a supplementary source of income or an alternative source of income?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID 	<ul style="list-style-type: none"> • Literature Review • Focus Group interviews • Stakeholder Questionnaire • Site Visits
		Is there evidence of improved household resilience resulting from diversified livelihoods or income?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID 	<ul style="list-style-type: none"> • Literature Review • Focus Group interviews • Stakeholder Questionnaire • Site Visits
4.	Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?	Is the CREL multi-dimensional, integrated approach integrating women and other vulnerable populations to the same extent as other population cohorts?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews • Focus Group interviews • Stakeholder Questionnaire • Site Visits
		Which approach, NRM, alternative livelihoods, or climate resilience, is most effective to integrate women and other vulnerable populations?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews • Focus Group interviews • Stakeholder

				<ul style="list-style-type: none"> Questionnaire Site Visits
		If an approach is not effective, how might this approach be improved?	<ul style="list-style-type: none"> CREL documentation CREL Link database CMOs CREL Management and staff USAID 	<ul style="list-style-type: none"> Literature Review Key Informant Interviews Focus Group interviews Stakeholder Questionnaire Site Visits
		If the combination of approaches is not effective, how can the combination of approaches be improved?	<ul style="list-style-type: none"> CREL documentation CREL Link database CMOs CREL Management and staff USAID 	<ul style="list-style-type: none"> Literature Review Key Informant Interviews Focus Group interviews Stakeholder Questionnaire Site Visits
5.	How effective is CREL's engagement with national level GOB partners in building government ownership of the co-management approach and strengthening the legal and policy framework for co-management?	How effective is CREL's engagement with national level GOB partners in building government ownership of the co-management approach	<ul style="list-style-type: none"> CREL documentation CREL Link database CMOs CREL Management and staff USAID GoB 	<ul style="list-style-type: none"> Literature Review Key Informant Interviews Focus Group interviews
		How effective is CREL's engagement with national level GOB partners in strengthening the legal and policy framework for co-management?	<ul style="list-style-type: none"> CREL documentation CREL Link database CMOs CREL Management and staff USAID 	<ul style="list-style-type: none"> Literature Review Key Informant Interviews Focus Group interviews

			<ul style="list-style-type: none"> • GoB 	
6.	What opportunities exist to enhance and strengthen programmatic effectiveness such as by adding, changing, re-scaling and/or removing activities to meet or surpass project targets/objectives and ensure sustainability?	What opportunities exist to enhance and strengthen programmatic effectiveness by adding activities to meet or surpass project targets/objectives and ensure sustainability?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews
		What opportunities exist to enhance and strengthen programmatic effectiveness by changing activities to meet or surpass project targets/objectives and ensure sustainability?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews
		What opportunities exist to enhance and strengthen programmatic effectiveness by re-scaling activities to meet or surpass project targets/objectives and ensure sustainability?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews
		What opportunities exist to enhance and strengthen programmatic effectiveness by removing activities to meet or surpass project targets/objectives and ensure sustainability?	<ul style="list-style-type: none"> • CREL documentation • CREL Link database • CMOs • CREL Management and staff • USAID • GoB 	<ul style="list-style-type: none"> • Literature Review • Key Informant Interviews

ANNEX IV: DATA COLLECTION INSTRUMENTS

Annex IV.1 CREL-PE Key Informant Interview Guide

Annex IV.2 CREL-PE Focus Group Discussion Guide

Annex IV.3 Survey Questionnaire

Annex IV.I: CREL-PE Key Informant Interview Guide

The evaluation team will apply a semi-structured approach to conduct CREL Key Informant Interviews (KIIs) and also conduct subsequent analysis and follow-up interviews.

The following section presents an overview of KIIs based on the major areas from the SOW evaluation questions. The objective of each major area is to identify the answers of evaluation question one through six. In addressing the KII in this capacity, the evaluation team has direct and indirect information for each evaluation question in the SOW. Direct and indirect information is important since the evaluation team can identify nuances responses that may not be readily available through other data collection tools. Through this data collection tool, the evaluation team can effectively address questions presented by USAID in a methodical manner that leaves no questions unanswered. Thus, by using this approach, the evaluation team will be able to manage the SOW using appropriate tools to produce a high quality project for USAID.

This approach has the following components:

- The major discussion areas for the KIIs and their stakeholder groups are below. The major discussion areas are from the evaluation SOW and the KII stakeholder groups include relevant stakeholders from each project group.
- CREL stakeholder groups are CREL Staff, Government of Bangladesh, USAID Staff, NGO Partner Staff, and Local Level. Some groups will have specific questions that address their individual role in the project.
- The evaluation team will also take the ‘snowball’ questioning approach for interviewees to have an open discussion on subject matter that directly and indirectly relate to topics addressed in the question.
- In the KIIs, each discussion question is within a major discussion area from the evaluation questions in the SOW.
- To code data derived from responses, the evaluation team will categorize topics within each evaluation question in the SOW.
- During data analysis, the evaluation team will examine the coded data to triangulate information acquired through the other data collection tools, such as focus group discussions, mini-surveys, literature reviews, etc.
- Throughout data analysis, the team will test findings against different sources of information to find out the actual likelihood of this finding. For example, if a KII discusses a topic of importance, but there other data collection sources do not discuss this topic, it is likely that this topic is not of overall importance to CREL since only one data collection tool addressed this. When this happens, the evaluation team will not include this topic in the preliminary findings.
- As a result of this data analysis, the team will have necessary information to address preliminary findings of evaluation questions one through six. Through these preliminary findings, the team can also identify conclusions, lessons learned, and recommendations.

Major areas for questions from the evaluation SOW

Section 1) Lessons Learned and Past Experiences: KIIs will target past lessons learned and past experiences from past USAID projects, including IPAC, the Nishorgo Support Project, and MACH.

Section 2) Training and Capacity Building Activities: the evaluation team will look for results from CREL project's training and capacity building activities in strengthened organizational capacity of NRM institutions and in improved capacity within co-management organizations to achieve sustainable financing and/or manage shared revenue from protected areas.

Section 3) Livelihood Activities: to measure CREL climate-resilient livelihood activities in the KIIs, the evaluation team will address the impact on the protection of natural resources in protected areas,

determine if CREL livelihood activities are a supplementary source of income or an alternative source of income, and if there is evidence of improved household resilience resulting from diversified livelihoods or income.

Section 4) Gender and Other Vulnerable Populations: socio-demographic equality among women and other vulnerable populations is a priority topic for the KII and the team will address CREL's multi-dimensional, integrated approach at integrating women and other vulnerable populations.

Section 5) CREL's engagement with National Level: the evaluation team will determine CREL's enabling environment with national level GOB partners in building government ownership of the co-management approach and strengthening the legal and policy framework for co-management.

Section 6) Enhance and Strengthen Programmatic Effectiveness: to enhance and strengthen CREL, KIIs will identify opportunities exist for programmatic effectiveness such as by adding, changing, re-scaling and/or removing activities.

Categorized Informant Groups

CREL Staff

Includes Winrock and **CREL subrecipients staff in Dhaka, Regional and Site offices.**

Government of Bangladesh

National, regional and site level officials of the three major CREL implementing partners: Forests Department, Department of Fisheries, and Department of Environment.

USAID Staff

CREL AOR and DAOR.

Local

Local level informants from CMOs in three regions and ten CREL sites.

Key Informant Interview Guide

Interview Date: _____

Informant Name: _____ Gender: _____

Phone: _____ E-Mail: _____

Organization: _____

Position in Organization: _____

Overall Questions

1. Briefly describe the organization that you work for.
2. Briefly describe your position in the organization.
3. How does your work relate to CREL?

Section 1) Lessons Learned and Past Experiences

a. Before CREL began, do you have any experiences with prior USAID natural resource management projects? For example: IPAC, the Nishorgo Support Project, or MACH. Please describe your past experiences.

If respondent did work on an earlier USAID project, proceed to the next question. If the respondent did not work on an earlier USAID project, go to section 2.

b. What have you learned from these projects that you envision would make CREL a better project to manage local natural resources?

c. What do you think of CREL's approach to improving local governance of natural resources?

Section 2) Training and Capacity Building Activities

a. Based on your experiences in CREL, how would you describe CREL's training for NRM institutions? NRM institutions are any organization that work with natural resource management. Areas include: 1) governance and leadership, 2) mission, vision, and strategy, 3) program delivery and impact, 4) strategic relationships, 5) resource development, 6) internal operations and management, and 7) mission, vision, and strategy.

b. Among these seven areas, has CREL experienced improvements?

c. Can you describe CREL sustainable financing? Has this been a successful experience?

d. Can you describe CREL manage shared revenue from protected areas?

Section 3) Livelihood Activities

a. Based on your experiences, do you see CREL livelihood activities as having an impact on the protection of natural resources at CREL sites? Please describe this.

b. What do you expect will be the future impacts of the protection of natural resources at CREL sites?

c. Through the CREL mid-term, do CREL livelihood activities bring in more income than past livelihood activities?

d. Through the CREL mid-term, do CREL livelihood activities bring in additional income when compared to past livelihood activities.

e. Do project activities build capacity of stakeholders to access climate information for agricultural planning?

f. Are the agricultural practices promoting sustainability in the context of climate change?

g. Will the project develop local capacity on longer-term climate change adaptation?

h. Does the project incorporate diversification to off-farm livelihoods strategies that may be less sensitive to climate hazards?

Section 4) Gender and Other Vulnerable Populations

a. Are CREL practices effective at integrating women and other vulnerable populations?

b. How does this compare to integration of other CREL participants?

In the following two questions, try to elicit the following responses: a. input in productive decisions, b. access to and decisions on credit, c. autonomy in production, d. ownership of assets, e. purchase, sale, or transfer of assets, f. control over use of income, g. group member, h. leadership, i. speaking in public, j. workload, and leisure.

- c. Are CREL agricultural practices effective at integrating women and other vulnerable populations?
- d. How does this compare to integration of other CREL participants?

Section 5) CREL's engagement with National Level

- a. Based on your experiences in CREL, how would you describe CREL's engagement with national level GOB partners?
- b. Does CREL create an enabling environment for government ownership of the co-management approach?
- c. Does CREL create an enabling environment for strengthening the legal and policy framework for co-management?
- d. Have the policies set forth by GOB been effective among local stakeholders? Local stakeholders include CMOs and village-level stakeholders.

Section 6) Enhance and Strengthen Programmatic Effectiveness

- a. What are your recommendations to make CREL a better project?
- b. Which activities should be added?
- c. Which activities should be changed?
- d. Which activities should be re-scaled?
- e. Which activities should be removed?

Annex IV.2: CREL-PE Focus Group Discussion Guide

The evaluation team will conduct focus group discussions (FGD) to help gather opinions and views from small group of selected beneficiaries and stakeholders of CREL.

During the Focus Group interviews, the evaluation team will observe social attributes and conduct open-ended discussions with focus groups to identify first-hand findings and accumulate relevant field data. Each category of focus group will have its own open-ended question checklist. Each checklist will have more questions than the team needs to use in the event that there is a different than expected group of participants. For example, if the Evaluation Team has a CMO focus group interview without any government officials, questions related to government motivation and cooperating with CREL become irrelevant to that particular focus group interview.

Participants in a group will be homogenous, who have something in common and from similar background, so that they share common traits related to the discussion topic. The evaluation team will therefore conduct focus group interviews with six distinct groups of CREL project stakeholders to assess differing perspectives among the groups to inform our assessment of the CREL-PE evaluation questions.

The preliminary selection of focus group types and the primary evaluation questions these interviews will address are:

1. CMO representatives: Evaluation Question 2 & 5
2. CBO members: Evaluation Question 2
3. CPG Members : Evaluation Question 2
4. VCF Members : Evaluation Question 2
5. Women: Evaluation Question 4
6. Representatives of AIG livelihoods groups: Evaluation Question 3

This section provides the six FGD guides that are customized to address each of the particular groups listed above and are structured according to the 6 evaluation questions, (i.e section 1 addresses evaluation question 1 and so on). The original evaluation questions are underlined in each guide, and each topic is followed by several smaller semi structured unambiguously worded questions, which aim to address the evaluation questions in a way that is easily understood by the participants. Additional guides will be prepared as and when required in the field.

The responses of the participants will be recorded as anonymous. However they will sign an attendance sheet to register their presence before the discussion (this mainly acts to formalize the discussion in the participants' mind and so that they take the discussion seriously).

At the beginning of the discussion the participants will be made to feel at ease by giving an explanation about the purpose of the discussion. The discussions will be structured around a set of predetermined questions (mostly open ended) but the discussions will be free flowing. The team expects that participant's comments will stimulate and influence the thinking and sharing of others. This method is used to obtain in depth qualitative information on perceptions and ideas from the group. During the discussion the moderator will ensure that all the questions are addressed, by narrowing down broader topics and probing the participants to give clearer and detailed responses on topics of interest.

Detailed notes will be taken during and after discussion by the evaluation specialist to capture exact phrases and statements made by participants. Tape recorders will be used to record the whole discussion. To verify our notes and findings, the team will also transcribe the focus group interviews through a field interpreter and note-taker who will accompany our team to field visits.

After the discussion field notes will be reviewed and tapes will be heard to write up a transcript (question by question) which will be converted to a preliminary report. Results from all the FGDs will be compared and contrasted by categories of individual focus groups to look for emerging themes and patterns that reappear in various discussions. Findings will be described in detail using quotes to illustrate. Final report will reflect the collective notions shared and conveyed by the groups.

Following is the FGD Guide for livelihood groups, our most common FGD. There were five other FGD Guides following this pattern but tailored for co-management committee members, community based organization members, community patrol group members, village conservation forum members, womens' groups.

Group - Livelihood

FOCUS GROUP DISCUSSION FOR CREL MID TERM PERFORMANCE EVALUATION

Location:

Date of FGD:

Duration (start time and end time):

Name of moderator:

Name of note-taker:

Participant summary:

Introduction:

Good morning and welcome to our session. Thanks for taking the time to join us to talk about CREL programs in your area. My name is Farin Islam. We are working on the mid-term performance evaluation of CREL project. We would like to ask you some questions about your experience and perceptions about a number of areas related to this program and how might the program be improved to ensure sustainability in the future. We are having discussions like this with several groups around the project's sites.

Has anyone participated in a focus group before?

- This a group discussion; We are not trying to achieve consensus, we're gathering information; There are no right or wrong answers; If you feel uncomfortable with any question, you can choose not to respond.
- These responses will be kept confidential and we will not associate your name with anything you say in the focus group.
- All information gathered will be used only for the mid-term performance evaluation of CREL project.

Logistics

- Focus group will last about one hour
- Feel free to move around
- Please check where is the bathroom/ Exit

Ground Rules

- Everyone should participate
- Information provided in the focus group must be kept confidential
- Stay with the group, respond one at a time and please don't have side conversations
- Turn off cell phones if possible
- Any questions before we start?

First I would like to ask you some general questions

Let's go around the group and introduce ourselves. Please tell us your name and where you live and how you are involved with CREL.

- Name
- Village
- CMO _____ Activity_____ Training_____

Section I –Recommendations incorporated by CREL

In what ways has CREL integrated learning from past USAID biodiversity activities (IPAC, the Nishorgo Support Project, the MACH) to strengthen local governance structures for natural resources management?

- i. Are steps being taken to integrate National government in co-management structure and have Co-management with all stakeholders represented (consisting of govt official and CBOs).

Are adequate measures being taken to compensate people who are restricted from PAs for income generation activities?

Community patrol groups?

- ii. Is a objective method for assessing the capacity and functioning of CMOs being developed which will allow CREL to address their sustainability after project exit.
- iii. Are CMOs targeting the “marginalized”, including women and local ethnic groups, rather than the “poor”?
- iv. What steps have been taken to address sustainability of co-management organizations, including their abilities to prepare their own business and sustainability plans, their abilities to effectively manage their long term finances, and integration with government activities through PPP and government involvement in CMOs.
- v. What steps have been taken to ensure capacity development for the FD, village organizations, and field staff?
 - FD, address capacity for PA managers across all levels of the FD.
 - village organizations, -provide training on empowerment and organizational strengthening-
 - field staff, provide training on sustainable management and utilization of local PA resources.
- vi. What steps have been taken to develop a Communications & Outreach campaign for PA landscape households, and FD officials regarding their role and responsibilities towards the PAs. Are there any form of feedback mechanism in place to collect public opinion regarding PA decision and plans

How effective is this approach in improving local governance of natural resources at targeted sites?

- i. Have these activities been helpful in improving local governance of natural resources management in your area?

3. Livelihood Activities

To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas?

- i. Do the chosen activities reduce and minimize the pressures on the natural resources in the environment?
- ii. Are these activities more ecofriendly alternative to your current income generating activity?

Are CREL livelihood activities a supplementary source of income or an alternative source of income?

- If supplementary source of income, what is your other source of income?
- If supplementary source of income, what percentage of your income comes from CREL livelihood activities?
- If alternative source of income, what was your original source of income?
- Are you confident that your CREL livelihood activities can support your household?

- Are these new activities generating higher income than your current source of income?
- i. Are the risks taken and investment required to adopt the new livelihood activities low?
- ii. What kind of assistance are beneficiaries getting from CREL to facilitate these transitions and minimize the initial risk – (better knowledge, market access, private sector linkage or support services)

Is there evidence of improved household resilience resulting from diversified livelihoods or income?

- i. How have you dealt with external shocks (drastic climate conditions/ financial loss) after diversifying your livelihood? Have you leaned on other households for financial help during drastic climate conditions?
 - Loan from others ,
 - sold livestock /assets /property
- ii. If yes have you been able to recover /purchase them back?
- iii. Have you been able to cope better with financial losses after diversifying your income?
- iv. How would you describe your household's ability to cope with and manage with future climate or financial shocks
 - Unable to cope
 - Able to cope with changes in income and food source
 - Able to cope without difficulty.

4. Inclusion of Women and Vulnerable groups

Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?

- i. Is there any particular Gender strategy developed?
- ii. Any economic incentive and livelihood programs targeted towards women?
- iii. Have these livelihood programs generated employment for women?
- iv. How involved were women in in actual site level issues, activities, and decision-making?
- v. Are women getting the full benefit of producing their crop/fish and marketing them?
- vi. How helpful were the mandatory quota system –did it enhance their confidence, leadership skills, knowledge gathering and sharing with other women in their communities
- vii. Provision of gender focused training.

Empowerment

- i. Among your family and friends, compared to men, do women enjoy the following privileges? Has it improved after engaging in CREL livelihood activities/trainings?
 - sole or joint decision-making over food and cash-crop farming, livestock, or fisheries?
 - autonomy in agricultural production?
 - ownership of agricultural assets?
 - power over purchase, sale, or transfer of assets?
 - access to and decisions on credit?
 - control over use of income for your household? Are women group members in economic or social groups?
 - comfort speaking in public?
 - allocation of time to do productive and domestic tasks?
 - Are women satisfied with the available time for leisure activities?

Please provide suggestions and recommendations for improvement and sustainability of the program activities.

Closing

That is all of my questions for now. Do you have anything you would like to add? Do you have any questions for us?

Thank you for your time.

Annex IV.3 Survey Questionnaire

Questionnaire for Participants

Section I: Identification Questions

IQ 101: CREL Participant ID											
Name:											
IQ 102: Participant's Mobile No											
IQ 103: Gender			<input type="checkbox"/>	IQ 106: Site ID							
IQ 104: Age			<input type="checkbox"/>	<input type="checkbox"/>	IQ 107: Trade Group						
IQ 105: Region			<input type="checkbox"/>								
IQ 108: Number of Family				<input type="checkbox"/>	<input type="checkbox"/>	IQ 111: Respondent is Landless Farmer?				<input type="checkbox"/>	
IQ 109: Number of Male Members				<input type="checkbox"/>	<input type="checkbox"/>	IQ 112: Respondent is Ethnic Minority?				<input type="checkbox"/>	
IQ 110: Number of Female				<input type="checkbox"/>	<input type="checkbox"/>	IQ 113: Respondent from Other Vulnerable Groups?				<input type="checkbox"/>	
IQ 114: Interview Date			IQ 115: Questionnaire ID			IQ 116: Enumerator Name:			<input type="checkbox"/>	<input type="checkbox"/>	

Section 2: Household Economic Information

LQ 201: Primary Income Generating Activities (IGA) (Primary Occupation) of All Earning Household Members (before and during project scenario) (Multiple Answers are acceptable) (Average of 12 months)

Household Member	Age	Sex (M/F)	Before Project (Prior to Dec, 2013)			During Project (After Dec, 2013)			
			IGA ID	Time Spent (Days per Year)	Avg. Annual Income (BDT) from this IGA	IGA ID	Time Spent (Days per Year)	Avg. Annual Income (BDT) From this IGA	Was this due to CREL initiative?
Household Member 1									
Household Member 2									
Household Member 3									
Household Member 4									

IGA Code

- 10 - Horticulture/Fruit e.g. 11--Mango, 12-Banana, 13-Papaya, 14-Lemon, 15-Pinneapple
- 20 Vegetable 21-High value (capsicum, summer tomato, strawberry), 22-Average value (cucumber, brinjal, ladies finger (dherosh), bitter guard (corolla), borboti, bean, etc.)
- 30 – Aquaculture 31-Carp, 32-Monosex Tilapia, 33-GIFT Tilapia, 34-Prawn (Golda), 35-Shrimp (Bagda)
- 40 Handicrafts, 41-Toy (putul), 42-Cap, 43-Dress, 44-Embroidery, 45-Bamboo-based, 46-Souvenir,
- 50 Livestock 51- Ducks, 52- Chickens, 53– Cows, 54- Goats, 55- Pigs,
- 60- Floriculture; 61-Rose, 62-Gladiolus, 63-Marigold (genda), 64-Tube rose (rajani gondha),
- 70 Field crops, 71-Sunflower, 72- Maize, 73- Potato
- 80 Others 81-Apiculture, others please specify
- 90 Natural Resource-based IGA e.g. 91 – Fishing; 92 – Collecting shrimp PL; 93 – Collecting Animals; 94 – Collecting plants for human food; 95 – Collecting fuel wood; 96 – Collecting fodder; 97 – Other forest/wetland products (specify)
- 100 In case the respondent is housewife
- 110 In case the respondent is unemployed

LQ 202: Subsistent Income Generating Activities (IGA) (Secondary Occupation) of All Earning Household Members (before and during project scenario) (Multiple Answers are acceptable)

Household Member	Age	Sex (M/F)	Before Project (Prior to Dec, 2013)			During Project (Last year)			
			IGA ID (Same as LQ 201)	Time Spent (Days per Year)	Avg. Annual Income (BDT) from this IGA	IGA ID (Same as LQ 201)	Time Spent (Days per Year)	Avg. Annual Income (BDT) from this IGA	Was this due to CREL initiative?
Household Member 1									
Household Member 2									
Household Member 3									
Household Member 4									

LQ 203: Please indicate if there is any income for the household from any other sources that was not covered in previous two questions (e.g. rent, remittance, etc.).

Source	Income Before Project (Average of 12 months)	Income During Project (Average of 12 months)

LQ 204: Total Household Income (Cumulative of all household members and of all sources)

Period	Average Annual income (BDT)
Before Project (Prior to Dec, 2013)	
During Project (Last 12 months)	

LQ 205: Total Household Savings and Loan (Cumulative of all household members and of all sources)

Period	Average Monthly Savings (BDT)	Average Annual Loan
Before Project (Prior to Dec, 2013)		
During Project (Last 12 months)		

LQ 206: Household Members' Wild/Natural Resource Extraction Practices (Average of 12 months)

Sector	Before Project (Prior to Dec, 2013)				During Project (After Dec, 2013)			
	No of Months Involved	No of Days per Month	Value of Product Sold (BDT)	Value of Product Consumed (BDT)	No of Months Involved	No of Days per Month	Value of Product Sold (BDT)	Value of Product Consumed (BDT)
Fishing								
Collecting Shrimp PL								
Collect Animals (e.g. Crab, Bush meat)								
Collect Plants for human food								
Collect Fuel Wood								
Collect Fodder								
Collect other forest or wetland NTFPs								

LQ 207: Household Land Resource Ownership (Area in Decimal)(Not suitable if the respondent is landless)

	Ownership	Cultivated	Homestead	Pond	Garden or Orchard	Other (e.g. Fellow)
Before Project (Prior to Dec, 2013)	Own					
	Own Land leased, share-cropped or rented out					
	Other's land leased, share-cropped or rented					
	Khas Land					
	Forest Land					
	Jol Mohal					
	Others' land used without payment					
During Project (After Dec, 2013)	Own					
	Own Land leased, share-cropped or rented out					
	Other's land leased, share-cropped or rented					
	Khas Land					
	Forest Land					
	Jol Mohal					
	Others' land used without payment					

Section 3: Participants' Perception about CREL Activities
PQ 301: Perception about Training Activities

A. Training Course ID	B. Heard about this training?	C. Date of	D. Participated this training?	E. Completed the training?²²	F. Relevance of subject matter²³	G. Your understanding of Training²⁴	H. Your Satisfaction with Training²⁵	I. Usefulness of Training Knowledge²⁶	J. Have you actually used the Training²⁷	K. Was there any refresher training on this issue?	L. Date of refresher training	M. Have you trained your neighbors or others the training	N. Did you get similar training before? (Y/N)	O. If yes then from whom?²⁸

Training ID

1 = Training on Climate Change Adaptation and Mitigation and Climate Resilient Natural Resources Management; 2 = Training on Climate Change Adaptation and Mitigation and Climate Resilient NRM; 3 = Training on Roles and Responsibilities of Community Patrolling Groups

²² Training Completion: 3 = Completed training; 2 = Partially completed; 1 = Only registered, did not complete
²³ Relevance of Subject Matter: 5 = Very much relevant; 4 = Relevant; 3 = Somewhat Relevant; 2 = Irrelevant; 1 = Completely Irrelevant
²⁴ Understanding of training: 5 = Understood very well; 4 = Understood; 3 = Somewhat understood; 2 = Could not quite understand; 1 = Completely could not understand
²⁵ Satisfaction with training: 5= Very satisfied; 4 = Satisfied; 3 = Somewhat satisfied; 2 = Unsatisfied; 1 = Very unsatisfied
²⁶ H. Usefulness of Training Knowledge: 5= Very useful for me; 4 = Useful; 3 = Somewhat useful; 2= Not quite useful; 1 = Not useful at all
²⁷ Training Neighbors or others: 1 = Trained what I learnt from training; 2 = Discussed on training subject matter; 3 = Gave them the contacts of the trainers; 4 = Did nothing
²⁸ From Whom: 1 = Government agencies (e.g. Upazila Agricultural Office, Upazila Fisheries Office, Upazila Livestock Office, etc.); 2 = Trainings done by other NGOs or Projects

(CPG); 4 = Financial and Entrepreneurial Literacy Programs (FELC) on Primers: 1 & 2 and Flip Chart for FEL group and VCF members; 5 = Financial and Entrepreneurial Literacy Programs (FELC) on Teacher/Facilitators' Guide Books based on Primers: 1 & 2 for FEL facilitator; 6 = Training on Financial and Grants Management; 7 = Training on Climate Resilient Livelihoods and Vegetables Cultivation; 8 = Training on Climate Resilient Livelihoods and Fish Culture; 9 = Training on Eco Guide Development; 10 = Training on Ecotourism: Entry Fee Revenue Sharing and Collection Mechanism; 11 = Training Laws, Policies, Institutions and Judiciary; 12 = Training on Gender mainstreaming and Leadership Development; 13 = Training on Resources Mobilization Planning; 14 = Training on Participatory Ecological Monitoring for Biodiversity Conservation; 15 = Training on Disaster Management and Disaster Risk Reduction (DRR); 16 = Training on Organizational Management

Bio-physical Activities ID

1 = Agroforestry homestead plantation; 2 = Bamboo plantation & Management; 3 = Mangrove plantation and protection; 4 = Nursery; 5 = Stream Bank Side Plantation; 6 = Pond side plantation; 7 = Roadside plantation

8 = Swamp plantation; 9 = Water reservoir creation

PQ 304: Results Experienced by Participants from different CREL Activities (Place Tick Mark)

Perceived Results	Could not get this result at all	somewnat could get this result	Got this result	Completely got this result
	1	2	3	4
Increased Knowledge on accounting, cost management, financial management				
Better Understanding on demand, supply and market information				
Links of buyers, their contacts, and improved marketing skills				
Improved negotiation skills and price setting				
Links of supplier and their contacts				
Links of support service provider and their contacts				
Increased Knowledge on raw materials quality, usage and availability				
Modern vegetable cultivation practice				
Modern fish culture practice				
Cultivation practice of high value crops (strawberry, capsicum, etc.)				
Production of quality handicrafts				
Modern livestock rearing practice				
Modern horticulture cultivation techniques				
Modern floriculture cultivation techniques				
Modern field crops cultivation techniques				
Knowledge on Apiculture practices				
Understanding about Ecotourism				
Production planning for agricultural/livestock products				
Knowledge on Storage of different products				
Knowledge on Post-harvest processing of different products				
Awareness on Laws and policies relevant to environment, ecosystems and NRM				
Improved ability to withstand effects of natural calamities/disasters				
Increased agroforestry homestead plantation				
Assistance in natural regeneration				
Increased Bamboo/mangrove Plantation				
Increased roadside/swamp/stream bank plantation				
Additional water reservoir creation				
Improved access to Khas Land/ Jol Mohal				

Perceived Results	Could not get this result at all 1	Somewhat could get this result 2	Got this result 3	Completely got this result 4
Decreased access of Resource Extractors to Protective Sites				
Decreased number of Natural Resource Extractors				
Decreased volume of Natural Resource Extraction				
Understanding on Climate Change Adaptation				
Understanding on Mitigation of Climate Change				
Understanding on Climate Resilient Natural Resource Management				
Improved knowledge on Disaster Risk Reduction				
Understanding Importance of Community Patrolling				

Section 4: Perception towards Coping up with Shocks from Climate Change or Natural Disaster

MQ 401: State the external shocks you faced over the last three years due to natural calamities, and disaster (e.g. Cyclone, Storm, Drought, etc.) (Multiple answers are acceptable)

Shocks	Extent of Impact				
	Severely Affected 5	Highly Affected 4	Affected 3	Moderately Affected 2	Not Affected 1
Loss of household/structure					
Loss of Land					
Physical Displacement					
Injury of household members					
Disruption of income					
Loss of crops					
Loss of livestock					
Loss of productive tools					
Loss of other assets					
Low quality of products					
Low volume of products					
Low price of products					
Urgent financial requirements					
Other shocks (Specify)					

MQ 402: What do you do to mitigate the loss from shocks resultant from natural disaster or climate change? (Multiple answers are acceptable)

Mitigation Measures	Frequently Do 3	Seldom Do 2	Never Do 1
Sell Assets			
Take loan from bank			
Take loan from NGO			
Take loan from community groups			
Take loan from Informal Lenders			
Borrow food from neighbors/relatives			

Change Occupation			
Eat less frequently			
Eat less amount			
Eat less variety			
Reduce expense on education			
Reduce expense on health			
Reduce expense on housing			
Reduce other expenses			
Migrate as labor			
Other measures (Specify)			

MQ 403: If you lost assets or resources, what is the present status for that loss? (Put tick mark)

Asset or resources	Could not recover or purchase	Could recover or purchase	Could purchase better asset or resource
Land			
Household			
Livestock			
Household Consumables			
Vehicles			
Equipment			
Other assets (specify)			

MQ 404: Which of the following statement better describe your situation after the last shock that you faced? (Last 5 years scenario)

1. Did not recover
2. Recovered some, but worse off than before shock
3. Recovered to same level as before shock
4. Recovered and better off
5. Not affected by shock

MQ 405: How effective do you think the CREL induced alternative IGAs in enabling your coping capacity for the financial loss due to shock? (Place tick mark)

1. Not effective at all
2. Not very effective
3. Somewhat effective
4. Quite effective
5. Very effective

MQ 406: How effective do you think CREL activities in improving your household's future capability against shock.

CREL Activities	Effectiveness of CREL Activities (Place tick Mark)				
	Not effective at all	Not very effective 2	Somewhat effective 3	Quite effective 4	Very effective 5

	I				
Training Programs					
Training ID 1:					
Training ID 2:					
Training ID 3:					
Training ID 4:					
Training ID 5:					
Training ID 6:					
Training ID 7:					
Bio-physical Activities					
Bio-physical Activities ID 1:					
Bio-physical Activities ID 2:					
Bio-physical Activities ID 3:					
Bio-physical Activities ID 4:					
Bio-physical Activities ID 5:					
Alternative Income Generating Activities					
Gender Empowerment Activities					
Other activities (specify)					

MQ 407: How do you define your present household capability in managing shocks in future? (Place tick mark)

1. Unable to Cope
2. Able to cope with changes in income and food source
3. Able to cope without difficulty

MQ 408: What steps have you taken till now to improve your household capability in managing shocks in future? (Place tick mark, multiple answers are acceptable)

1. Trained household members on preparedness during and after of a natural disaster
2. Arranged emergency funds/resources to cope up with the situation after natural disaster or external shock
3. Changed profession to something that is not dependent on environment to a large extent
4. Physical changes to household/structures (e.g. raising the floor)
5. Gathered information on the nearest emergency shelter
6. Keep regular communication with local members of disaster management committee
7. I have taken other steps (please specify)

Section 5: Questions for Women, Ethnic Minority and Vulnerable Population

VQ 501: Please explain in what frequency and extent you face the following problems.

Problem	Before Project (Prior to Dec, 2013)				During Project (After Dec, 2013)			
	Frequently Face A 1	Seldom Face A 2	Severe Problem B 1	Minor Problem B 2	Frequently Face A 3	Seldom Face A 4	Severe Problem B 3	Minor Problem B 4
Limited								

access to productive assets								
Limited income earning opportunity								
Limited information on better production								
Limited information on market								
Limited access to finance								
Limited income								
No voice/control on financial expenditure								
Limited decision making power in household								
Limited influencing power in the society								
Victim of violence								
Victim of social discrimination								

VQ 502: In your view, how successful was CREL in incorporating women, ethnic minority or vulnerable people in its different activities?

CREL Activities	How effectively CREL incorporated women into the program activities <i>(Place tick Mark)</i>				
	Not effective at all 1	Not very effective 2	Somewhat effective 3	Quite effective 4	Very effective 5
Training Programs					

Training ID 1:					
Training ID 2:					
Training ID 3:					
Training ID 4:					
Training ID 5:					
Training ID 6:					
Training ID 7:					
Bio-physical Activities					
Bio-physical Activities ID 1:					
Bio-physical Activities ID 2:					
Bio-physical Activities ID 3:					
Bio-physical Activities ID 4:					
Bio-physical Activities ID 5:					
Alternative Income Generating Activities					
Gender Empowerment Activities					
Other activities (specify)					

VQ 503: Please explain if you think CREL project could result in the following changes for you.

Changes CREL participants faced	I have seen significant change 3	There were somewhat changes 2	I have not seen any change 1
Better technical knowledge on products			
Better market linkage			
Better access to finance			
Increased confidence			
Increased income			
Better decision making power in household			
Increased participation in social issues			
Increased participation in NRM			
Better position at home resultant from increased income			
Decreased domestic violence			
Better acceptability in the society			

VQ 504: What additional support do you think CREL should provide to Women in future?

ANNEX V: SOURCES OF INFORMATION

Annex V.I Bibliography

Annex V.II Evaluation Itinerary

Annex V.III List of Persons Interviewed

ANNEX VI: BIBLIOGRAPHY

V.I.I Citations in Text

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V.1.2 Other Documents Consulted

V.1.2.a Training Modules and Reports Reviewed

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Training Module on Climate-Resilient Livelihood for VCF Members, Selected Farmers, Local Community and CMO Members. USAID: November 2014.

Training Manual on Laws, Policies, Institutions and Judiciary: Contexts of Environment, Ecosystems, Natural Resource Management, Climate Change and Disaster Management. USAID: October 2014.

Training Manual on Eco-tourism: Entry Fees, Revenue Sharing and Collection Mechanism in Protected Areas (for field level selected CMO's members). USAID: August 2014.

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Training Manual on Roles and Responsibilities of Community Patrol Group. USAID: November 2013.

ANNEX VII: EVALUATION ITINERARY

Date	Activity	Region/Site
Sunday, September 27, 2015	Team Leader and Evaluation Specialist Arrive in Country	Dhaka
Monday, September 28, 2015	Team meetings, In briefing with USAID	Dhaka
Tuesday Sept 29, 2015 through Thursday Oct 8, 2015	Meeting with CREL, meetings with GoB, USAID, team meetings, revision of methodology and work plan, logistic preparation	Dhaka
Friday, October 09, 2015	OFF	
Saturday, October 10, 2015	Travel to Srimangal , KII- RC, Regional office, FGD- Regional team	Srimangal, Sylhet.
Sunday, October 11, 2015	KII- Barangina President at baikka beel, Barangina Secretary at Baikka Beel, LSP at Barangina RMO office, Hazipur,Kalapur, DFO-DOF, Moulivbazar, FGD- Barangina RMO at Baikka beel, Livelihood beneficiaries at purba Liarkul, Bhunubir.	Hail Haor
Monday, October 12, 2015	KII- CMC Treasurer, Lawachara National Park, FGD- CPG at Baghmara Camp(LNP), CMC(LNP),FELC, Vashanigaon, Kamalganj, Direct Observation- Ecotourism (LNP).	Lawachara National Park
Tuesday, October 13, 2015	KII- LSP, KII with Beat Officer, RKWS, Chunaroghat, CMC President, at ACF office, Chunaroghat, Divisional Forest Officer, Moulivbazar. FGD- Livelihood Group (Men) Himaliya, Chunaroghat, CMC,RKWS, DFO, Kalenga,	Rame-Kalenga Wildlife Sanctuary
Wednesday, October 14, 2015	KII -VCG Secretary, Noagaon, Bhatara, Kulaura, LSP Noagaon, Bhatara, Kulaura, UNO, FGD- VCG at Yudhistipur-Badedeuli VCG office, Fenchuganj, Livelihood Beneficiaries at Yudhistipur-Badedeuli VCG office, Fenchuganj.	Hakaluki Haor
Thursday, October 15, 2015	FGD- CREL staff at Srimangal Office. Return to Dhaka	Srimangal, Dhaka
Friday, October 16, 2015	OFF	Dhaka
Saturday, October 17, 2015	Travel to Khulna, CREL Khulna staff meeting, interview CREL Regional Office staff	Khulna
Sunday, October 18, 2015	KII- CMC Chair at Chandpai, ACF(RO), LSP, FGD- Savings & loan group at Hoglabunia, VCF at Saintmeris, Direct observation: mangrove nursery, home garden, saline tolerant paddy trials, crab aquaculture, improvided cookstoves, climate resilient garden demo	Chandpai
Monday, October 19, 2015	KII- UFO, Shyamnagar, AC land, AC land-Shyamnagar, CMC chair, FGD- women group, Fultoli, CMC Shatkira, PF Shatkira. Direct Observation- Livelihood and NRM beneficiaries, Purba kalinagar.	Munshigonj, Satkhira
Tuesday, October 20, 2015	KII- DFO -East, Interviews with CREL staff, extended briefing on CRELink with CREL Khulan M&E officer,	Bagerhat, Khulna
Wednesday, October 21, 2015	KII- DD Fisheries, CREL grant officer, KII with Khulna Circle Conservator of Forests, Gov Off, DFO (WL), Regional Coordinator, Monitoring Officer.	Khulna
Thursday, October 22, 2015	Analysis and administration	Khulna
Friday, October 23, 2015	Return to Dhaka	Dhaka
Saturday, October 24, 2015	Travel to Cox's Bazar, meeting with CREL Regional Office staff, interviews with CREL-CB Regional Coordinator, Livelihoods Officer, Monitoring Officer.	Cox's Bazar
Sunday, October 25, 2015	KII-LSP, DFO-S, VCF-Barochara (FI), PF President, DFO-N, CMC President , Agri Officer, FGD- VCF-Barochara (FI), CMC -HNP (FI), Direct Observation- Pebble, Handicraft.	Himchari, Cox's Bazar
Monday, October 26, 2015	KII-CMC President, Range Officer, UP-Khutakhali, LSP FGD - VCF-Fashiakhali (FI), FELC (FI) Direct Observation- Roadside Plantation, Homestead Gardening, Handicraft, ICS, FELC Classroom, FKWS trail visit, Dulahazara Safari Park.	Fasiakhali
Tuesday, October 27, 2015	KII- CMC President & Vice President Whykong, ACF, Fisheries Officer, FGD- CMC-Whykong (FI), FELC+Livelihood (women) (FI), CPG (women) (FI), Direct Observation- CMC (Whykong), Teknaf Nature Park, Plantation (Keruntoli).	Teknaf
Wednesday, October 28, 2015	KII- Fuelwood Collector, VCF President, CPG Member, LSP-Shilkhali,FGD- CPG Shilkhali (FI), PF Himchari (FI), Direct Observation- CPG Plantation, Teknaf Nature Park, Shilkhali Garjan Plot, PF (Exe. Com.) Meeting.	Teknaf, Himchari
Thursday, October 29, 2015	KII- Project Coordinator, LSP, FGD- Livelihood (FI), Direct Observation- Hajirpara VCF members, Sikderpara VCF members, Meeting with CREL Regional Office staff, return to Dhaka	Medakachapia
Friday, October 30, 2015	Off	Dhaka
Saturday October 31, 2015	Analysis and report preparation	Dhaka
Sunday, November 01, 2015	Team meeting, analysis, report preparation, presentation preparation	Dhaka
Monday, November 02, 2015	Briefing with USAID, team meeting, analysis, report preparation, presentation preparation	Dhaka
Tuesday, November 3 through Thursday November 5, 2015	KIIs with senior GOB officials, team meeting, analysis, report preparation, powerpoint presentation preparation	Dhaka
Friday, November 06, 2015	OFF	Dhaka
Saturday, November 07, 2015	Team meeting preparing for USAID presentation.	Dhaka
Sunday, November 08, 2015	PowerPoint presentation to USAID	Dhaka
Monday, November 09 through Thursday, November 12, 2015	Team meeting, analysis, report preparation, stakeholder PowerPoint presentation preparation, powerpoint presentation to CREL staff	Dhaka
Friday, November 13, 2015	OFF	Dhaka
Saturday, November 14, 2015	Team meeting, prepare for stakeholders PowerPoint presentation.	Dhaka
Sunday, November 15, 2015	Stakeholder PowerPoint presentation, return to US	Dhaka

ANNEX VIII: LIST OF PERSONS INTERVIEWED

Person/Institution	Position
USAID Bangladesh	
Azharul H Mazumder	CREL Agreement Officer Representative
Edith McClintock	CREL Alternate-Agreement Officer Representative
CREL Staff	
Central	
John Dorr	Chief of Party
Kevin Kamp	Deputy Chief of Party
Erin Hughes	Project Director (Winrock home office)
Paul Thompson	Senior Co-Management Advisor
Abu Mostafa Kamal Uddin	Senior NRM & CC & Policy Advisor
A.K.M. Shamsuddin	Co management Coordinator Forestry,
Badrul Alam Tarafder	Govt. Liaison & Policy Specialist
Dr. Md Sharif Uddin	Wetland & Fisheries Specialist, World Fish
Ruhul Mohaiman Chowdhury	Manager, Monitoring and Evaluation
Shahzia Mohsin Khan	Manager, Governance of Natural Resources and Biodiversity
Md. Shams Uddin	Climate-Change Ecosystems and Livelihoods
Md. Abdul Wahab	Manager, Institutional Capacity Building & Training
Mahmud Hossain	Manager, Private Sec Enterprise & Livelihood Program
Md.Fakhrul Islam	Database Manager, CNRS
Utpal Dutta	Community Organization Development Coordinator
Dipanker Mallick	Governance Officer
Rahima Khatun	Gender Specialist
Obaidul Fattah Tanvir	Communications Manager
Sylhet	
Md. Mazharul Islam (Zahangir)	Regional Coordinator, CNRS
Md. Shahinur Kabir	Monitoring Officer, CNRS
Balaram Saha	Regional Accounts & Admin Officer , CNRS
Shah Kamal Hossain	Market Development Officer, CNRS
Swaran Kumar Chowhan	NRM & Livelihood Coordinator, CNRS
CREL Regional Office Staff team meeting	Sreemangal
Khulna	
Sheikh Md. Ziaul Haque	Regional Coordinator
Mohtahsam Billah	Monitoring Officer
Touhid Rahman	Subregional Coordinator - Khulna, East
Swaran Chowhan	Subregional Coordinator - Khulna, West
Shoron Kumar Chowhan	NRM & livelihood Coordinator South West, CNRS
Md Touhidur Rahman	NRM & livelihood Coordinator South East, CODEC
Tapan Dey	Livelihood Officer, CODEC
Md. Shahidul Islam	Monitoring Officer
Dipakner Mallick	Governance Officer
CREL Regional Office Staff team meeting	Khulna
Cox's Bazar	
Md. Safiqur Rahman	Regional Coordinator, NACOM
Samiul Mohsanin	Monitoring Officer, NACOM
Mohammad Helal Uddin	Grants Officer, NACOM

Bishawjit Sen	Communication Officer, NACOM
Md. Abdul Kaiyum	Site Officer, NACOM
Tapan Kanti Dey	Livelihood Officer, CODEC
Farhad-Al-Mahmud	Site Officer, NACOM
Md. Mahbub Morshed	MDO, CODEC
Md. Alam Khan	CCPAMO, NACOM
Sarwar Jahan	Governance Officer, NACOM
CREL Regional Office Staff team meeting	Cox's Bazar

CREL NGO Partner Home Office Staff	
M. Mokhlesur Rahman	Executive Director, CNRS
M. Anisul Islam	Director, CNRS
Md. Abdur Rob Mollah	Executive Director - NACOM
Md. Abdul Mannan	Project Coordinator, NACOM
Craig Meisner	Country Director, WorldFish Bangladesh

Other Persons	
Catherine Mackenzie	IPAC Evaluation Team Leader
Dr. Ram Sharma	IPAC Chief of Party

Government of Bangladesh Key Informants	
Forest Department	
Md. Yunus Ali	Chief Conservator of Forest
Md. Tariqul Islam	Project Director
Sunil Kumar Kundu, PhD	Conservator of Forest, Khulna Circle
Md. Jahidul Kabir	Wildlife Warden & Divisional Forest Officer, Khulna
Mohammad Shah-E-Alam	Divisional Forest Officer, North Forest Division, Cox's Bazar
Md. Sayedd Ali	Divisional Forests Office, Moulvibazar
Mr. Ratan Chandra Das	Range Officer, Rema Kalenga Wildlife Sanctuary
Md. Saidul Islam	Divisional Forest Officer, Bagherat
Reganl Kasim Chowdhury	Assistant Conservator Forests, Teknaf
Sunil Dev Roy	Range Officer, Whykhong
Mohammad Yousuf	Assistant Conservator Forests, Cox's Bazar North Forest Division
M.A. Hassam	Assistant Conservator Forests, Cox's Bazar South Forest Division
Md. Belayet Hossen	Assistant Conservator Forests, Chandpai Range
Department of Fisheries	
Syed Arif Azad, PhD	Director General
Md. Abdul Quaiyyum, Ph.D	Project Director
Md. Delwar Hossain	Assistant Project Director
Shameem Ara Begum	Senior Assistant Director
Md. Moniruzzaman	Deputy Director, Khulna
Sheikh Hafizur Tahman	Senior Upazila Fisheries Officer
AQM Shafiqal-Zamai	District Fisheries Officer, Moulvibazar
Department of Environment	

Md. Raisul Alam Mondal	Director General
Solaiman Haider	Focal Point
Dr. Mallick Anwar Hossain	Deputy Secretary, Khulna
Ministry of Environment and Forestry	
Abdullah Al Mohsin Chowdhury	Additional Secretary
Shamshur Rahman Khan	Deputy Chief
Ministry of Land	
Md. Rashedul Islam	Deputy Secretary
Md. Ahasan Ullah Shorif	Assistant Commissioner of Land, Dept of Administration
Other GOB Agencies	
Md. Kamrul Hasan	Deputy Commissioner & District Magistrate , Moulovibazar
Chandan Kumar Mohapatra	Agricultural Officer, Fencuganj, Sylhet
Md. Enayet-e-Rabbi	Upazilla Agricultural Officer, Cox's Bazar
Nazrul Islam	UP Chairman, Burigoalini

CREL Beneficiaries Key Informants	
Sylhet	
Azmir Hossain	LSP, Alamgir Agro Life Fishries
Abdul Muchabbir Chowdhury	CMC Treasurer, Lawachara National Park
Md. Abdul Hai	LSP for Livestock, Hemalia, Kalenga, Chunarughat
Mr. Akbar Hossain	CMC, President, Sreemangal
MD. Nuruddin	LSP, South Pacheun, Mirzapur, Moulvibazar
Abdul Sobhan Chowdhury	President, Baragangina RMO, Hail Haor
Md. Taibul Islam	General Secretary, Baragangina RMO, Hail Hour
Md. Shamsuddin	Treasurer, Baragangina RMO, Hail Haor
Md. Alamgir Hossain	LSP (Fishery), Baragangina, Hajipur, Baruna, Sreemangal
Saleh Ahmed	LSP (Fishery), Alingar, Hail Haor
Kabir Ahmed	VCG Secretary, Hail Haor
Khulna	
Md. Ratan Chandra Das	CMC, FD Official, RKWS
CMC President	Joymuni
CMC VP	Joymuni
PF Treasurer	Joymuni
Milton Nath	LSP, (Fisheries) Chila
Asim Kumar Joades	President (Satkhira) CMC
Cox's Bazar	
Sultan Ahmed	LSP (Livelihood), Secretary of VCF , Ramu, Cox's Bazar
Syed Alam	President of PF, CMC member, Ramu, Cox's Bazar
Abu Morshed Chawdhury	President Himchari CMC
Farid Uddin Chawdhury	CMC President Fashiakhali, Chokoria, Cox's Bazar
Md. Abdur Rahman	UP Chairman (17 no Khutakhali Union), Chokoria Cox's Bazar
Md. Aminul Islam	LSP (Vegetables), Fashikhali VCF, Chokoria Cox's Bazar
Md. Alamgir Chawdhury	CMC President (Whykong)
Shamin Ara Parvin	CMC Vice- President (Whykong)
Md. Zakir Hossain	President of Shilkhali VCF, LSP
Mrs. Laila Begum	LSP Uttar Medhakacchapia, Chokoria, Cox's Bazar

CREL Beneficiaries Focus Groups	
FGD Groups	Site, CMO, Village
Sylhet	
Resource Management Organization	Hail Haor, Barangina
Livelihood group	Hail Haor, Purba Loiyar Kool
Co-Management Committee	Lawachara
Community Patrol Group (2)	Lawachara
Financial Entrepreneurship Literacy Center	Lawachara, Vashanigaon
Livelihood group	Rema Kalenga, Chunarghat, Himalia
Co-Management Committee	Rema Kalenga
Village Conservation Group	Hakaluki Haor, Ekota
Livelihood group	Hakaluki Haor, Alinagar
Community Patrol Group	Lawachara, Baghmara
Village Conservation Group	Hakaluki Haor, Judhishtipur
Khulna	
Savings and Loan Group	Chandpai, Hoglabunia
Village Conservation Forum	Chandpai, Kainbari
Livelihood group	Munshigonj, Fultoli
Co-Management Committee	Munshigonj, Satkhira
People's Forum	Munshigonj, Satkhira
Local Service Providers	Munshigonj, Burigoalini
Cox's Bazar	
Village Conservation Forum	Himchori, Borochara
Co-Management Committee	Himchori
Village Conservation Forum	Fasiakhali, Maizpara
Financial Entrepreneurship Literacy Center	Fasiakhali, Ringbongshagirchakata
Co-Management Committee	Teknaf, Wykong
Community Patrol Group	Teknaf, Kerantali
Community Patrol Group	Teknaf, Shilkhali
People's Forum	Himchori
Livelihood group	North Medakachapia
Financial Entrepreneurship Literacy Center	Teknaf, Jhingmonkhali



CREL MID-TERM PERFORMANCE EVALUATION

Beneficiary Survey Report

ACCELERATING CAPACITY FOR MONITORING AND EVALUATION (ACME) ACTIVITY IN BANGLADESH

November 30, 2015

This report was produced for review by the United States Agency for International Development (USAID). It was prepared by e.Gen, a sub-contractor to International Business & Technical Consultants, Inc. (IBTCI) under Contract No.: AID-388-C-14-00001.

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ACRONYMS

ACME	Accelerating Capacity for Monitoring and Evaluation
CREL	Climate Resilient Ecosystems and Livelihood
CREL-PE	CREL Midterm Performance Evaluation
DiD	Difference-in-Difference
DRR	Disaster Risk Reduction
EQ	Evaluation Questions
IGA	Income Generating Activities
GCC	Global Climate Change
NR	Natural Resource
NRE	Natural Resource Extraction
NRM	Natural Resource Management
MET	Midterm Evaluation Team
QS	Quantitative Survey
VCF	Village Conservation Forum

EXECUTIVE SUMMARY

Survey Overview and Objectives

The USAID funded Climate Resilient Ecosystems and Livelihood (CREL) project is aimed at improving the responsiveness to climate change for more than 700,000 beneficiaries in Bangladesh. An interim performance evaluation is in process during the halfway implementation of the project, known as CREL Midterm Performance Evaluation (CREL-PE) conducted by the Accelerating Capacity for Monitoring and Evaluation (ACME) project. The CREL-PE is in process to assess the extent to which the CREL project is on track to meet its overall performance goals and inform management of any challenges or opportunities that warrant adjustments to ensure the achievement of those results. As a part of the CREL-PE, this particular Quantitative Survey (QS) was conducted. The objective of the QS was to find quantitative data to answer for two specific Evaluation Questions (EQ) known as EQ 3 and EQ 4. The questions are:

EQ 3: To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?

EQ 4: Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?

Survey Design and Methodology

The survey was designed to be conducted taking into account participation from CREL beneficiaries. The beneficiary list of CREL was considered as the sampling frame for the survey. CREL works with households and all the members in a household are considered beneficiaries of the project. Each of the households are represented by one member and CREL assigns unique identity number for that member. As such, the households are the beneficiary households in the project, with all the members being beneficiaries, and working under one unique identity number assigned to a particular household member. Beneficiaries with these unique identity numbers were respondents in the survey.

CREL beneficiary households were found to be associated under different Village Conservation Forums (VCF) in different locations (known as CREL project sites) in different broader geographic areas (known as regions). This particular survey selected three regions, namely Cox's Bazar, Khulna and Sylhet among the CREL working regions. Ten sites were taken for consideration from this survey - Fasiakhali, Himcchari, Medakachapia and Teknaf sites from Cox's Bazar region; Hail haor, Hakaluki haor, Lawacchara and Rema-Kalenga sites from Sylhet region; and Munshiganj and Chandpai sites from Khulna region.

A stratified random sampling method was adopted in selecting samples in the survey in which VCFs were considered as stratum and members of the VCFs (CREL beneficiaries with unique identity numbers) were considered to be sample element. From each site, 4 to 5 VCFs were selected randomly and from each VCF samples were randomly drawn. The survey included a total of 352 samples in which 97, 126 and 129 samples were taken respectively from Cox's Bazar, Khulna and Sylhet region. Throughout the report, these samples were termed as "Respondents." Around 44 percent of the respondents were women and 59 percent of them were landless.

A structured questionnaire was used in recording the answers from the respondents. It was developed in Bangla for ease of administration. There were multiple questions to cover all the aspects of EQ 3 and EQ 4. The majority of the questions had options to put numerical data. For the rest of the questions,

Likert scales and Semantic Differential scales were used to quantify the responses. A sample of the English version of the questionnaire is attached in the annex.

Implementation

The questionnaire was administered in a timeline from October 18 to 31, 2015. Trained enumerators administered the questionnaire under the supervision of survey supervisors, data quality control officer and survey coordinator. The survey was conducted using a face-to-face interview technique within the respondents' household premises. There was no presence from CREL staff during the interview process. A proper monitoring mechanism was put in place to ensure quality of data through spot-checking and back-checking of questionnaires.

Key Findings from the Survey

The respondents were identified having average age of 41 years and from families having average size of six members. Although the survey asked the question to one household member, the question was designed in a way to cover Income Generating Activities (IGA) and Natural Resource (NR) extraction information for all the household members.

The IGAs in which they were found involved can be classified into a few groups – primary Income Generating Activities, alternative IGAs and supplementary IGAs. *Primary IGAs* were defined in the questionnaire as the household (HH) or individual economic activities resulting in the largest amount of the individual or household income relative to the portion of resource investment (including money, time and other resources). *Alternate IGAs* were defined in the questionnaire as the ones in which a beneficiary reported that s/he had changed the source of primary income either at the individual or HH level. In case of alternative IGAs, there were questions asked on whether those changes were due to CREL interventions. *Supplementary IGAs* were defined in the questionnaire as any source of income that did not become a primary source of income, but only provided a subsistent income. It is synonymous with secondary IGAs.

The survey identified 51 IGAs in which the respondents and their household members were found involved in different modalities of primary, alternate and supplementary income earning. A total of 528 household members from surveyed 352 households were found to be involved in primary IGAs. Of those involved in primary IGAs, 207 of them were found to have supplementary IGAs. 32 percent of those involved in primary IGAs attributed CREL for their income increase from existing non-NR extraction related IGAs. They informed enumerators that increased efficiency resulting from CREL activities enhanced the income from those IGAs, which was estimated to be 42 percent during the project period in comparison to the before project situation. 36 percent of those involved in primary IGAs attributed CREL for shifting towards a non-NR extraction-based alternate IGA that increased their income around 9 percent in comparison with the before project scenario. 70 percent of those involved in supplementary IGAs acknowledge CREL initiative for the supplementary income. As a cumulative effect of the income increase through primary, alternative and supplementary IGAs, overall household income for the respondents was also found to be increased during project period.

Before the initiation of the project, local inhabitants were involved in extraction of different types of NR, the volume of which is difficult to quantify. Hence, to measure the NR extraction pattern, three indicators were used in this survey: number of person days spent in protective areas, value of NR sold and consumed, and household income from NR. The survey found the respondents spending less days in protective areas during the project period in comparison to before the project period. There was also a significant decrease visible in case of sales and consumption of NR by the respondents. As a result, and also as a result of the increased income from non-NR based activities, overall household income from NR extraction was also seen decreased during the survey in comparison to the before project situation.

All the surveyed respondents were found to have received one training from CREL, while more than two-thirds of them received more than one training. Two thirds of the respondents received one IGA training and one third received another type of training. Trainings on vegetables, fish, climate change adaptation and NR management were found to be the most common other trainings named by respondents. Respondents seemed to have a positive perception regarding the relevance of training subject matters. They also thought that the trainings were useful for their livelihood and daily activities. A significant portion of them was found to be disseminating training knowledge to others or at least discussing the training topics.

CREL also conducted several bio-physical activities among which the agroforestry homestead plantation, roadside plantation, nursery and pond-side plantation were found to be the activities on top of respondents' mind. They also found to have positive perception regarding the relevance of these activities with their livelihood and daily life. It was found that respondents participating in different CREL activities have decreased NR extraction during project period.

Respondents were found to be exposed to different natural calamities and disasters that caused loss of assets and lives for them. Almost one-third of the respondents expressed that they could not recover from the losses they faced during the last disaster. However, they expressed that the activities implemented by the CREL project helped them in managing the financial loss they already faced. More than two-thirds of the respondents opined that CREL alternative livelihood activities could enable their household resilience in managing losses from future natural disasters. A significant portion of the beneficiaries were also found taking different measures to mitigate the risks from disasters and associated losses.

Major Findings on EQ 3

Despite the correlation between participation in CREL IGA services and reduced NR extraction, the survey team was not able to find a correlation between increases in reported income and decreased NR extraction. This goes to the heart of the rationale behind introducing IGAs: to provide alternatives to resource extraction. The lack of a significant correlation is not surprising given that the CREL livelihoods program has been operating for barely two years and future income effects should be stronger. Our findings indicate that while CREL is driving a switch from NR extraction to new sources of income, this has not yet resulted in a substantial increase in income.

CREL livelihood activities are providing opportunities for both alternative and supplementary sources of income. The project's livelihood activities are implemented using the value chain approach, in which it assumes a facilitation role. The project is enabling beneficiaries' capacity and linking them to the market. The beneficiaries take the decision on whether they want to shift from the existing primary IGA to an alternative one, or they want to take a supplementary IGA along with the exiting primary IGA. Therefore, we can say the project is enabling opportunities for both types of income for its beneficiaries.

The data and findings from the survey demonstrate that a significant number of CREL beneficiaries regularly face financial and other losses due to natural calamities and disasters. Some of them are still unable to cope with future shocks, while a large portion has to change their income and food sourcing to cope. A substantial majority of respondents believe that CREL activities are helping them prepare for the shocks and losses in future and many report that they have already taken steps for improving their ability to cope clear sign of improved household resilience resulting from CREL livelihood and climate awareness activities.

Major Findings on EQ 4

The survey identified the project being impartial in keeping a similar ratio of male and female in its different activities. Surveyed respondents also expressed their positive opinion regarding the project being effective in incorporating women and other vulnerable populations to the same extent as other population cohorts. We found the project livelihood activities increased income for female beneficiaries

through skill development and market linkage. Awareness related to climate change, NR management and disaster risk management was also found to be enhanced for women. However, the randomly selected respondents list did not include ethnic minority or socially excluded beneficiaries and hence we cannot directly comment on how the project integrated those people in different activities.

Data limitations

There were some limitations in the study that limits the generalization from this quantitative survey. Chittagong was not included in the survey, therefore the findings from this questionnaire survey do not represent the entire CREL geographic dispersion. Respondents were all project beneficiaries. Inclusion of non-project beneficiaries in the survey could result in better comparison in different aspects. Due to random selection, ethnic minority and other vulnerable group representation was not ensured in the sample. Hence, although we have perception data, there is no indicator to quantify the actual impact of project activities on the vulnerable population. The survey used recall information to identify income from different source before project scenario. There might be some error in respondents' recollection regarding a data dated two years back. Also, we felt that the questionnaire survey approach might not be the ideal for getting some of the sensitive information, especially regarding quantification of NR extraction.

Recommendations

Since the survey could not have an analysis on control group respondents, a future study following Different-in-Difference (DiD) approach can reveal detailed comparison between project beneficiaries and non-beneficiaries. Additionally, we recommend a deeper analysis on the NR extraction pattern of the beneficiaries, taking a smaller and judgmentally selected respondents and studied over a longer period to establish the relationship between livelihood improvement and NR extraction reduction. A study focusing on different vulnerable groups, especially ethnic minority can also be conducted to see if there is impact of the project on their livelihood and household resilience. Chittagong should also be included in the subsequent studies so that a common generalization can be made on the entire CREL project area.

SECTION ONE: INTRODUCTION

1.1 CONTEXT OF THE QUANTITATIVE SURVEY

USAID is working with Government of Bangladesh and local communities to better manage and conserve Bangladesh's natural resource and biodiversity, as a part of the broader Global Climate Change (GCC) initiative. Initiating in October 2012, this five-year project Climate Resilient Ecosystems and Livelihood (CREL) is aimed at improving the responsiveness to climate change for more than 700,000 beneficiaries in Bangladesh. During the midway of implementation, USAID Bangladesh asked the Accelerating Capacity for Monitoring and Evaluation (ACME) project to conduct a mid-term performance evaluation of the CREL project. The purpose of the CREL Midterm Performance Evaluation (CREL-PE) was to assess the extent to which the CREL project is on track to meet its overall performance goals and inform management of any challenges or opportunities that warrant adjustments to ensure the achievement of those results. The evaluation was focused around six different Evaluation Questions or EQ. Among these, there were two specific EQs for which the Midterm Evaluation Team (MET) of ACME required to quantify the findings. These two EQs were:

EQ 3: To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?

EQ 4: Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?

This particular Quantitative Survey (QS) was conducted to deliver quantitative findings required by the MET to answer the aforementioned two EQs.

1.2 METHODOLOGY ADOPTED

Population Definition

The nature of EQ 3 and EQ 4 required the survey to be administered on the CREL beneficiary households³². However, the inclusion of all beneficiary households was not possible in the time allowed. The activities of CREL with the beneficiary households are expected to have results at least one business cycle after they adopt a particular Income Generating Activity (IGA). This is generally considered to be one year in Bangladesh. From this perspective, beneficiary households working with CREL after December, 2014 will have less chance to experience any significant result from project activities. Hence, those entering prior to December 2014 were considered to be the population of this specific survey. The list of these households gathered from "CrelLink" was considered as the sampling frame for this survey. 14906 beneficiary households were identified in the sampling frame and samples

³² Households participating in CREL activities are beneficiary households. All the members of the beneficiary households are beneficiaries of the project. The beneficiaries of a household are represented by one household member to the project and have a unique identity code.

were drawn from this frame. Crellink assigns unique identity number against each individual beneficiary household.

Sampling Strategy

In Crellink, the beneficiary households were seen arranged as per their Village Conservation Forum (VCF) names. These VCFs were found to be under different sites, and the sites were found to be registered under different regions. 10 sites from 3 regions were under consideration of the CREL-PE, namely – Fasiakhali, Himcchari, Medakachapia and Teknaf sites from Cox’s Bazar region; Hail haor, Hakaluki haor, Lawacchara and Rema-Kalenga sites from Sylhet region; and Munshiganj and Chandpai sites from Khulna region.

Initially, it was decided that 300 samples will be covered under this survey. However, later, there was an escalation in the sample size and ultimately 352 samples were included in the survey. Stratified Random Sampling was used as sampling method in the survey. Under this method, four to five VCFs from each of the ten allocated sites were selected and samples were picked randomly according to the unique identity number in the sampling frame. A total of 450 samples were drawn randomly in this process and the aforementioned 352 samples were interviewed from the list of these 450 samples. While selecting the samples, first-come-first-serve method was used, i.e. the sample coming first in the list was interviewed first and then proceeding towards the next sample. In case where the sample was found to be unable to participate the survey, the next sample was taken from the list. The distribution of the samples interviewed in the survey is shown in Table I. The household member with the unique beneficiary identity number was considered as the respondent of the survey questions.

Table I: Sample Distribution Followed in the Survey

Region	Respondents (Number)			Respondents (Percentage)	
	Male	Female	Total	Male	Female
Cox’s Bazar	53	44	97	55%	45%
Khulna	62	64	126	49%	51%
Sylhet	81	48	129	63%	37%
Total	196	156	352	56%	44%

Tools and Methods for Survey Administration

A structured questionnaire was used in the survey. The questionnaire was designed to collect information necessary to answer EQ 3 and 4. EQ 3 is focused on the impact of project on beneficiaries’ income, livelihood and Natural Resource Extraction (NRE) practices. Hence the questionnaire included questions on the income and sources of the surveyed respondents – both before and during project scenarios. Income Generating Activities (IGA) resulting earning for the respondents and their households were classified into a few categories, as shown below –

- *Primary IGAs* were defined in the questionnaire as the household or individual economic activities resulting in the largest amount of the individual or household income relative to the portion of resource investment (including money, time and other resources).
- *Alternate IGAs* were defined in the questionnaire as the ones in which a beneficiary reported that s/he had changed the source of primary income either at the individual or HH level. In case of

alternative IGAs, there were questions asked on whether those were due to CREL interventions.

- *Supplementary IGAs* were defined in the questionnaire as any source of income that did not become a primary source of income, but only provide a subsistent income. It is synonymous with secondary IGAs.

Along with the income, respondents were asked about their NRE practices, before and during the project scenario. There were questions on the participation of the respondents in different CREL activities and their perception related to the effectiveness, relevance, usefulness, etc. There were questions related to household resilience of the respondents, whether they experienced any change in household resilience and whether there were CREL impacts on that.

EQ 4 was focused on participation of women and vulnerable communities in different CREL activities. So the questions were organized accordingly. There were questions on effectiveness of CREL in enabling the aforementioned persons into different activities and result visible from those. The questionnaire was designed in a way that to directly record quantitative data. To quantify the qualitative information Semantic Differential scales and Likert scales was used. Special codes were used to define specific qualitative information. For ease of administration, the questionnaire was translated in Bangla. A sample of the questionnaire is shown in annex.

The data collection exercise continued from October 18 to 31, 2015. A team of sixteen enumerators were used for data collection through administering the questionnaire. Enumerators visited door to door of the respondents. Face-to-face interview were done for data collection and there was no representation of CREL project staff present during the interview process. Although there was support taken from CREL field level staff to identify the specific VCFs, the identity of the specific respondents included in the survey was kept anonymous to them. This ensured there were no biases from the project staff during the questionnaire administration and recording process. There were survey supervisors to monitor the questionnaire administration process and quality of data. On top of the supervisors, there was a data quality control officer and survey coordinator. Both of them were also involved in quality control of the questionnaire administration. Spot-checking was done by the supervisors on sample basis at the field. Later, the survey coordinator and quality control officer conducted back-checking of another sample of questionnaires through calling the respondents over telephone. So, the data quality was found to be at a satisfactory level. Upon completion of the data collection, there were rigorous processing and cleaning of data. Afterwards, data was entered into a predefined database developed in Microsoft Access. Then the database was converted into SPSS for further analysis.

SECTION TWO: RESPONDENTS' HOUSEHOLD INFORMATION

2.1 GENERAL INFORMATION

As mentioned before in Table 1, around 44 percent of the respondents in the survey were women. Tables 2 and 3 provide general information of the respondents regarding their gender, age, and household size. The average age for women respondents was found to be 36 years and for men it was 45 years. The average household size was found to be around 6 with roughly equal proportion of male to female household members.

Table 2: Age and Gender of the Households Surveyed

Region	Average Age of the Respondents (Years)		
	Male	Female	Average
Cox's Bazar	42	35	39
Khulna	45	36	41
Sylhet	47	39	44
Average	45	36	41

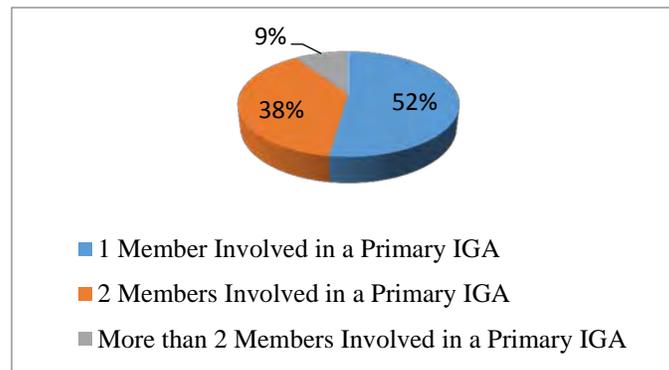
Table 3: Size of the Households Surveyed

Region	Number of Household Members		
	Avg. No of Male Members	Avg. No of Female Members	Avg. No of Total Members
Cox's Bazar	2.95	2.93	5.89
Khulna	2.56	2.56	4.96
Sylhet	3.58	3.16	6.64
Average	3.05	2.89	5.85

59 percent of the surveyed households were found to be landless. No respondents self-identified as an ethnic minority.³³ 52 percent of the households were found to have at least one member involved in a primary IGA (as shown in figure 1), while 38 percent households had 2 members involved and 17 percent had more than two members involved in a primary IGA.

³³ Note: the survey did not specifically select for minority respondents though the survey was conducted in areas when ethnic minorities are known to be present and working with CREL.

Figure 1: Percentage of Household Members Involved in Primary IGAs



2.2 HOUSEHOLD ECONOMIC INFORMATION

The survey identified 51 different sources from which individuals and households earn income. As mentioned before, these sources were classified into two broad IGAs – primary and supplementary. There was one exception though for the case of housewife. For before project and current IGA comparison purposes we treated housewife as an IGA. Although it does not provide monetary return, however, it consumes the bulk of the woman’s time and attention and hence was considered to be a primary IGA.

The survey asked respondents regarding details of IGAs for all the household members. So, although there were 352 respondents participating the survey, information could collect for all the surveyed household members’ income, different income source, primary and supplementary IGAs, whether they have adopted any alternative IGAs because of CREL initiatives. The survey identified 528 household members involved in primary IGAs from the households of 352 respondents. In addition 207 household members were found to be involved in supplementary IGAs³⁴. The definition of primary, supplementary and alternative IGAs are given in the previous chapter.

As mentioned before, the survey found 528 household members involved in primary IGAs. Among them, 32 percent mentioned that their income was increased during project due to increasing efficiency resulting from CREL initiatives (table 4). In addition, 36 percent told that their income increased due to shifting to an alternative IGA³⁵ because of CREL initiative. All 207 household members involving in supplementary IGAs also experienced income increase. Among them, 70 percent attributed CREL for the income increase.

³⁴ These 207 household members are common in the list of 528 household members having primary IGAs

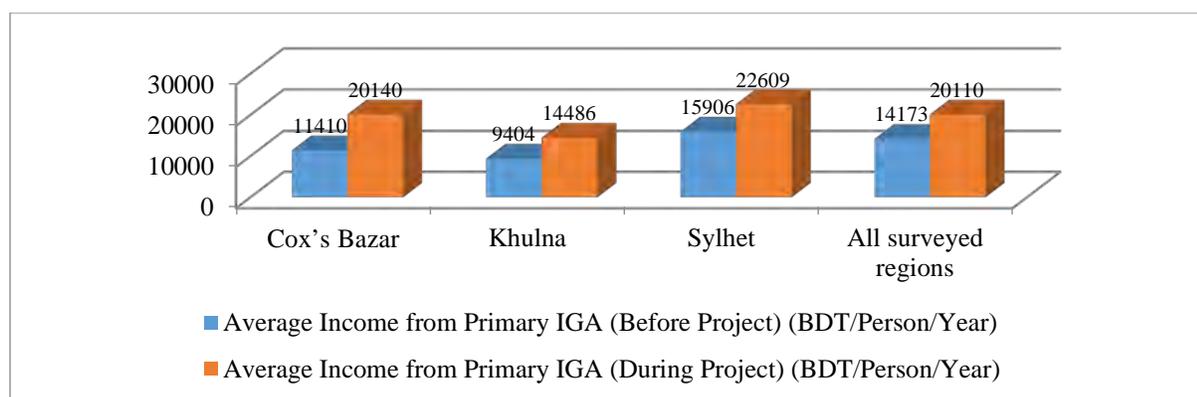
³⁵ The IGAs promoted from CREL, either as primary or supplementary IGA, are – horticulture (mango, banana, papaya, lemon, pineapple, etc.); high value vegetables (capsicum, summer tomato, strawberry); average value vegetables (cucumber, eggplant, okra, bitter guard, bean, etc.); aquaculture (carp, tilapia, prawn, shrimp, etc.); handicrafts (pebble toys, cap, dress, embroidery, souvenir, bamboo crafts, etc.); poultry and livestock (duck, chicken, cow, goat, pig, etc.); floriculture; field crops (sunflower, maize, potato, etc.); apiculture; and small business

Table 4: CREL influence on number of household members in increasing income from IGAs

Categories of CREL impact on household members' IGAs	Number of household members in this category attributing to CREL	Percentage of household members in this category attributing to CREL
Income increase due to increasing efficiency	169	32%
Income increase due to shifting to an alternative IGA	190	36%
Income increase due to adding a supplementary IGA	145	70%

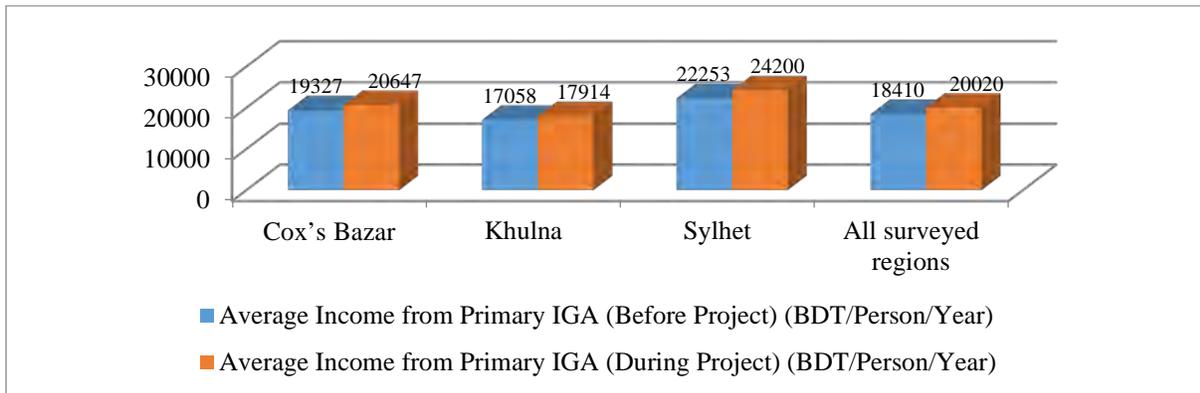
Figure 2 quantifies the income increase due to increasing efficiency from participating CREL activities for those who were in the same primary IGA both in before and during project scenario. For these household members, average annual income from primary IGAs before project was BDT 14,173, which became BDT 20,110, which means there was an escalation of around 42 percent (Figure 2). CREL promoted better production technology and enabled better market linkages for its beneficiaries, which resulted in increased productivity, better quality of products and decreased cost. These are the reasons for such escalation of income from primary IGAs for the household members.

Figure 2: Income from primary IGAs for those staying in the same IGAs and attributing CREL for the income increase



It has been shown in Table 4 that 36 percent of the household members from the surveyed households attributed CREL for their shifting towards alternative IGAs. They also mentioned about income increase from their alternative IGAs. The survey identified an increase of 9 percent of income for these household members (shown in figure 3).

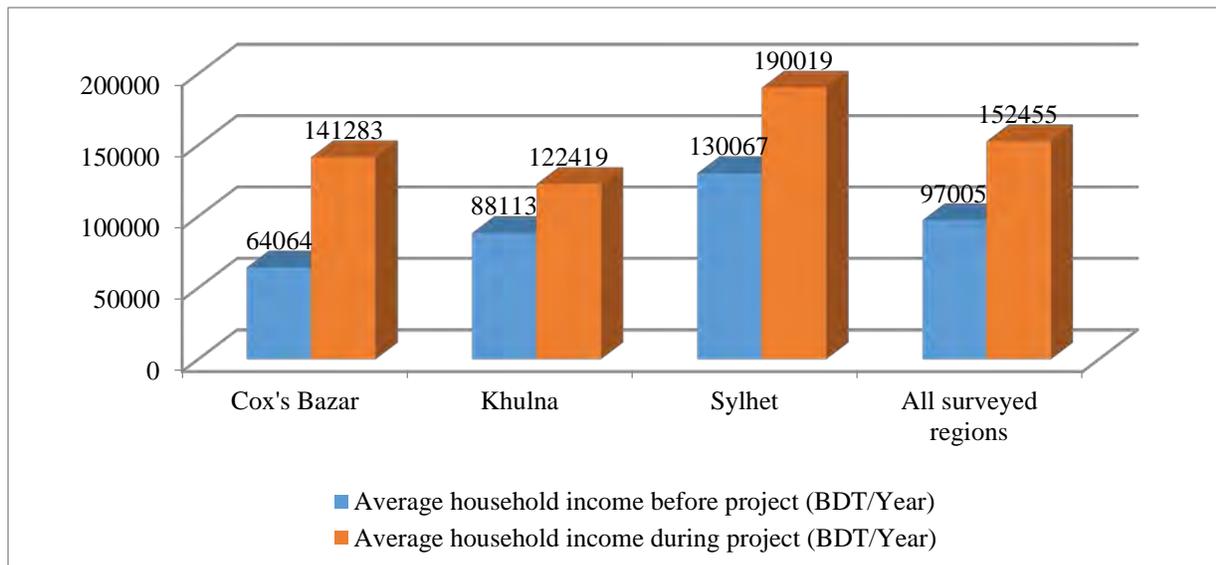
Figure 3: Income from alternative IGAs for those shifting from a different primary IGA and attributing CREL for the income increase



A point to be noted is that the income increase for those staying in the same IGA was higher than the income increase for those shifting to alternative IGAs. One of the reasons behind this is the skill and experience of the IGA holders who stayed in the same IGA, which the project could even increase through better training, information and market linkage. For those shifting towards the alternative IGA, these skills were somewhat new to them. Already they have shown some signs of improvement, evident from the small escalation in income. Since the project is continuously working with them in different IGA aspects, including training, technology transfer and market linkage, there is a possibility that this income will increase eventually in future.

Total household income for the surveyed respondents was measured as cumulative of income of all household members from primary IGA, income of all household members from supplementary IGAs, household benefits/grants from different programs, sell of household goods, rent, remittance and other income from other sources. For before project scenario – the previous year for the respondent before entering into the project was considered. In case of during project scenario – previous 12 months from the survey was considered. Overall household income for the surveyed respondents' households was seen increased to almost 57 percent during project in comparison to the before project scenario. The increased income from primary IGAs and the additional income from supplementary IGAs contributed towards this income increase.

Figure 4: Total income of the surveyed households



2.3 HOUSEHOLD NATURAL RESOURCE EXTRACTION INFORMATION

As natural resource (NR) extraction from protected areas is illegal, and this is well understood by CREL beneficiaries, accurate responses to our questions about NR extraction patterns before and after CREL intervention are useful primarily as qualitative indicators.³⁶ To compensate for this we included in the survey several questions to improve our understanding of before project and current patterns of NR extraction. These include:

- Number of days spent in protected areas,
- The value of natural resources extracted for sale and consumption,
- The percent of income from natural resource extraction

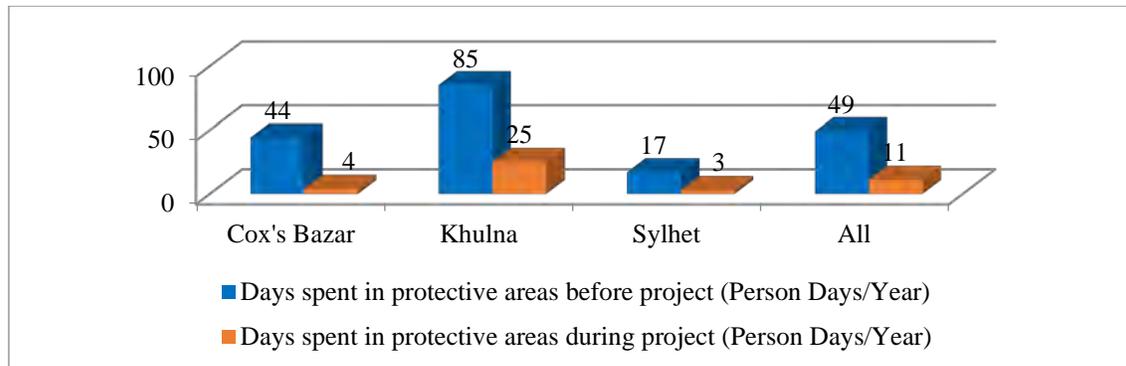
The respondents were asked the question of how many days they spent in protected areas like forests and wetland in a year. Since most of the NRs extracted have seasonal factors, the extractors spend different amounts of time for different products. While getting the cumulative figure for all products in a year, the survey revealed that the respondents used to spend 49 days/year/person in protective areas before the project initiated. However, it was found to be 11 days/year/person during the project, which indicates a remarkable decrease of 78 percent. This figure was found to be the maximum (91 percent) for the respondents in Cox's Bazar. The decrease indicates that the practice of going into protective areas has decreased for the respondents, which can be in indication of decreased NR extraction by them.

A point to be noted is that the average days spent in protective areas was found to be quite low in Sylhet region even before the project. Considering the type of products extracted by the respondents,

³⁶ Natural Resource was meant by fuel wood, shrimp post larvae (pl), animals, plants for human consumption, fodder and other non-timber forest products (NTFP) like honey. Fishing was not included in the NR definition as CREL is not promoting reduced fishing.

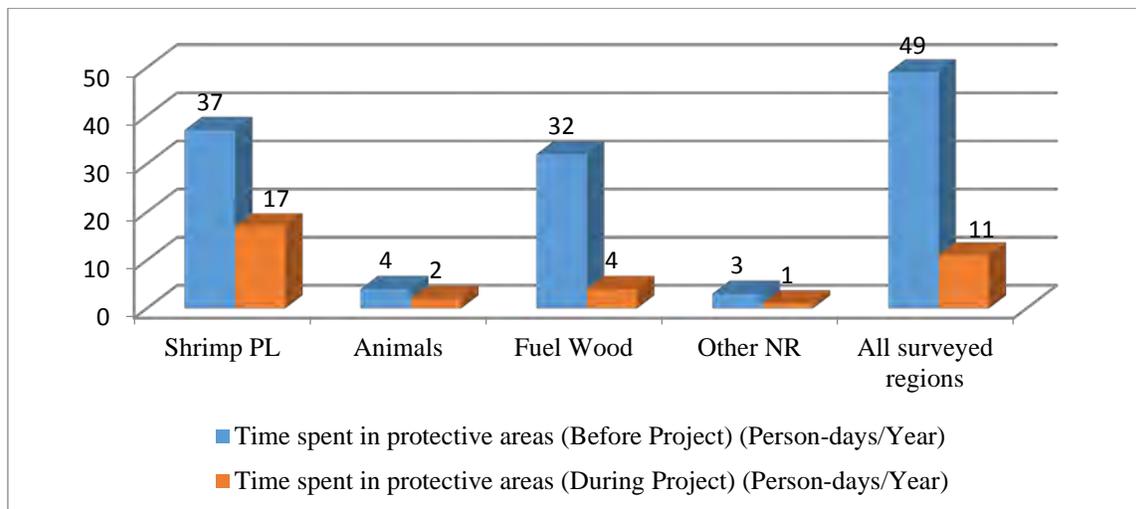
we identified that the majority of the respondents from sites like Hail haor and Hakaluki haor are from wetlands and they do not have access to forest products. The wetlands in those two sites do not have NR like shrimp pl or crab. Since fishing was not considered as NR definition of CREL, that can be one possible reason behind low number of person days in protective areas in Sylhet region.

Figure 5: Number of days spent in protective areas by the respondents



The survey also looked into the specific NR for which respondents spent time in protective areas. There was a high degree of decrease in the number of times spent in protective areas for collecting fuel wood during project in comparison to before project situation (figure 6). Approximately 87 percent of decrease was visible for this NR. There was also a significant decrease of time spent found in case of shrimp PL (54 percent). Time spent for other types of NR was not very significant even before the project, as per the respondents.

Figure 6: Specific NR for which respondents spent time in protective areas



As mentioned before, another value of NR sold and consumed by the respondents was also considered to be an indicator to understand their NR extraction pattern. A quite remarkable decrease was visible in this indicator. There was no sale of NR found in Cox's Bazar. Consumption of NR was found to be only for fuel wood in Cox's Bazar, which was seen decreased around 58 percent during project period. NR sell and consumption in Khulna was found to be for shrimp pl, animals, fuel wood and a few other Non-Timber Forest Products (NTFPs). Decrease was visible for both NR sales and consumption in Khulna for the respondents. Such decrease was estimated to be 22 percent and 18 percent respectively during project for NR sales and consumption in Khulna in comparison to before project scenario. Decrease for

both sales and consumption was also found in Sylhet, which was estimated to be 71 percent and 44 percent respectively during project period.

Figure 7: Cumulative value of NR sold and consumed by the respondents (in BDT/Year/Person)

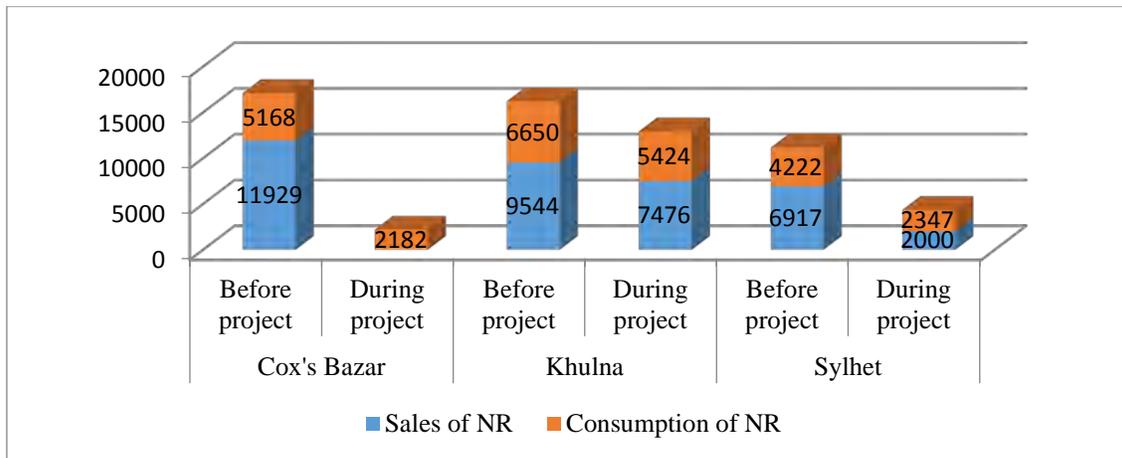
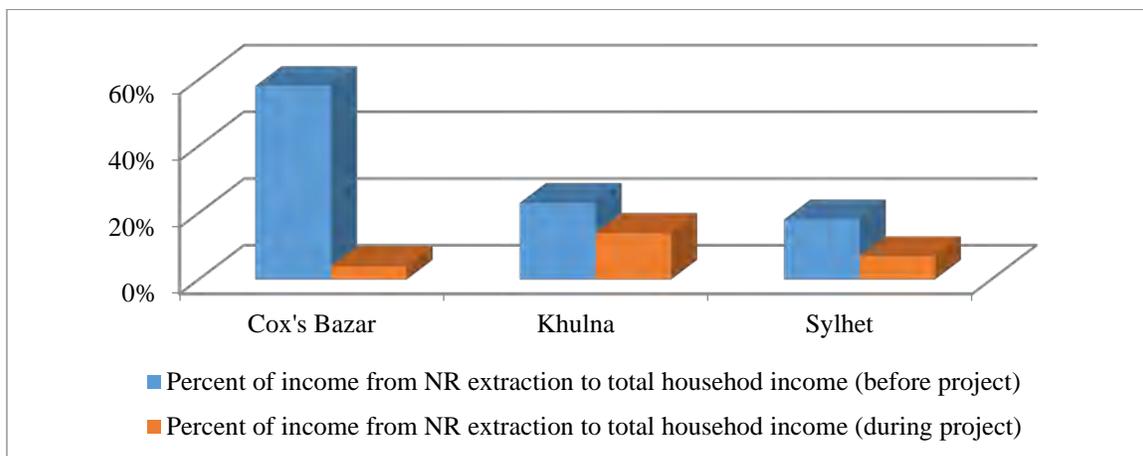


Figure 2 above shows total household income before and during project. We identified total income of household from NR extraction by summing up the income from NR extraction for all the household members (both primary and supplementary income). Afterwards, there was analysis made on identifying the percentage of total household income resulting from NR extraction from both before and during project situation. There was significant decrease in the percentage of income from NR extraction to total household income for all regions, as shown in Figure 8. This decrease is a combined reason for a number of factor that took place during project, including decrease in sales of NR by the household members, increased income resulting from increased efficiency of the non-NR IGAs, increased income resulting from alternative IGAs and additional income from the supplementary IGAs.

Figure 8: Percentage of income from NR extraction to total household income (before and during project)



SECTION THREE: PERCEPTION OF RESPONDENTS ABOUT CREL ACTIVITIES

3.1 CREL TRAINING ACTIVITIES

CREL prepared and delivered 16 different trainings. During the survey we queried respondents specifically whether they had attended 16 of these shown in Table 5.³⁷ These trainings included issues like climate resilience, Disaster Risk Reduction (DRR), Natural Resource Management (NRM), financial literacy, and IGAs. However, these trainings were targeted for different categories of stakeholders. Table 5 below shows the list of trainings and percentage of respondents participating in those trainings.

Table 5: Participation in Different CREL Trainings

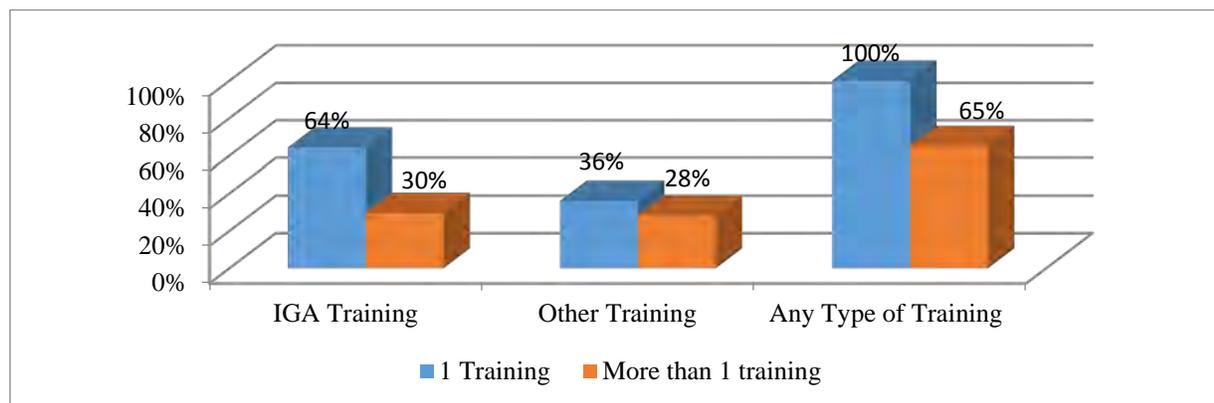
Training Title	Percent of Surveyed Respondents Participating
Training on Climate Change Adaptation and Mitigation and Climate Resilient NRM using Flip Chart and Facilitators Guide Books for VCF members, VCG, PF, UCC, RUG,NS	46%
Training on Climate Change Adaptation and Mitigation and Climate Resilient Natural Resources Management for CMOs Members and LLGOs of FD, DoE, DoF	1%
Training on Roles and Responsibilities of Community Patrolling Groups (CPG)	9%
Financial and Entrepreneurial Literacy Programs (FELC) on Primers: 1 & 2 and Flip Chart for FEL group and VCF members	13%
Financial and Entrepreneurial Literacy Programs (FELC) on Teacher/Facilitators' Guide Books based on Primers: 1 & 2 for FEL facilitator	5%
Training on Financial and Grants Management for CMOs members and Accounts and Admin Assistants	8%
Training on Climate Resilient Livelihoods and Vegetables Cultivation for VCF, selected Farmers, Local People & CMO Members	55%
Training on Climate Resilient Livelihoods and Fish Culture for VCF, selected Farmers, Local People & CMO Members	50%
Training on Eco Guide Development for Local Youth and Selected CMO Members	1%
Training on Ecotourism: Entry Fee Revenue Sharing and Collection Mechanism in Protected Area for Field Level Selected CMOs Members	1%
Training Laws, Policies, Institutions and Judiciary: Contexts of Environment, Ecosystems, Natural Resource Management, Climate Change and Disaster Management for Local Government Institute (LGI), UP ,UPZ members and Sectoral/ Departmental officials	9%
Training on Gender mainstreaming and Leadership Development : Environment and Biodiversity Conservation for CMO members	12%
Training on Resources Mobilization Planning for CMOs and CBOs Member	1%
Training on Participatory Ecological Monitoring for Biodiversity Conservation for local	9%

³⁷ The discrepancy between total trainings provided by CREL and the 16 training covered in the survey was due to an error in communicating the complete list of CREL trainings that was not discovered until after the survey had begun.

level Govt. officials, local youths, selected CMO members and Nishorgo Sahayak	
Training on Disaster Management and Disaster Risk Reduction (DRR) for Selected CMC Members and Local Level Govt. Officers	30%
Training on Organizational Management of CMOs for Natural Resources Management for CMOs members and local level Govt. Officials	6%

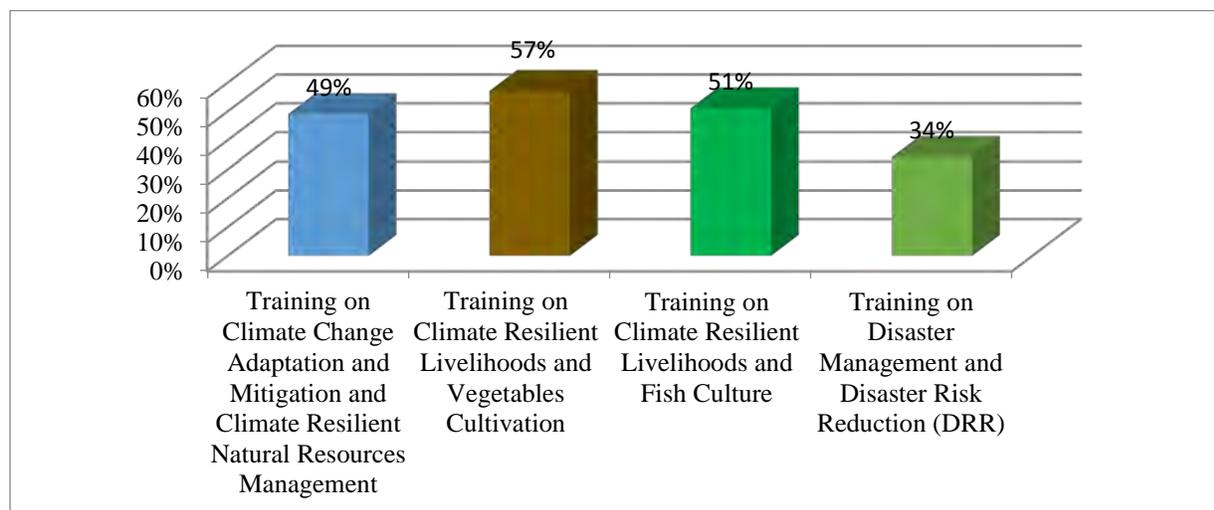
The 16 trainings delivered (as shown in table 5) can broadly be categorized into two areas – IGA related trainings and other types. All the respondents surveyed had received at least one training of any nature (Figure 9). 65 percent of the beneficiaries reported receiving two or more trainings. In case of IGA training, 64 percent of the respondents received at least one IGA training.

Figure 9: Respondents getting different categories and numbers of trainings



Respondents were asked whether they could recall the training title or issue. As shown in Figure 10, the four most common trainings were also the one most on top of the respondents' minds.

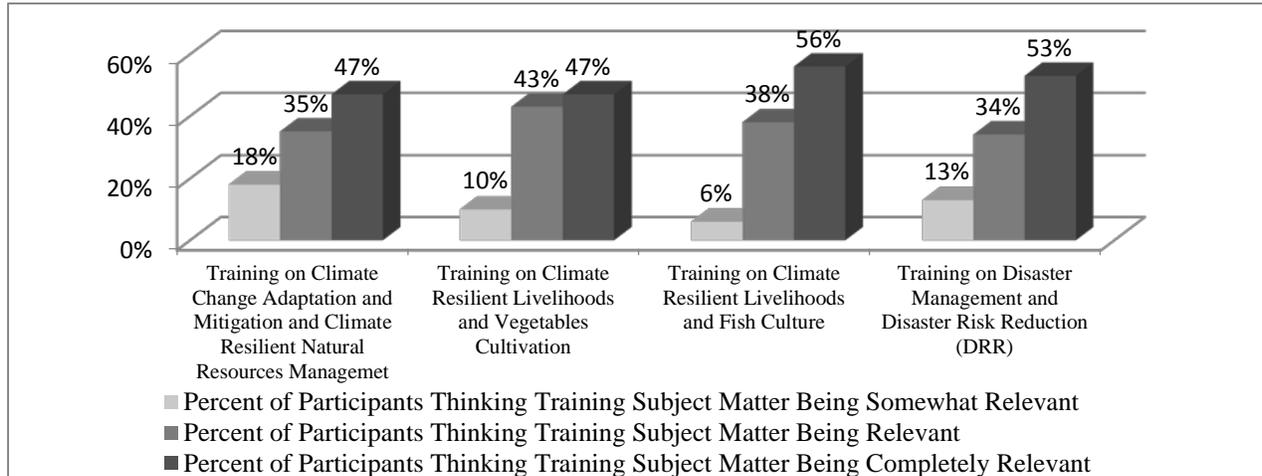
Figure 10: Different trainings on top of mind for percent of respondents



We asked about respondents' perception of relevance of these four trainings (see Figures 11). There was a five point semantic differential scale was used to quantify the responses – starting from completely irrelevant to completely relevant. Around 56 percent of the respondents expressed that the training on climate resilient livelihood and fish culture was completely relevant to them. The percentage for

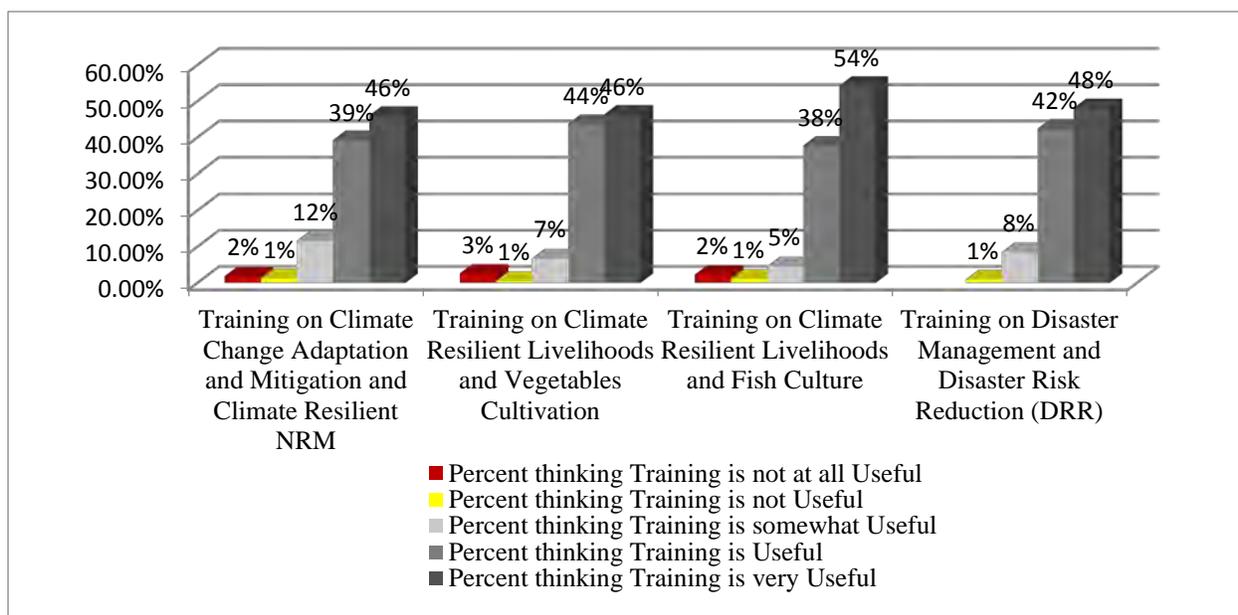
respondents thinking training being completely relevant for vegetable, DRR and climate resilient NRM are 47 percent, 53 percent and 47 percent respectively. Another good percentage of beneficiaries thought the climate resilient NRM, vegetable, fish and DRR trainings were relevant to their livelihood (35 percent, 43 percent, 38 percent and 34 percent respectively). There was no response regarding any of the trainings being irrelevant or completely irrelevant.

Figure 11: Surveyed respondents' opinion regarding relevance of the training subject matters



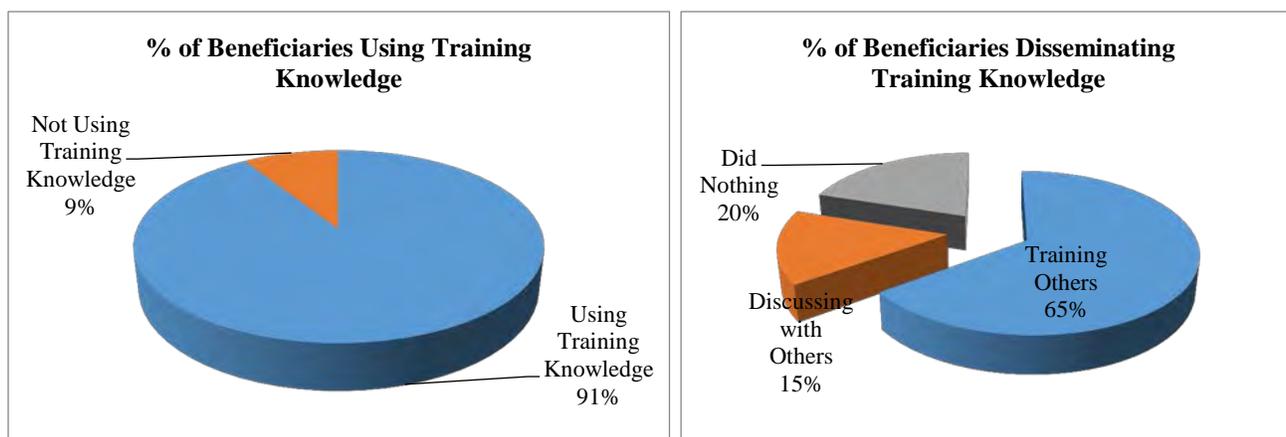
Furthermore, respondents were asked about the usefulness of the trainings in their livelihood and daily activities, which were also measured using a five point semantic differential scale (see Figure 12). Again between 38 and 54 percent of respondents perceived that these trainings were “very effective” and “quite effective” for fish and vegetable trainings. As per their responses, these trainings have direct impact on their livelihood and income increase. They also responded that NRM training was very effective or quite effective as the training issues they can implement in their daily life to conserve natural resources for future. Training on disaster risk reduction was perceived as less useful to them, mostly since they could not relate the subject matter as close as aforementioned three trainings.

Figure 12: Beneficiaries' Perception on Usefulness of the Trainings



As shown in Figure 13, 91 percent of the participants replied that they have used the training knowledge. 65 percent of beneficiaries reported that they share their training other persons (neighbors, friends or relatives). Another 15 percent do not train others, but frequently discuss the training topics and issues. Only 20 percent of the respondents replied that they do not disseminate the training knowledge in any manner.

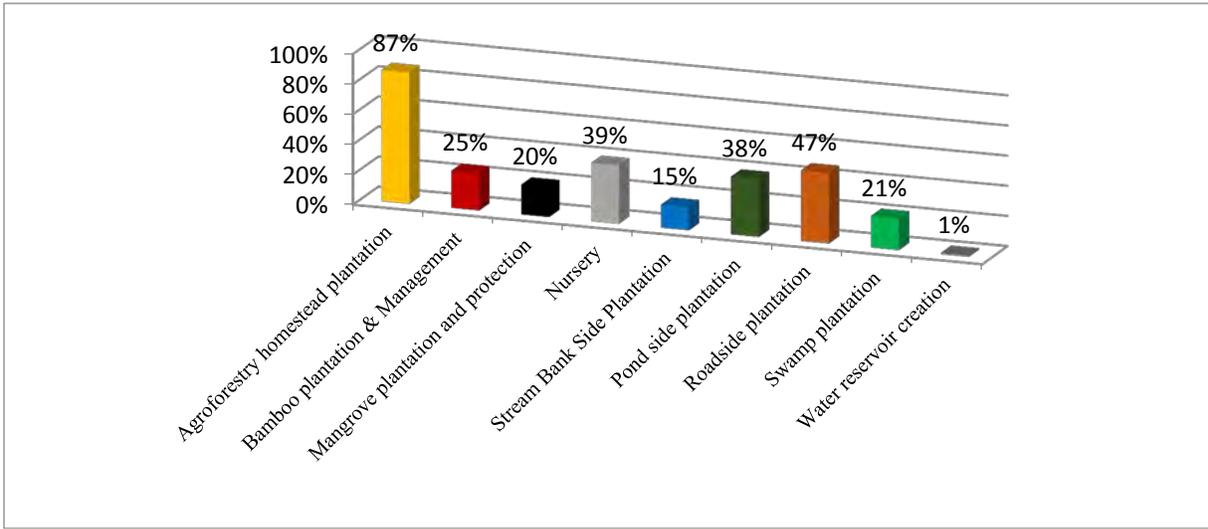
Figure 13: Usage and Dissemination of Training Knowledge by the Training Participants



3.2 CREL BIO-PHYSICAL ACTIVITIES

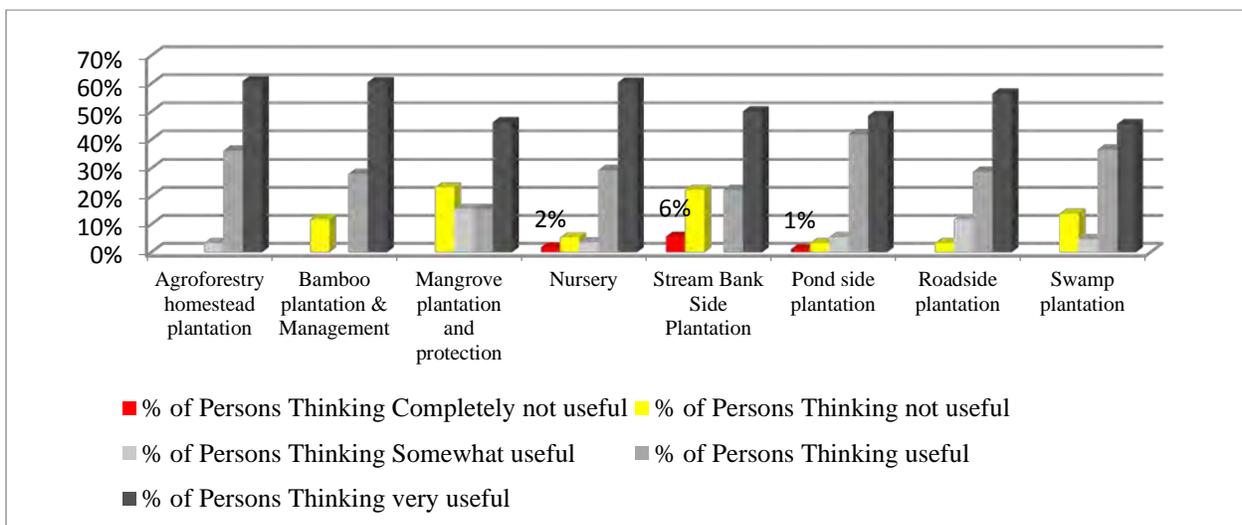
CREL provided the survey team a list of nine project-promoted bio-physical activities: (i) agroforestry homestead plantation; (ii) bamboo plantation and management; (iii) mangrove plantation and protection; (iv) nursery; (v) stream bank side plantation; (vi) pond side plantation; (vii) roadside plantation (viii) swamp plantation; (ix) water reservoir creation. Respondents were asked whether they could recall these activities (Figure 14). 87 percent of the respondents were found to recall the agroforestry homestead plantation activity. Roadside plantation, Nursery and Pond side plantation also had good recall among the surveyed respondents – respectively 47 percent, 39 percent and 38 percent.

Figure 14: Beneficiaries Recalling Different Bio-physical Activities of CREL



Beneficiaries participating in different bio-physical activities were asked about their perception on the usefulness of the bio-physical activities. This was again measured using a five point semantic differential scale. Percentage of beneficiaries thinking bio-physical activities being very useful ranged from 45 percent to 61 percent for different activities (see figure 15). 15 to 42 percent of the respondents reported these activities being useful for them, while 0 to 15 percent expressed these being somewhat useful. For agroforestry homestead plantation, there was no response on the activity being not useful or completely not useful. There were some responses regarding activities not being useful, ranging from 3 percent to 23 percent for activities like bamboo plantation, mangrove plantation, nursery, stream bank side plantation, pond side plantation, roadside plantation and swamp plantation. The response on bio-physical activities completely being not useful were 6 percent, 2 percent and 1 percent respectively for stream bank side plantation, nursery and pond side plantation.

Figure 15: Beneficiaries Perception about Usefulness of the Bio-physical Activities



SECTION FOUR: IMPACT OF CREL ACTIVITIES ON RESPONDENTS NATURAL RESOURCE MANAGEMENT, LIVELIHOOD AND RESILIENCE

4.1 IMPACT OF CREL ACTIVITIES ON NR EXTRACTION OF RESPONDENTS

We found a strong correlation (significant at 0.001 level) between respondents' participation in CREL livelihood activities and their reduced natural resources extraction for sales or consumption. Magnitude shows an increase in CREL activities participation (training and bio-physical) result in almost 14 percent decrease in NR extraction (combination of sales and consumption).

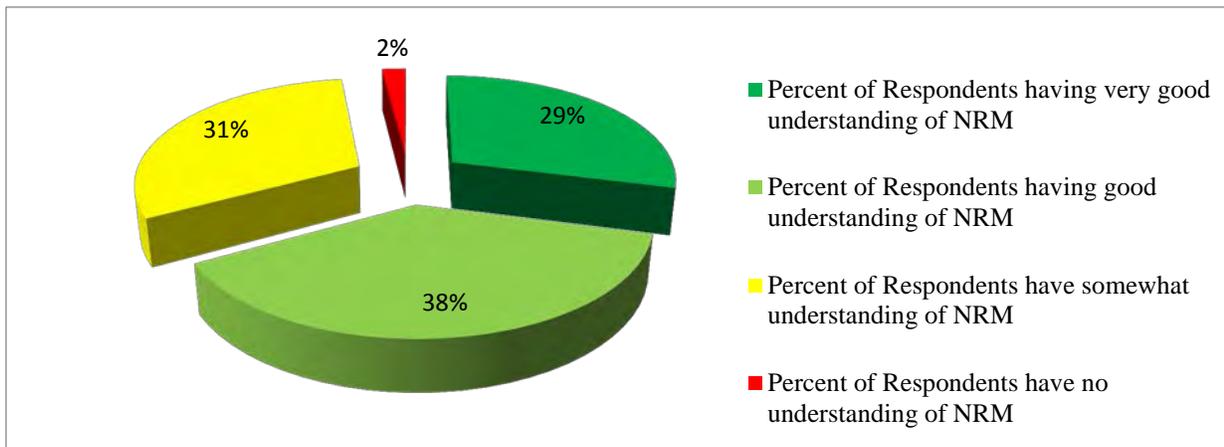
Correlations

	Participation in Activities	Decrease in NR Extraction
Participation in Activities	1	.138**
Sig. (2-tailed)		.009
N	355	355
Decrease in NR Extraction	.138**	1
Sig. (2-tailed)	.009	
N	355	355

** . Correlation is significant at the 0.01 level (2 tailed).

The survey findings indicated that respondents' understanding of natural resources management (NRM) has increased quite significantly. This was visible from more than two thirds of the respondents reporting to have good understanding about climate resilient natural resource management because of the CREL initiated trainings (see figure 16). This improved understanding of NRM can be one of the possible reasons for the decrease in NR extraction by them.

Figure 16: Respondents' understanding of NRM



4.2 CREL ACTIVITIES AND RESPONDENTS' LIVELIHOOD

It has already been shown in Table 4 that 32 percent of the surveyed household members involved in IGAs attributed CREL for their income increase from existing non-NR extraction related IGAs. They expressed that because of being involved in CREL activities, especially training and market linkages, efficiency increased in terms of reduced cost, enhanced productivity and improved product quality resulting better price. According to the information provided by the respondents, 36 percent of the surveyed household members involved in IGAs adopted alternative IGAs that also increased their income. The survey also found 207 members from the surveyed household being involved in supplementary IGAs that are providing supplementary income for the households. Seventy percent of them attributed CREL for their engagement in those supplementary IGAs. So, from this discussion, we cannot comment that the project only provided supplementary or alternative income earning opportunity for the household; rather it generated opportunities for both types of income for the surveyed households.

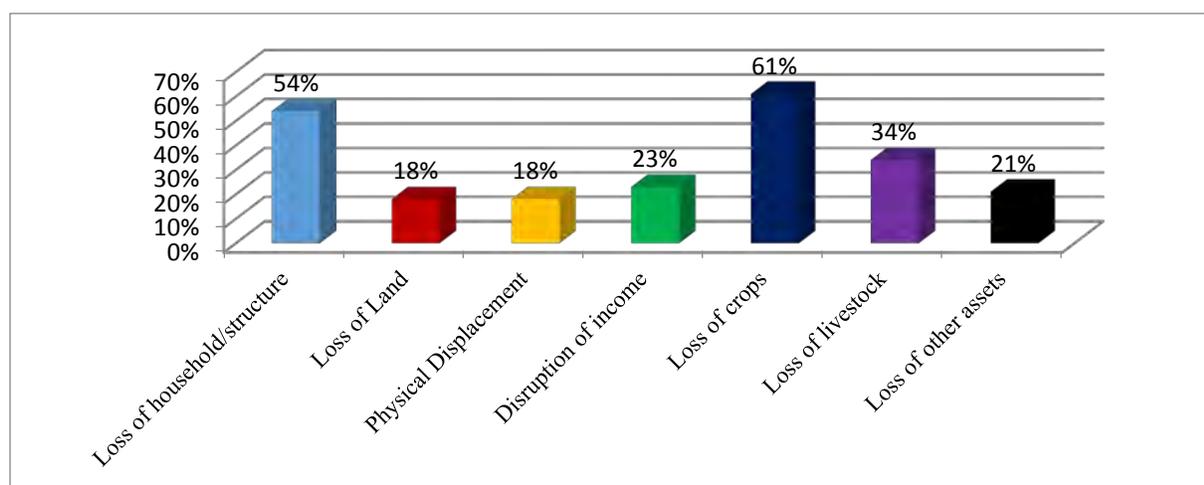
4.3 RESPONDENTS' LIVELIHOOD AND NR EXTRACTION

Despite the correlation between participation in CREL IGA services and reduced NR extraction the Survey team was not able to find a correlation between increases in reported income and decreased NR extraction. This goes to the heart of the rationale behind introducing IGAs: to provide alternatives to resource extraction. The lack of a significant correlation is not surprising given that the CREL livelihoods program has been operating for barely two years and future income effects should be stronger. Our findings indicate that while CREL is driving a switch from NR extraction to new sources of income but this has not as yet resulted in a substantial increase in income.

4.4 CREL ACTIVITIES AND RESPONDENTS' HOUSEHOLD RESILIENCE

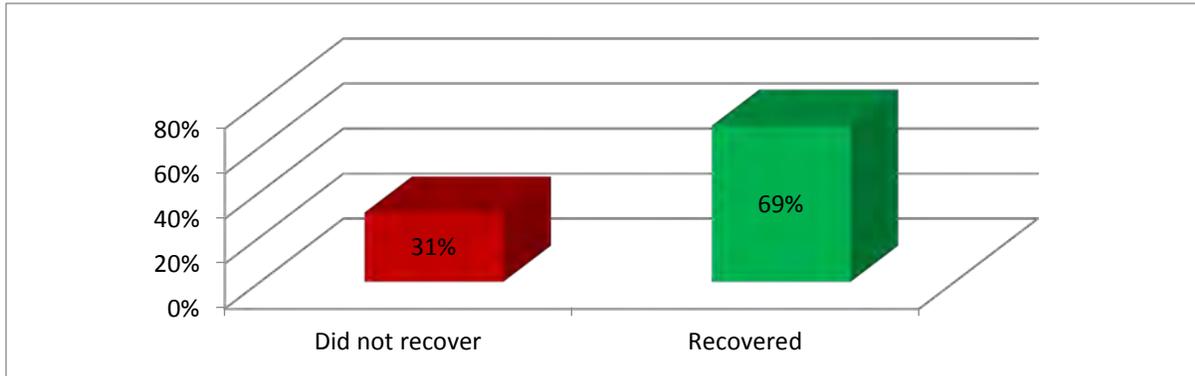
All three surveyed regions in which CREL works, climate change related natural calamities such as cyclone, drought, flash flood, erosion, salinization, etc. are quite common phenomenon and 92 percent of our respondents reported experiencing one or more of them. As shown in Figure 17, loss of crops and damage to household structures were reported by more than half of respondents.

Figure 17: Impacts experienced by respondents due to natural disaster



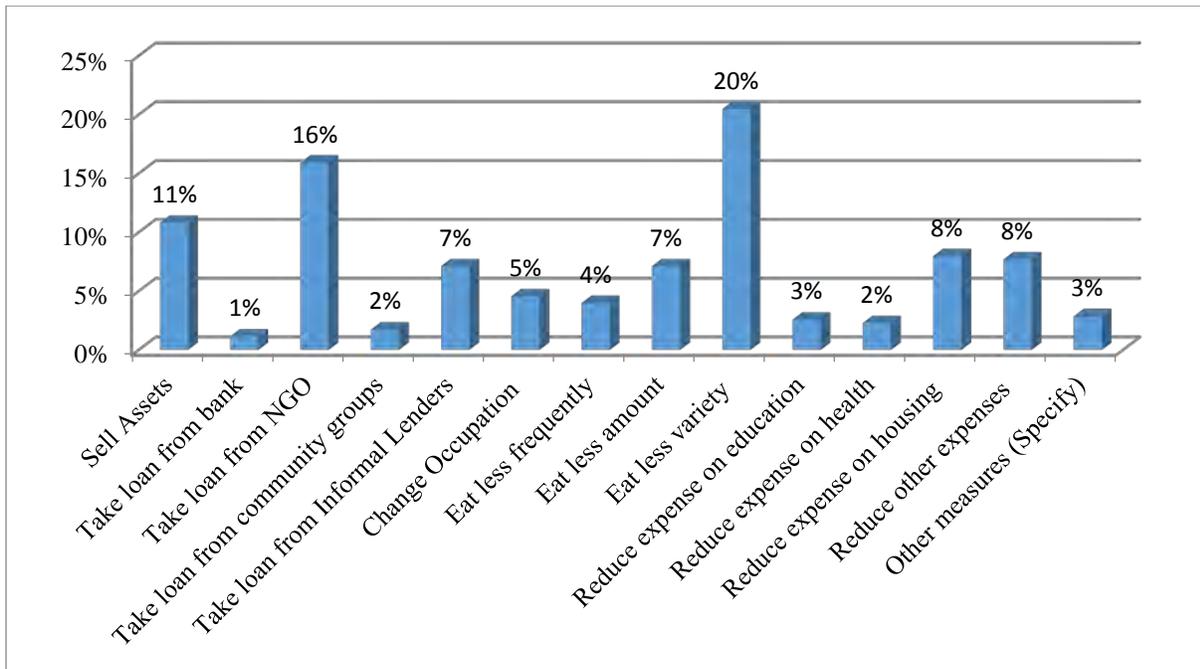
We asked respondents whether they could recover from the financial losses due to natural disaster they faced in previous five years, 31 percent said they had not recovered from natural calamities they had experienced (Figure 18).

Figure 18: Status of respondents recovering from losses due to natural calamities



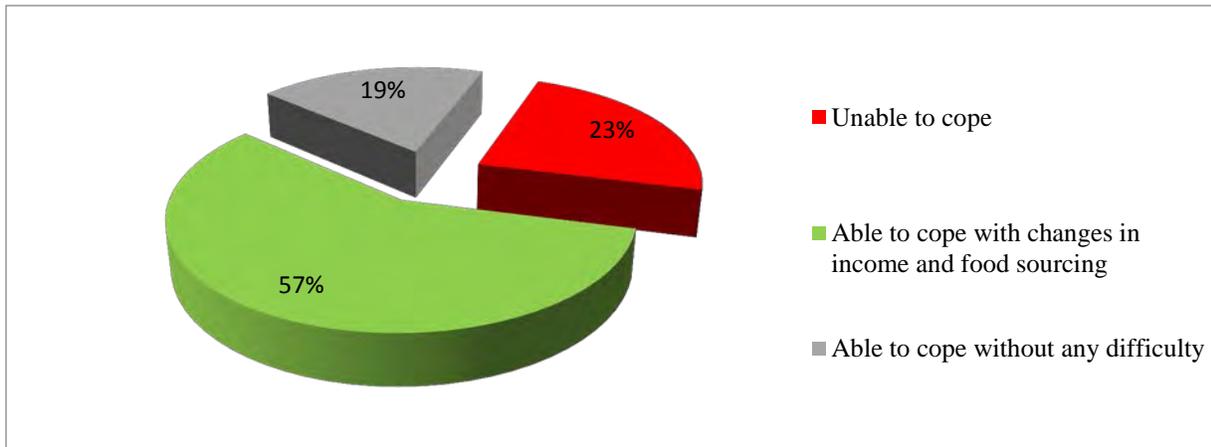
We asked the respondents regarding the alternatives they take to manage loss due to natural disaster. Twenty percent of the respondents were found to eat less variety, while 16 percent were seen taking loan from NGOs. Eleven percent of the respondents expressed that they sell their assets in mitigating the loss due to natural calamities. Figure 19 shows other alternatives that they adopt in the event of mitigating loss due to natural calamities.

Figure 19: Alternatives taken by respondents in mitigating loss due to natural calamities



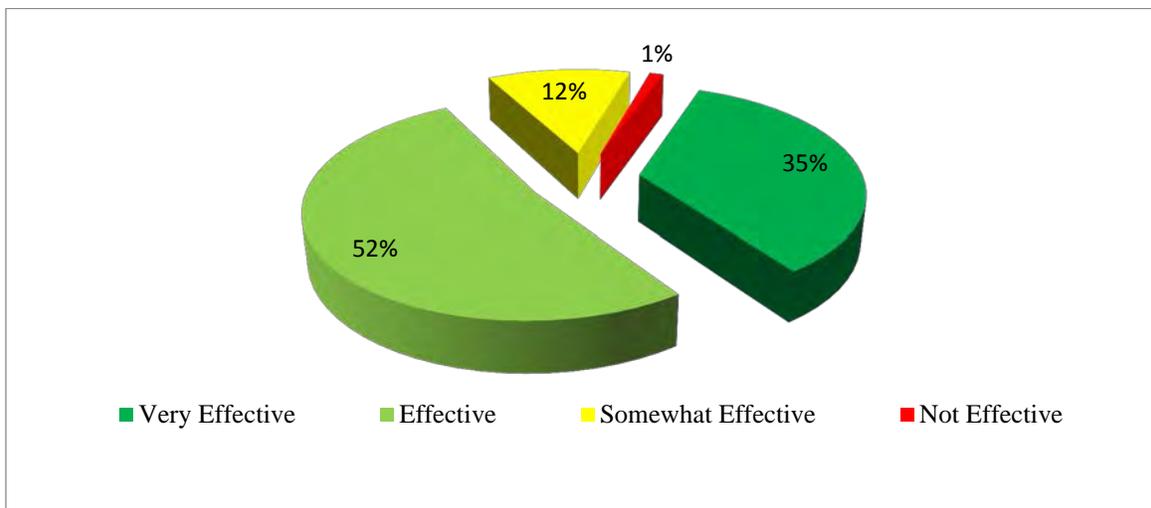
As shown in Figure 20, 23 percent of our informants predicted they would not be able to cope with the losses due to future shocks from natural calamity. 57 percent said they will be able to cope but that will result in adjustments in their income and food sourcing. Only 19 percent felt they would be able to cope with difficulty.

Figure 20: Respondents' ability in coping future shocks due to natural calamities



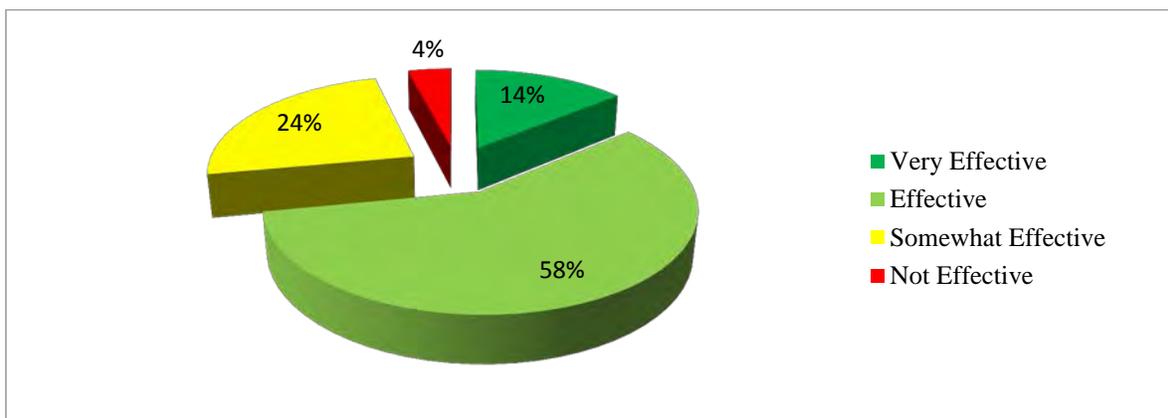
We then asked respondents about their perceptions of the effectiveness of CREL alternative IGAs in helping them mitigate financial/asset loss they previously faced due to natural calamity. As shown in Figure 21, 87 percent of respondents stated that the CREL alternative IGAs were effective in mitigating financial loss. As mentioned before, the alternative IGAs resulted in additional income for the beneficiaries and their households. So, the increased income helped them in mitigating financial loss they faced due to disaster.

Figure 21: Respondents' perception of CREL alternative IGA effectiveness in enabling their ability to mitigate financial loss they have previously faced



As shown in Figure 22, respondents were asked whether they think the activities of CREL have enabled their capabilities in coping/managing future shocks due to natural disaster. 14 percent expressed that these are very effective, 58 percent thought these are effective and 24 percent felt these are somewhat effective.

Figure 22: Respondents' perception of CREL alternative IGA effectiveness in enabling their ability to mitigate financial loss due to future shocks from natural calamities



We asked respondents what steps they had taken to prepare for disaster. As shown in Table 6, 60 percent of the respondents trained their household members on preparedness for disaster, and 37 percent gathered information about nearest emergency shelter so that they can take shelter during a disaster. Others changed their profession to something that is not dependent on environment to a large extent (e.g. handicrafts).

Table 6: Steps Taken by Beneficiaries as Preparedness for Disaster

Steps Taken	Percent of Beneficiaries
Trained household members on preparedness for disaster	60%
Gathered information on the nearest emergency shelter	37%
Changed profession to something that is not dependent on environment to a large extent	30%
Arranged emergency funds/resources to cope up with the situation after natural disaster or external shock	28%
Physical changes to household/structures (e.g. raising the floor)	26%
Keep regular communication with local members of disaster management committee	18%
Others	1%

The data and findings above demonstrate that a significant number of CREL beneficiaries regularly face financial and other losses due to natural calamities and disasters. Some of them are still unable to cope with future shocks, while a large portion has to change their income and food sourcing to cope. A substantial majority of respondents believe that CREL activities are helping them prepare for the shocks and losses in future and many report that they have already taken steps for improving their ability to cope clear sign of improved household resilience resulting from CREL livelihood and climate awareness activities.

SECTION FIVE: WOMEN AND OTHER VULNERABLE PEOPLE AND PROJECT ACTIVITIES

5.1 PARTICIPATION FROM WOMEN AND VULNERABLE POPULATION IN PROJECT ACTIVITIES

We looked at effective integration of women and other vulnerable populations in different project activities. Training was one of the activities that was looked into and the survey found that there was almost equal participation in trainings from male and female participants (shown in Figure 23). A similar scenario was seen for the bio-physical activities in which males and females participated at almost equal rates (Figure 24). As the respondents for the survey being randomly chosen and no ethnic minority being selected in the sample barred the survey from looking into participation from that group of population in different project activities.

Figure 23: Comparative Participation from Male and Female in Different Trainings

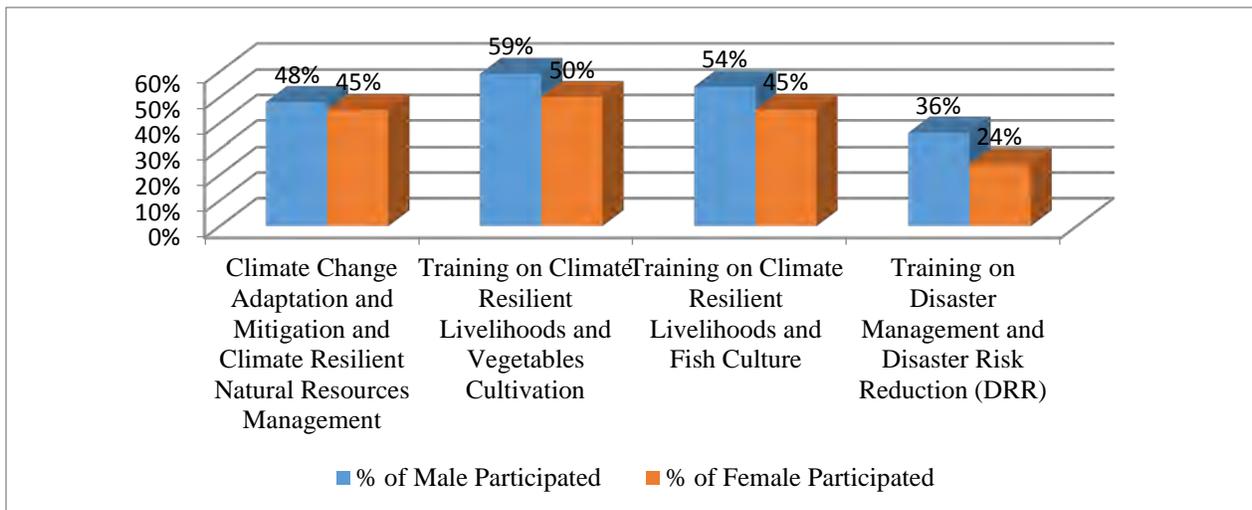
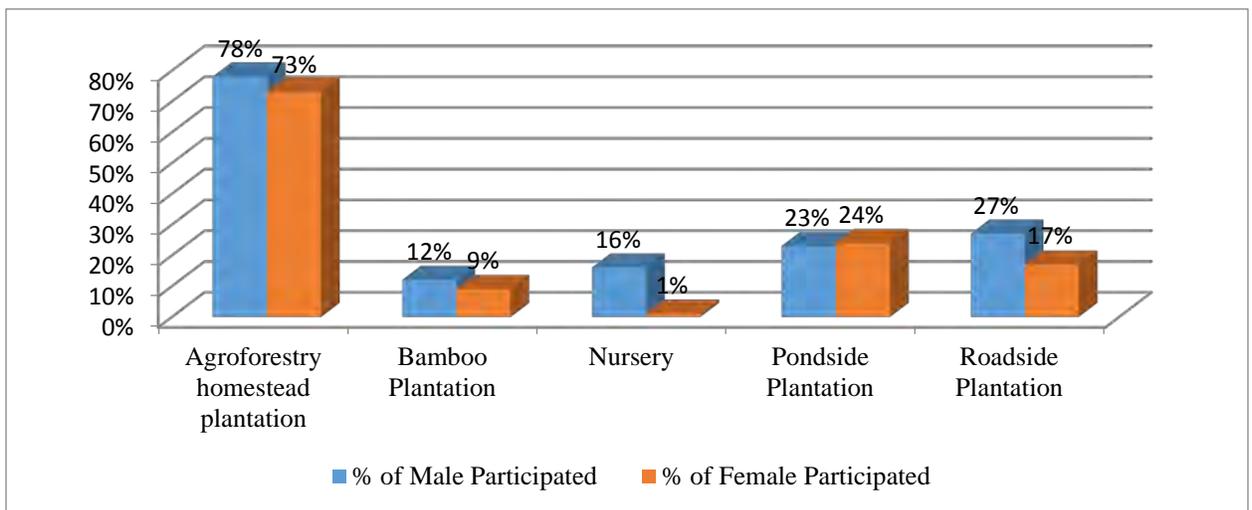
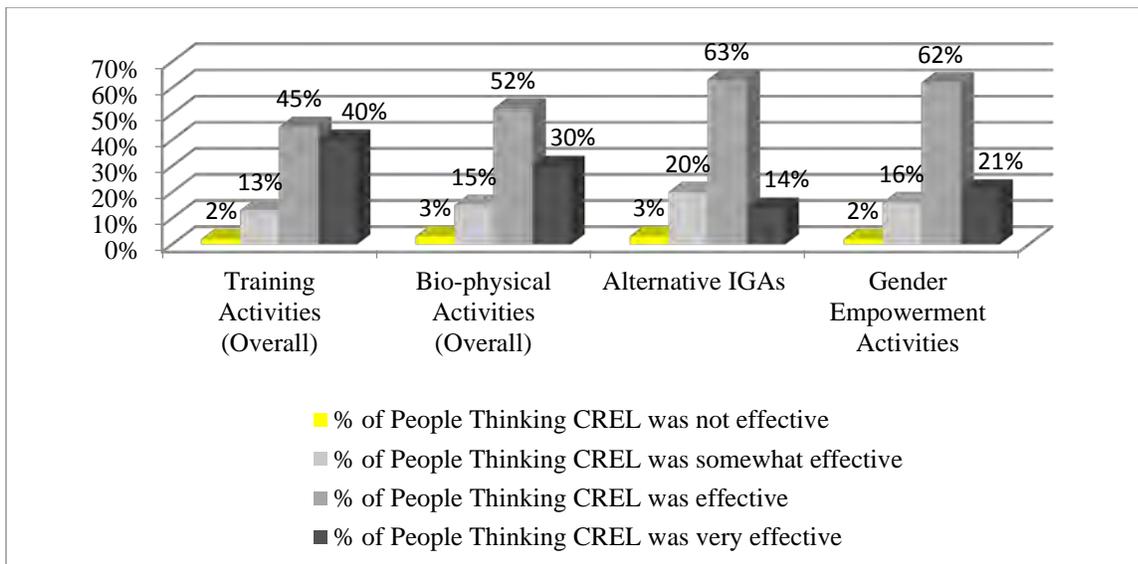


Figure 24: Comparative participation of male and female in bio-physical activities



Respondents were asked about their perception of CREL effectiveness in including women and vulnerable people in different project activities. Five point semantic differential scale was used to measure the perception about effectiveness. As shown in Figure 25, the percentage of respondents thinking CREL was very effective in including women and other vulnerable people in project activities varied from 14 percent to 40 percent. Similarly, the percentage of respondents thinking CREL was effective in such inclusion ranged from 45 percent to 63 percent. This means that the general perspective of respondents on effectiveness of the project in including women and other vulnerable people in project activities was positive. Additionally, there were no responses on the project being very ineffective in such inclusion, and a very small percentage of responses regarding project being not effective in the inclusion, which also indicates a positive perception of the respondents in general.

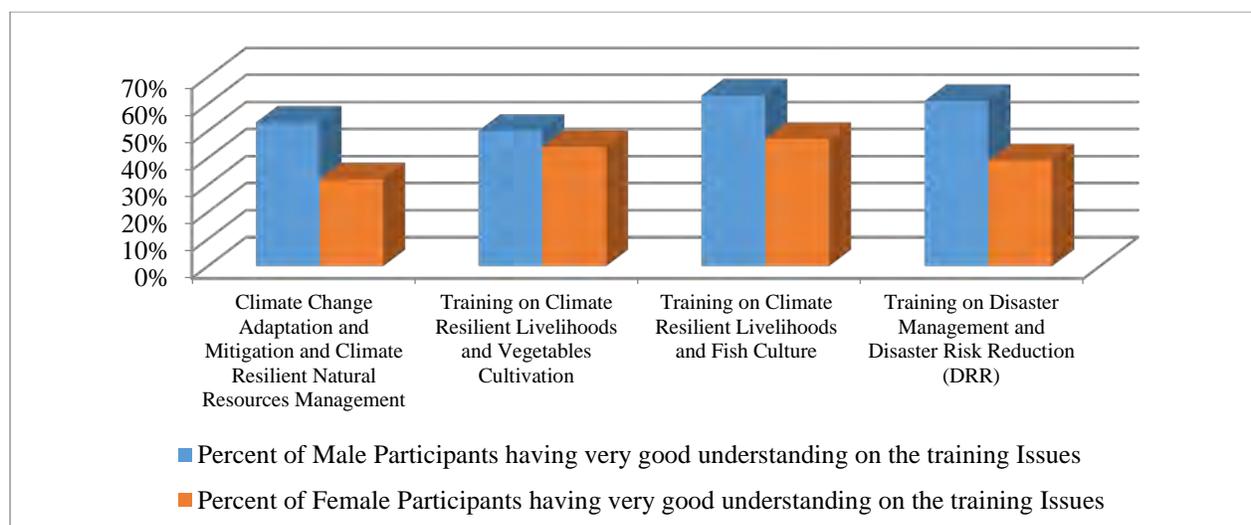
Figure 25: Respondents perception of CREL effectiveness in including women and other vulnerable people in project activities



5.2 IMPACT OF CREL ACTIVITIES ON WOMEN AND VULNERABLE PEOPLES

As shown in Figure 26, women consistently report somewhat lower levels of understanding of CREL trainings than men even on vegetable cultivation, which is largely directed toward women. The difference was more pronounced for more abstract subjects such as climate change and disaster risk reduction.

Figure 26: Understanding of respondents of trainings



As displayed in Table 7, respondents reported substantially lower levels of problems on a number of focal areas supported by the project related to income generation and empowerment.

Table 7: Problems faced by women (before and during project)

Problems faced by Women	Percent of Respondents Frequently Facing the Problem Before Project	Percent of Respondents Frequently Facing the Problem During Project
Limited access to productive assets	61%	7%
Limited income earning opportunity	64%	4%
Limited information on better production	67%	4%
Limited information on market	68%	4%
Limited access to finance	58%	4%
Limited decision making power in household	52%	5%

In the rural Bangladesh context, a large portion of the married women are housewives – investing the bulk of their time and attention in household chores. As these activities do not result in any economic return, this large group of women does not have any income of their own. A similar scenario was seen for the housewife respondents in the survey as none of them had any income before the project. Apart from the limited time to invest in IGAs, housewives, in many times, lack the skills, technology and market access to generate income. The CREL project worked in this area for capacity building of housewives in different IGAs and linking them to the market. The project could involve 22 percent of the housewives in primary IGAs, resulting average annual income of BDT 11,676 for them (see table 8). In addition, 25 per cent of the housewives were seen adopting a supplementary IGA along with their household chores and could earn an average of BDT 7,251 annually. This is quite a significant achievement for the surveyed households, since these women did not have any income beforehand and hence the income generated during project is an addition to the household income.

Table 8: Housewives involvement in IGAs during project and average income

	Percent of Housewives Involving into this IGA	Average Income (BDT/Person/Year)
Primary IGA	22%	11,676
Supplementary IGA	25%	7,251

Apart from housewives, women in general, experienced income increase from both primary and supplementary sources during the project in comparison to their before project status. In case of primary IGA, this increase was 6 percent, while the same for supplementary IGA was found to be 26 percent

Table 9: Income Increase from different IGAs for Women

Income Type	Before Project (BDT/Person/Year)	During Project (BDT/Person/Year)	Percentage of Increase
Women's Income from Primary IGA	27,477	29,233	6%
Women's Income from Supplementary IGA	5,165	6,497	26%

SECTION SIX: CONCLUSIONS AND RECOMMENDATIONS

The quantitative survey was meant primarily for identifying answers of the following questions:

1. To what extent have CREL climate-resilient livelihood activities achieved a direct and measurable impact on the protection of natural resources in protected areas? Are CREL livelihood activities a supplementary source of income or an alternative source of income? Is there evidence of improved household resilience resulting from diversified livelihoods or income?
2. Is the CREL multi-dimensional, integrated approach (e.g., NRM, alternative livelihoods, climate resilience) integrating women and other vulnerable populations to the same extent as other population cohorts? If not, how might this be improved?

Analysis shown in previous sections clearly indicates CREL having positive impact on the livelihood of its beneficiaries in terms of increasing income and enhancing their household resilience against shocks from natural disasters. The project also could enhance awareness of the beneficiaries regarding NR management through its various training and bio-physical activities. We have already found beneficiaries participating CREL activities have reduced NR extraction. However, as mentioned before, we could not establish a significant relationship of improved climate-resilient livelihood activities having direct and measurable impact on the protection of natural resources in protected areas. As a matter of fact, this is quite a complex relationship to establish and questionnaire survey might not be the ideal tool to establish that relationship. The survey administration team members were outsiders in the surveyed areas and had stayed quite a short time for survey administration. So, a thorough analysis for a significantly longer period with smaller group of beneficiaries might be useful in establishing such complex relationship. Taking a control group of respondents can also improve the probability of establishing the relationship, which was lacking in the present quantitative survey. CREL team might think of a “Difference-in-Difference (DiD)” analysis in this regard.

It has been clearly shown that CREL livelihood activities are providing opportunities for both alternative and supplementary source of income. The livelihood activities are implemented using the value chain approach, in which it assumes a facilitation role. The project is enabling beneficiaries’ capacity and linking them to the market. The beneficiaries take the decision on whether they want to shift from the existing primary IGA to an alternative one, or they want to take a supplementary IGA along with the exiting primary IGA. So, we can say the project is enabling opportunities for both types of income for its beneficiaries.

We have seen that the beneficiaries of CREL project are prone to natural disasters that cause financial requirements for them. Prior to the project, majority of them had very little alternative to face those requirements. CREL worked in two ways in this area. First, the project enhanced capacities of the beneficiaries on increasing income from different IGAs. This improved their ability to mitigate financial requirements that results from disaster. Secondly, the project worked on increasing the awareness of the beneficiaries regarding climate change adaptation and disaster risk reduction. At the same time, the project also helped them being prepared for disaster management. This twofold approach helped increasing beneficiaries’ household resilience. Survey captured the respondents’ expression regarding this increased household resilience. So, not only the livelihood activities increased household resilience, but also other activities (e.g. training, bio-physical activities), also helped in this resilience increase.

Survey identified the project being impartial in keeping a similar ratio of male and female in its different activities. Surveyed respondents also expressed their positive opinion regarding the project being effective in incorporating women and other vulnerable population to the same extent as other population cohorts. However, the randomly selected respondents list was not included with ethnic minority or socially excluded beneficiaries and hence we cannot directly comment on how the project integrated those people in different activities. Hence, we are proposing further analysis taking a

judgmental sample of different vulnerable people to see how the CREL multi-dimensional, integrated approach is integrating the vulnerable population.

ANNEX 1

Climate-Resilient Ecosystems and Livelihoods Midterm Performance Evaluation Questionnaire for CREL Participants

Climate-Resilient Ecosystems and Livelihoods Midterm Performance Evaluation

Questionnaire Survey of CREL Participants

Informed Consent: *It is necessary to introduce the stakeholders to the interview and obtain their consent to participate. Make it clear to them that their participation in the interview is voluntary.*

Thank you for the opportunity to speak with you. My name is and work for We are conducting this interview as a part of the Midterm Performance Evaluation of CREL project. You/your household, being a participant of this project, were selected randomly to participate in this interview. The purpose of this interview is to find whether CREL has resulted in any changes in your livelihood and your Natural Resource Management (NRM) pattern and to define the extent of change. The interview is expected to last about 60 minutes to complete and your participation is entirely voluntary.

If you agree to participate, you can chose to stop at any time or to skip any question you do not want to answer. There will be written notes taken on our conversation with the primary purpose to allow for accurately documentation and analyze the findings. During analysis and reporting, your identity will strictly be kept anonymous. Information that you provide will only be analyzed and reported as collective opinion. We can proceed if we get your voluntary consent to the interview.

Questionnaire for Participants

Section 1: Identification Questions

IQ 101: CREL Participant ID										
Name:										
IQ 102: Participant's Mobile No										
IQ 103: Gender				IQ 106: Site ID						
IQ 104: Age					IQ 107: Trade Group					
IQ 105: Region										
IQ 108: Number of Family						IQ 111: Respondent is Landless Farmer?				
IQ 109: Number of Male Members						IQ 112: Respondent is Ethnic Minority?				
IQ 110: Number of Female						IQ 113: Respondent from Other Vulnerable Groups?				
IQ 114: Interview Date			IQ 115: Questionnaire ID				IQ 116: Enumerator Name:			

Section 2: Household Economic Information

LQ 201: Primary Income Generating Activities (IGA) (Primary Occupation) of All Earning Household Members (before and during project scenario) (Multiple Answers are acceptable) (Average of 12 months)

Household Member	Age	Sex (M/F)	Before Project (Prior to Dec, 2013)			During Project (After Dec, 2013)			
			IGA ID	Time Spent (Days per Year)	Avg. Annual Income (BDT) from this IGA	IGA ID	Time Spent (Days per Year)	Avg. Annual Income (BDT) From this IGA	Was this due to CREL initiative?
Household Member 1									
Household Member 2									
Household Member 3									
Household Member 4									

IGA Code

10 - Horticulture/Fruit e.g. 11--Mango, 12-Banana, 13-Papaya, 14-Lemon, 15-Pineapple

- 20 Vegetable 21-High value (capsicum, summer tomato, strawberry), 22-Average value (cucumber, brinjal, ladies finger (dherosh), bitter guard (corolla), borboti, bean, etc.)
- 30 – Aquaculture 31-Carp, 32-Monosex Tilapia, 33-GIFT Tilapia, 34-Prawn (Golda), 35-Shrimp (Bagda)
- 40 Handicrafts, 41-Toy (putul), 42-Cap, 43-Dress, 44-Embroidery, 45-Bamboo-based, 46-Souvenir,
- 50 Livestock 51- Ducks, 52- Chickens, 53– Cows, 54- Goats, 55- Pigs,
- 60- Floriculture; 61-Rose, 62-Gladiolus, 63-Marigold (genda), 64-Tube rose (rajani gondha),
- 70 Field crops, 71-Sunflower, 72- Maize, 73- Potato
- 80 Others 81-Apiculture, others please specify
- 90 Natural Resource-based IGA e.g. 91 – Fishing; 92 – Collecting shrimp PL; 93 – Collecting Animals; 94 – Collecting plants for human food; 95 – Collecting fuel wood; 96 – Collecting fodder; 97 – Other forest/wetland products (specify)
- 100 In case the respondent is housewife
- 110 In case the respondent is unemployed

LQ 202: Subsistent Income Generating Activities (IGA) (Secondary Occupation) of All Earning Household Members (before and during project scenario) (Multiple Answers are acceptable)

Household Member	Age	Sex (M/F)	Before Project (Prior to Dec, 2013)			During Project (Last year)			
			IGA ID (Same as LQ 201)	Time Spent (Days per Year)	Avg. Annual Income (BDT) from this IGA	IGA ID (Same as LQ 201)	Time Spent (Days per Year)	Avg. Annual Income (BDT) from this IGA	Was this due to CREL initiative?
Household Member 1									
Household Member 2									
Household Member 3									
Household Member 4									

LQ 203: Please indicate if there is any income for the household from any other sources that was not covered in previous two questions (e.g. rent, remittance, etc.).

Source	Income Before Project (Average of 12 months)	Income During Project (Average of 12 months)

LQ 204: Total Household Income (Cumulative of all household members and of all sources)

Period	Average Annual income (BDT)
Before Project (Prior to Dec, 2013)	
During Project (Last 12 months)	

LQ 205: Total Household Savings and Loan (Cumulative of all household members and of all sources)

Period	Average Monthly Savings (BDT)	Average Annual Loan
Before Project (Prior to Dec, 2013)		
During Project (Last 12 months)		

LQ 206: Household Members' Wild/Natural Resource Extraction Practices (Average of 12 months)

Sector	Before Project (Prior to Dec, 2013)				During Project (After Dec, 2013)			
	No of Months Involved	No of Days per Month	Value of Product Sold (BDT)	Value of Product Consumed (BDT)	No of Months Involved	No of Days per Month	Value of Product Sold (BDT)	Value of Product Consumed (BDT)
Fishing								
Collecting Shrimp PL								
Collect Animals (e.g. Crab, Bush meat)								
Collect Plants for human food								
Collect Fuel Wood								
Collect Fodder								
Collect other forest or wetland NTFPs								

LQ 207: Household Land Resource Ownership (Area in Decimal)(Not suitable if the respondent is landless)

	Ownership	Cultivated	Homestead	Pond	Garden or Orchard	Other (e.g. Fellow)
Before Project (Prior to Dec, 2013)	Own					
	Own Land leased, share-cropped or rented out					
	Other's land leased, share-cropped or rented					
	Khas Land					
	Forest Land					
	Jol Mohal					
	Others' land used without payment					
t (A ft)	Own					
	Own Land leased, share-cropped or rented					

	out					
	Other's land leased, share-cropped or rented					
	Khas Land					
	Forest Land					
	Jol Mohal					
	Others' land used without payment					

Teacher/Facilitators' Guide Books based on Primers: 1 & 2 for FEL facilitator; 6 = Training on Financial and Grants Management; 7 = Training on Climate Resilient Livelihoods and Vegetables Cultivation; 8 = Training on Climate Resilient Livelihoods and Fish Culture; 9 = Training on Eco Guide Development; 10 = Training on Ecotourism: Entry Fee Revenue Sharing and Collection Mechanism; 11 = Training Laws, Policies, Institutions and Judiciary; 12 = Training on Gender mainstreaming and Leadership Development; 13 = Training on Resources Mobilization Planning; 14 = Training on Participatory Ecological Monitoring for Biodiversity Conservation; 15 = Training on Disaster Management and Disaster Risk Reduction (DRR); 16 = Training on Organizational Management

PQ 304: Results Experienced by Participants from different CREL Activities (Place Tick Mark)

Perceived Results	Could not get this result at all 1	Somewhat could get this result 2	Got this result 3	Completely got this result 4
Increased Knowledge on accounting, cost management, financial management				
Better Understanding on demand, supply and market information				
Links of buyers, their contacts, and improved marketing skills				
Improved negotiation skills and price setting				
Links of supplier and their contacts				
Links of support service provider and their contacts				
Increased Knowledge on raw materials quality, usage and availability				
Modern vegetable cultivation practice				
Modern fish culture practice				
Cultivation practice of high value crops (strawberry, capsicum, etc.)				
Production of quality handicrafts				
Modern livestock rearing practice				
Modern horticulture cultivation techniques				
Modern floriculture cultivation techniques				
Modern field crops cultivation techniques				
Knowledge on Apiculture practices				
Understanding about Ecotourism				
Production planning for agricultural/livestock products				
Knowledge on Storage of different products				
Knowledge on Post-harvest processing of different products				
Awareness on Laws and policies relevant to environment, ecosystems and NRM				
Improved ability to withstand effects of natural calamities/disasters				
Increased agroforestry homestead plantation				
Assistance in natural regeneration				
Increased Bamboo/mangrove Plantation				
Increased roadside/swamp/stream bank plantation				
Additional water reservoir creation				
Improved access to Khas Land/ Jol Mohal				
Decreased access of Resource Extractors to Protective Sites				
Decreased number of Natural Resource Extractors				
Decreased volume of Natural Resource Extraction				
Understanding on Climate Change Adaptation				
Understanding on Mitigation of Climate Change				
Understanding on Climate Resilient Natural Resource Management				
Improved knowledge on Disaster Risk Reduction				
Understanding Importance of Community Patrolling				

Section 4: Perception towards Coping up with Shocks from Climate Change or Natural Disaster

MQ 401: State the external shocks you faced over the last three years due to natural calamities, and disaster (e.g. Cyclone, Storm, Drought, etc.) *(Multiple answers are acceptable)*

Shocks	Extent of Impact				
	Severely Affected 5	Highly Affected 4	Affected 3	Moderately Affected 2	Not Affected 1
Loss of household/structure					
Loss of Land					
Physical Displacement					
Injury of household members					
Disruption of income					
Loss of crops					
Loss of livestock					
Loss of productive tools					
Loss of other assets					
Low quality of products					
Low volume of products					
Low price of products					
Urgent financial requirements					
Other shocks (Specify)					

MQ 402: What do you do to mitigate the loss from shocks resultant from natural disaster or climate change? *(Multiple answers are acceptable)*

Mitigation Measures	Frequently Do 3	Seldom Do 2	Never Do 1
Sell Assets			
Take loan from bank			
Take loan from NGO			
Take loan from community groups			
Take loan from Informal Lenders			
Borrow food from neighbors/relatives			
Change Occupation			
Eat less frequently			
Eat less amount			
Eat less variety			
Reduce expense on education			
Reduce expense on health			
Reduce expense on housing			
Reduce other expenses			
Migrate as labor			
Other measures (Specify)			

MQ 403: If you lost assets or resources, what is the present status for that loss? (Put tick mark)

Asset or resources	Could not recover or purchase	Could recover or purchase	Could purchase better asset or resource
Land			
Household			
Livestock			
Household Consumables			
Vehicles			
Equipment			
Other assets (specify)			

MQ 404: Which of the following statement better describe your situation after the last shock that you faced? (Last 5 years scenario)

6. Did not recover
7. Recovered some, but worse off than before shock
8. Recovered to same level as before shock
9. Recovered and better off
10. Not affected by shock

MQ 405: How effective do you think the CREL induced alternative IGAs in enabling your coping capacity for the financial loss due to shock? (Place tick mark)

6. Not effective at all
7. Not very effective
8. Somewhat effective
9. Quite effective
10. Very effective

MQ 406: How effective do you think CREL activities in improving your household's future capability against shock.

CREL Activities	Effectiveness of CREL Activities (Place tick Mark)				
	Not effective at all 1	Not very effective 2	Somewhat effective 3	Quite effective 4	Very effective 5
Training Programs					
Training ID 1:					
Training ID 2:					
Training ID 3:					
Training ID 4:					
Training ID 5:					
Training ID 6:					
Training ID 7:					
Bio-physical Activities					
Bio-physical Activities ID 1:					
Bio-physical Activities ID 2:					
Bio-physical Activities ID 3:					
Bio-physical Activities ID 4:					
Bio-physical Activities ID 5:					

income								
No voice/control on financial expenditure								
Limited decision making power in household								
Limited influencing power in the society								
Victim of violence								
Victim of social discrimination								

VQ 502: In your view, how successful was CREL in incorporating women, ethnic minority or vulnerable people in its different activities?

CREL Activities	How effectively CREL incorporated women into the program activities (Place tick Mark)				
	Not effective at all 1	Not very effective 2	Somewhat effective 3	Quite effective 4	Very effective 5
Training Programs					
Training ID 1:					
Training ID 2:					
Training ID 3:					
Training ID 4:					
Training ID 5:					
Training ID 6:					
Training ID 7:					
Bio-physical Activities					
Bio-physical Activities ID 1:					
Bio-physical Activities ID 2:					
Bio-physical Activities ID 3:					
Bio-physical Activities ID 4:					
Bio-physical Activities ID 5:					
Alternative Income Generating Activities					
Gender Empowerment Activities					
Other activities (specify)					

VQ 503: Please explain if you think CREL project could result in the following changes for you.

Changes CREL participants faced	I have seen significant change 3	There were somewhat changes 2	I have not seen any change 1
Better technical knowledge on products			
Better market linkage			
Better access to finance			
Increased confidence			
Increased income			
Better decision making power in household			
Increased participation in social issues			
Increased participation in NRM			
Better position at home resultant from increased income			
Decreased domestic violence			
Better acceptability in the society			

VQ 504: What additional support do you think CREL should provide to Women in future?

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