



Department of Environment and Natural Resources
Region V

2021 Annual Report

Task Force Build Back Better
Bicol River Basin and Catanduanes Province

BUILD BACK BETTER TASK FORCE
Bicol River Basin and Catanduanes Province
2021 ANNUAL REPORT

I. Executive Summary

The destruction brought in 2020 by three (3) consecutive typhoons namely: Quinta, Rolly, and Ulysses hitting the Bicol Region in rapid succession, prompted and urged the creation of the Executive Order 120 and the Build Back Better Task Force (BBBTF). The Department of Environment and Natural Resources (DENR) serves as the chairperson with the Department of Public Works and Highways (DPWH) as the co-chairperson. Together with the member agencies from the regional level, BBBTF identified six (6) Key Result Areas (KRAs) which focus on the implementation and monitoring of post-disaster recovery and rehabilitation efforts in typhoon-affected areas in accordance with the Recovery and Rehabilitation Planning Guideline (RRPG).

The Province of Catanduanes and the Bicol River Basin (BRB) comprised of the Provinces of Albay, Camarines Norte and Camarines Sur were identified to be the priority areas for the implementation activities in support to the BBBTF. Despite the rich biodiversity, abundant resources within it and the ecological services it provides to support the livelihood of communities, due to the typhoon receptiveness of the region, it is very vulnerable to flooding. Thus, the focus of the lead agencies for each KRA is to implement programs, activities and projects that could mitigate the flooding and other hazards occurring in communities within the priority areas.

For KRA 1 Better and Resilient Infrastructures, the DPWH as lead agency focused on the dredging of the Bicol River, particularly in Brgy. San Roque in Camaligan, Camarines Sur which served as the pilot site for the dredging in the BRB. A total of 60,806 cu. m. of spoils were already removed from the Bicol River and 705,314.55 cu. m. of spoils dredged from rivers around Mt. Mayon.

Under KRA 2 Stronger Shelter and Resilient Settlement, Resettlement Plan for Bicol is one of the major activities being undertaken by the DHSUD and NHA with the support of other member agencies under KRA 2. Currently, on-going constructions of is being undertaken for the Housing and Resettlement Project in 3 municipalities of Albay to cover approximately 2,594 House and Lot Units. Likewise, trainings and capacity building to LGUs in the preparation and implementation of CLUPs and ZOs, PFPs, CDRA and GIS is also being undertaken by DHSUD.

Initiatives under KRA 3 Improved Systems and Essential Service, being led by OCD, ensures availability and adequacy of key lifelines such as basic needs, medical services, electricity, water, telecommunication and transportation that can be mobilized immediately after the typhoon. Thus, after the series of typhoons, Power Restoration Rapid Deployment Task Force was initiated through Philippine Rural Electric Cooperatives Association, Inc. (PHILRECA) to facilitate restoration of powerlines in affected areas. Likewise, they also facilitated restoration of communication lines/network receptions and provided emergency satellite communications. For water utilities, funding requests for the repair/rehabilitation of Water Districts were also prioritized.

The activities for KRA 4 Restore Sustainable Livelihood focuses by DTI focuses on providing support to Macro, Small and Medium Enterprises through the following programs: (1) Livelihood Seeding Program - Negosyo Serbisyo sa Barangay; (2) Shared Service Facilities Project (SSF); (3) SME Roving Academy (SMERA); and (4) Pondo sa Pagbabago at Pag Asenso (P3) - COVID19 Assistance to Restart Enterprises (CARES).

Activities under KRA 5 Strengthened Governance thru Broad-based Citizen Input aims to improve land-use planning and enforcement of building codes. As part of the initiatives of DILG, capacity development activities were conducted for the Local Climate Change Action Plan (LCCAP) of LGUs, formulation of the Risk-Informed Comprehensive Development Plan (CDP), Local Disaster Risk Reduction and Management Planning and Contingency Planning, Climate Disaster Risk Assessment (CDRA) Team and training on GIS-CDRA-LCCAP Formulation.

Under Intensified Watershed Management, the following activities were undertaken by the DENR under CY 2021 Work and Financial Plan for KRA 6 which include: (i) Hiring of 168 Forest Protection Officers; (ii) Survey and assessment of river easement to a total of 159.92 kilometers along Bicol and Libmanan-Pulantuna River; (iii) Planting of 580,250 bamboo culms to a total of 1,496.8 hectares; and (iv) Construction 7,224 cu.m. of gabions, gabion checkdams and checkdams in the priority areas.

II. Introduction

A. The Flooding Situation in Bicol River Basin and Province of Catanduanes

The Bicol River Basin (BRB) is one of the identified priority river basins in the country and the largest priority critical watershed in the Bicol Region, covering the provinces of Albay, Camarines Sur and portions of Camarines Norte. Based on the updated administrative boundary of Forest Management Bureau the Bicol River Basin has a land area of 301,529 hectares. Eighty-six percent (86%) of which is classified as Alienable and Disposable (A & D) land covering 259,106.61 hectares, and only fourteen percent (14%) or 42,422.39 hectares is classified as Forestland including portions of six (6) Protected Areas (PAs) in the Region.

It has two major rivers namely, the Bicol River and Libmanan River which meet near Aslong, Libmanan before it finally empties into the San Miguel Bay. The river basin has an elevation of 0 to 2,445 meters above sea level wherein the highest points are located in PAs and the lowest points are found within 25 municipalities which exhibits vulnerability to flooding covering a total area of approximately 71,720.39 hectares (Figure 1.0).

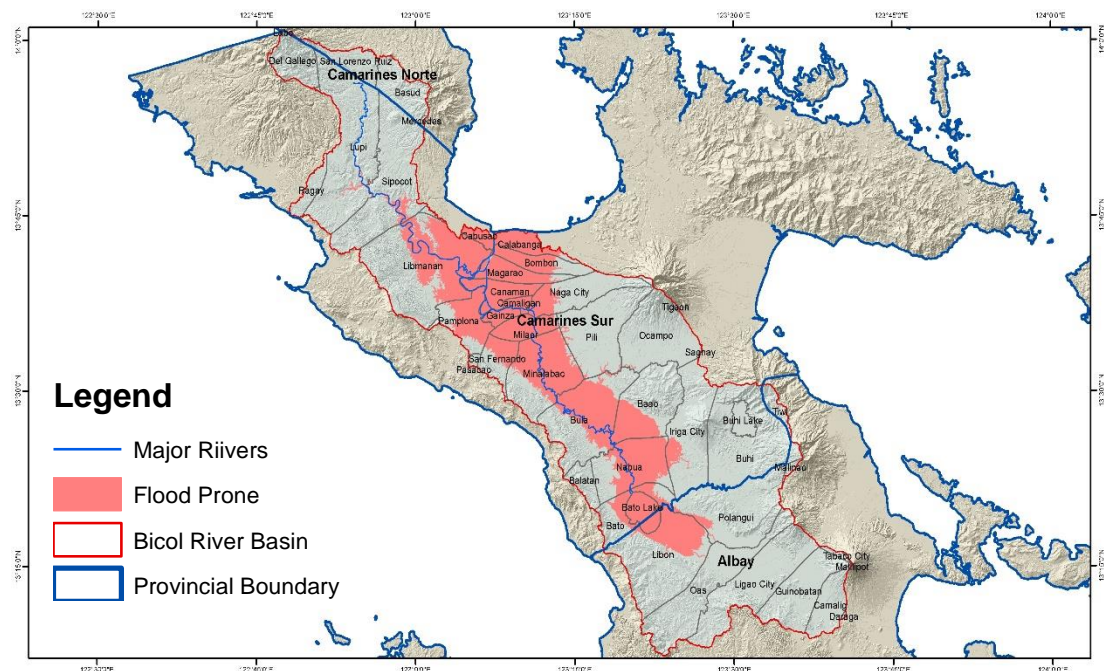


Figure 1.0 Areas vulnerable to flooding within the Bicol River Basin

Being one of the priority critical watersheds in the region, the river basins head waters, rivers and lakes provide irrigation water to agricultural lands and for domestic use, apart from being used for fishing. The forestlands, including protected areas, contain rich biodiversity resources and non-timber products, which are source of raw materials.

Likewise, the Island Province of Catanduanes has a total area of 147,248.05 hectares and thirty-three percent (33%) or 48,924.09 hectares of which covers the PA of Catanduanes Natural Park (CatNP). Fifty-three percent (53%) or 77,802.89 hectares of province land area is classified as A & D land, and the remaining forty-seven percent (47%) or 69,445.16 hectares is classified as forestland including its PA.

Located in the eastern portion of the Bicol Region facing the Pacific Ocean, the Province of Catanduanes has an elevation of 0 to 824.7 meters above sea level. And

8% of its land area is flood prone which is approximately 13,076.63 hectares that mostly are mostly in the coastal barangays.

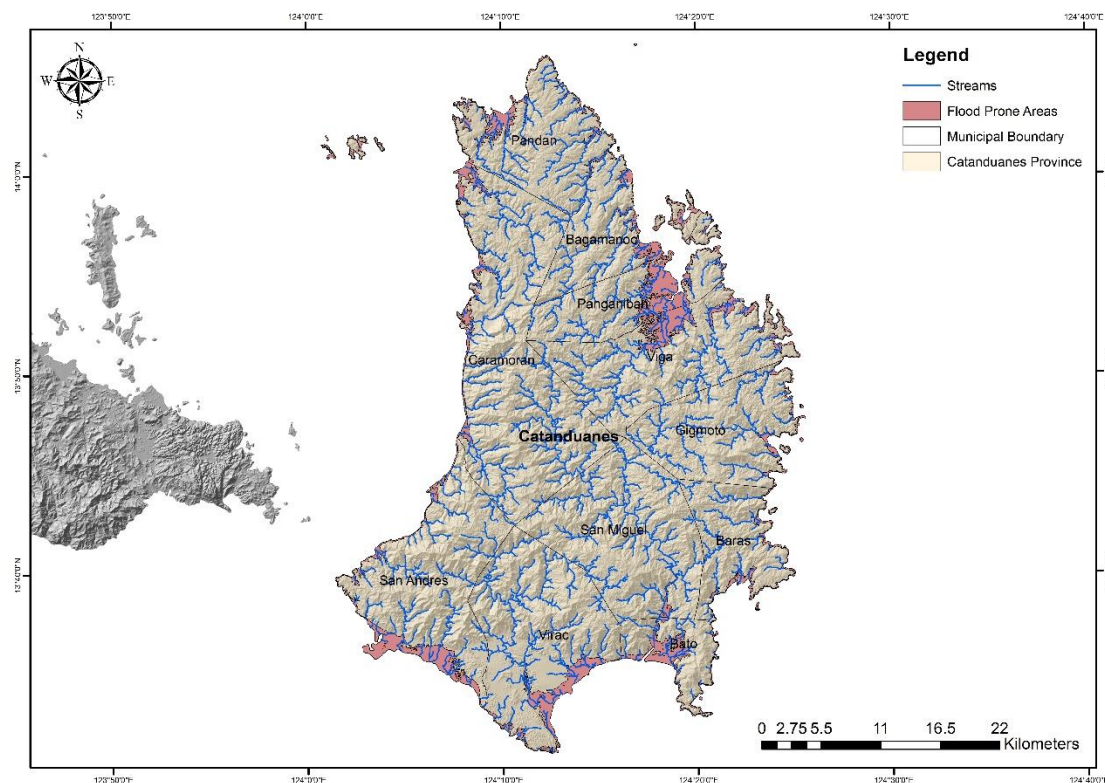


Figure 2.0 Areas vulnerable to flooding in the Province of Catanduanes

The CatNP has the largest remaining forest block in the Bicol Region including close canopy and old growth dipterocarp forests, and secondary/ residual forests. These forests harbor the richness of biodiversity that placed Catanduanes among the list of important Key Biodiversity Areas in the country, thus earning the province pride as a natural heritage.

While it is pronounced that typhoons are regular natural occurrence in the region, the BRB and CatNP plays a significant role in the development of the communities within because of the abundant resources within it and the ecological services it provides to support the livelihood of communities. However, in 2020, amidst a prevailing global pandemic, three (3) consecutive typhoons namely: Quinta, Rolly, and Ulysses hit the Bicol region in rapid successions which brought flooding and erosions particularly in the Provinces of Albay, Camarines Norte, Camarines Sur and Catanduanes. The aftermath of these natural calamities resulted to devastating damages in infrastructures and livelihoods of thousands of Bicolanos. Among the reported damages include human casualties and incurred losses in different sectors such as agriculture. In a short period of time, accumulated effects left the Bicolanos in a vulnerable state.

Shown below are the typhoon tracking images from the Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) and photo documentation of the aftermath and damages of the typhoons within the areas in the Bicol region:

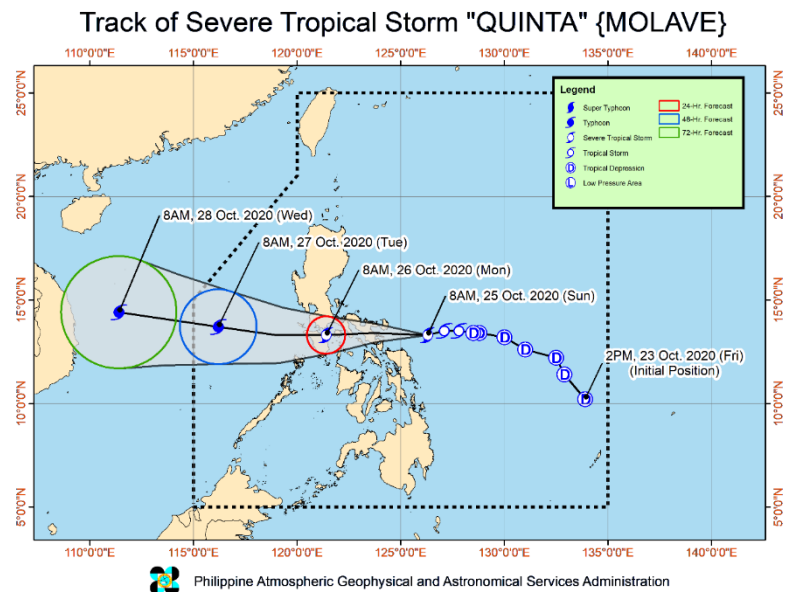


Figure 3.0 Typhoon Quinta (October 25-26, 2020)

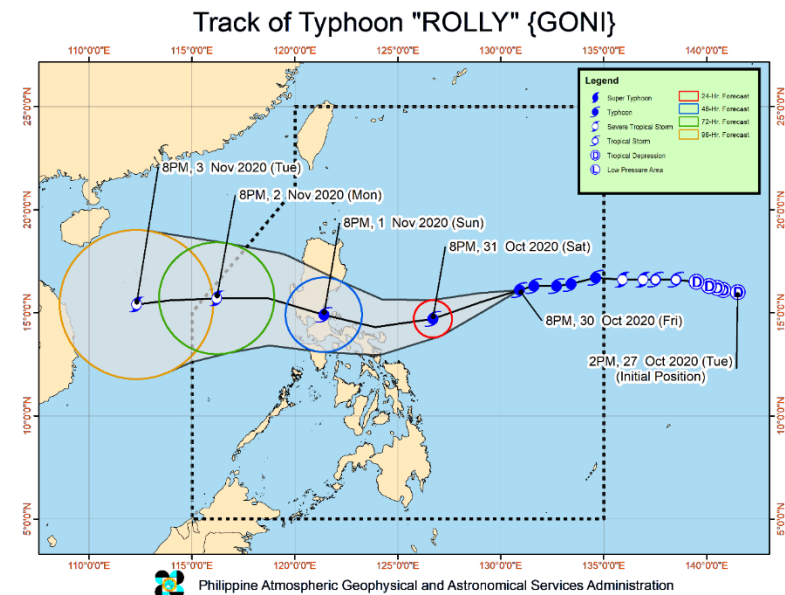


Figure 3.1 Typhoon Rolly (November 1-2, 2020)

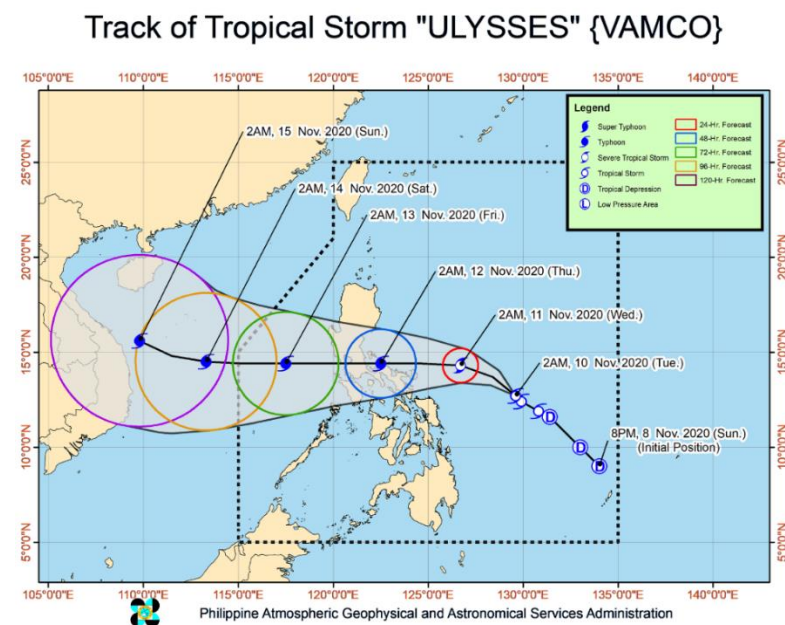


Figure 3.2 Typhoon Ulysses (November 11-12, 2020)



Figure 4.0 Photo courtesy of AJ Mairafior Barangay Cagsawa in Daraga, Albay

B. Executive Order No. 120, Series of 2020

Executive Order 120 also known as Strengthening Rehabilitation and Recovery Efforts in Typhoon-Hit Areas through the Creation of the Build Back Better Task Force (BBBTF) was signed on November 18, 2020 to implement strategies that will ensure post disaster rehabilitation and recovery efforts for vulnerable areas hit by typhoons. Hence, the Province of Catanduanes and the Bicol River Basin (BRB) comprised of the Provinces of Albay, Camarines Norte and Camarines Sur were identified to be the priority areas in the Bicol Region.

The Department of Environment and Natural Resources serves as the chairperson jointly leading the task force with the Department of Public Works and Highways (DPWH) as the co-chairperson. Member agencies from the regional level are as follows:

- Department of Human Settlement and Urban Development (DHSUD)
- Office of the Civil Defense (OCD)
- Department of Trade and Industry (DTI)
- Department of Interior and Local Government (DILG)
- National Housing Authority (NHA)
- National Economic and Development Authority (NEDA)
- Department of Agriculture (DA)
- Department of Budget and Management (DBM)
- Land Registration Authority-Registry of Deeds (LRA-ROD)
- Department of Finance- Bureau of Local Government Finance (BLFG)
- Local Water Utilities Administration (LWUA)
- Department of Transportation-Land Transportation Franchising and Regulatory Board (DOTr-LTFRB)
- Department of Education (DepEd)
- National Electrification Administration (NEA)
- Department of Health (DOH)
- National Irrigation Administration (NIA)
- Department of Social Welfare and Development (DSWD)
- Philippine Coconut Authority
- Department of Energy (DOE)
- Department of Labor and Employment (DOLE)
- Cooperative Development Authority (CDA)
- Department of Science and Technology (DOST)

One of the main functions of the Task Force includes the implementation and monitoring of post-disaster recovery and rehabilitation efforts in typhoon-affected

areas in accordance with the Recovery and Rehabilitation Planning Guideline (RRPG). Thus, six (6) Key Result Areas (KRAs) were identified to be led and supported by concerned National Government Agencies.

Table 1.0 Key Result Areas of the Build Back Better Task Force

	Proposed KRA	Lead	Member Agencies
KRA 1	Better and Resilient Infrastructures	DPWH	DENR, DBM, DOTr, NEDA, DND-OCD, DILG, DOF, DOST, DOE, DepEd
KRA 2	Stronger Shelter and Resilient Settlement	DHSUD	DILG, DBM, NHA, LRA, DSWD, DENR, LWUA, NEA, DOE, DOST
KRA 3	Improved Systems and Essential Service	DND-OCD	DILG, DOH, DBM, LWUA, DSWD, DENR, DHSUD, NEDA, DOE, DPWH, DOST
KRA 4	Restored Sustainable Livelihood	DTI	CDA, DILG, DOST, DBM, PCA, DSWD, DOLE, DA, DENR, DOE
KRA 5	Strengthened Governance thru Broad-based Citizen Input	DILG	NEDA, DOH, DENR, DBM, DepEd, DPWH, NHA, DHSUD, DTI, DOE
KRA 6	Intensified Watershed Management	DENR	DILG, NEDA, DPWH, NHA, DHSUD, LRA, NIA, DOST, DBM, DOE, DSWD

C. The Bicol River Basin and Catanduanes Province Build Back Better Task Force

The Bicol River Basin and Catanduanes Province BBBTF highlights the conduct of Simultaneous Launching of Riverbank Stabilization through Bamboo Planting on February 9 to 12, 2021 in the Provinces of Albay, Camarines Norte, Camarines Sur and Catanduanes. During this activity, Food-For-Work beneficiaries were tapped to conduct the bamboo planting activity in priority riverbanks within the BRB and Catanduanes Province.



Figure 5.0 Launching Ceremony at Balinad, Polangui, Albay, Panoypoyan, Bula, Camarines Sur, Manambrag, San Andres, Catanduanes and Tuaca, Basud, Camarines Norte held of February 9, 2021

The Bicol River Restoration Launch was also conducted on March 23 to 26, 2021 in Camaligan, Camarines Sur. The highlight of the event was the Ceremonial Dredging in the Bicol River which aims to mitigate flooding during the occurrence of natural calamities within the river basin. Participated by total of 28 National Government Agencies, Provincial and Local Government Offices, including 21 media practitioners, presentations from keynote speakers/ KRAs lead agencies were delivered giving emphasis on implementation plans in support to the KRAs for the BRB and Catanduanes Province.



Figure 6.0 Bicol River restoration launch and ceremonial dredging activity in Camaligan, Camarines Sur

Furthermore, a media briefing participated by heads of key National Government Agencies, Provincial and Local Government heads and media practitioners was also conducted highlighting future plans for the management and development of the Bicol River Basin and the Bicol Region.

The efficiency and effectiveness of the implementation of Build Back Better initiatives requires collaboration among all stakeholders. Thus, the following activities were also undertaken by the Regional Build Back Better Task Force for Bicol River Basin and Catanduanes Province:

- 1) Conduct of regular meetings of the Regional Task Force headed by the DENR V;
- 2) Creation of DENR Regional Special-Order Nos. 020-405 and 020-406, designating DENR V personnel to support all initiatives of the BBB TF, including those Key Result Areas being led by other implementing agencies;
- 3) Conduct of successive internal and inter-agency meetings for the formulation of work and implementation plan (short-, medium- and long-term plans) for the proposed programs/ projects/ activities for the different KRAs in support to E.O. 120;
- 4) Identification of proposed programs/ projects/ activities (PPAs) for the rehabilitation and recovery of BRB and Catanduanes Province;
- 5) Site Assessment of the proposed PPAs;

- 6) Preparation of work and financial plan by lead agencies for identified priority activities for each KRA requiring additional funding to support the implementation of activities within the BRB and Catanduanes Province;
- 7) Collaboration with the Department of Social Welfare and Development (DSWD) Region V to support the implementation of Riverbank Stabilization through Bamboo Planting and Growing under KRA 6; and
- 8) Signing of Memorandum of Agreement between DENR V for the implementation of Riverbank Stabilization through the Food for Work Program of DSWD V under KRA 6;
- 9) Monitored the implementation of different projects under the different KRAs for consolidation and report preparation.



Figure 7.0 Regional Executive Director Atty. Francisco E. Milla participating in the national and regional meetings of the Build Back Better Task Force

D. Proposed Solutions to Bicol River Basin Flooding Situation and Disaster Mitigation in the Province of Catanduanes

The 15-year Integrated Bicol River Basin Management and Development Master Plan formulated in 2015 and Catanduanes Natural Park Management Plan formulated in 2017 served as the basis for the proposed activities to be implemented in support to the identified KRAs. The priority activities identified focus to address the flooding situation in priority areas thru harmonious convergence of initiatives which include structural/ engineering measures, vegetative measures, planning and policy formulation and implementation, citizen and community engagement, and Disaster Risk Reduction and Management. The priority activities provided short, medium and long-term activities for the sustainable management of BRB and Catanduanes Province so it can continue to provide environmental goods and services to communities.

III. Rehabilitation for Bicol River Basin and Catanduanes Province: 2021 Accomplishments

A. KRA 1: Better and Resilient Infrastructures (DPWH)

There were six (6) major projects proposed in the 2021 Implementation Plan for KRA 1 in the Bicol Region. The six projects with the corresponding targets to measure the accomplishment are the following:

Project		Target	Accomplishment
1.	Dredging/Desilting of Bicol River	2,131,605 cu. m.	60,806 cu. m. (2.82%)
2.	Dredging of fourteen (14) Rivers around Mayon Volcano	705,314.55 cu. m.	135,981.40 cu. m. (19.28%)
3.	Dredging/Desilting of Lake Bato	4,625,979.75 cu. m.	Still for funding
4.	Initiatives of the Local Government of Camarines Sur to undertake dredging and river restoration works near the vicinity of the mouth of Bicol River Basin	4,818,618.67 cu. m.	Still for funding
5.	Rehabilitation/Replacement of flood gates along the Naga-Calabanga Embankment	40 flood gates	Still for funding
6.	Proposed construction of 7 flood control projects along Bicol River Basin	7 Projects	Feasibility Study and Detailed Engineering Design still on-going

Aside from the abovementioned major projects, there are also one hundred thirty-eight (138) projects amounting to 2.418 billion Pesos funded under the DPWH F.Y. 2021 GAA and four hundred sixty-seven (467) projects amounting to 213.88 billion Pesos proposed for the DPWH F.Y. 2022 GAA for the repair and reconstruction of various infrastructures damaged by typhoons.

Further, ninety-eight (98) projects amounting to 1.442 billion Pesos have already been completed (59.64%) for the repair and reconstruction of various infrastructures damaged by typhoons funded under the F.Y. 2021 GAA and two hundred sixty-six (266) projects amounting to 12.94 billion Pesos have been granted funds under the F.Y. 2022 GAA.



Figure 8.0 Before and after photographs of the dredging site in Brgy. San Roque, Camaligan, Camarines Sur

In addition, main challenge encountered by DPWH Regional Office V to implement the projects and programs proposed under the Build Back Better Program is mainly the lack of equipment, manpower and funds to execute the projects. The office has already submitted a funding request amounting to 3.28 billion Pesos to append the

existing equipment fleet of the region and be able to accomplish all the proposed dredging activities in the region. Also, a funding request amounting to 64.10 million Pesos was already submitted for the replacement/improvement of the existing 40 flood gates in Camarines Sur. Up to this date, the requests are still not granted and the Regional Office is accomplishing the proposed dredging in a slow phase with the current equipment fleet.

As for the proposed seven (7) flood control projects within the Bicol River Basin, the Feasibility Study and Detailed Engineering Design is still on-going and is set to be completed this coming January 2022. It is imperative that the study be completed first before requesting the required funds and subsequently implement the projects as the entire details and project requirements are critical in the effective solution for the flooding in the said basin.

The repair and reconstruction of infrastructures damaged by the past typhoons' only challenge is when there are current weather disturbances and typhoons that delays the implementation of the said projects. Thus, the proposed projects will continue to be delayed if the necessary funding requirements are not met. Continuous request and follow-up are recommended to grant the said funds. The Regional Office will continue to accomplish the proposed projects with the current capability of the office until the requests are granted.

B. KRA 2: Stronger Shelter and Resilient Settlements (DHSUD)

The DHSUD served as the lead agency in implementing activities to facilitate the relocation of poor households exposed to climate change-related hazards and oversee the construction of safe evacuation facilities. Thus, Resettlement Plan for Bicol is one of the major activities being undertaken by the Department with the support of other member agencies under KRA 2.

In partnership with the National Housing Authority activities undertaken were as follows:

Table 3.0 Status of NHA Housing and Resettlement Project in Bicol

Project Title	Location	Cost (₱)	Accomplishment
Tabaco Housing Project Phase I (966 Units)	Brgy. San Vicente, Tabaco City, Albay	616,224,513.20	20%
Tabaco Housing Project Phase II (1,395 Units)	Brgy. San Vicente, Tabaco City, Albay	889,694,936.04	15%
Malilipot Resettlement Project Phase I (233 Units)	Brgy. Binitayan, Malilipot, Albay	162,168,707.63	10.50%
Malilipot Resettlement Project Phase II (413 Units)	Brgy. Binitayan, Malilipot, Albay	282,991,248.70	For Contract Perfection
Ligao Residences (1,248 Units)	Ligao City, Albay	855,005,288.69	For Contract Perfection
Oas Residences (830 Units)	Oas, Albay	568,490,653.89	For Contract Perfection
Tigaon Residences 1 (1,000 Units)	Brgy. Mabalodbalod, Tigaon, Camarines Sur	684,735,243.81	For Notice of Award

Camaligan Residences (290 Units)	Brgy. Sua, Camaligan, Camarines Sur	198,755,270.00	For Notice of Award
San Fernando Resettlement Project (543 Units)	Brgy. San Joaquin, San Fernando, Camarines Sur	372,152,109.00	For Notice of Award
Bato Residences 1 (1,204 Units)	Brgy. Libjo, Bato, Catanduanes	-	For Notice of Award
Bato Residences 2 (1,000 Units)	Brgy. Libjo, Bato, Catanduanes	-	For Notice of Award
Guinobatan Resettlement Project (896 Units)	Brgy. Binugsacan, Guinobatan, Albay	-	For Notice of Award

Likewise, as of December 16, 2021, twenty-six (26) housing and resettlement were for bidding which will cover a total of 30,681 Units in the Provinces of Albay, Camarines Norte, Camarines Sur and Catanduanes.





Figure 9.0 Housing and resettlement projects of National Housing Authority

Apart from this, trainings and capacity building to Local Government Units were undertaken by DHSUD particularly on the following: (1) Training on the preparation and technical assistance on the review and approval process of Comprehensive Land Use Plan (CLUP) and Zoning Ordinances (ZO)/ Provincial Physical Framework Plan (PPFP); (2) Training on Geographic Information System (GIS); (3) Training on Climate and Disaster Risk Assessment (CDRA); and (4) Technical assistance on the topics related to environmental, land use and urban planning and development.

C. KRA 3: Improved Systems and Essentials Services (OCD)

Key Result Area 3 stems from the function of ensuring availability and adequacy of key lifelines such as basic needs, medical services, electricity, water, telecommunication and transportation that can be mobilized immediately after the typhoon. Early recovery is part of Disaster Response, but as the activities under the thematic area approaches termination with the gradual return to normalcy, long-term recovery should commence with activities related to Rehabilitation and Recovery Planning, sustainment of the early recovery efforts and implementation of the respective PAPs under the various KRAs of the BBBTF. Thus, KRA 3 primarily includes lifelines namely: roadways, pipelines, powerlines, sewers, communications and ports facilities and basic needs, such as food, water, clothing, shelter, sanitation, education and healthcare.

Due to the series of typhoons in the latter part of 2020, major destructions were observed in lifelines, specifically powerlines. A Power Restoration Rapid Deployment Task Force was initiated through Philippine Rural Electric Cooperatives Association, Inc. (PHILRECA). Different Electric Cooperatives (ECs) were deployed to the provinces of Catanduanes, Camarines Sur and Albay to assist in the restoration of powerlines in the affected provinces. Thus, as of July 2021, the powerlines in Albay, Camarines Sur, Camarines Norte and Catanduanes were completely restored.

Table 4.0 Restoration of power lines in typhoon-hit areas

Province		Target Municipalities	Accomplishment
1	Albay	18	18 (100%)
2	Camarines Norte	12	12 (100%)
3	Camarines Sur	37	37 (100%)
4	Catanduanes	11	11 (100%)



Figure 10.0 Powerline restoration and rehabilitation activities in Bicol Region

In terms of Communication, the National Telecommunications Commission (NTC) aimed to provide an immediate communication that will link the "ground zero" to the rest of the world and to provide day to day communication in contact with different Radio Communication Group in the Region. These objectives were achieved through Rapid Deployable Communication System project and HF/VHF Communication System, respectively.

Furthermore, the Department of Information and Communications Technology (DICT) coordinated efforts for the restoration of Network Reception to the affected areas and provided emergency satellite communications to Provincial Emergency Operations Centers in the Bicol Region.

For water utilities, repair/rehabilitation of nine (9) Water Districts in the provinces of Albay, Camarines Sur, Sorsogon and Catanduanes were approved on July 21, 2021 amounting to a total of ₱54,532,590.24. Moreover, another six (6) Water Districts requested for funding for same purpose and was endorsed to the Office of the President on August 18, 2021.

Table 5.0 Status of water districts request for repair/ restoration of facilities damaged by typhoons

Name of Water District	Amount (₱)	Province	Total (₱)	Remarks
Bato Water District	7,512,050.00	Catanduanes	54,532,590.24	Repair/Rehab of nine (9) Water Districts Approved last 21 July 2021; SARO-BMB-C-21-0009808 Released last 18 October 2021
Viga Water District	3,988,605.74			
Pandan Water District	3,372,390.00			
San Andres Water District	6,001,064.00			
Tabaco City Water District	4,836,487.50	Albay		
Bacacay Water District	2,047,198.00			
Matnog Water District	1,302,104.00	Sorsogon		
Gubat Water District	10,047,126.00			
Cabusao Water District	15,425,565.00	Camarines Sur		
Virac Water District	30,000,000.00	Catanduanes	51,711,013.00	Endorsed to OP last 18 August 2021
Baras Water District	14,197,268.00			
Camalig Water District	1,159,664.00	Albay		
Ligao City Water District	1,052,945.00			
Bombon Water District	1,733,414.00	Camarines Sur		
Calabanga Water District	3,567,722.00			

D. KRA 4: Restored Sustainable Livelihood (DTI)

The activities to restore sustainable livelihood focuses on providing support to Macro, Small and Medium Enterprises through the programs of the Department of Trade and Industry as the lead agency for KRA 4, with their accomplishment as follows:

Table 6.0 DTI priority programs and accomplishments under KRA 4

Programs/Project	Key Indicators to Measure Accomplishments	Target	Accomplishment
Livelihood Seeding Program - Negosyo Serbisyo sa Barangay	Number of MSMEs assisted	4,495	4,135
	Number of livelihood kits provided	1,239	1,505
Shared Service Facilities Project (SSF)	Number of SSF Established	-	35
	Number of MSMEs assisted	-	2,581
SME Roving Academy (SMERA)	No. of Training Programs/Sessions Conducted	745	935
	No. of Participants-MSMEs assisted	9,871	10,321
Pondo sa Pagbabago at Pag Asenso (P3) - COVID19 Assistance to Restart Enterprises (CARES)	Amount of loan approved	₱193,506,676	₱325,088,671.00
	Amount of loan released	₱193,506,676	₱303,858,276.00
	Number of MSMEs assisted	2,250	2,840



Figure 11.0 DTI distribution of livelihood kits distribution



Figure 11.1 DTI Shared Services Facilities

E. KRA 5: Strengthened Governance thru Broad-based Citizen Input (DILG)

Strengthened Governance thru Broad-based Citizen Input aims to improve land-use planning and enforcement of building codes. As part of the initiatives of DILG, the following activities and programs were conducted and implemented through the support of other National Government Agencies and concerned Local Government Units (LGUs):

1. Capacity development intervention to 30 LGUs (5 LGU per province) for their Local Climate Change Action Plan (LCCAP)
2. Consultation workshop on the development of standardized training course and module for the formulation of the Risk-Informed Comprehensive Development Plan (CDP+) of LGUs
3. Trainings and Technical Assistance

4. Training on Local Disaster Risk Reduction and Management Planning and Contingency Planning



Figure 12.0 Local Disaster Risk Reduction and Management Planning and Contingency Planning on July 26-30, 2021 in Catanduanes (left) and August 9-13, 2021 in Masbate (right)

5. Training on Trainers of the Climate Disaster Risk Assessment (CDRA) Team

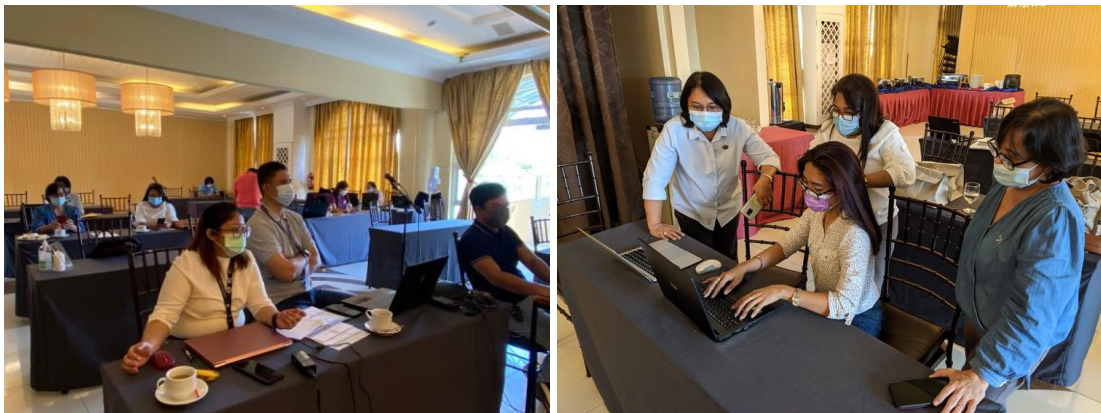


Figure 12.1 Training on Trainers of the Climate Disaster Risk Assessment (CDRA) Team on September 20-24, 2021

6. Training on GIS-CDRA-LCCAP Formulation

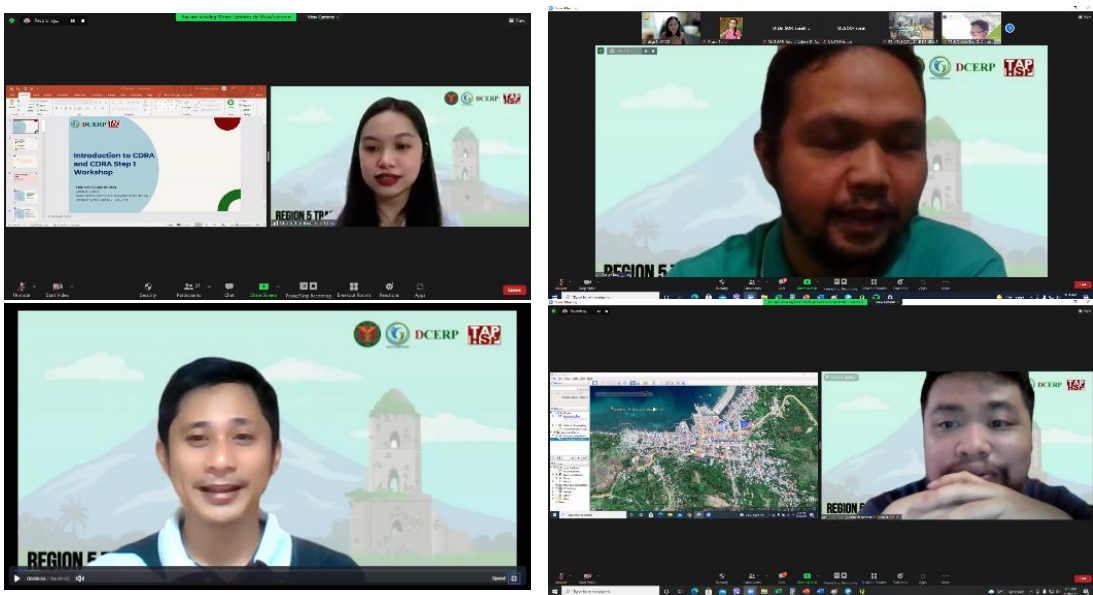


Figure 12.2 Training on GIS-CDRA-LCCAP Formulation on November 4-17, 2021 via Zoom Platform

F. KRA 6: Intensified Watershed Management (DENR)

The implementation of priority activities for KRA 6 in BRB and Catanduanes Province has a total budget allotment of Sixty-Six Million Four Hundred Twenty-Nine Pesos (Php 66,429,0000.00) downloaded to DENR Region 5 under Central Office Based Fund, to wit:

Table 7.0 Priority programs, activities and projects for KRA 6

P/A/P	Allotment (₱)
Natural Resources Management Arrangement/ Agreement and Permit Issuance	23,423,000.00
Forest Development, Rehabilitation, Maintenance and Protection	5,000,000.00
	15,000,000.00
Soil Conservation and Watershed Management	23,000,000.00
TOTAL	66,429,000.00

Specific activities undertaken include: (i) Hiring of Forest Protection Officers; (ii) Survey and assessment of river easement; (iii) Production/ procurement of bamboo propagules; (iv) Site preparation and planting; and (v) Construction of gabions, gabion checkdams and checkdams.

A total of 168 Forest Protection Officers were hired to support the full operationalization of LAWIN System for priority areas in Bicol region. They also conducted operations against illegal Environment and Natural Resources (ENR) Activities within Forest Conservation Areas (FCAs) in the Protected Areas within the BRB and Catanduanes Natural Park.

Table 8.0 Distribution of FPOs/ Bantay Gubat hired in different provinces

Province	FPOs hired (no.)	Kilometers (km) patrolled
Albay	28	973.54
Camarines Norte	10	2,630.13
Camarines Sur	30	1,980.38
Catanduanes	100	578.16
Total	168	6,162.21





Figure 13.0 Orientation of hired Forest Protection Officers in the Provinces of Albay, Camarines Norte, Camarines Sur and Catanduanes

In addition to this, the hired FPOs assisted in the protection and maintenance to ensure the survival of planted bamboo culms along identified riverbanks.

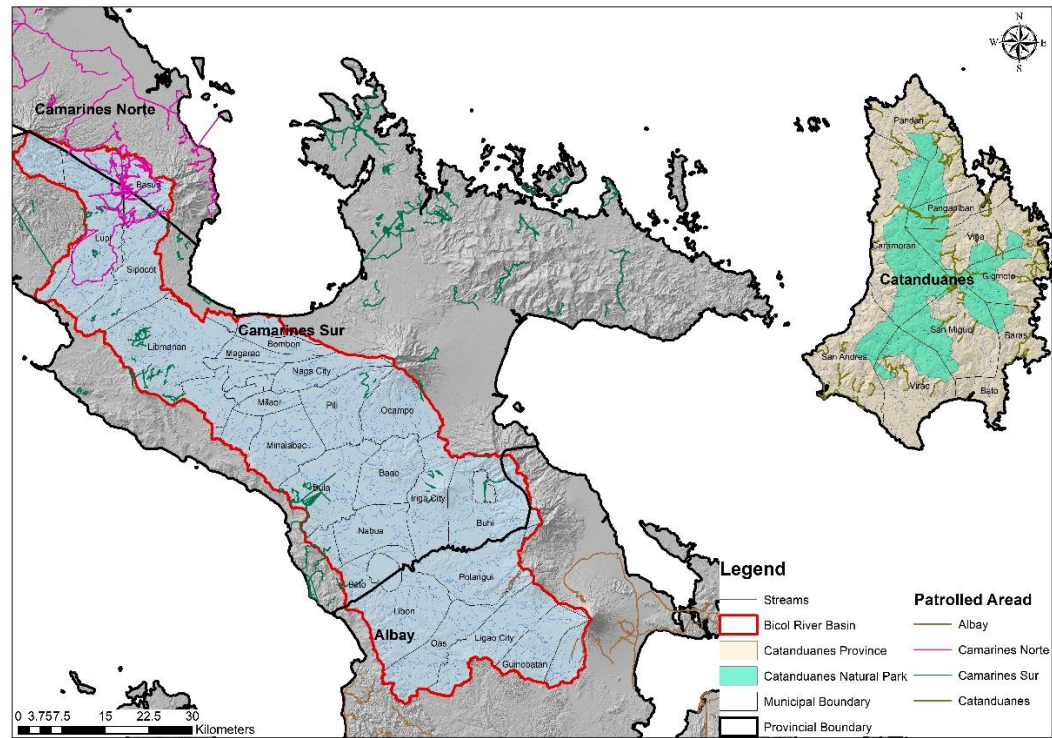


Figure 14.0 Tracking of area patrolled by hired Forest Protection Officers in priority areas





Survey and assessment of river easement was conducted along the major rivers of the Bicol River Basin, particularly, the Bicol River and Libmanan-Pulantuna River. This activity could enhance disaster risk reduction efforts within the BRB and promote public safety pursuant to the Water Code of the Philippines requiring riverbank easements of 3.00 meters, 20.00 meters and 40.00 meters in urban areas, agricultural areas and forestland, respectively.

Part of the activities undertaken for the survey and assessment of river easement include research and reconnaissance, execution of actual survey, and preparation of map/ plan. A total 159.92 kilometers along the major rivers were surveyed covering 118 Barangays. And demarcation was conducted in 115 Barangays in the Provinces of Albay, Camarines Norte and Camarines Sur.

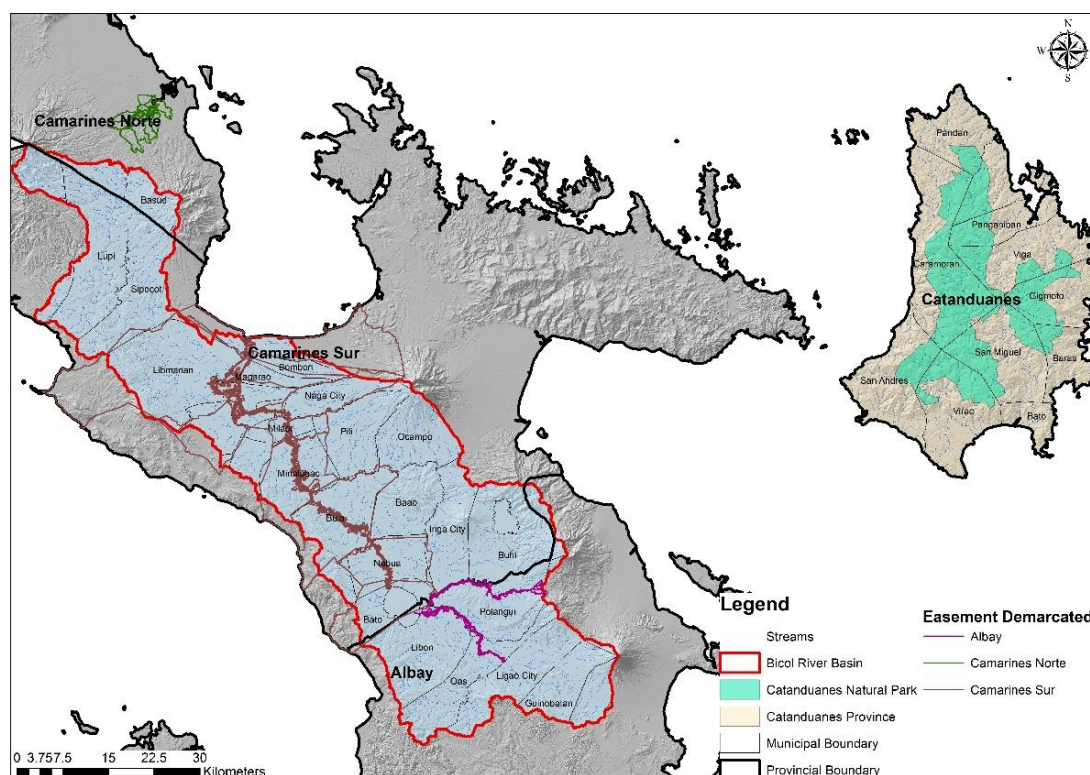


Figure 16.0 Location of easement recovery

Table 9.0 Distribution of surveyed and demarcated barangays along major rivers of BRB

Municipality/City	Target (Barangay)	Surveyed (Barangay)	Demarcated (Barangay)
Albay	25	27	27
Camarines Norte	5	8	5

Camarines Sur	83	83	83
TOTAL	113	118	115

Bamboo planting along riverbanks is another priority activity for KRA 6. Thus, on February 2021 the Simultaneous Launching of Riverbank Stabilization through Bamboo Planting and Growing was conducted on identified priority sites in the Provinces of Albay, Camarines Norte, Camarines Sur and Catanduanes.



Figure 17.0 Simultaneous bamboo planting activity in BRB and Catanduanes Province on February 9 to 12, 2021

The activity specifically aims to mitigate the impacts of soil erosion by stabilizing creeks and riverbanks through vegetative measures. Beneficiaries belonging to Pantawid Pamilyang Pilipino Program (4Ps), Tulong Panghanapbuhay sa Ating Disadvantaged/Displaced (TUPAD) Workers, economically displaced individuals and the likes were identified and tapped during the planting activity. In return, these beneficiaries received family food packs from the Food-for-Work Program of the DSWD or cash incentives from DOLE.

From February to May 2021, under the Forest Management Bureau (FMB) downloaded fund amounting to Five Million Pesos (₱ 5,000,000.00). A total of 143,860 bamboo culms were planted along identified riverbanks in priority areas covering 425.75 hectares. During the said months 2,490 DSWD Food Packs were distributed to the 4Ps beneficiaries who were tapped during the planting activity.

Table 10.0 Planted bamboo culms from February to May 2021 under the FMB downloaded fund

Location	Target bamboo culms to be planted	Accomplishment		Cost (₱)
		Bamboo culms planted	Area (ha.)	
Albay	142,857	28,500	110.35	5,000,000.00
Camarines Norte		27,351	93.99	
Camarines Sur		87,000	216.41	
Catanduanes		1,009	5	
Total		143,860	425.75	5,000,000.00

From June to December 2021, under the Central Office Based-Fund (COBF) downloaded amounting to Fifteen Million Pesos (₱ 15,000,000.00). A total of 436,417 bamboo culms were planted along identified riverbanks in priority areas covering 991.05 hectares and a total 6,889 DSWD Food Packs were distributed to the 4Ps beneficiaries who were tapped during the planting activity.

Table 11.0 Planted bamboo culms from June to December 2021 under the Central Office Based Fund

Location	Target bamboo culms to be planted	Accomplishment		Cost (₱)
		Bamboo culms planted	Area (ha.)	
Albay	57,143	62,712	144.29	15,000,000.00
Cam Norte	85,714	85,714	214.26	
CamSur	228,571	228,571	563.68	
Catanduanes	57,143	59,393	148.83	
Total	428,571	436,390	1,071.05	15,000,000.00

In summary, a total of 580,277 bamboo culms were planted from February to December 2021 along priority riverbanks covering a total of 1,416.80 hectares throughout the four (4) provinces. A total of 9,379 food packs and cash incentives were given to Food-for-Work Program/ 4Ps and TUPAD beneficiaries of DSWD and DOLE, respectively.



Figure 18.0 Distribution of DSWD food-packs to beneficiaries tapped during bamboo planting

Table 12.0 Summary of planted Bamboo culms from February to December in support to KRA 6

Location	No. of Bamboo Culms Planted	Area (ha.)
Albay	91,212	254.64
Camarines Norte	113,065	308,25
Camarines Sur	315,571	700.78
Catanduanes	60,402	153.83
Total	580,250	1,416.80

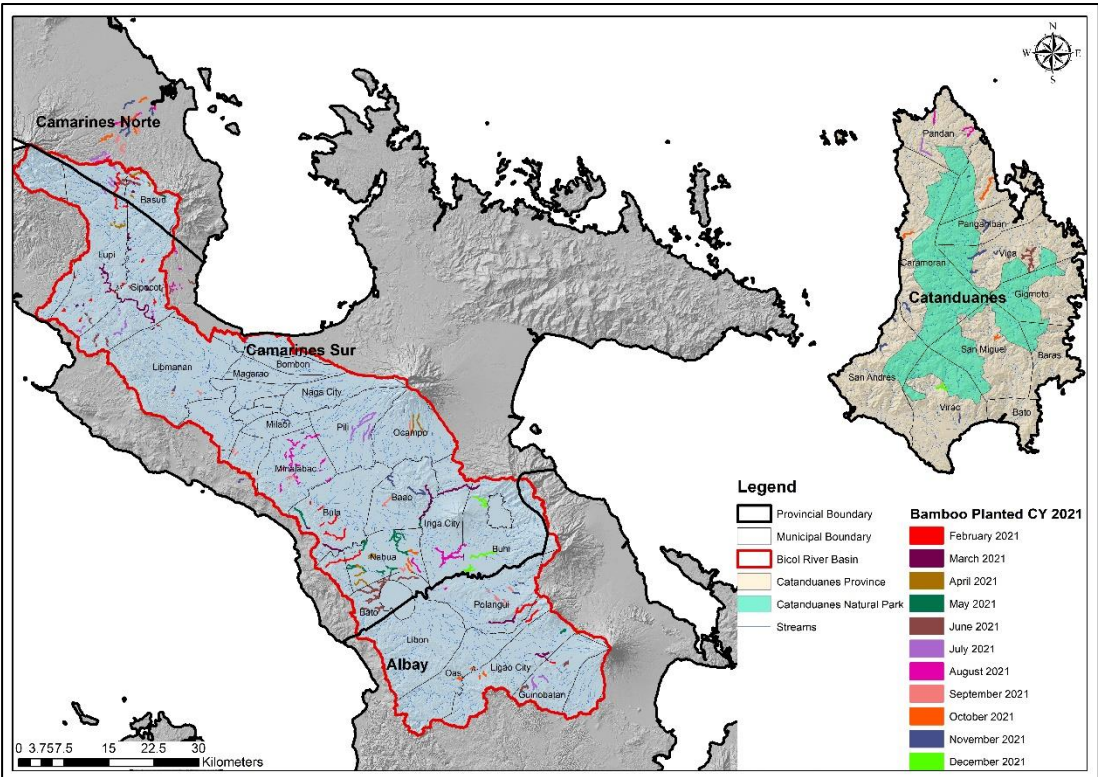


Figure 19.0 Location of planted bamboo culms in BRB and Catanduanes Province

Moreover, as part of the initiatives for intensified watershed management, soil conservation and watershed management structural measures were constructed under Soil Conservation and Watershed Management including River Basin Management and Development Program. Gabions, gabion checkdams and chekdams were constructed in minor river channels within the BRB and Catanduanes Province which may help eliminate and reduce impacts of flooding and severe cases of soil erosion.

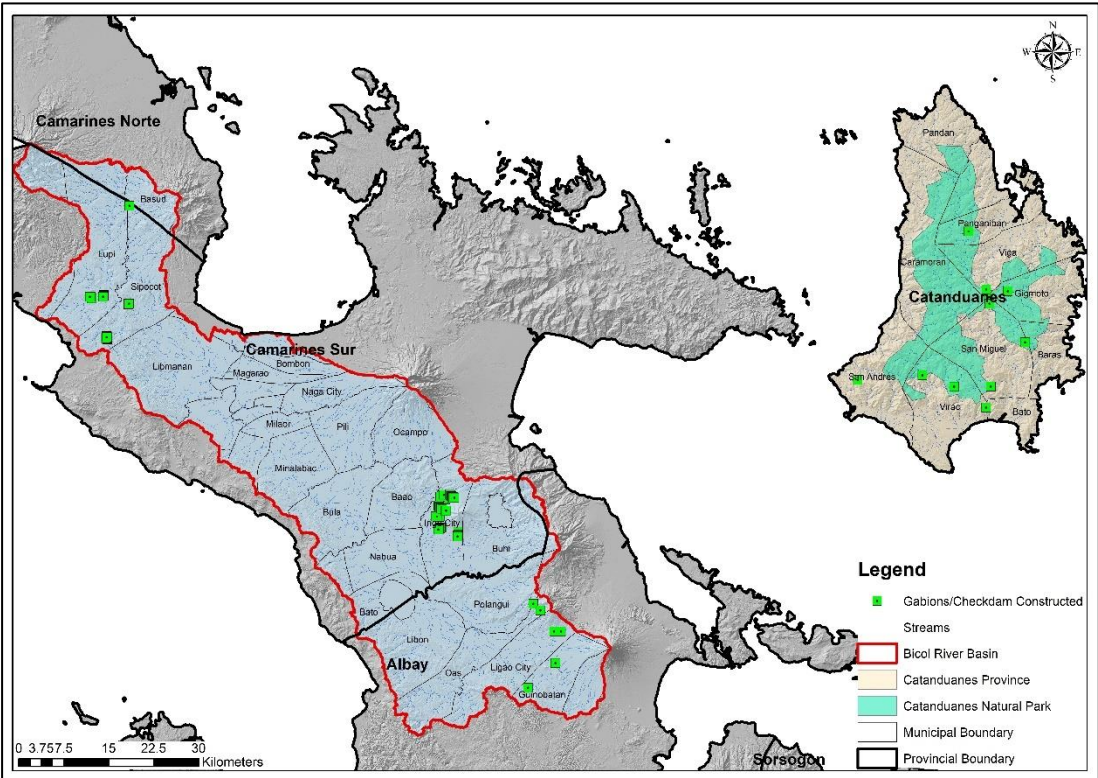


Figure 20.0 Locations of constructed structural measures within the Bicol River Basin and Catanduanes Province

A total of 7,224 cu.m. of gabions, gabion checkdams and checkdams were constructed in the priority areas with the particulars as follows:

Table 13.0 Distribution of constructed structural measures

Location	Structural Measure	Constructed (cu.m.)	Cost (₱)
Albay	Gabions, Gabion Check Dams	1,134	3,402,000.00
Camarines Sur		3,422	10,266,000.00
Catanduanes		1,334	4,002,000.00
Camarines Sur	Check Dam	1,334	5,336,000.00
TOTAL		7,224	23,0006,000.00

Other initiatives under KRA 6

In the implementation of intensified watershed management, other activities were also conducted within the Bicol River Basin which includes: (1) dredging efforts along rivers around Mt. Mayon Natural Park conducted by the Mines and Geosciences Bureau (MGB); (2) assessment of lakes within the Bicol River Basin as possible source of energy and income for communities within the basin; and (3) assessment of possible sites for the establishment of Science-Based Real-Time Watershed Monitoring Instruments in support to the strengthening of early warning systems particularly in areas that are prone to flooding.

IV. Challenges, Recommendations and Ways Forward

Table 14.0 Summary of issues, concerns and recommendations per Key Result Area

Program/ Activity/ Project	Challenges/ Issues/ Concerns	Recommendations/ Ways- Forward
KRA 1 Better and Resilient Infrastructures (DPWH)		
Bicol River Dredging Project	Delay in the implementation due to insufficient: <ul style="list-style-type: none">• Equipment;• manpower; and• funds	DPWH submitted a funding request amounting to 3.28 billion Pesos to append the existing equipment fleet of the region and be able to accomplish all the proposed dredging activities in the region.
Replacement/ improvement of existing flood gates		Funding request amounting to 64.10 million Pesos was already submitted for the replacement/ improvement of the existing 40 flood gates in Camarines Sur
KRA 2: Stronger Shelter and Resilient Settlements (DHSUD)		
Trainings and capacity building to LGUs in the preparation and implementation of CLUPs and ZOs, PFPs, CDRA and GIS	<ul style="list-style-type: none">• Lack of Manpower;• Travel restrictions and observance of COVID-19 protocols;• Communication and telecommunication constraints;• Political will of concerned LGUs;• Funding source;	<ul style="list-style-type: none">• Planning Division staff complement• Strict compliance to RA 10587 Build strong collaboration/ partnership with NGAs, LGUs, NGOs, CSOs, for delivering support to communities

	<ul style="list-style-type: none"> • Data sharing of plan documents with NGAs and LGUs; and • Technical expertise 	<ul style="list-style-type: none"> • Capacity sharing and support on planning among organizations
KRA 4: Restored Sustainable Livelihood (DTI)		
Livelihood Seeding Program - Negosyo Serbisyo sa Barangay	Damages to Micro Enterprises and Cooperatives	<ul style="list-style-type: none"> • Automatic loan moratorium; Establishment of government insurance company or scheme for MSMEs; • Creation of a standby emergency relief fund for the MSME sector; • Institutionalization of the Livelihood Seeding Program-Pangkabuhayan sa Pagbangon at Ginhawa; • Institutionalization of Business Continuity Plans; • Institutionalization of Post-disaster assessment for the MSME sector
Pondo sa Pagbabago at Pag Asenso (P3) - COVID19 Assistance to Restart Enterprises (CARES)	Damages to Small and Medium Enterprises (SMEs) and Cooperatives	P3 Program shall be implemented in parallel with SB Corporation's Bayanihan CARES Program to assist enterprises affected by the COVID-19 pandemic
KRA 5: Strengthened Governance thru Broad-based Citizen Input (DILG)		
Component 1: Mainstreaming DRR-CCA in the Local Development Plans		
Technical assistance on the conduct of Climate and Disaster Risk Assessment (CDRA) and other related assessments for strengthened basis of the CLUP/ZO	Lack of disaster and climate risk-related studies and assessment to be used in the updating of CLUP/CDP	<p>On provision of technical assistance:</p> <p>*DHSUD to provided technical assistance to provinces, cities, and municipalities in building their capacity to undertake formulating CLUPs (RA No. 11201)</p> <p>*OCD to provide advice and technical assistance and assist in mobilizing necessary resources to increase the overall capacity of LGUs, specifical the low income in high-risk areas (RA 10121 IRR, Rule 7, Section 3.q)</p> <p>*CCC shall facilitate capacity building for local adaptation planning, implementation and monitoring of climate change</p>

		<p>initiatives in vulnerable and marginalized communities and area (RA 10174, section 7)</p> <p>On provision of CCA and DRR information:</p> <p>*DENR shall oversee the establishment and maintenance of a climate change information management system and network, including climate change risks, activities and investments in collaboration with other concerned NGAs and LGUs (RA 10174, Section 10)</p> <p>*DOST shall promote assistance and undertake scientific and technological projections and analysis of future climate scenarios, including activities relative to observation, collection, assessment and processing of climate-related data such as rainfall, sea level rise, extreme climate events, rise in temperature, and records of droughts monitored over long period of time (RA 10174 Section 10.h)</p>
Series of workshops on the formulation of CLUP and Zoning Ordinance which ensures integration of DRR-CCA components, and FLUP	Outdated CLUP; no DRR-CCA component	<p>On provision of technical assistance:</p> <p>*DHSUD to provided technical assistance to provinces, cities, and municipalities in building their capacity to undertake formulating CLUPs (RA No. 11201)</p> <p>*DHSUD to train and capacitate their ROs in providing technical assistance to provinces, in undertaking housing and urban development and management including formulation and updating of CLUPs and ZOs, (RA 10121 IRR Section 19.10)</p> <p>*OCD to provide advice and technical assistance and assist in mobilizing necessary resources to increase the overall</p>

		<p>capacity of LGUs, specific the low income in high-risk areas (RA 10121 IRR, Rule 7, Section 3.q)</p> <p>*CCC shall facilitate capacity building for local adaptation planning, implementation and monitoring of climate change initiatives in vulnerable and marginalized communities and area (RA 10174, section 7)</p>
Technical assistance on the drafting of LGUs' Contingency Plan	No Contingency Plan	<p>*LGU to facilitate and support risk assessments and contingency planning activities at the local level (RA No. 10121 Section 12)</p> <p>*NDCC-OCD in coordination with UNCHR released a manual for LGUs re Contingency Planning for Emergencies</p>
Assistance in the drafting of LCCAP	No LCCAP	<p>*DILG and LGU, in coordination with NEDA, shall facilitate, the development and provisions of a capacity-building program for LGUs in climate change, including the provision of necessary and appropriate technology. (RA 10174, Section 10)</p> <p>*DILG and LGU, in coordination with CCC, developed guidelines on the formulation of LCCAP per DILG MC 2014-135</p>
Component 2: Enforcement of policies on the No-build Zone		
LRA-Geo Spatial Service	Identification of owners of titled properties within the areas of interest to be provided by the Task Force	*LRA is the central repository of all land records involving registered or titled lands
Organizing Local Housing Boards (LHBs)		*DHSUD to provide technical assistance to P/C/M in building capability to undertake housing and urban development and management including creation of Local Housing Board (RA 11201, Chapter III, section 5.II.b)

Organizing of Local Committee Against Professional Squatters and Squatting Syndicates (LCASSPS)	Weak institutional mechanisms in addressing encroachments of informal settlements along riverbanks and easements	*NHA shall continue to function as a production and financing arm in housing and shall exercise all other functions based on its existing charter and its other mandates as provided under existing laws (RA 11201 IRR Section 10)
Strengthening the functionality of LCASSPs	Landslides	
Review of existing CLUP and Zoning Ordinance; provision of Technical Assistance in the updating of CLUP/ZO	No-Build Zones not included in CLUP and/or does not have ordinance to support enforcement	*HLURB to review approve or disapprove land use plans of cities and municipalities (EO 648, as amended by EO 90)
Provide assistance to LGUs in the establishment of office/ appointing personnel for monitoring of No-Build Zones/ ZO	Weak institutional mechanisms to monitor implementation of the policy on no-build zones/ zoning ordinance	*DHSUD to train and capacitate their ROs in providing technical assistance to provinces, in undertaking housing and urban development and management including formulation and updating of CLUPs and ZOs and CLUP implementation and ZO enforcement for LGUS (RA 10121 IRR Section 19.10)
Training on the use of Land Use Zoning Information System (LUZIS) of the HLURB		<p>*NAMRIA shall expand its capability in the production and maintenance of maps, charts and similar photogrammetry and cartography materials. (EO 192 s. 1987, Section 22.a)</p> <p>* HLURB is mandated shall design and install an information system to monitor changes in the actual use of land resources and the implementation of CLUPs by LGUs with a view to ensuring compliance with national policies, standards and guidelines. (EO 72 s. 1993, Section 3c). In response to this mandate, the Land Use and Zoning Information System</p>

		(LUZIS) Development Program is created.
Establishment of an institutional mechanism within the LGU to facilitate the monitoring of built/ completed structures and its compliance to the Building Code	Lack of monitoring on the compliance of completed structures to the conditions set by the Building Permit	*DHSUD to train and capacitate their ROs in providing technical assistance to provinces, in undertaking housing and urban development and management including formulation and updating of CLUPs and ZOs and CLUP implementation and ZO enforcement for LGUS (RA 10121 IRR Section 19.10)
Component 3: Broad-based Citizen Input		
Provision of technical assistance in the formulation of the CDRA communication plan	Lack of community awareness on risk and hazards	<p>*CCC to oversee the dissemination of information on climate change, local vulnerabilities and risk, relevant to laws and protocols and adaptation and mitigation measures (RA 10174, Section7.o)</p> <p>*PCOO shall develop and implement necessary guidelines and mechanisms pertaining to the delivery and dissemination of information relating to the policies, programs, official activities and achievements of the President and the Executive Branch (EO 4 S. 2010) Section 2.a)</p> <p>*PIA shall provide technical assistance to other government agencies on the communications component of their programs; shall upgrade skills of government information officers, rural broadcasters, communicators, journalists and other communications personnel through training services and/or consultancy. (EO 100 S. 1987)</p>
Inclusion of IEC campaigns on hazard and risks to the communities in local development plans		*CCC to oversee the dissemination of information on climate change, local vulnerabilities and risk, relevant to laws and protocols and adaptation and mitigation measures (RA 10174, Section7.o)

Provision of assistance on participatory development planning	Non-observance of inclusive and participative planning most especially on DRR-CCA area	<p>*DHSUD to provided technical assistance to provinces, cities, and municipalities in building their capacity to undertake formulating CLUPs (RA No. 11201)</p> <p>*DHSUD to train and capacitate their ROs in providing technical assistance to provinces, in undertaking housing and urban development and management including formulation and updating of CLUPs and ZOs, (RA 10121 IRR Section 19.10)</p> <p>*CCC shall create an enabling environment that shall promote broader multi-stakeholder participation and integrate climate change mitigation and adaptation</p>
Component 4: Monitoring of LGU Performance		
Development of performance audit to assess quality and annual implementation of the local development plans	Lack of monitoring mechanism to review and assess local development plans and how DRR-CCA is mainstreamed	<p>*OCD shall review and evaluate the LDRMMPs to facilitate the integration of DRR measures into the local CDP and CLUP. (RA 10121 IRR Rule 7, Section 3.e)</p> <p>*CCC shall create an enabling environment that shall promote broader multi-stakeholder participation and integrate climate change mitigation and adaptation</p>
KRA 6: Intensified Watershed Management (DENR)		
Implementation of Integrated Bicol River Basin Management and Development Master Plan	Limited funds and manpower	Institutionalization of BRB Development Authority
Soil and Water Conservation	Soil degradation	<ul style="list-style-type: none"> • Adaption of Agroforestry and Sloping Land Use Technology (SALT) for soil and water conservation • Creation of Agroforestry demonstration and experimental area in partnership with Bicol University (BU) and other interested stakeholders

Disaster Risk Reduction and Management	Flooding and landslide	<ul style="list-style-type: none">• Installations of Automated Water Level Stations (AWLS) and Automated Weather Stations (AWS) for early warning system for flooding and landslides• Investment on Bamboo industry through partnership with private land owner, LGU's and NGA's
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