PROPOSAL SUMMARY

Project Title	Piloting of some climate-resilient development initiatives at Char Kazal, Galachipa, Patuakhali: an innovative concept of CBA to CC
Project Site	Union: Charkazal, Upazila: Golachipa, District: Patuakhli Char Kajal lays between 21º11´21´´N to 21º57´30´´N lat. and 90º29´41´´E to 90º35´53´´ E long.
Proponent	**Name of Organization**: Center for Natural Resource Studies (CNRS) **Address**: House # 19/B, Road # 16, Block B, Banani, Dhaka 1213 **Email**: anis@cnrs.org.bd, info@cnrs.org.bd, **web**: www.cnrs.org.bd **Phone**: 9886514, 01711813407, Fax: 9880928 **Contact Person**: M. Anisul Islam, Executive Director (Acting), CNRS
Authorized Representatives	M. Anisul Islam, Executive Director (Acting), CNRS **Email**: anis@cnrs.org.bd, **Phone**: 9886514, 01711813407
Cooperating Organizations	1. **Bangladesh Rice Research Institute (BRRI)** for technical support and financial assistance Contact person: Md. Shamsher Ali, CSO and Head, Biotechnology Division; Phone- 9257401-5 Ext. 493; email: mds_ali2003@yahoo.com 2. **Chevron-Bangladesh** for financial assistance Contact person: Obaidullah Al-Ejaz, Manager, Community Relations External Affairs, "Bay's Galleria" (4th Floor), 57 Gulshan Avenue, Gulshan-1, Dhaka 1212. Phone- 9892244, 8828891, Ext. 258, Cell- 01730335467, email: oaejaz@chevron.com
Project Dates	January 2011 to December 2012
Total Project Cost (USD) (local currency)	Planning phase: US $ 1,900 (BDT 133,000) Implementation phase: US $ 185,945 (BDT 13,016,130)
Amount Requested from CBA (USD) (local currency)	Planning phase: US $ 1000 (BDT 70,000) Implementation phase: US $ 49,887 (BDT 3,492,090)
Co-financing (USD) (local currency)	Local Community: US $ 14,120 (BDT 988,400) as kind CNRS: US $ 11,000 (BDT 770,000) as kind BRRI: US $ 9,760 (BDT 6,83,200) Chevron: US $ 96,178 (BDT 6,732,440)

Project Objective	The project is intended to promote community-based adaptive capacity of the people at Char Kajal through piloting of adaptive agriculture practices, renovation of house and boat to make them cyclone-resilient, and conservation of land by promoting reforestation/aforestation of mangroves.
Brief Project Description	The description of the project area and its inhabitant depict that the livelihoods of the community of Char Kazal is largely dependent on the natural resources. The area is highly exposed to risks associated with climate variability and change. Frequent cyclonic events with storm surge, river bank erosion, increased salinity, increased incidents of abnormal high tides, increased frequency of rough sea weather conditions (signal # 3), erratic rainfall and higher temperatures are the visible climate related hazards, here. Stress on livelihoods is evidentially increased in the recent past. Other than the livelihoods and natural resources, social life of local people is at high risk because of climate induced risks. Therefore, the project is envisaged for developing resilience at some of the areas that facilitate to sustain livelihoods, and local-institutional system by promoting community based adaptation to climate change. The activities include adaptive agriculture practices, house and boat renovation to make them cyclone-resilient, and conservation of land by promoting reforestation/aforestation of mangroves. Being a pioneer organization in implementing community-based projects, CNRS, proposes this project to pilot some of the initiatives on climate resilient development in association with the community. However, the project will promote adaptation means, and will initiate to make positive change in the eco-system and its services. The project will demonstrate some alternative options for better livelihood especially for the poor, women and youth. Finally, the project will emphasis on the empowerment of the local institutions.

1.0 RATIONALE

The project is intended to build adaptive capacity of the community living at Char Kazal union of Golachipa upazila under Patuakhli district. Char Kajal lays between 21º11´21´´N to 21º57´30´´N lat. and 90º29´41´´E to 90º35´53´´ E long., and is situated at one of the most vulnerable area of Bangladesh. The map of Char Kazal is attached in Annex-1.

Char Kazal is a riverine island of 187.8 km^2, bounded by two rivers – Bura Gaurango and Tetulia. The island is divided by Bura Gaurango river from the Galachipa main land, and by Tetulia fiver from Bhola. Char Kazal includes 4 villages. During monsoon, the breadth of Bura Gaurango becomes 7-10 km, and causes difficulty to reach to the main land for the essential reasons including emergency medical purposes. The area is exposed to some frequent hazards associated with climate variability and change. Poverty is a common issue here, as well.

As part of the 'planning phase', CNRS conducted a detail census at the area. The result shows that the union is inhabited by about 21,110 people belongs to 4448 households (HH) with an average family size of 4.7. The socio-economic status is so lamentable, here. For instance, about 26 and 60% of HHs do not pose any land for homestead and farming, respectively. Another 66.5% HH own 50 decimal or less land for homestead. Table-1 represents that about 83.9%HH falls in the category of either Landless or Marginal. Agriculture, wage-labor, fishing are considered as major primary occupations of the community (Table-2). However, the community is almost entirely depended on natural resource bases for their livelihood.

Table-1: Distribution of HH by cultivable land

Category	# HH	%
Landless-1 (0 dec)	2680	60.3
Landless-2 (1-50 dec)	461	10.4
Marginal (51-150 dec)	589	13.2
Small (151-250 dec)	265	6.0
Medium (251-500 dec)	227	5.1
Large (Over 500 dec)	226	5.1
Total	4448	100

Table-2: Distribution of HH by primary occupation

Primary occupation	# HH	%
Agriculture (own land)	172	3.9
Agriculture (own + share-in)	740	16.6
Agriculture (lease & share-in)	292	6.6
Agriculture day labour	515	11.6
Day labor(none agriculture)	808	18.2
Fishing	728	16.4
Business (M & L)	228	5.1
Petty business	236	5.3
Fish business	40	0.9
Service (Govt./NGO)	215	4.8
Remittance	57	1.3

During the study, the land use pattern was identified (Fig-01). It was revealed that most part of the land once were utilized for agricultural practices. However, soil degradation of crop lands has become a great concern since last 10-15 years. Sand carpeting and salinity intrusion are the major two causes for land degradation. Fig-02 illustrates that a major part (about 66%) of the total land have been degraded already. That means bellow 10% area of the land remains productive for agriculture that indicates about the level of food scarcity here. The sand-carpeting incidence forced many of the community members to change occupation. However, the cropping pattern (Fig-03) at the aforesaid

productive land indicates, the crop intensity (bellow 2), and hence the land efficiency remains bellow average.

The area is highly exposed to risks associated with climate variability and change. Frequent cyclonic events with storm surge, river bank erosion, increased salinity, increased incidents of abnormal high tides, increased frequency of rough sea weather conditions (signal # 3), erratic rainfall and higher temperatures are the visible climate related hazards as mentioned by the local communities. The natural calamities and their hazardous level at the coastal zone were also assessed my many studies under different projects including Climate Change Cell (CCC) of Comprehensive Disaster Management Program (CDMP).

Community people are largely failed to combat with the increased intensity of the hazards including the unknown ones. Along with the adverse affect on livelihood, the hazards have been making serious consequences on the resource bases including some special ones that provide habitat and ecological *niche* for numbers of species of both flora and fauna. For instance, the area also consists a patch of mangrove forest that has been shrinking with a greater pace in contemporary period. A pictorial documentation about the resources and issues are presented in Annex-2.

Fig-01: Land-use pattern

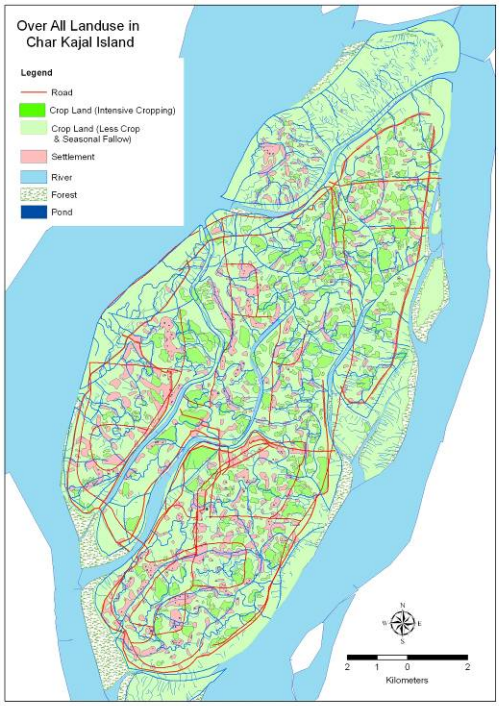
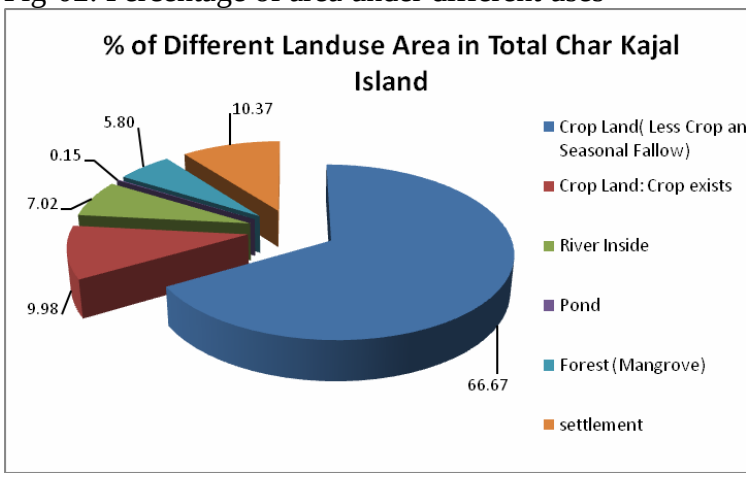


Fig-02: Percentage of area under different uses



Regarding future climate change incidents, people have less clarity to define what would be the scenario. They, however, afraid of higher water volume in rivers (increase in river water), more intense cyclone & storm surge, higher salinity, loss of biodiversity including fish and crisis of freshwater. Interestingly, most of the poor do not have strategy for adapting to these future climate change induced hazards and shocks.

Fig-03: The cropping pattern at the productive lands of Char Kazal (source: CNRS PLUS, 2010)

Crop	***Coverage (% cultivable land)***	***Baysha k* (Apr-May)**	***Jaushat a* (May-Jun)**	***Asar* (Jun-Jul)**	***Sraban* (Jul-Aug)**	***Vadro* (Agu-Sep)**	***Arshin* (Sep-Oct)**	***Kartik* (Oct-Nov)**	***Agraho n* (Nov-Dec)**	***Paush* (Dec-Jan)**	***Magh* (Jan-Feb)**	***Falgun* (Feb-Mar)**	***Chatra* (Mar-Apr)**
Musuri	5-8												
Kheshari Kalai	15-20												
T-Aman	70-80												
Til	8-10												
Water Melan	7-10												
Boro	7-10												
Mug	27-30												

However, the project will initiate to facilitate the local community to adopt the techniques to cope with some of the climate change induced natural calamities. The project will primarily focus on a few areas: (a) adaptive agriculture to enhance the potentiality of food security, (b) protection of houses, boats and cattle from cyclones/depressions, and (c) conservation of land by promoting reforestation/ aforestation of mangroves. Moreover, for the sustainability of the project initiatives local institutions will be trained and involved.

2.0 COMMUNITY OWNERSHIP

Project Formulation :
As part of the project formulation, some of the participatory tools including (1) Vulnerability Risk Assessment (VRA), (2) Participatory Land Use Survey (PLUS) and (3) Participatory Action Plan Development (PAPD) were conducted where the representatives from different strata of the community were ensured. Therefore, the design of the project became as the out-put of the needs and constraints identified and prioritize by the community themselves. Annex-3 represents a pictorial documentation of the process.

Project Implementation :
The local institutions (i.e. UP-UDMC and other relevant stakeholders) are already been encouraged to form a Community-based Management Committee (CMC). The CMC will act as the 'Implementer' of the project. Initiatives also will be taken so that the CMC are registered under Social Welfare Department. However, CNRS will over see and coordinate the project.

Phase-Out Mechanism, Sustainability :
The Community-based Management Committee (CMC) will be trained and encouraged in ensuring continuous sustainability of the implemented activities.

Contribution of the volunteers to the CBA Project												
Project Activities	Description of the voluntary contribution	Total number of volunteers to be mobilized	*Women*	*Men*	*Elderly persons (older than 60)*	*Youth (younger than 25)*	*People with disabilities*	*Local*	*National*	*International*	Number of volunteer days anticipated	Monetary value of the voluntary contribution including labor and materials
Trial of soil tolerent rice variety	Land, labor, etc.	20		10		10					300	USD 2,200
Trial of alternative crops at the degraded farmlands	Land, labor, etc.	20		10		10					300	USD 2,200
Trial of minimizing sail salinity affect on vegetable cultivation	Land, labor, etc.	60	30		10	20					600	USD 3,400
Trial of crop intensification at farmlands	Land, labor, etc.	20		10		10					500	USD 3,000
Trial of crab fattening at inundated lands	Land, labor, etc.	10				5					200	USD 1,300
Demonstration renovation of houses to make them cyclone resilient	Labor, home, etc.	2	2								40	USD 1,600
Demonstration renovation of country-boats to make them cyclone resilient	Labor, boat, etc.	4				4					40	USD 1,000

For reference: What are the mechanisms for volunteerism that already exist in the community before the CBA project?

Char Kazal is at such a remote place where people use to help each other in case of emergency. In fact, it is the neighbours who are the ones to extend hands until the external assistance from government reach there.

For reference: Number of volunteers in the community already engaged in climate change adaptation activities before the CBA project.

There are about a hundred of volunteers involved with the government early-warning system for cyclones.

For reference: What are the opportunities or obstacles that could facilitate or impede people from engaging in voluntary activities?

People have courage to get relief from the intensified and frequent natural calamities.

3.0 PROPONENT DESCRIPTION

CNRS became operational in the field as a non-governmental development organization upon being registered with the NGO Affairs Bureau in 1994. Initially, the key focus of CNRS was to put on community-based co-management of natural resources with active engagement and leadership of local user communities and other relevant stakeholders with the understanding that the livelihoods of millions of poor households depend on natural resources for their sustenance. Since formation, CNRS has been active in this field and able to draw attention of the relevant local, national and international actors including government and donor agencies through demonstrating innovations in its approaches and producing tangible learning outcomes. Over the years, during the course of its journey, CNRS incorporated other areas of development which include skills building, livelihoods options & employment creation, market linkage development, empowerment, WATSAN, disaster risk reduction and climate change adaptation. Attention is also drawn on gender equity, good governance and advocacy with an objective of ensuring sustainable development through a process of establishing rights of access to resources by the poor user communities. Besides, CNRS runs a micro-credit program of its own in its area of operation facilitating capitation for the small initiatives taken by the poor resource users as means of alternative income generation.

Vision: CNRS dreams to see that people and nature live in harmony in a world free from exploitation and exclusion.

Mission: Empowering marginalized communities with required skills and capabilities for making change that favors pro-poor, inclusive and lasting development and minimizing gaps with the rich towards a better co-existence

Goal: The goal of CNRS is to join with others in influencing the national development strategy in directions that supports national development strategy building or rather destroying the nation's environmental resources.

Approaches: In its journey, CNRS adopts diverse approaches and methods, developed by itself as well as with the help of partners. The system has been evolving through a process of challenges and responses. With its flexible structure, CNRS is continuously gaining and sharpening its knowledge base from various sources, especially from participating communities including various development partners.

Legal Status: CNRS is registered with NGO Affairs Bureau of People's Republic of Bangladesh vide No. 841 dated 6 July 1994 (under the Foreign Donations Regulation Ordinance 1978) and also registered with the Societies Registration Act, XXI of 1860 (No. S-2463 (56)/2000) dated on 13 September 2000.

Organizational Membership: CNRS keeps active co-operation and association with national and international organizations working in the develpment sector. It also keeps close attachment with the main stream sustainable human development efforts in Bangladesh. CNRS has partnership and membership with some Forums and Associations. Among them the followings are worth mentioning:

- IUCN Bangladesh National Committee
- PRA Promoters' Society-Bangladesh (PPS-BD)
- Coastal Fisher-folk Community Network (COFCON)
- Credit Development Forum (CDF) and
- Asian DRR network

- Bangladesh Network for Environmental Governance (BNEG)

Major Clients and Partners

Clients and Donors:
Government of Bangladesh, UNDP, UNICEF, UNOPS, WFP, UNESCO, FAO, GEF/UNDP, World Bank, DFID-UK and Bangladesh, EC, USAID, SDC, Ford Foundation, IUCN Netherlands, Oxfam GB, Oxfam Hong Kong, Shell BVD, Cairn Energy, Royal Netherlands Embassy, CIDA and other international and national agencies.

Partners

International**:**
WorldFish Center (CGIAR Center based in Malaysia), Inter Cooperation (Switzerland), ITDG (UK), Winrock International (USA), ITAD (UK), Reading University (UK), Newcastle University (UK), Oriental Bird Club (UK), MRAG (UK), IUCN-Bangladesh, CARE Bangladesh, Practical Action (UK), Action Aid Bangladesh, Manitoba University (Canada), NRSP and FMSP/Huntings-DFID, Concern Worldwide, ECHO

National**:**
MoEF, MoFL, WARPO, BWDB, DoF, DoE, LGED, DPHE, Disaster Management Bureau, BRAC, PROSHIKA, Caritas, Dhaka University, Bangladesh Agriculture University, Rajshahi University, BARI, BRRI, DAE, BARC, BRAC University, North South University, CEGIS and other government agencies and NGOs.

Income and Expenditure of CNRS in last 5 years

Fiscal Year	Income (BDT)	Expenditure (BDT)
2009-2010	278,970,545	277,168,954
2008-2009	239,754,310	215,972,320
2007-2008	175,401,405	151,264,208
2006-2007	164,468,491	156,582,544
2005-2006	151,535,455	137,118,933

Expertise of CNRS

CNRS has expertise in program development and implementation in different areas of rural development following a holistic and integrated approach such as natural resource management, environmental education, social mobilization, peoples empowerment, health, nutrition, sanitation, education, training, disaster management, emergency relief operation, rehabilitation, flood proofing, gender-disadvantaged/vulnerable group/disable-physically handicap development. The detail profile and registration certificates of the proponent is presented in Annex – 4 and 5, respectively. However, special expertise that has been practiced by CNRS in its all projects is as follows:

1. Livelihood Analysis
2. Community Based Management
3. Institutional Development
4. PAPD (Participatory Action Plan Development) as Consensus Building among the stakeholders
5. Spatial Data Development and Analysis : GIS
6. Participatory Monitoring (Report Card)
7. Community Mobilization
8. Capacity Building and Training
9. Private-public Linkage Development
10. Governance
11. Right Based Activities
12. CNRS Linkage with Civil Society

13. Community Risk Reduction (CRA)
14. Disaster Risk Reduction

Experience of CNRS in coastal zone

CNRS has been working in the coastal areas from late nineties. A partial list of the involvements of the organization in the coastal zone is presented bellow:

1. Conducted post SIDR assessment in 2007-08 in the affected areas including Patuakhali-Barguna in assistance with UNDP (as emergency response partner of UNDP);
2. conducted SIDR rehabilitation activities with the fisher communities of greater Barisal Division in 2008 in assistance of FAO;
3. Conducted Environmental Monitoring of Seismic survey in Patuakhali (2009), Community Consultation in Patuakhali (on going, 2010-2011) in assistance with Chevron;
4. Presently, we have been implementing process monitoring of social investment program project (World Bank supported project for 2009-2011) in Bagerhat, Pirojpur, Barguna and Patuakhali districts;
5. Conducted a study on Fishing community in greater Chittagong in assistance with in 2003;
6. Conducted socio-economic baseline and prepared an alternative livelihoods plan for fisher community of greater Chittagong in assistance with CARE Bangladesh in 2008;
7. Conducted Hilsha breeding survey in Meghnaestuary including Hatiya under MES II (Meghna Estuary Survey) in 2001-2002 in assistance with Royal Dutch Embassy;
8. Conducted participatory action plan development workshops with forests and marine resource users in Char Bata, Hatiya and other island chars in Noakhali;
9. Conducted marine fisheries monitoring in Noakhali in 2003;
10. Monitoring of the impacts of rural roads on local environment at Noakhlai sadar upazila with support of CARE Bangladesh in 1997-98;
11. Sea turtle conservation and public awareness activities at Teknaf, Cox's Bazaar, Kutubdia and Mohelskhali since October 1998 with support of the Shell Oil Company;
12. Being a partner of Empowerment of Coastal Fishing Communities (ECFC – a FAO/DoF project) we mobilized coastal fishers in Teknaf, Kutubdia and Chakoria upazilas during 2000-2001;
13. Coastal biodiversity planning at the coastal char areas of Noakhali with support of the Royal Netherlands Embassy in 2000;
14. Carried out participatory district development planning exercise as partner of ICZMP and WARPO and developed the plan for the Bhola and Cox's bazaar districts with CEGIS;

CNRS has been involved in numbers of projects working on climate change. A list of the projects and "Data Sheet" of Climate Change, NRM and Livelihoods Projects are presented in Annex – 6 & 7.

Banking Information

Name of Account:	Center for Natural Resource Studies
Name of Bank:	Prime Bank Limited
Account Number:	13231060000279
Branch:	Banani Branch, Dhaka 1213

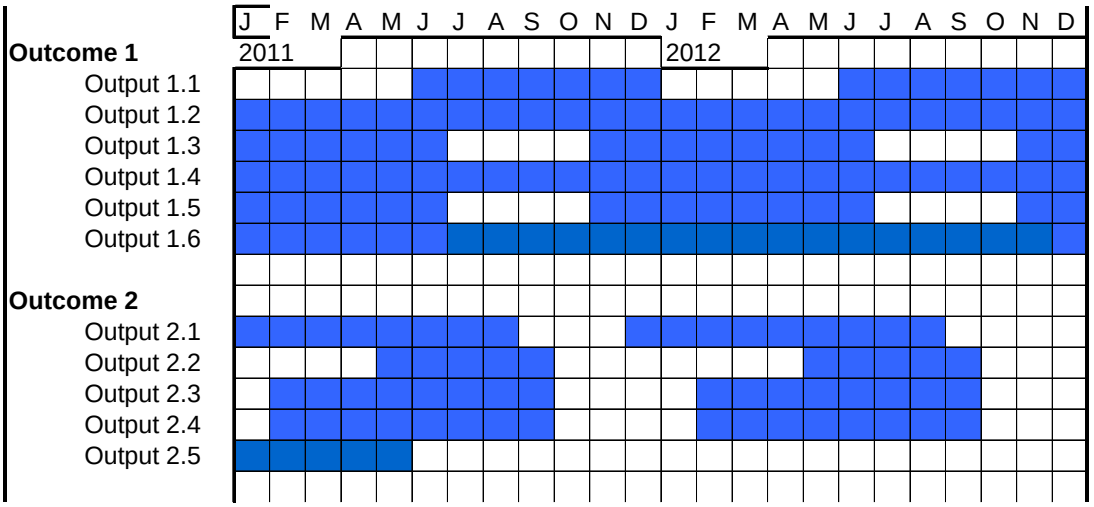
4.0 PROJECT DESCRIPTION

4.1 Objective, Outcomes, Planned Outputs:

The overall objective of the project is to develop community-based adaptation to climate change mechanism through implementation of adaptive agriculture, renovating home and boat to make them cyclone resilient, and conservation of land by promoting reforestation/aforestation of mangroves. However, the log-frame of the project is presented bellow:

Project Objective: The objective of the project is to increase community-level capacity to be able to adapt to climate change induced natural calamities, and hence to improve livelihood of the community at Char Kajal.			
Outcome 1.0: Capacity for adaptive farming increased in the face of climate change risks			
	Output 1.1: Demonstration trial of saline tolerant rice varieties		
	Output 1.2: Demonstration trial of alternative crops (i.e. water melon, mazie) at the degraded farmlands that got sand-carpet		
	Output 1.3: Demonstration trial of the technique to minimize soil-salinity affect on vegetable cultivation		
	Output 1.4: Demonstration trial of crop intensification for the farmlands		
	Output 1.5: Demonstration trial of crab fattening at the inundated lands that were once good farmland		
	Output 1.6: Trial of duck rearing at the inundated lands		
Outcome 2.0: Capacity for coping with natural hazards increased			
	Output 2.1: Demonstration plantation of mangrove to minimize the affect of storm-surges, high-tides, etc.		
	Output 2.2: Demonstration plantation to create live fence with coconut trees to protect homestead from cyclone		
	Output 2.3: Demonstration renovation of houses to make them cyclone resilient.		
	Output 2.4: Demonstration renovation of country-boats to make them cyclone resilient (eligible to be rowed even at signal #3)		
	Output 2.5:Construction of *killah* to protect cattle during cyclone and storm surge		

4.2 Timetable



4.3 Risks and Barriers

Community participation, and hence community-based project management is a relatively new approach. The people at Char Kazal are not very familiar to community-contribution in project implementation, as well. This is because, they have been observing that external inputs (as disaster response) are channeled following a natural calamity strikes, by the government, NGOs and well intended civil societies. Therefore, the key barrier might be to change the communities' mind-set from "relief-oriented" to "development-oriented". The prime risk factor is identified that the trend of natural calamities will not be further intensified.

4.4 Monitoring and Evaluation Plan

CNRS personnel will facilitate, and will involve CMC to conduct the monitoring and evaluation activities. For the VRA all indicators (assessed in the Initial VRA analysis) will be monitored and measured again in second VRA meeting planned to be conducted during the implementation phase (halfway) and again upon completion of the project implementation. Depending on funds availability, a fourth consultation may be conducted a year after the completion of the project implementation.

4.4.1 Initial Vulnerability Reduction Assessment (VRA) Analysis

During the initial VRA, a good number of representatives from the different strata of the community were involved. It should be noted that, views of women and young people were valued equally. The VRA session considered all the 5 indicators, prescribed. The process identified that the community prefers to prioritise the initiatives to be taken to adapt with the consequences of climate change are: (1) adaptive agriculture practices, (2) minimizing the affect of cyclone on household assets (i.e. house, boat), and (3) minimizing the propagation of degradation and erosion of land. However, the indicator questions along with the common themes in the answers to the questions, the score and information gather from the initial VRA consultation phase are presented in the following table:

Vulnerability Reduction Assessment Reporting Form					
Indicator	*Question/Questions Used*	*Score*	*Reasons for Negative Responses*	*Reasons for Positive Responses*	*How could the score be improved?*
1. Vulnerability of livelihood/welfare to existing climate change and/or climate variability.	What are the calamities you face? What happens when there is cyclone, storm surge, inundation, salinity intrusion, erosion or/and extreme weather events? How does this affect you and your community?	1	1)destroys homestead, cattle, and other assets; 2)causes degradation of farmland; 3)restricts fishing opportunities; 4) causes occasional displacement		1) if they got an innovative & low cost know-how to make their house & boat resilient to cyclone/strong wind; 2) if they got the know-how to continue agriculture in the changed situation; 3) if erosion and degradation of mangrove are minimized
2. Vulnerability of livelihood/welfare to developing climate change risks.	What would happen if the intensity of the calamities are increased? How would this affect you and your community?	1	1) adverse effects will be intensified; 2) will have no other options but to migrate out		1)construction seawall with appropriate drainage facility; 2) two step green belt with mangrove (outer) & coconut plants (inner); 3) more cyclone shelters for human and cattle; 4)better services for agriculture;
3. Magnitude of barriers (institutional, policy, technological, financial, etc) barriers to adaptation.	How do you cope with the calamities? Who comes first to assist? How you can take part into the process?	3	1) some how they survive 2) not happy with the government assistance 3) community involvement in government initiatives are not common		Need to recognize & empower the inherent strength of the local institutions and the individuals
4. Assets available to community for adaptation (volunteers, skills, commitment, indigenous knowledge, community leadership, etc.)	What means do your community have to initiate climate change resilient development?	6		Despite they do not have financial strength but have courage and traditional knowledge that help them to survive, some how	Need to institutionalize the moral strength of the community by forming a CBO
5. Ability and willingness of the community to continue to manage climate change risks		6		They fight for their existence	The CBO needs to be registered &empowered
VRA Score		**3.4**			

4.4.2 Project M&E Plan

VRA:

	Approximate timing of VRA sessions	Who ran/ will run the VRA meeting	Who will be responsible for collecting VRA data
First	October 2010	CNRS personnel	CNRS personnel
Second/midterm	at project month 13	CNRS personnel & CMC	CNRS personnel
Final	at the end of the project	CNRS personnel & CMC	CNRS personnel

IAS:

Considering the notion of the project, the Impact Assessment System (IAS) indicators were set as accordingly that is presented in the following table. The indicators will be measured on a scale of 1 (worst) to 5 (excellent).

IAS Indicator to be measured	How it will be measured	When it will be measured	Target value to be achieved by project end
1. # plots under demonstration trial of saline tolerant rice variety	by CNRS personnel & CMC	at the project month 13 & 24	20 (10 in each year)
2. # plots under demonstration trial of alternative crops at the degraded land	-do-	-do-	20 (10 in each year)
3. # plots under demonstration trial to minimize soil salinity affect on vegetables	-do-	-do-	60 (30 in each year)
4. # plots under demonstration trial of crop intensification in farm lands	-do-	-do-	20 (10 in each year)
5. # plots under demonstration trial of crab fattening	-do-	-do-	10 (5 in each year)
6. # houses renovated with the innovative technology to make cyclone resilient	-do-	-do-	2
7. # boats renovated with the innovative technology to make cyclone resilient	-do-	-do-	4
8. area covered under mangrove plantation/replantation	-do-	-do-	50 decimal
9. area covered under coconut tree plantation	-do-	-do-	50 decimal

4.5 Progress Reports

Progress reports will be submitted in accordance with times marked for VRA and IAS sessions. Indicators will be measured and included in progress reports, accordingly.

4.6 Project Management

The local institutions (i.e. UP-UDMC and other relevant stakeholders) are already been encouraged to form a Community-based Management Committee (CMC). The CMC will act as the 'Implementer' of the project. Initiatives also will be taken so that the CMC are registered under Social Welfare Department. However, CNRS will over see and coordinate the project where Mr. MHM Mostafa Rahman will act as Project Manager. The CVs of the Project Manager and the important personnel of CNRS are attached in Annex-8 to 10.

Being a co-financing partner, Chevron will extend fund to some of the activities of the project while BRRI will extend both financial and technical assistance in appropriate cases. The agreement copies between CNRS and the co-financing partners are attached in Annex -11 & 12.

5.0 PROJECT COSTS AND OTHER SOURCES OF FUNDING

It is learnt that CBA project require at least 1:1 support from either the proponent or matching funds from other donor. CNRS is proposing for 1:2.73 matching fund for the grant for implementation stage. It is noted that CNRS has been implementing community consultation for Chevron under which cost of many activities will be covered. Moreover, CNRS has long term MOU with BRRI for cooperation and research. CNRS is going to implement a research project with BRRI and many costs under this project will be borne under this project. The implementation phase is planned for 24 months with a cost of USD 188,638 while CBA grant is USD 48,980. The detail budget in the prescribed form is presented in the following pages.

Planning Grant

It is envisaged that UNDP would provide a additional lumpsum support of USD 1,000 for development of the plan for CBA (including detail proposal). During the planning phase, a total of about USD 1,900 were expended. However, CNRS expect that UNDP will provide USD 1,000, as well for the planning phase.

Total Project Cost and Amount Requested Table

Outcome & Output		Budget Items (Description)	Budget Items (USD x __)	Amount Requested from CBA	Amount from Community		Amount from other Organizations			Total USD
				In Cash USD	In Cash USD	In Kind =USD	Name of Organization	In Cash USD	In Kind =USD	
Outcome 1	**Capacity for adaptive farming increased**									
	Output 1.1	**Trial of soil tolerent rice variety**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Agriculturist	300 x 4.8months				BRRI	1,440		1,440
		Labor	4 x 300mandays			1,200				1,200
		Land rent	L/S			1,000				1,000
		Inputs	L/S	3,000			BRRI	500		3,500
		Farmers' rally, workshop,	L/S	500			BRRI	600		1,100
		Operating, logistics, etc.	L/S	100			CNRS	100		200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000
	Output 1.2	**Trial of alternative crops at the degraded farmlands**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Agriculturist	300 x 4.8months				BRRI	1,440		1,440
		Labor	4 x 300mandays			1,200				1,200
		Land rent	L/S			500				500
		Inputs	L/S	3,000			BRRI	500		3,500
		Farmers' rally, workshop, monitoring, etc.	L/S	480			BRRI	600		1,080
		Operating, logistics, etc.	L/S	100			CNRS	100		200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000

Outcome & Output		Budget Items (Description)	Budget Items (USD x __)	Amount Requested from CBA	Amount from Community		Amount from other Organizations			Total USD
				In Cash USD	In Cash USD	In Kind =USD	Name of Organization	In Cash USD	In Kind =USD	
	Output 1.3	**Trial of minimizing soil salinity affect on vegetable cultivation**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Agriculturist	300 x 4.8months				BRRI	1,440		1,440
		Labor	4 x 600mandays			2,400				2,400
		Land rent	L/S			1,000				1,000
		Inputs	L/S	3,000			BRRI	500		3,500
		Farmers' rally, workshop, monitoring, etc.	L/S	400			BRRI	600		1,000
		Operating, logistics, etc.	L/S	100			CNRS	100		200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000
	Output 1.4	**Trial of crop intensification at farmlands**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Agriculturist	300 x 4.8months				BRRI	1,440		1,440
		Labor	4 x 500mandays			2,000				2,000
		Land rent	L/S			1,000				1,000
		Inputs	L/S	3,000			BRRI	500		3,500
		Farmers' rally, workshop, monitoring, etc.	L/S	400			BRRI	600		1,000
		Operating, logistics, etc.	L/S	100			CNRS	100		200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000

Outcome & Output		Budget Items (Description)	Budget Items (USD x __)	Amount Requested from CBA	Amount from Community		Amount from other Organizations			Total USD
				In Cash USD	In Cash USD	In Kind =USD	Name of Organization	In Cash USD	In Kind =USD	
	Output 1.5	**Trial of crab fattening at inundated lands**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Aquaculturist	300 x 4months				CNRS	600		600
		Labor	4 x 200mandays			800				800
		Land rent	L/S			500				500
		Inputs	L/S	2,500			Chevron	1,000		3,500
		Farmers' rally, workshop, monitoring, etc.	L/S	400			BRRI	600		1,000
		Operating, logistics, etc.	L/S	100			CNRS	100		200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000
	Output 1.6	**Trial of duck rearing at the inundated lands**								
		Personnel-Project Manager	650 x 2.18months							-
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Poultry Expert	300 x 4months				Chevron	1,200		1,200
		Labor	4 x 1000mandays			4,000				4,000
		Inputs	L/S				Chevron	21,429		21,429
		Farmers' rally, workshop, monitoring, etc.	L/S				Chevron	500		500
		Operating, logistics, etc.	L/S				Chevron	200		200
		Transport, perdiem, communication, etc.	L/S				Chevron	100		100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000

Outcome & Output		Budget Items (Description)	Budget Items (USD x __)	Amount Requested from CBA	Amount from Community		Amount from other Organizations			Total USD
				In Cash USD	In Cash USD	In Kind =USD	Name of Organization	In Cash USD	In Kind =USD	
Outcome 2	**Capacity for coping with natural hazards increased**									
	Output 2.1	**Demonstration plantation of mangrove plants**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Botanist	300 x 2months				CNRS	400		400
		Labor	4 x 300mandays	1,200						1,200
		Inputs	L/S	6,000			Chevron	3,000		9,000
		Workshop, monitoring, etc.	L/S	500			Chevron	2,000		2,500
		Operating, logistics, etc.	L/S	200						200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000
	Output 2.2	**Demonstration plantation to create live fence with coconut trees**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Botanist	300 x 2months				CNRS	400		400
		Labor	4 x 100mandays	200		200				400
		Inputs	L/S	6,000			Chevron	2,000		8,000
		Workshop, monitoring, etc.	L/S	500			Chevron	2,000		2,500
		Operating, logistics, etc.	L/S	200						200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000

Outcome & Output		Budget Items (Description)	Budget Items (USD x __)	Amount Requested from CBA	Amount from Community		Amount from other Organizations			Total USD
				In Cash USD	In Cash USD	In Kind =USD	Name of Organization	In Cash USD	In Kind =USD	
	Output 2.3	**Demonstration renovation of houses to make them cyclone resilient**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Engineer	300 x 0.5months				CNRS	600		600
		Mason	8 x 50mandays	400						400
		Labor	4 x 40mandays			160				160
		Inputs	L/S	6,000		1,500	Chevron	4,000		11,500
		Workshop, monitoring, etc.	L/S	500			Chevron	1,000		1,500
		Operating, logistics, etc.	L/S	200						200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000
	Output 2.4	**Demonstration renovation of country-boats to make them cyclone resilient**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Engineer	300 x 0.5months				CNRS	600		600
		Mason	8 x 50mandays	400						400
		Labor	4 x 40mandays			160				160
		Inputs	L/S	3,000		500	Chevron	2,000		5,500
		Workshop, monitoring, etc.	L/S	500			Chevron	1,000		1,500
		Operating,logistics,etc.	L/S	200						200
		Transport, perdiem, communication, etc.	L/S	100						100
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000

Outcome & Output		Budget Items (Description)	Budget Items (USD x __)	Amount Requested from CBA	Amount from Community		Amount from other Organizations			Total USD
				In Cash USD	In Cash USD	In Kind =USD	Name of Organization	In Cash USD	In Kind =USD	
	Output 2.5	**Construction of killah to protect cattle during cyclone and storm surge**								
		Personnel-Project Manager	650 x 2.18months	490						490
		Personnel-Field Coordinator	400 x 2.18months				Chevron	872		872
		Personnel-Engineer	300 x 2months				Chevron	600		600
		Labor & inputs	L/S			1,000	Chevron	42,857		43,857
		Workshop, monitoring, etc.	L/S				Chevron	500		500
		Operating,logistics,etc.	L/S				Chevron	200		200
		Transport, perdiem, communication, etc.	L/S				Chevron	500		500
		Office rent, utility, equipments & reporting	L/S				CNRS & Chevron		1,000	1,000
			Total	**48,980**	**-**	**19,120**	**-**	**109,538**	**11,000**	**188,638**