

Form 1: Cement Nalla Bund (CNB)

	Question	Possible options for answer	Answer	Medium	Whom to ask?	Purpose
	New Construction	y/n				
A.1 Location						
1	Lat/Long			GPS		
A.2 Suitability						
1	Depth of nalla	Less than 1.5 m More than 1.5m		VI		Storage capacity
2	Slope of nalla bed (Should be less than 1%)	Steep/moderate/flat		VI		Main structure can fail on slope due to excess water pressure on u/s side
3	On sharp curve	y/n		VI		Erodes (scouring of sides) the side of nalla
4	Bed strata / soil type	1. Soil 2. Hard rock 3. Cant found 4. other		VI	Govt. official	Purpose to fulfill (percolation /storage)
5	How long back water is present	i.e 10m				Appr. Storage capacity
6	Height of bandhara above bed nallah level is correct or not?	Foundation depth + Height of main body app 3m		VI		Structural stability
A.3 Structural Soundness						

1	Dimensions of main body	Length Breadth Height (m)		Tape/ laser meter		
2	Apron presence	y/n		VI		To avoid d/s erosion
3	Freeboard .3 m	y/n				To escape surplus water easily
4	D/S slope provided	y/n		VI		Structural stability to resist water pressure
5	Flank wall dimensions	Length Breadth Height		Tape/Laser meter		
6	Leakages at base	Heavy/light/no/can't figure out		VI		Cracks in the concrete structure causes leakages, reduces strength and fails
7	Leakages at side	Heavy/light/no/can't figure out		VI		
8	Overall Anchorage of all parts	y/n				To carry self load and water load together
9	Silt deposition	Heavy/mild/no				Reduces water storage capacity
10	Condition of main body (only concrete/boulders/etc)	Good/mod/bad		VI		
11	Strength of main body	At left corner – 3 readings at 1m (top) (Bottom) - 3 At middle (top) – 3 (bottom) - 3 At right end (top) – 3 (bottom) -3		Rebound hammer		Concrete grade (mix proportions) defines strength of concrete

12	Strength of flank wall (grade of concrete mix)	Left and right Top – 3 readings Bottom- 3 readings Middle – 3 readings		Rebound hammer		
13	excavated soil is filled with surrounding the embankment	y/n		VI		Water flow should not be disturbed and silted
14	Quality of concrete mix (depend on grade)	Mix proportions y/n		VI		
15	Only boulders in the main body	y/n				
	Repair Work	y/n				
	Repair method	Reinforcement steel repair, Smoothing or leveling of surfaces, Filling of flow to honeycombs or holes, Damaged corners etc				
A.4 Utility						
1	Water available	y/n		VI		
2	Water used for	DW, irrigation etc		interview	Farmer	
3	Is there a well near by (number if many)	y/n		interview	Govt official/ farmer	Recharge
4	Well water level increased due to CNB construction	y/n		interview	farmer	
B	Beneficiary Interview Form					

B1	Beneficiary/Farmer Name					
	Plot Details					
	Plot No		Plot Size (in acers)		Distance from CNB	
	Rain fed/ Irrigated		Single Crop/ Double Crop			
	Cropping Details					
	Year	Rabi Crop	Yield	Kharif Crop	Yield	
	2013					
	2014					
	2015					
	2016					
B2	Beneficiary/Farmer Name					
	Plot Details					
	Plot No		Plot Size (in acers)		Distance from CNB	
	Rain fed/ Irrigated		Single Crop/ Double Crop			
	Cropping Details					

	Year	Rabi Crop	Yield	Kharif Crop	Yield
	2013				
	2014				
	2015				
	2016				
B3	Beneficiary/Farmer Name				
	Plot Details				
	Plot No		Plot Size (in acers)		Distance from CNB
	Rain fed/ Irrigated		Single Crop/ Double Crop		
	Cropping Details				
	Year	Rabi Crop	Yield	Kharif Crop	Yield
	2013				
	2014				
	2015				
	2016				

B4	Beneficiary/Farmer Name				
Plot Details					
	Plot No		Plot Size (in acers)		Distance from CNB
	Rain fed/ Irrigated		Single Crop/ Double Crop		
Cropping Details					
	Year	Rabi Crop	Yield	Kharif Crop	Yield
	2013				
	2014				
	2015				
	2016				

Form 2: Earthen Nalla Bund

	Question	Possible options for answer	Answer	Medium	Whom to ask?	Purpose
	A.1 Location					
	Lat/Long			GPS		
	A.2 Suitability					
	Gully slope less than 10%					
	Impervious soil strata on site (fine soil or clay)	Y/n		VI		Earthen material to stabilize the structure
	Across the nalla slope	y/n		VI		To obstruct water flow and store it
	Back water spread provided	y/n		VI		Water should not enter into farms
	A.3 Structural soundness					
	Cross section is trapezoidal	y/n		VI		Stable shape
	Earth work in foundation of 0.3m					Foundation
	Freeboard	y/n				Excess water to flow without damage
	Core section is impervious	y/n		VI		To prevent seepage through main body
	Dimensions	Length Breadth		Tape		

		Depth				
	compaction	Good/bad/mod		VI		
	Pitching on u/s	y/n		VI		Protect u/s side from erosion and seepage
	COT	Y/N		VI		Collect Seepage water
	Rock toe	y/n		VI		Drain water to outside of structure
	D/s side cushion chamber			VI		
A.4 Utility						
	Water present till which month	Name of month		interview	farmer	
	Is there a well present near to ENB (number if many)	y/n		interview	farmer	
	Well water increased due to ENB construction	y/n		interview	farmer	
B	Beneficiary Interview Form					
B1	Beneficiary/Farmer Name					
	Plot Details					
	Plot No		Plot Size (in acers)		Distance from ENB	

	Rain fed/ Irrigated		Single Crop/ Double Crop		
Cropping Details					
	Year	Rabi Crop	Yield	Kharif Crop	Yield
	2013				
	2014				
	2015				
	2016				
B2	Beneficiary/Farmer Name				
Plot Details					
	Plot No		Plot Size (in acers)		Distance from ENB
	Rain fed/ Irrigated		Single Crop/ Double Crop		
Cropping Details					
	Year	Rabi Crop	Yield	Kharif Crop	Yield
	2013				
	2014				

	2015				
	2016				
B3	Beneficiary/Farmer Name				
	Plot Details				
	Plot No		Plot Size (in acers)		Distance from ENB
	Rain fed/ Irrigated		Single Crop/ Double Crop		
	Cropping Details				
	Year	Rabi Crop	Yield	Kharif Crop	Yield
	2013				
	2014				
	2015				
	2016				
B4	Beneficiary/Farmer Name				
	Plot Details				
	Plot No		Plot Size (in acers)		Distance from ENB

	Rain fed/ Irrigated		Single Crop/ Double Crop		
Cropping Details					
	Year	Rabi Crop	Yield	Kharif Crop	Yield
	2013				
	2014				
	2015				
	2016				

Form 2: Farm Pond

	Question	Possible options for answer	Answer	Medium	Whom to ask?	Purpose
A.1 Location						
	Lat/Long			GPS		
A.2 Suitability						
1	Pond location in farm	Flat/ hilly/ corner or edge		VI		Rainfall can damage the pond and silt deposits
2	Built in nalla	y/n		VI		Flows away with rainwater

3	Purpose of pond	Percolation / storage				
4	Pond elevation than nearest stream	Higher / lower/ same				
A.3 Structural Soundness						
1	Dimensions	Length : Breadth: Depth :		Tape/ laser meter		
2	Berm present	y/n		VI		Avoid breaching of bund
3	Plastic cover	y/n		VI		To avoid draining of water
4	Bund	y/n		VI		
5	Inlet provided	y/n		VI		allow water to enter into pond
6	Outlet provided	y/n		VI		Allow water to drain
7	Position of inlet	Correct/ incorrect		VI		At higher elevation in the flow direction
8	Correct location of excavated soil deposition	y/n		VI		On the bund side but not on the way from which water is coming into pond. Avoid on nalla side
9	Maintained Slope of pond sides	y/n				To protect the sides of pond to slide down into the pond.
10	Soil compacted	y/n				Overall stability of pond
11	Pitching or revetment	y/n				Sides sag down into pit and erodes sides
A.4 Utility						

1	Water present till which month	Name of month		interview	farmer	To analyze Water availability
2	Is there a well near to pond (number if many)	y/n		interview	farmer	Well recharge purpose
3	Well water level increased due to pond construction	y/n		interview	farmer	
B	Beneficiary Interview Form					
B1	Beneficiary/Farmer Name					
Plot Details						
	Plot No		Plot Size (in acers)			
	Rain fed/ Irrigated		Single Crop/ Double Crop			
Cropping Details						
	Year	Rabi Crop	Yield	Kharif Crop	Yield	Summer, if any
	2013					
	2014					
	2015					
	2016					