

Executive Summary of the DPR of Devnala I Microwatershed, Chaibasa, Jharkhand.

1. Project details, present status of the area:

Devnala Milliwatershed project is located in three Blocks of Singhbhum West District of Jharkhand state. These Blocks are Jagannathpur, Noamundi and newly carved out block Hatgamharia. The project is a cluster of nine micro-watersheds which are 4H1E4d2a, 4H1E4d2b, 4H1E4d2c, 4H1E4d2d, 4H1E4d2e, 4H1E4d2f, 4H1E4d2g, 4H1E4d2h and 4H1E4d2j being their respective codes. The total project area of the watershed is about 6865 hectare, out of which 6178.50 hectare has been undertaken to be treated under Integrated Watershed Management Programme (IWMP) year 2010-14. The project area lies in the Jagannathpur Sub division of Singhbhum West district. The area is full of hills alternating with valleys, steep mountains, and deep forests on the mountain slopes.

Devnala I Microwatershed (4H1E4d2a) lies in the Noamundi block, Singhbhum West district of the Jharkhand state. It has the geographical area of 675.80 hectare. The proposed treatment area is 608.22 hectare and the total cost of **Devnala I Microwatershed (4H1E4d2a)** is 73.00 lakhs (seventy three lakh only). The **Devnala I Microwatershed** is bounded by 22°17'29" to 22°20'25" North latitude and 85° 36' 55" to 85° 38'09" East longitude. Biodiversity refers to variation and abundance of species in their living environment. The people are solely dependent on forest for firewood, fodder, food and timber.

Devnal I Microwatershed (4H1E4d2a) has a total of 96 households with a population of 497 (*as per base-line survey*) out of which 245 are male and 252 female. The sex ratio is 01:01.03. There are 39 BPL families. The average family size is 5.17. The major castes in the village are Schedule tribes. Majority of population is involved in agriculture and forest based activity. For employment they go to the forest area for fire wood and other non-wood forest products collection. During summer peoples are facing problem for drinking water.

2. Vision Statement:

Community organization in the form of SHG, UG and WC would be the basic of watershed processes and it would cover 90% of the watershed families. Natural Resource Management (NRM)

interventions such as soil moisture conservation measures, water harvesting structures, horticulture, plantation, afforestation mixed with Swai grass etc. are proposed to benefit 85% of the project families. It is expected that the NRM activities would increase ground water table by 2-3 meters, increase irrigated command area by 55 hectares. Additionally, it will check soil erosion, reduce run off, improve moisture availability and improve the soil quality. 53% (net 358.40 Ha) of the watershed area will be brought under treatment. Cropping intensity will be increase up to 160% through different type of agriculture related intervention like demonstration and training. Through promotion of modern agriculture practices and proper management of water crop productivity will be increase 2-3 times in the case of Paddy. For vegetable cultivation the increase will be 8-10 times through increments in cultivation area. Micro enterprises such as Poultry, goat rearing & making rope of swai grass will ensure the livelihood of 70% of the project families with an additional annual income of over Rs. 25,000. These interventions are aimed to immediate check the migration up to 80%.

Nearly 95% of the watershed families would be capacitated through various trainings, exposures, demonstrations etc. and to participate in activities implementation, monitor the progress of work at different level. The institutions promoted in the project villages are expected to take care of the assets and infrastructures. The Community Based Organizations will continue, expand and sustain the effort even after the completion of the project period.

3. PIAs strength: The DSCO, Chaibasa is the PIA of Devnala I Micro watershed. The PIA is responsible for supervising, planning, implementing, documenting and promoting watershed development projects in the area as per guidelines. The PIA have Dedicated and experienced staff and a multidisciplinary team to execute the watershed programme. PIA has experienced Civil Engineer, Veterinary Doctor, Agricultural Scientist, Horticulturist and Community Organizer as WDT member.

4. Salient Project Activities: In *Devnala I Microwatershed*, People's participation and collective action are important ingredients for watershed management. Sustainability, equity and participation are the three basic elements which have been followed to execute the programme. Continuous Contour Trench, Farm Bunding, Water Absorption Trench, Farm Pond (Dobha), Horticulture, Afforestation, Savai Grass Palntation, Demonstration Plot to introduce rabi crop has taken to execute in the watershed. Various demonstrations Plot to improve agriculture practice and Trainings programme for capacity building to improve livelihood is planned to execute in the village. The

details of the activity are given in **Annexure I**. The development activity will be carried out by the secretary and other member of Watershed Committee under joint supervision of President of WC and PIA. Further it is evaluated by the villager in Gram Sabha. Technical support to construction of water harvesting structure and capacity building programme will be looked after by the WDT member and PIA. A Total 21479 mandays have been created and a sum of Rs. 1.82 lakhs has been generated as watershed development fund.

5. Convergence: The total cost required for treatment of Devnala I Microwatershed (4H1E4d2a) is ` 110.00 lakhs (One Crore Ten Lakhs). The 37.00 lakhs has more funds for integrated development of village, so that amount would be pooled from convergence. For convergence programme MGNREGA, TSC , SGSY fund of Block and afforestation fund of Department of Forest will be used. In addition KVK, Jagannathpur; BAU, Ranchi; and some NGO have been identified and approached for taking help for sustainable livelihood programme.

6. Exit policy: Watershed development fund has been collected and it will deposit in separate account for repairing and maintenance of watershed structure in future. Beside this the WC will also decide to charge some to users which is known as user charges which will also deposit in WDF account. Gram Sabha will be the last and final institution to take any decision to implement the programme and PIA will help to strengthen it. After completion of the project the entire watershed structures constructed in the area will be handed over the villagers through Gram Panchayat. The outcomes of the project will increase the income level, change standard of living, generate off farm and farm income and established linkage with bank.

Devnala I Microwatershed (4H1E4d2a)									
Singbhum West, Jharkhand									
State Level Nodal Agency- Jharkhand State Watershade Mission (SLNA- JSWM)									
Name of PIA : DSCO Chaibasa	No. of Families existing under Micro watershed : 96								
Name of micro Watershed: Devnala I (4H1E4d2a)	No. of BPL Families: 39								
Block covered: Novamundi	No. of Exiting SHG : 3								
District: Singbhum West	No. of SHG to be formed : 4								
Name of villages: Dumarjoba, Bamasai, Jojkobir									
Total geographical area of Micro Watershed (Ha) : 675.80	No. of Exiting UG : 2								
Total proposed area to be treated (Ha) : 608.22	No. of UG to be Formed : 12								
Total Budget (Rs. In Lakh): 73.00	No. of Exposure visit to be Conducted : 2								
	No. of training to be proposed : 15								
	No. of Person Days to be Generated: 21479								
	Date of Approval from Gram sabha :								
Devnala- 1 Microwatershed (4H1E4d2a)									
Cumulative physical breakup for five Year Plan (2009-2014)									
S.No	Activities	Unit	physical target	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
1	Soil Conservation								
	i. Continuous Contour Trench	Ha. (200rm/ha)	37.58	P	37.58	0	0	0	0
	ii. Water Absorption Trench	Ha. (100rm/ha)	55.00	R	55	0	0	0	0
	iii. Loose Boulder Check	No.	75	O	25	25	25	0	0
	iv. Farm Bunding	Ha. (160rm/ha)	52.00	J	0	26	26	0	0
2	Water Conservation			E					
	i. Farm Pond (100x100x12 ft)	No.	2	C	0	1	1	0	0
	ii. Farm Pond (60x60x12 ft)	No.	15	T	0	0	8	7	0
	iii. Earthen Check Dam - 150ft length	No.	1	S	0	0	0	1	0

	iv. Pond Renovation (100 ft x 100ft x 6ft)	No.	1	A	1	0	0	0	0
3	Plantation			N					
	i. Afforestation	Ha. (1100plant/ha)	15.00	C	0	15.00	0	0	0
	ii. Horticulture (Mango etc.)	Ha. (100plant/ha)	10.00	T	0	10	0	0	0
	iii. Sawai Grass with plantation	Ha. (200 plant/ha)	18.82	I	0	0	18.82	0	0
4	Production System and Micro Enterprises			o					
	i. Agriculture demonstration		100 demo	N	0	25	25	25	25
	ii. SRI technique		20 families	E	0	10	10	0	0
	iii. Composite farming		2 families	D	0	0	0	1	1
	iv. Kitchen Garden		84 families		0	41	41	0	0
	v. Lifting device with delivery for Irrigation		6 UGs		2	2	2	0	0
	vi. Rope making equipments		20 families		0	0	0	20	0
	vii. Drip Irrigation		2 families		0	0	0	1	1
	viii. Vermi compost unit		4 UGs		0	0	1	0	0
5	Livelihood Activity								
	i. Goat farming		40 families		0	0	15	25	0
	ii. Poultry		35 families		15	20	0	0	0
6	Institution and capacity building								
	i. SHG Kit (Record, box, carpet board ect)		7 SHGs		7	0	0	0	0
	i. SHG conceptual & basic training		3 Unit		1	2	0	0	0
	ii. Watershed Workshop		1 Unit		1	0	0	0	0
	iii. SHG exposure		1 Unit		0	1	0	0	0
	iv. UG for Resource Using		1 Unit		0	1	0	0	0

	v. Skill Training (Swing, Rope making etc)		64 families		0	0	25	39	0
	vi. Training on Soil water Conservation		2 Unit		1	1	0	0	0
	vii. Vermicompost & Organic farming training		1 Unit		0	1	0	0	0
	viii. Training on forest & Horticulture Development		1 Unit		1	0	0	0	0
	ix. Exposure Visit W/s village		1 Unit		0	1	0	0	0
7	Entry Point Activity(4%)								
	i) Kitchen Gardening		88 families		88	0	0	0	0
	ii) Solar Street Lamp		1 unit		1	0	0	0	0
	iii) Pump Set & Pipe		1 unit		1	0	0	0	0
	iv) Well Repairing		2 unit		2	0	0	0	0
	v) Vegetable Demonstration		20 families		20	0	0	0	0
	vi) Sprayer		23 farmers		23	0	0	0	0
	vii) Weeder		20 farmers		20	0	0	0	0
	viii) Compost Pit		10 families		10	0	0	0	0
8	Preparatory phase								
	i. DPR preparation		1		1				

Signature of WC, secretary

Signature of WDT

Signature of PIA

Signature of CEO, SLNA

Devnala I Microwatershed (4H1E4d2a)											
Singhbhum West, Jharkhand											
State Level Nodal Agency- Jharkhand State Watershed Mission (SLNA- JSWM)											
Name of PIA : DSCO, Chaibasa											
Name of micro Watershed: Devanala 1											
Block covered: Novamundi											
District: Singhbhum West											
Cumulative Financial breakup for five Year Plan (2009-2014)											
S.No	Activities	Quantity	Unit Cost (Rs)	Total Cost (Rs)	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
1	Soil Conservation										
	i. Continuous Contour Trench	37.58 Ha.	1900/-ha	71400	P	71400	0	0	0	0	0
	ii. Water Absorption Trench	55 Ha.	5500/- ha	302500	R	302500	0	0	0	0	0
	iii. Loose Boulder Check	75 No.	5700/- unit	427500	O	142500	142500	142500	0	0	0
	iv. Farm Bunding including outlet	52 Ha.	15228/ha	791856	J	395928	395928	0	0	0	0
	Sub Total			1593256	E	912328	538428	142500	0	0	0
2	Water Conservation				C						
	i. Farm Pond (100x100x12 ft)	2 no.	162500/unit	325000	T	0	162500	162500	0	0	0
	ii. Farm Pond (60x60x12 ft)	15 no.	49000/unit	735000	S	0	0	392000	343000	0	0
	iii. Earthen Check Dam - 150ft length	1 no.	80000/unit	80000	A	0	0	0	80000	0	0
	iv. pond Renovation (100 ft x 100 ft x 6 ft)	1 no.	58500/unit	58500	N	0	0	58500	0	0	0
	Sub Total			1198500	C	0	162500	613000	423000	0	0
3	Plantation				T						
	i. Afforestation	15 Ha.	19926/- ha	298890	I	0	198890	0	0	0	0
	ii. Horticulture (Mango etc.)	10 Ha.	22675/-ha	226750	O	0	226750	0	0	0	0
	iii. Sawai Grass with plantation	18.82 Ha.	18200/-ha	342575	N	0	0	342575	0	0	0
	Sub Total			868215	E	0	425640	342575	0	0	0
	Total 1+2+3 (50.15%)			3659971	D	912328	1126568	1098075	423000	0	0
4	Production System and Micro Enterprises(13%)										

	i. Agriculture demo. (pulse, veg, oil seed)	100	4000/- unit	400000			0	100000	100000	100000	100000
	ii. SRI technique	20	5000/- unit	100000			0	50000	50000	0	0
	iii. Composite farming	2	30000/-unit	60000			0	0	0	30000	30000
	iv. Kitchen Garden	84	500/- unit	42000			0	21000	21000	0	0
	v. Lifting device with delivery for Irrigation	6	30000/-unit	180000			0	60000	60000	60000	0
	vi. Rope making Equipments	20	2350/- unit	47000			0	0	0	47000	0
	vii. Drip Irrigation	2	30000/-unit	60000			0	0	0	30000	30000
	ix. Vermi compost unit	4	15000/- unit	60000			0	0	60000	0	0
	Sub Total	238		949000			0	231000	291000	267000	160000
5	Livelihood Activity (10.00%)										
	i. Goat farming	40	12000/- unit	480000			0	0	180000	300000	0
	ii. Poultry	35	7200/-unit	252000			108000	144000	0	0	0
	Sub Total	75		732000			108000	144000	180000	300000	0
6	Institution and capacity building(5.00%)										
	i. SHG Kit (Record, box, carpet board ect)	7	1000/ unit x 7	7000			7000	0	0	0	0
	i. SHG conceptual & basic training	99	5000/ unit x3	15000			5000	10000	0	0	0
	ii. Watershed Workshop	33	13250/ unit x 1	13250			13250	0	0	0	0
	iii. SHG exposure	33	13500/unit x 1	13500			0	13500	0	0	0
	iv. UG for Resource Using	25	30250/unit x 1	30250			0	30250	0	0	0
	v. Skill Training (Swing, Rope making etc)	64	Rs.2000/- ben.	128000			0	0	50000	78000	0
	vi. Training on Soil water Conservation	50	30250/unit x 2	60500			30250	30250	0	0	0
	vii. Vermicompost & Organic farming training	33	13250/unit x 1	13250			0	13250	0	0	0
	viii. Training on forest & Horticulture Development	33	13250/unit x 1	13250			13250	0	0	0	0

	ix. Exposure Visit W/s village	28	71000/unit x 1	71000		0	71000	0	0	0
	Sub Total	339		365000		68750	168250	50000	78000	0
7	Entry Point Activity(3.85%)									
	i) Kitchen Gardening	88 families		17000		17000	0	0	0	0
	ii) Solar Street Lamp	1 unit		39000		39000	0	0	0	0
	iii) Pump Set & Pipe	1 unit		50000		50000	0	0	0	0
	iv) Well Repairing	2 unit		50000		50000	0	0	0	0
	v) Vegetable Demonstration	20 families		10000		10000	0	0	0	0
	vi) Sprayer	23 farmers		35000		35000	0	0	0	0
	vii) Weeder	20 farmers		30000		30000	0	0	0	0
	viii) Compost Pit	10 families		50000		50000	0	0	0	0
	Sub Total			281000		281000	0	0	0	0
8	Preparatory phase (1.00%)									
	i. DPR preparation			72980		72980	0	0	0	0
	Sub Total			72980		72980	0	0	0	0
9	Management Component (12%)									
	i. Administration cost (10%)			729800		145960	145960	145960	145960	145960
	ii. Monitoring (1%)			72980		14596	14596	14596	14596	14596
	iii. Evaluation (1%)			72980		14596	14596	14596	14596	14596
	Sub Total			875760		175152	175152	175152	175152	175152
10	Consolidation phase (5%)			364900		0	0	0	0	364900
	G.Total 1+2+3+4+5+6+7+8+9			7300611		1618210	1844970	1794227	1243152	700052

Signature of WC, secretary

Signature of WDT

Signature of PIA

Signature of CEO, SLNA