**DPR** 

# INTEGRATED WATERSHED DEVELOPMENT PROGRAMME



**PROJECT: GURDASPUR-2/10-11** 

Compiled By:

The Society for Promotion and Conservation of Environment Chandigarh

DIVISIONAL SOIL CONSERVATION OFFICER, GURDASPUR DEPARTMENT OF SOIL & WATER CONSERVATION, PUNJAB

## Executive Summary

The project area is located in Dhar Kalan Block of erstwhile Gurdaspur but now Pathankot district of Punjab state. The Latitude varies from 32° 20 to 32° 30 and longitude from 75°-45 to 75° to 55 and covered by Survey of India topo-sheets No 43P/15 and 43P/11. Three micro-watershed have been included in the project. The micro-watershed Putoli (IWDP-II) is located about 35 Km from Pathankot on left side of Pathankot Dalhousie road ,have watershed code B3e (ICIB4k4, ICIB4k5, ICIB4k6, ICIB4k7) and covers treatable area of 2791 ha. The area of Bhawar Khad is located along the Pathankot- Jugial- Shahpur Kandi road, have watershed code A7c (ICIB3d7, ICIB3d8, ICIB3g1, ICIB3g2), with treatable area of 2328 ha. The area of Hara Majah micro-watershed is accessed from Pathankot- Nurpur road; have watershed code A7f (ICIB3d8, ICIB3g1, ICIB3g2) with treatable area of 1256 ha. The entire area falls in rain-fed, highly degraded, water stressed, poverty ridden Shivalik foot hill region having sizeable number of SC, BPL and landless/small farmer communities the Dhar Kalan Block area receives mean annual rainfall of 1400 mm with bimodal pattern of distribution. Almost 80 percent of rainfall occurs in three monsoon months with very high coefficient of variability the area of Bhawar Khad and Hara-Majah receive about 100 mm mean annual rainfall. The Integrated Watershed Management Programe is mainly designed for planning and management of land, water, and biomass resources with a sharp focus on social and institutional aspects beside biophysical ones. It aims to address the challenges of degradation of land resources, water scarcity, deforestation, and poverty in rainfed area of Dhar Kalan Block

Three sub- watersheds of Gurdaspur district of Punjab falling in foot hill area of Shivaliks in Dhar block were selected for funding support by submitting a Preliminary Project Report to the DOLR through SLNA. This was approved and then DPR work was initiated. The basic information about the selected watersheds is given as under Table.

### **Basic Project Information**

S.No	Project Name	Sub watershed	Micro Watershed Code No	Treatment area ( ha)	Project Cost (Lakh Rs)	PIA
1		Putoli Nadi B3e	ICIB4k4, ICIB4k5, ICIB4k6, ICIB4k7	2791	334.92	DSCO Gurdaspur
2	IWMP-2	Bhawar Khad A7c	ICIB3d7, ICIB3d8, ICIB3g1, ICIB3g2	2328	279.36	DSCO Grdaspur
3		Hara- Majha	ICIB3d8, ICIB3g1, ICIB3g2	1256	150.72	DSCO Gurdaspur
Total				6375	765.00	

Source: Preliminary Project Report (PPR) of IWMP Gurdaspur

#### NRM:

The natural resource management component in Patoli Nadi micro-watershed include 1900 rmt of vegetative barriers at the cost of Rs. 1.33, 1970rmt of brush wood check dams at a cost of Rs. 1.97 lakh, 1220cume of dry stone at a cost of Rs. 7.32 lakh and 1499 cume of crate wire structures at a cost of Rs. 26.98 lakh. This also covers the construction of 13 silt

detention structures at a cost of Rs. 19.50 lakh, 14 roofwater harvesting at a cost of Rs. 5.91 lakh. 13 renovation of well at a cost of Rs. 16.12, 17 farm ponds at a cost of Rs. 25.5 lakh, 1578 rmt of ponds at a cost of Rs. 61.13, 255 m diversion channel at a cost of Rs. 9.87, one liftirrigatrion cost of Rs. 7.00 lakh and 4 no. renovation of well at a cost of Rs. 4.96. The total cost of NRM work is Rs. 187.55 lakh.

In all 2080 m of retaining waals for stream bank protection at a cost of Rs. 83.27 lakh, 900m retaining walls of village ponds at a cost of Rs. 48.75 lakh, excavation/renovation of 7 village ponds at a cost of Rs. 9.21 lakh, check dams and ramps at a cost of Rs. 15.23 lakh, one tank at a cost of Rs. 3.00 and rectangular channel 900m at a cost of Rs. 4.5 and pipe line 250 m at a cost of Rs. 5.00. The total cost of these works comes 168.96 lakh against the provision of Rs 156.44 Lakhs. The balance of Rs. 12.52 lakh would be met from MNREGA.

The natural resource management component in Hara-Majah micro-watershed include 622 m length of retaining walls for stream bank protection at a cost of Rs. 24.74 lakh, 860m retaining walls of village ponds at a cost of Rs. 35.81, repair renovation of one pond and one bauli and water point 21 check dams, five sump wells, 395 rmt of u/g pipeline, and 45 rmt of crate check walls one lift irrigation scheme, reapir of one kulil etc. An axpenditure of Rs 96. 6 Lakh has been planned against the provision of Rs 84.4 Lakh. The balance amount of Rs. 12.2 lakh (96.60-84.40) would be met of MNREGA Scheme.

#### PRODUCTION SYSTEM

The detaile of proposed production system for all the three sub watersheds covering total cost of Rs. 76.50 lakhs is given in the table below:

Sr. No.	Name of Activity	Qty of work					
	,	Putoli Nadi	Bhanwar Khad	Hara Majha	Total	Rate (Rs.)	Amount (Lakhs)
1.	Crop Diversification						
1.1	High yielding crops – Pulses, winter maize	68	75	96	239	1000	2.39
1.2	Veg seed kits	650	-	-	650	40	0.26
1.3	Fodder crops multicut bajra	33	75	-	108	1000	1.08
1.4	Fodder seed Kits	-	-	545	545	200	1.09
2.	Integrated Farming Systems						
2.1	Promotion of Horticulture Plantation	30	50	16	96	10000	9.60
2.2	Agro forestry Plants	15000	13800	-	288200	10	2.88
2.3	Homested fruit plants	7300	-	6400	13700	30	4.11
3.	Livestock Management						
3.1	Livestock camps/ medicine to CB	-	-	54	54	2000	1.08
3.2	Back yard poultry	-	163	-	163	3000	4.89
3.3	Sheep goat unit	-	23	8	31	25000	7.75
3.4	Vermin composting INCREASE	-	26	8	34	8000	2.72
3.5	Vetnary medicine camp	-	-	8	8	5000	0.40
3.6	Support to dairy farming unit	-	-	6	6	25000	1.50
3.7	Piggery unit	-	-	1	1	25000	0.25
3.8	Support to AI center	1	1	-	2	15.00	30.00
4.	Horticultural pastoral system						
4.1	Drip system	-	-	3	3	75000	2.25
4.2	Renovation of common well to NRM	-	-	6	6	50000	3.00
5.	Others						
6.2	Help to SHG	-	-	25	25	5000	1.25
	Total						76.50

# **Livelihood Support System**

The detaile of proposed livelihood support system for all the three sub watersheds covering total cost of Rs. 68.83 lakhs is given in the table below:

Sr. No.	Name of Activity		Qty of work			Rate (Rs.)	ount (Lakhs)
		Putoli Nadi	Bhanwar Khad	Hara Majha			
1.	Revolving fund assistance to SHGs for establishing IGA's						
1.1	Bee keeping	5	19	8	32	20000	6.40
1.2	Mushroom cultivation	21	13	8	42	20000	8.40
1.3	Sewing/tailoring Unit	21	13	7	41	23000	9.43
1.4	Seri culture unit	-	-	3	3	25000	0.75
2.	Revolving fund assistance to individuals unemployed youth/landless, women						
2.1	Back yard poultry	91	47	23	161	5000	8.05
2.2	Vermi-composting unit	21	17	8	46	20000	9.20
2.3	Dairy unit	21	25	8	54	25000	13.50
2.4	Piggery unit	7	7	5	19	25000	4.75
2.5	Toy/box making unit	21	6	6	33	10000	3.30
3.	Grant in aid to unemploye	o unemployed youth					
3.1	Cobblers/Black smith/mechanic repair	37	33	31	102	5000	5.05
	Total						68.83