# CERTIFICATE

Certified that the undersigned have proposed the appropriate and need based activities required in the watershed project area with active participation of beneficiaries along with consultation of Watershed Committees (WCs). Approval of Watershed Project Plan and DPR has been obtained from WC, Gram Sabah. The plan and DPR document of **RAIPUR (PALI IWMP – XXI)** Project, at P.S.–Raipur District - Pali is technically sound, viable and appropriate for implementation during the period 2011-12 to 2017-18.

We recommend that this plan to be sanctioned and put to implementation.

| Signature Chairman/ WC | Signature Secretary WC | Signature WDT members | Signature Junior Engineer P.S.Raipur | Signature Assistant Engineer&PIA P.S.- Raipur | Signature Project Manager,WCDC Distt.- Pali |
|---|---|---|---|---|---|
| | | 1 | | | |
| | | 2 | | | |
| | | 3 | | | |
| | | 4 | | | |

# Detail of Project

1. Name of Project : RAIPUR (PALI IWMP- XXI)2011–12
2. Sanction No. & date of Project : 4800–508 Date:- 05–08–2011
3. Macro & Micro No. : 10/1,2B,6,7,8,9,10 6/1,2,3,4
4. Deviation from Project Sanctioned :

| Items | As per Project Sanctioned | | As proposed in DPR | |
|---|---|---|---|---|
| Project Name | No. Of G.P | No. Of Villages | No. Of G.P | No. Of Villages |
| IWMP XXI | 5 | 14 | 7 | 12 |

| Items | As per Project Sanctioned | As proposed in DPR |
|---|---|---|
| Project Area | 5180 Ha. | 4361 Ha. |
| Macro/Micro No | 10/1,2B,6,7,8,9,10 6/1,2,3,4 | 10/1,2B,6,7,8,9,10 6/1,2,3,4 |
| Name of Gram Panchayat | Chang , Chitar , Nanana, Pratapgarh, Ratdiya, Relra | Chang , Chitar , Giri, Nanana, Pratapgarh, Ratdiya, Relra |
| Name of Villages | Badi Pole, Sailpura, Ratdiya, Bhavriya, Nanana, Rawatkhera, Chang, Salacot, Devnagar, Kalpura, Kanecha, Naharpura, Pratapgarh | Chang, Kanpura, Chitar, Lakhina Panabaori, Giri, Nanana, Naharpura, Ratdiya, Sailpura, Deoli Khurd, Kanecha Udawatan |
| Project Cost (Rs. in Lakes) | 777.00 Lac. | 654.15 Lac. |

- **5180-4361 = 819 Ha. Area are due to Treatted.**

# • CHAPTER – I

# INTRODUCTION

## Location

The Project is located in Raipur Block, of Pali District. The project area is between the Latitudes **25° 15' 30"** & **74° 18' 30"** Longitudes. It is at a distance of 17 km from its Block head quarters and 46 Km. from the district head quarters. There is 14 no. of habitations in the Project area and other details are given below.

**General features of watershed**

| S. No. | Name of Project (as per GOI) | Raipur (PALI IWMP) 21/2011-12 |
|---|---|---|
| (a) | Name of Catchment | Local Nalla |
| (b) | Name of watershed area (Local Name) | Pali IWMP–21 Nanana(10), Narpura(6) |
| (c) | Project Area | 4361 Ha |
| (d) | Net treatable Area | 4361 Ha |
| (e) | Cost of Project | 654.15 Lack |
| (f) | Cost/hectare | 15000/- Per Ha. |
| (g) | Year of Sanction | 2011-12 |
| (h) | Watershed Code | 06020601,6020602,6020603,6020604, 6021001, 6021002, 6021006, 6021007, 6021008, 6021009, 6021010 |
| (i) | No. of Gram Panchayats in project area | 7 No |
| (j) | No. of villages in project area | 12 No |
| (k) | Type of Project | Other |
| (l) | Elevation (metres) | 450-500 m |
| (m) | Major streams | 10.800 K.M. |
| (n) | Slope range (%) | 0-3% |

| S. No. | Name of Gram Panchayat | Macro/Micro | Name of Villages Covered | Census code of villages | Total Area of Village | Area in W/S (Ha) |
|---|---|---|---|---|---|---|
| 1 | CHANG | 10/2,8,9 | CHANG | 0820000202408500 | **1326** | **519** |
| 2 | CHITAR | 10/8 | KANPURA | 0820000202406600 | 1992 | **19** |
| 3 | | 10/8,9 | CHITAR | 0820000202406500 | 1405 | 479 |
| 4 | | 10/1 | LAKHINA PANABAORI | 0820000202409000 | 37 | 37 |
| **TOTAL** | | | | | **3434** | **535** |
| 5 | GIRI | 10/6'7'10 | GIRI | 0820000202405200 | **2563** | **308** |
| 6 | NANANA | 10/6 | NANANA | 0820000202405900 | **1555** | **128** |
| 7 | PRATAPGARH | 6/1,2,3,4 | NAHARPURA | 0820000202409900 | 987 | 832 |
| 8 | | 6/2 | PRATAPGARH | 0820000202410000 | 942 | 436 |
| **TOTAL** | | | | | **1929** | **1268** |
| 9 | RATDIYA | 6/1,3,4,10/2,9,1 | RATDIYA | 0820000202409100 | 1455 | 1206 |
| 10 | | 10/1,2,9 | SAILPURA | 0820000202408900 | 195 | 170 |
| **TOTAL** | | | | | **1650** | **1376** |
| 11 | RELRA | 10/6 | DEOLI KHURD | 0820000202406300 | 249 | 82 |
| 12 | | 10/9 | KANECHA UDAWATAN | 0820000202406400 | 145 | 145 |
| **TOTAL** | | | | | **394** | **227** |
| **TOTAL** | | | | | **12851** | **4361** |

The watershed falls in Agro climatic Zone IV. The soil texture is Sandy Loom. The average rainfall is 56.89 cm. The temperatures in the area are in the range between 31-47 centigrade during summer and 5-23 centigrade during winter. The major crops in the area are 2397 Ha (Bajara, Wheat, Gram & Mastered) 54.96% land is under cultivation, 45.04% land fallow, 45.04% land is wasteland. 21.74% land is irrigated through well, Tube well, & Minor Irrigation Project Of G.P. Tanks.

823 No of households are BPL (16.96% households) 945 are landless households (19.47% households) and 3156 household are small and marginal farmers (65.04%household). Average land holding in the area is 1.11 ha. 33.22% area is single cropped area and 21.74% is double cropped. The main source of irrigation is well & Tube well. The average annual rainfall (10 years) in the area is 566.51 mm. The Major streams in the Watershed are 10.800 Km. the major festivals in the village are Dashera, Deepawali & Holi. At present those villages of Project Area having 25593 No population with Communities like SC, ST, Jat, Gurjar, Mali & Other.

## Climatic and Hydrological information

**1 Average Annual Rainfall (mm)**

| | Year | Average Annual Rainfall(mm) |
|---|---|---|
| 1 | 2003 | 477 |
| 2 | 2004 | 398 |
| 3 | 2005 | 446 |
| 4 | 2006 | 533 |
| 5 | 2007 | 548 |
| 6 | 2008 | 367 |
| 7 | 2009 | 441 |
| 8 | 2010 | 967 |
| 9 | 2011 | 785 |
| 10 | 2012 | 727 |
| **Average Rainfall (Last 10 Years)** | | **568.90 mm** |

**2. Average Monthly rainfall (Last Ten Years)**

| | Month | Rainfall(mm) |
|---|---|---|
| i) | June | 37.90MM |
| ii) | July | 159.45MM |
| iii) | August | 234.70MM |
| iv) | September | 93.80MM |

**3. Maximum rainfall intensity (mm)**

| | Duration | rainfall intensity(mm) |
|---|---|---|
| (i) | 15 minute duration | 37 mm |
| (ii) | 30 minute duration | 65 mm |
| (iii) | 60 minute duration | 80 mm |

**4. Temperature (Degree C)**

| | Season | Max | Min |
|---|---|---|---|
| (i) | Summer Season | 47 | 31 |
| (ii) | Winter Season | 23 | 5 |
| (iii) | Rainy Season | 38 | 17 |



**5. Potential Evaporation Transpiration (PET) (mm/day)**

| | Season | PET |
|---|---|---|
| (i) | Summer | 15 |
| (ii) | Winter | 5 |
| (iii) | Rainy | 8 |

**6. Runoff**

| | | | | |
|---|---|---|---|---|
| (i) | Peak Rate (cum/hr) | | 1751040 (Cum./Hr.) | |
| (ii) | Total run off volume of rainy season (ha.m.) | | 35.825 | |
| (iii) | Time of return | 5 Years | 10 Years | In - Years |
| | (a) maximum flood | Nil | Nil | Nil |
| (iv) | (b) Periodicity of Drought in village area | Yes | Yes | No |

**Other Development Schemes in the project area**

| S. No | Scheme | Name of the department | Key interventions under the Scheme | Targeted Beneficiaries | Provisions under the Scheme |
|---|---|---|---|---|---|
| 1. | MNREGA | ZILA PARISHAD PALI | KHADIN | 7 | 35.420 |
| | | | FARM POND | 9 | 15.660 |
| | | | OPEN CONTOUR TRENCH | 200 | 23.400 |
| | | | NADI IN PD BLOCK | 1 | 5.060 |
| | | | TANKA IN PD BLOCK | 1 | 1.850 |
| | | | L.S.C.D. | 207 | 13.124 |
| | | | GALI PLUG | 9 | 1.260 |
| | | | PASTURE DEVELOPMENT (Private Pasture) | 24 | 2.587 |
| | | | HORTICULTURE PLANTATION | 59 | 29.695 |
| | | | M.M.S. 10m. | 2 | 10.960 |
| | | | M.M.S. 5m. | 3 | 12.750 |
| | | | A.I. | 400 | 0.600 |
| 2. | Others (Bank) | | Grant in aid to enterprising SHG or Federation of SHGs individual | 12 | 24.000 |
| | **TOTAL** | | | **934** | **176.37** |

**Details of infrastructure in the project areas:-**

| Parameters | | Status | | | |
|---|---|---|---|---|---|
| (i) | No. of villages connected to the main road by an all-weather road | 12 No. | | | |
| (ii) | No. of villages provided with electricity | 12 No. | | | |
| (iii) | No. of households without access to drinking water | 0 | | | |
| (iv) | No. of educational institutions : | (P) | (UPS) | (HS) | (VI) |
| | Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI) | 24 | 6 | 3 | |
| (v) | No. of villages with access to Primary Health Centre | 5 | | | |
| (vi) | No. of villages with access to Veterinary Dispensary | 0 | | | |
| (vii) | No. of villages with access to Post Office | 3 | | | |
| (viii) | No. of villages with access to Banks | 3 | | | |
| (ix) | No. of villages with access to Markets/ mandis | 5 | | | |
| (x) | No. of villages with access to Agro-industries | 0 | | | |
| (xi) | Total quantity of surplus milk | 3 | | | |
| (xii) | No. of milk collection centres | (U) | (S) | (PA) | (O) |
| | (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O)) | 0 | 3 | 15 | 0 |
| (xiii) | No. of villages with access to Anganwadi Centre | 22 | | | |
| (xiv) | Any other facilities with no. of villages (please specify) | 7 No. (Rajiv Gandhi Seva Kendra) | | | |
| (xv) | Nearest KVK | Pali | | | |
| (xvi) | cooperative society | 7 | | | |
| (xvii) | NGOs | Nil | | | |
| (xviii) | Credit institutions | | | | |
| | (i) Bank | Nil | | | |
| | (ii) Cooperative Society | 7 | | | |
| (xix) | Agro Service Centre's | Nil | | | |

**Institutional arrangements (SLNA, DWDU, PIA, WDT, WC, Secretary)**

**DWDU Details**

| 1 | 2 | 3 |
|---|---|---|
| **S. No** | **Particulars** | **Details of DWDU** |
| **1.** | PM, DWDU | Sh. Govind Singh |
| **2.** | Address with contact no., website | Zila Parisad Pali |
| **3.** | Telephone | 02932–221682 |
| **4.** | Fax | |
| **5.** | E-mail | dwdu.pali@gmail.com |

**PIA particulars**

| 1 | 2 | 3 |
|---|---|---|
| **S. No** | **Particulars** | **Details of PIA** |
| **6.** | Name of PIA | Sh. Ramraj Meena |
| **7.** | Designation | Assistant Engineer |
| **8.** | Address with contact no., website | Zila Parisad Pali |
| **9.** | Telephone | |
| **10.** | Fax | |
| **11.** | E-mail | |

**WDT Particulars:**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| S. No | Name of WDT member | M/F | Age | Qualification | Experience in watershed(Yrs) | Description of professional training | Role/ Function |
| 1 | Jh ukjk;.k flag pkSgku | M | | B. A. | 15 Year | Social Scientist | For Make of SHG |
| 2 | | | | | | Vetenary Scientist | Animal Husbandry Work |
| 3 | Jh Nhrj [kku | M | | XII Agriculture | 6 Year | Agriculture Scientist | |
| 4 | Jh jktsUnz dqekj jk[kspk | M | | Diploma Civil | 17 Year | Engineer | |

**Details of Watershed Committees (WC)**

| S. No. | Name of WCs | Date of Gram Sabah for WC | Date of Registration as a Society (dd/mm/yyyy | Designation | Name | M/F | SC/ST/ OBC/ General | Landless/ MF/SF/ BF | Name of UG/SHG | Educational qualification |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CHANG | 20-03-2013 | N. R. | President | Jh dkyw [kkWa@ih: [kkWa | M | OBC | | | |
| | | | | Secretary | Jh gjn;ky@Hkaoj yky | M | | | UG | |
| | | | | Member | Jh feBw flag@dkyw flag | M | General | | UG | |
| | | | | Member | Jh lktu@inek | M | | | UG | |
| | | | | Member | Jh xksfoUnjke@nsoh yky | M | | | UG | |
| | | | | Member | Jh jes'k@ckcw yky | M | | | UG | |
| | | | | Member | Jh gSnjvyh@lqcku | M | | | UG | |
| | | | | Member | Jh erh rqylh@xksiky | F | | | SHG | |
| | | | | Member | Jh erh ucZnk nsoh@jkepUnz | F | | | SHG | |
| | | | | Member | Jh erh lhrk@isek | F | | | SHG | |
| | | | | Member | Jh eqjkn@eaxyk | M | | | UG | |
| | | | | Member | Jh lqok@ckcw | M | | | UG | |
| | | | | Member | Jh erh lk;j@rstk | F | | | SHG | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 2 | CHITAR | | N. R. | President | Jh uSuqdkBkr | M | | | | |
| | | | | Secretary | Jh nsohdkBkr@eksrhdkBkr | M | OBC | | UG | |
| | | | | Member | Jh ukuw@ckyk | M | OBC | | UG | |
| | | | | Member | Jh erh ukFkh@eksgu | F | SC | | SHG | |
| | | | | Member | Jh vteky@dslk | M | OBC | MF | UG | |
| | | | | Member | Jh Jo.k@lejFkk | M | OBC | MF | UG | |
| | | | | Member | Jh jktw@eksVk | M | OBC | Landless | UG | |
| | | | | Member | Jh nhuk@lek | M | OBC | MF | UG | |
| | | | | Member | Jh do:@vyh | M | OBC | MF | UG | |
| | | | | Member | Jh gjth@cUuk | M | SC | MF | UG | |
| | | | | Member | Jh xksiky@uthj | M | OBC | Landless | UG | |
| | | | | Member | Jh lnoj@eksgEen [kkWa | M | OBC | Landless | UG | |
| | | | | Member | Jh jetku@bZLekbZy | M | OBC | Landless | UG | |

**Details of Watershed Committees (WC)**

| S. No. | Name of WCs | Date of Gram Sabah for WC | Date of Registration as a Society (dd/mm/yyyy | Designation | Name | M/F | SC/ST/ OBC/ General | Landless/ MF/SF/ BF | Name of UG/SHG | Educational qualification |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | GIRI | | N. R. | President | | | | | | |
| | | | | Secretary | | | | | | |
| | | | | Member | | | | | | |
| | | | | Member | | | | | | |
| | | | | Member | | | | | | |
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| | | | | Member | | | | | | |
| | | | | Member | | | | | | |
| | | | | Member | | | | | | |

**Details of Watershed Committees (WC)**

| S. No. | Name of WCs | Date of Gram Sabah for WC | Date of Registration as a Society (dd/mm/yyyy | Designation | Name | M/F | SC/ST/ OBC/ General | Landless/ MF/SF/ BF | Name of UG/SHG | Educational qualification |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | NANANA | 28-02-2012 | N. R. | President | Jh Nxu flag@mjt flag | M | General | SF | | |
| | | | | Secretary | Jh ukjk;.k flag@xsu flag | M | General | SF | UG | |
| | | | | Member | Jh jru flag@xkso/kZu flag | M | General | MF | UG | |
| | | | | Member | Jh cq/kk flag@dslk flag | M | General | MF | UG | |
| | | | | Member | Jh efr usuh nsoh@vej flag | F | General | MF | SHG | |
| | | | | Member | Jh eksrh dkBkr | M | SC | Landless | UG | |
| | | | | Member | Jh nsok@eaxyk es?koky | M | SC | MF | UG | |
| | | | | Member | Jh rstkjke@ukjk;.k yky dqEgkj | M | OBC | Landless | UG | |
| | | | | Member | Jh ckcq yky@ukjn yky 'kekZ | M | General | Landless | UG | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Member | Jh iUuk@inek HkkaM+ | M | OBC | Landless | UG | |
| | | | | Member | Jh dkyw@'kdqj [kka rsyh | M | OBC | Landless | UG | |

**Details of Watershed Committees (WC)**

| S. No. | Name of WCs | Date of Gram Sabah for WC | Date of Registration as a Society (dd/mm/yyyy | Designation | Name | M/F | SC/ST/ OBC/ General | Landless/ MF/SF/ BF | Name of UG/SHG | Educational qualification |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | PRATAP GARH | | N. R. | President | Jh Qrsg flag@/kUuk flag | M | General | | | |
| | | | | Secretary | Jh ;ksdj flag@jke flag | M | General | | UG | |
| | | | | Member | Jh erh lk;jh nsoh@ukFkk es?koky | F | SC | | SHG | |
| | | | | Member | Jh exu flag@yknq flag | M | General | | UG | |
| | | | | Member | Jh n;ky flag@ine flag | M | General | | UG | |
| | | | | Member | Jh enu flag@Hkknk | M | General | | UG | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | flag | | | | | |
| | | | | Member | Jh erh yfyrk@lqjs'k iqjh | F | OBC | | SHG | |
| | | | | Member | Jh erh ekuh nsoh@nsoh flag | F | General | | SHG | |
| | | | | Member | Jh Hkokuh flag@lqtk flag | M | General | | UG | |
| | | | | Member | Jh erh lq[kh@lkaoj flag | F | General | | SHG | |
| | | | | Member | Jh feBq flag@yknq flag | M | General | | UG | |



**Details of Watershed Committees (WC)**

| S. No. | Name of WCs | Date of Gram Sabah for WC | Date of Registration as a Society (dd/mm/yyyy | Designation | Name | M/F | SC/ST/ OBC/ General | Landless/ MF/SF/ BF | Name of UG/SHG | Educational qualification |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | RATDIYA | 27-02-2012 | N. R. | President | Jh ckcq flag@gtkjh flag | M | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | jkor | | | | | |
| | | | | Secretary | Jh i`Fohjkt dqekj flag@gfj flag | M | General | | UG | |
| | | | | Member | Jh ukjk;.k flag@eaxy flag jkor | M | | | UG | |
| | | | | Member | Jh efr 'kkUrh nsoh@ckcq flag jkor | F | | | SHG | |
| | | | | Member | Jh uksjr ukFk@feJh ukFk | M | OBC | | UG | |
| | | | | Member | Jh xksih flag@izse flag jkor | M | | | UG | |
| | | | | Member | Jh Qrsg eksgEen@fHk{kq [kka | M | OBC | | UG | |
| | | | | Member | Jh ckcq flag@gtkjh flag jkor | M | | | UG | |
| | | | | Member | Jh Hkxoku flag@Nksx flag jkor | M | | | UG | |
| | | | | Member | Jh ukjk;.k@izrki th xqtZj | M | OBC | | UG | |
| | | | | Member | Jh jetku@usuk th esjkr | M | OBC | | UG | |
| | | | | Member | Jh dpd flag@vthe flag jkor | M | | | UG | |
| | | | | Member | Jh [kse flag@eky flag jkor | M | | | UG | |

**Details of Watershed Committees (WC)**

| S. No. | Name of WCs | Date of Gram Sabah for WC | Date of Registration as a Society (dd/mm/yyyy | Designation | Name | M/F | SC/ST/ OBC/ General | Landless/ MF/SF/ BF | Name of UG/SHG | Educational qualification |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | RELRA | 12-08-2013 | N. R. | President | Jh enu flag | M | General | | | |
| | | | | Secretary | Jh izse flag | M | General | | UG | |
| | | | | Member | Jh ukjk;.k yky | M | | | UG | |
| | | | | Member | Jh guqeku yky | M | | | UG | |
| | | | | Member | Jh ukjk;.k flag iap | M | General | | UG | |
| | | | | Member | Jh efr Hkaojh nsoh iap | F | | | SHG | |
| | | | | Member | Jh y{e.k flag | M | General | | UG | |
| | | | | Member | Jh lksgu flag | M | General | | UG | |
| | | | | Member | Jh izse flag | M | General | | UG | |
| | | | | Member | Jh dku flag | M | General | | UG | |
| | | | | Member | Jh ckcq flag | M | General | | UG | |

**Problems and scope of improvement in the project area**

The socio economic conditions of the area can be improved through increased production which can be achieved through expansion in cultivated area and productivity 2397 Ha. Land is Arable & 1964 Ha. Wasteland Land 612 Ha. is fallow can be brought under cultivation.

948 Ha. is only Irrigated and with efforts this can be increased to 850 Ha. The productivity gap of major crops in the area as compared with district and with areas in the same agro climatic zones indicate potential to increase the productivity. The demonstration of improved package of practices, improved varieties, increased irrigation facilities and soil conservation measures under the project can bridge this gap. Due to small land holdings in the area focus of the project would be on diversification in agriculture (horticulture, vegetables, green houses, Agro forestry, fodder crops)and diversification in Livelihoods(Agriculture, Animal husbandry, self employment)

37350 Quintal fodder scarcity can be met out through Pasture development .Improved animal Husbandry practices can increase the productivity of livestock. 152 no of persons migrate due to lack of employment at village level, this migration can be checked through creation of employment opportunities in the project area through increase in production and diversification in agriculture and Livelihoods as mentioned above.

## 1. Soil Erosion

Soil of Raipur is moderately to severely erode mainly by rivers and nallahs, mostly during the rainy months. Besides, stagnation of water has given rise to the problem of salinity and alkalinity.

## 2.Socio-Demographic Profile

The project area consists of a total population of 25593 with nearly 9.30% of the population belonging to the Scheduled Caste and 0.00% of the population Scheduled Tribe communities. The sex ratio in the area is 1041. The area has a low level of literacy of 33.23% as compared to 60.40% at the State level. With the female literacy rate being a mere 10.96%, the status of literacy in the area is one of the indicators of the deplorable plight of the women in the area.

**Table 3: Demographic Profile of Raipur Project Area**

| POPULATION | |
|---|---|
| Total population | 25593 |
| Male Population (%) | 49.00 |
| Female Population (%) | 51.00 |
| Sex ratio (female per thousand males) | 1041 |
| % Population of Scheduled Caste | 9.30 |
| % Population of Scheduled Tribe | 0.00 |
| Literacy rate Total (percent) | 33.23 |
| Literacy rate male (percent) | 22.27 |
| Literacy rate female (percent) | 10.96 |

Source: Government of Rajasthan and Census of India

## 3. Livelihood Profile

Agriculture and animal husbandry have been central to the livelihoods of the people living in this area. Frequent occurrences of drought in the recent years has however, increased the vulnerability of the farming communities. Increased pressure on land, decline in the productivity of agricultural land combined with shrinking of forests and common pasture land has threatened the viability of farming as a primary livelihood option in the area.

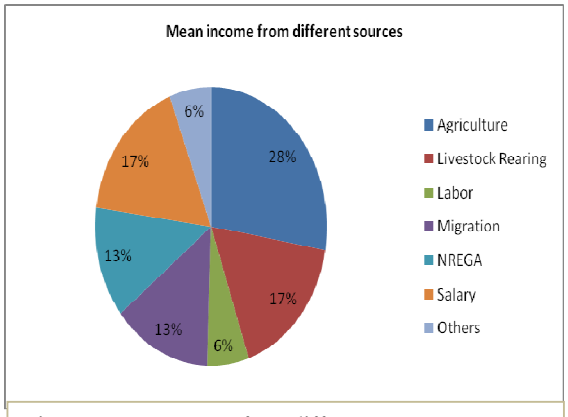



**Figure 2: Mean Income from different sources**
Source: Baseline Survey (2012)

Only 45% of the income is derived from farming and the people have to resort to other options for sustaining their families. Low levels of literacy, absence of programmes for developing skills particularly in the non-farm sector and limited access to basic infrastructural facilities and services has impinged on the people's right to choose the best livelihood option. Migration can be seen as a prominent phenomenon with nearly 12% of the income coming from migration. Launch of MGNERGA has helped in generating employment in the area with about 12% of the income of the people being derived from working on MGNREGA sites.

## 4. Agriculture

Land and water resources have been the key drivers of farm based production systems which form the predominant source of livelihoods of the people in this area. The area is characterized by land based economy. Land has also been crucial in defining the social and political relations of the people in the area. 21.67% of the households are landless while 64.50% are small and marginal farmers. With very low landholdings and subject to vagaries of nature agriculture remains a high risk-low input-low output activity.

The area mostly has sandy loam to clay loam soil where the percolation of water ranges from good to medium. Most of the soil is calcareous while in some patches, saline and alkaline soil is also found. The soil is moderately to severely eroded mainly by rivers and nallahs. Substitution of organic fertilizer with chemical fertilizer has further worsened the soil quality. The nature of agriculture and farming practices is also strongly conditioned by the availability of water. Depletion in the surface as well as ground water resources has adversely affected agriculture. Some of the villages in the area have access to canal and tank irrigation; wells are the most common source of irrigation. The farmers mostly use engine to draw water for irrigation from wells. Besides, flood irrigation is a common practice that can be found in the area.

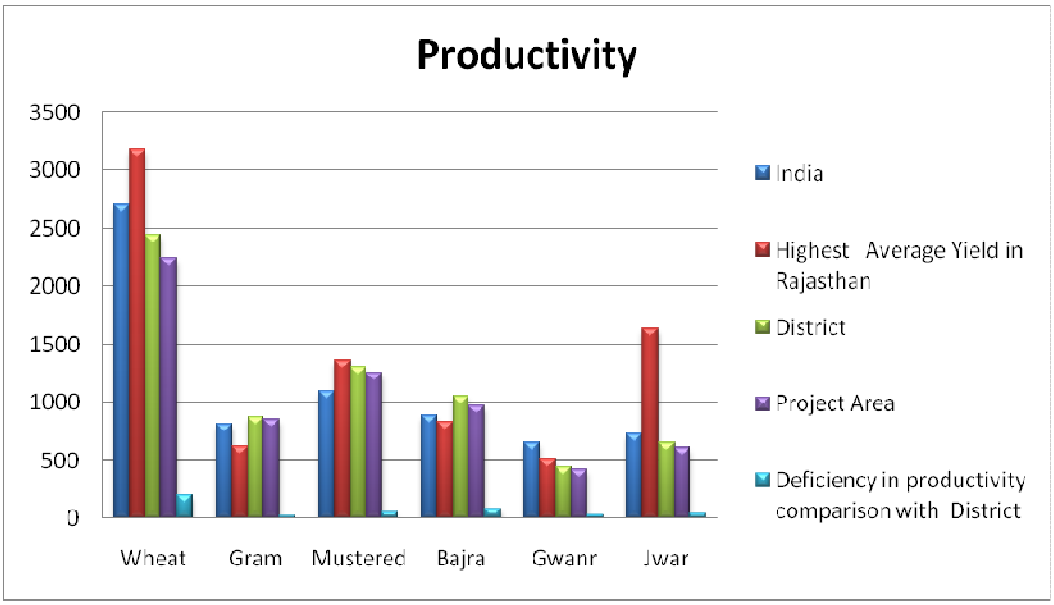
**Kharif** is the main cropping season in the area. Major cereals grown during Kharif include maize, bajra and jowar. Crop production during *Rabi* remains limited to such farmlands which have access to irrigation. Wheat is the main cereal crop grown during *Rabi.* Besides cereal crops, pulses, fodder crops like *Rajka* and oilseeds such as groundnut and mustard are also cultivated in the area. Over the years, the agricultural practices have undergone a remarkable change in the area. Besides the traditional plough, tractors are also being increasingly used. Chemical fertilizer is used intensively. The types of seeds, pesticide and fertilizer across the different villages in the area are detailed in the tables below:

| Cropping Status | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. No | Season | Crop Shown | Rainfed | | | | Irrigated | | | | Total | |
| | | | Varieties | Area (Ha.) | Production (Tun) | Productivity (kg/ha) | Varieties | Area (Ha.) | Production (Tun) | Productivity (kg/ha) | Area (Ha.) | Production (Tun) |
| 1 | Kharif | Bajra | MK-30 | 850 | 824.50 | 970 | MK-30 | 85 | 83.30 | 980 | 935 | 907.80 |
| | | GWAR | | 285 | 119.70 | 420 | | 45 | 19.25 | 425 | 330 | 138.95 |
| | | JWAR | 151M | 650 | 624.00 | 960 | 151M | 55 | 53.07 | 965 | 705 | 677.07 |
| 2 | Rabi | | | | | | | | | | | |
| | | WHEET | 3077, Lok-1 | | | | 3077 | 350 | 784.00 | 2240 | 350 | 784.00 |
| | | CHANA | | | | | DAHED YELLOW | 115 | 98.32 | 855 | 115 | 98.32 |
| | | SARNSO | T-59/ PUSA-VON | | | | T-59/PUSA-VON | 250 | 312.50 | 1250 | 250 | 312.50 |
| **TOTAL** | | | | **1785** | **1568.20** | | | **900** | **1350.44** | | **2685** | **2918.64** |

**Productivity kg/ha**

| Name of the crop | India | Highest Average Yield in Rajasthan | District | Project Area | Deficiency in productivity comparison with District |
|---|---|---|---|---|---|
| Wheat | 2708 | 3185 | 2440 | 2240 | 200 |
| Gram | 808 | 622 | 875 | 855 | 20 |
| Mustered | 1095 | 1356 | 1300 | 1250 | 50 |
| Bajra | 886 | 828 | 1050 | 970 | 70 |
| Gwanr | 650 | 509 | 445 | 420 | 25 |
| Jwar | 730 | 1634 | 650 | 610 | 40 |

**Shown The Bar Chart As Follow**




**Reasons for law productivity:-**

- Use local Varieties of Seed
- Allcanase soil
- Soil depth low
- Wrong Agriculture practice
- Lack of Availability of good quality seeds of desired crop and variety in adequate quantities and time to the farmers.
- Availability of water for cultivation(18.33% is Irrigated table **No. 2.6**)

**5. Livestock**

Agriculture supplemented with livestock keeping forms the basis of sustenance for the farmers in this area. Crop residue and grazing provides fodder and forage to livestock. Livestock keeping on the other hand acts as a drought power and source of energy, nutrition and manure. The symbiotic relation between the two systems is clearly visible and change in one has a direct impact on the other. As per the baseline survey, livestock rearing contributes 17% of the income of the people in the area.

The livestock composition shows that smaller ruminants are more than the larger ruminants. However, the number of cows is much higher than other animals in the area. Degradation of common grazing lands and frequent occurrences of drought in the recent years has raised serious questions pertaining to fodder security in the area. Loss of vegetative cover as a result of high degrees of soil erosion and overgrazing has adversely affected the productivity of these common grazing lands. Changes in the cropping pattern along with the substitution of organic fertilizer with chemical fertilizer reduced the fertility of the soil as well as the quality of fodder available from crop residue. Further, frequent occurrences of drought leading to crop failure also affected the fodder availability from crop residue which has increased the pressure on the already overexploited common grazing land. The factors mentioned above have not only led to a decline in the productivity of the livestock but have also increased instances of distress sale of livestock.

| S. No | Name of Animal | Av. milk production (Lit. per day) | Actual milk production (Lit. per day) | Remarks. |
|---|---|---|---|---|
| 1 | Cow Indigenous | 2 - 3 | 4 - 5 | |
| 2 | Cow Hybrid | 7 - 8 | 10 - 12 | |
| 3 | Buffalo | 5 - 6 | 12 - 15 | |

**Reasons for gap in milk production**

A. Deficiency of vitamin and minerals.
B. Lack of management and awareness.
C. Lack of health treatment in proper way.

## 5. Migration

In an economy which largely demands skilled manpower, lack of skill enhancement opportunities is an added disadvantage for the people in this area. Most of the people in the area who have resorted to non-farm employment end up as daily wage earners in the nearby cities. The ones who migrate to cities have to leave their families back in the village as their earning in the city is not able to substitute returns from farm but only supplement it. As per the baseline survey, about 5% of the Population in the area migrate. Migration to cities and towns is usually in mining and quarrying, construction and in some small trading and manufacturing work.

**Table 10: Households Migrating**

| | Total Population | No of Population |
|---|---|---|
| CHANG | 4444 | 450 |
| KANPURA | 799 | 95 |
| CHITAR | 4023 | 425 |
| LAKHINA PANABAORI | 37 | 0 |
| GIRI | 4711 | 510 |
| NANANA | 3399 | 380 |
| NAHARPURA | 2258 | 250 |
| PRATAPGARH | 1801 | 205 |
| RATDIYA | 2782 | 310 |
| SAILPURA | 731 | 95 |
| DEOLI KHURD | 278 | 40 |
| KANECHA UDAWATAN | 330 | 50 |
| **Total** | **25593** | **2810** |

**Source: Baseline Survey (2012)**

# Base Line Survey Format for IWMP MIS website

Project Name :- RAIPUR IWMP-XXI

Total Geographical Area of Project (Lakh Hectares) :- 0.04361 Lakh Hectares

**Treatable Area**

| | | | |
|---|---|---|---|
| **Wasteland (Lakh Hectares)** | **0.01964** | **Rainfed Agricultural Land (Lakh Hectares)** | **0.01449** |
| **Total Cropped Area (Lakh Hectares)** | **0.02397** | **Net Sown Area (Lakh Hactares)** | **0.02685** |
| **Total no. of Water Storage Structure** | | **Total no. of Water Extracting Units** | |
| **Total storage capacity of water storage structures (cubic meters)** | | **cum** | |

**No. of Household**

| | | | |
|---|---|---|---|
| **SC** | **447** | **ST** | **6** |
| **Others** | **4399** | | |
| **Total Population of the project Area** | **25593** | **No. of Household of Landless people** | **945** |
| **Total no. of BPL Household** | **823** | **No. of small Farmer's household** | **1377** |
| **No. of person-days of Seasonal Migration** | **2810-270 Day in a Year** | **No. of Marginal Farmer's Household** | **1779** |

**Depth of Ground Water (meters) below Ground level**

| | | | |
|---|---|---|---|
| **Pre- monsoon** | **15.70** | **Post-monsoon** | **15.00** |
| **No. of person-days of Seasonal Migration** | **2810-270 Day in a Year** | | |

# ***CHAPTER – II Socio economic Features, Problems and Scope***

**Table 2.1 Population & Household Details:**

**Total Population**

| Male | Female | Total | SC | ST |
|---|---|---|---|---|
| 12539 | 13054 | 25593 | 2450 | 50 |

| Household Details | | | | | | |
|---|---|---|---|---|---|---|
| **BPL Household** | **L. Less** | **Small Farmer** | **M. Farmer** | **Total Household** | **SC Household** | **ST Household** |
| 823 | 945 | 1377 | 1779 | 4852 | 447 | 6 |

**Table 2.2 Development indicators**

| S. No. | Development Indicators | State | Project Area |
|---|---|---|---|
| 1. | Per capita income (Rs.) | 16200 | 12400 |
| 2. | Poverty ratio | 0.22 | 0.229 |
| 3. | Literacy (%) | 60.40% | 33.23% |
| 4. | Sex Ratio | 921 | 1041 |
| 5. | infant mortality rate | 60 | 68 |
| 6. | maternal mortality ratio | 331 | 338 |

The above table indicates (**poor,average,good**) socio economic conditions.

**Table 2.3 Land Use**

| Land Use | Total area in Ha. | | | | |
|---|---|---|---|---|---|
| | Private | Panchayat | Government | Community | Total |
| Agriculture Land | 2397 | 0 | 0 | 0 | **2397** |
| Temporary fallow | 612 | 0 | 0 | 0 | **612** |
| Permanent Fallow | 755 | 0 | 0 | 0 | **755** |
| Cultivated Rainfed | 1449 | 0 | 0 | 0 | **1449** |
| Cultivated irrigated | 948 | 0 | 0 | 0 | **948** |
| Net Sown Area | 1785 | 0 | 0 | 0 | **1785** |
| Net Area sown more than once | 900 | 0 | 0 | 0 | **900** |
| Forest Land | 0 | 0 | 0 | 0 | **0** |
| Waste Land | 755 | 1209 | 0 | 0 | **1964** |
| Pastures | 0 | 0 | 0 | 0 | **0** |
| Others | 0 | 0 | 0 | 0 | **0** |

The project area has 755 ha of cultivable wasteland . 612 ha of fallow land (total 1367 ha) can be brought under cultivation if some irrigation source can be provided through Construction of WHS like MMS, MCD, Farm ponds etc. and also through demonstration of rainfed varieties of crops. Construction of WHS can also increase in area under irrigation which is only 21.73% 1367 ha. (45.03 % of the project area) wastelands can be brought under vegetative cover, with reasonable effort. Activities like Masonry check dams, Vegetative filter strip, V-ditches, staggered trenches, WHS (Johad) Afforestation of wastelands and Pasture development will be taken up on these Lands.

**Pasture development :-** the land use table shows that there is 755 Ha. pasture land (17.31%) This emphasizes the need for taking up pastureland development works through sowing of promising species of grasses Lick Dhaman shytailo hamata etc. and plantation lick Desi Babul Khejri etc.

**Table 2.4 .a Agriculture and Horticulture status and fuel availability.**

| Cropping Status | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. No | Season | Crop Shown | Rainfed | | | | Irrigated | | | | Total | |
| | | | Varieties | Area (Ha.) | Production (Tun) | Productivity (kg/ha) | Varieties | Area (Ha.) | Production (Tun) | Productivity (kg/ha) | Area (Ha.) | Production (Tun) |
| 1 | Kharif | Bajra | MK-30 | 850 | 824.50 | 970 | MK-30 | 85 | 83.30 | 980 | 935 | 907.80 |
| | | GWAR | | 285 | 119.70 | 420 | | 45 | 19.25 | 425 | 330 | 138.95 |
| | | JWAR | 151M | 650 | 624.00 | 960 | 151M | 55 | 53.07 | 965 | 705 | 677.07 |
| 2 | Rabi | | | | | | | | | | | |
| | | WHEET | 3077, Lok-1 | | | | 3077 | 350 | 784.00 | 2240 | 350 | 784.00 |
| | | CHANA | | | | | DAHED YELLOW | 115 | 98.32 | 855 | 115 | 98.32 |
| | | SARNSO | T-59/ PUSA-VON | | | | T-59/PUSA-VON | 250 | 312.50 | 1250 | 250 | 312.50 |
| **TOTAL** | | | | **1785** | **1568.20** | | | **900** | **1350.44** | | **2685** | **2918.64** |

| **Table 2.4.b Abstract of cropped Area(ha)** | |
|---|---|
| Area under Single crop | 2685 |
| Area under Double crop | 900 |
| Area under Multiple crop | |

**The Farmers are using Desi Varieties of as shown below where on Hybrid Varieties shown in table can increase the Production:-**

| Name of crop | Use Varieties | Recommended Varieties | Remark |
|---|---|---|---|
| Bajra | MK-30 | 1 navjot , Partp sanker | Use Recommended Varieties can increase the Production |
| Gawar | Desi / Local | Durgapura Safed , Pusa navbahar | |
| Jwar | Desi / Local | 151M | |
| Wheat | 3077 | Ral 3077 , Raj 4037, H.I.153 | |
| Gram | | RSG-888 | |
| Sarnso | T-59/PUSA-VON | Bayo 902, Vasundra | |

**Crop Rotation****will vary from project to project

| | | |
|---|---|---|
| Bajra | - | Wheat |
| Bajra | - | Fallow |
| Jawar | - | Mustered |
| Gawar | - | Fallow |
| Fallow | - | Gram |
| Gawar | - | Fallow |

The table shows that only 900 Ha. are (20.63%) is double cropped area. Also the crop rotation shows that fallow lands are there. This indicates that there is scope for change in crop rotation in fields where there are fallow lands through Soil and Water conservation measures, crop demonstration and diversification in agriculture.

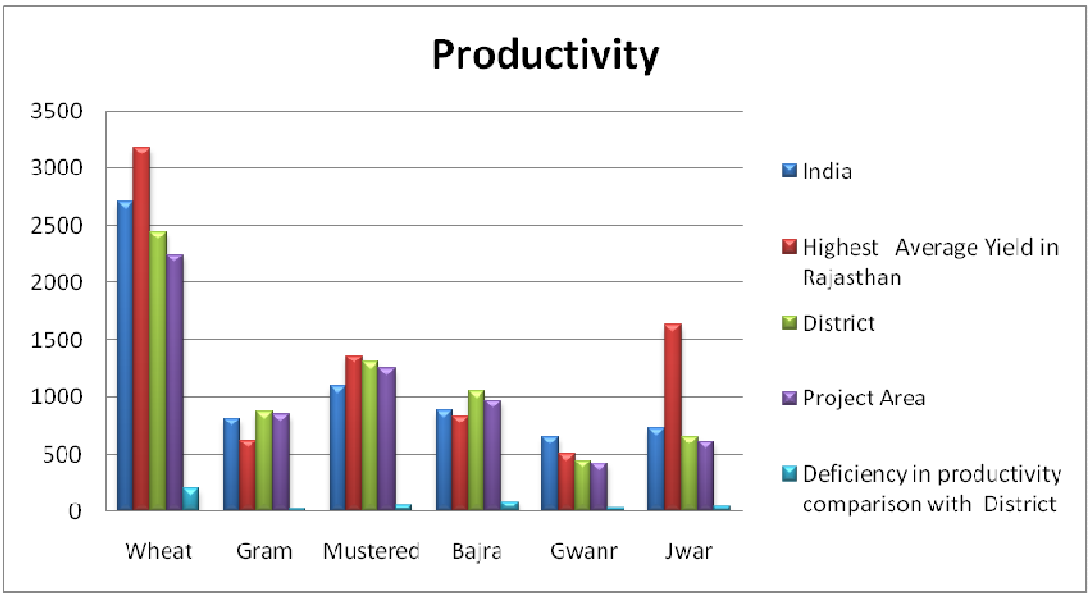
Soil and Water conservation measures besides putting fallow lands under cultivation can change the area under single cropping to double and multiple cropping.

**Table 2.4.c Productivity Gap Analysis**

**Productivity kg/ha**

| Name of the crop | India | Highest Average Yield in Rajasthan | District | Project Area | Deficiency in productivity comparison with District |
|---|---|---|---|---|---|
| Wheat | 2708 | 3185 | 2440 | 2240 | 200 |
| Gram | 808 | 622 | 875 | 855 | 20 |
| Mustered | 1095 | 1356 | 1300 | 1250 | 50 |
| Bajra | 886 | 828 | 1050 | 970 | 70 |
| Gwanr | 650 | 509 | 445 | 420 | 25 |
| Jwar | 730 | 1634 | 650 | 610 | 40 |

**Shown The Bar Chart As Follow**




Analysis of the above table indicate that besides national gap there is wide gap in productivity within state and even within same agro climatic zones.

The reasons for this variation are

- Use local Varieties of Seed
- Allcanase soil
- Soil depth low
- Wrong Agriculture practice
- Lack of Availability of good quality seeds of desired crop and variety in adequate quantities and time to the farmers.
- Availability of water for cultivation(18.33% is Irrigated table **No. 2.6**)

The productivity gap and reasons of it indicate potential to increase the productivity through crop demonstration. Crop demonstrations would be carried out on improved crops/ varieties, improved agronomic practices. INM, IPM, Mixed cropping, distribution of fodder seed mini kit. Demonstration of improved methods and economics of fodder crops cultivation and also distribution foundation seeds of Forage Crops for further multiplication, introduction of fodder crops in the existing crop rotations.

**Table 2.5 Existing area under horticulture/Vegetables/Floriculture (ha)**

| Activity | Area | Species | Varieties | Recommended varieties | Production |
|---|---|---|---|---|---|
| Horticulture | 4 Ha. | Nimbus | Desi | Kagji (Beeju) | 1 Qt. per plant |
| | 2 Ha. | Orange | | Nagpuri, New Selar , Bader | |
| | 5 Ha. | Awla | | Graphted, Karshna , Kanchan , Kalmi | |
| Vegetables | 0Ha. | Tomato | | | |
| | | | | | |
| Floriculture | 0 | 0 | 0 | 0 | 0 |
| | | | | | |
| Medicinal Plants | 0 | 0 | 0 | 0 | 0 |

**Table 2.6 Land holding Pattern in project area**

| Type of Farmer | Total House holds | Land holding (ha) irrigation source wise | | | | Land holding (ha)Social group wise | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Irrigated (source) | Rainfed | Private Waste Land | Total | General | SC | ST | OBC | **Total** |
| (i) Large farmer | 751 | 362 | 553 | 286 | 1201 | 158 | 24 | 0 | 1019 | **1201** |
| (ii) Marginal farmer | 1779 | 255 | 390 | 205 | 850 | 143 | 79 | 1 | 627 | **850** |
| (iii) Small farmer | 1377 | 331 | 506 | 264 | 1101 | 186 | 99 | 0 | 816 | **1101** |
| (iv) Landless person | 945 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **Total** | **4852** | **948** | **1449** | **775** | **3152** | **487** | **202** | **1** | **2462** | **3152** |

65.04% land holdings belong to small and marginal farmers who own 54.96% of total cultivated area. Horticulture/vegetables could be more economical to Small and marginal farmers with irrigation source. For large farmers with no irrigation facility Horticulture/ vegetables will be promoted in a part of land with farm pond/Tankan construction.

The following activities will be more beneficial for small land holdings and for diversification and income for large farmers.



***Horticulture plantation, Medicinal and Aromatic Crops, floriculture:*** As discussed earlier . Horticulture/vegetables could be more economical to Small and marginal farmers with irrigation source. Also the project area has good potential for medicinal & aromatic crops like Sonamukhi, Isabgol, Ashwagandha, Khus, Mehandi etc.

**Agro forestry plantation:** To increase the income of farmers and also for shelter belt plantation as wind velocity is high in the project area.

***Setting of Vermi Compost Units*** - Keeping in view the side effect of residues of chemicals and fertilizers on human health the emphasis would be on cultivation of organic produce through motivating farmers and providing assistance for production of organic input, vermi compost.

***Production and distribution of quality seed –*** There is need to ensure that good quality seed is available for cultivators for which adequate seed production would be initiated in watershed areas with the assistance of private sector and agriculture department technologies

***Sprinklers and pipelines*** for efficient water management practices emphasis on demonstration of sprinklers with adequate financial support and convergence/private partnership.

***Establishment of Green House*** - For growing off season vegetables seedlings and other horticultural crops under controlled atmospheric conditions of green house.

**Establishment of nurseries:** Most of the planting material is procured from other parts of the State/ country. The procurement of planting material from distant places causes damage to the planting material and often results in untimely supply. Hence nursery development activity in area.

**Innovative hi-tech/ export oriented activities**: innovative hi-tech/ export oriented projects like mushroom cultivation, floriculture, etc which are in negligible existence at present, can be implemented by individual farmers / private companies.



***Drip irrigation*** Drip irrigation will be promoted in all horticulture plantations, vegetables, green houses and in nurseries for rational use of irrigation higher yields and quality produce.

**Table 2.7 Livestock Status - animals/milk production / average yield**.

| S. No. | Description of Animals | Population in No. | Yield(milk/ mutton/Wool) | Equ. cow units | Dry matter requirement per year qtl (7Kg per animal/day.) | Total requirement in M.T. |
|---|---|---|---|---|---|---|
| 1 | Cows | | | | | |
| | Indigenous | 1171 | 4684 | | 29919 | 299.19 |
| | Crossbreed | 395 | 3160 | | 10092 | 100.92 |
| 2 | Buffaloes | 1413 | 8478 | | 36102 | 361.02 |
| 3 | Goat | 1996 | 1197 | 988 | 25243 | 252.43 |
| 4 | Sheep | 2285 | 1371 | 1143 | 29203 | 292.03 |
| 5 | Camel | 0 | 0 | | 0 | 0 |
| 6 | Poultry | 0 | 0 | NA | 0 | 0 |
| 7 | Piggery | 0 | 0 | NA | 0 | 0 |
| | Total | **4382** | **18890** | | **130559** | **1305.59** |

In spite of the large number of livestock, production is less hence increase in productivity across all species, is a major challenge. To reduce production of unproductive cattle and improve the productivity by improving the breeds by breeding management following activities will be taken up

- Castration
- Artificial insemination
- Distribution of superior Breeding bulls for use in Cattle and Buffalo
- Breeding distribution crossbred rams

Besides breed improvement other animal husbandry practices like better health, hygiene and feeding practices can increase productivity of livestock. Hence Activities like Animal health camps ,Urea-Molasses treatment demonstration ,demonstration of improved methods of conservation and utilization of Forage crops are proposed.

**Table 2.8 Existing area under fodder (ha)**

| S. No | Item | Unit | Area/Quantity |
|---|---|---|---|
| 1 | Existing Cultivable area under Fodder | Ha | 2397 |
| 2 | Production of Green fodder | quintals/year | 71910 |
| 3 | Production of Dry fodder | quintals/year | 0 |
| 4 | Area under Pastures | Ha | 755 |
| 5 | Production of fodder | quintals/year | 37750 |
| 6 | Existing area under Fuel wood | Ha | |
| 7 | Supplementary feed | Kgs/ day | 35769 |
| 8 | Silage Pits | No | - |
| 9 | Availability of fodder | quintals | 109660 |
| 10 | Deficiency/excess of fodder | quintals | 20899 |

The table above shows there is fodder deficiency (Requirement is 130559 Qt. and availability 109660 Qt.)

To minimize the large and expanding gap between feed and fodder resource availability and demand there is need for

- Increase in area under fodder crops
- Increase in productivity of fodder crops
- Development of pastures
- And reduction in large number of livestock production through replacement by few but productive animals.

**Table 2.9 Agriculture implements**

| 1 | 2 | 3 |
|---|---|---|
| **S. No** | **Implements** | **Nos.** |
| 1 | Tractor | 34 |
| 2 | Sprayers-manual/ power | 45 |
| 3 | Cultivators/Harrows | 3020 |
| 4 | Seed drill | 15 |
| 5 | Any Other (Trally) | 10 |



**Farm mechanization and seed banks**: As discussed earlier 65.01% land holdings belong to small and marginal farmers who own only 34.99% of total cultivated area so owning of big farm implements by individual farmers is not economical so SHG would be promoted to buy farm implements and rent to farmer.

**Table 2.10 MNREGA Status - No. of Card Holder, activities taken so far, employment status.**

| S. No. | Name of Village/G.P. | Total No of job cards In G.P. | Employment Status | Activity taken up so far |
|---|---|---|---|---|
| 1 | Chang | | | Road , CVH , Nadi ect. |
| 2 | Chitar | | | Road , CVH , Nadi ect. |
| 3 | Giri | | | Road , CVH , Nadi ect. |
| 4 | Nanana | | | Road , CVH , Nadi ect. |
| 5 | Pratapura | | | Road , CVH , Nadi ect. |
| 6 | Ratdiya | | | Road , CVH , Nadi ect. |
| 7 | Relra | | | Road , CVH , Nadi ect. |

**Table 2.11 Migration Details**

| Name of village | No. of persons migrating | No. of days per year of migration | Major reason(s) for migrating | Distance of destination of migration from the village (km) | Occupation during migration | Income from such occupation (Rs. in lakh) |
|---|---|---|---|---|---|---|
| CHANG | 450 | 8To 10 Month | Employment | 850 Km | Service At Individual enterprineour lick Ice-cream Trolly , Tatrctor commpressure for coocking of foods etc. in the state of Maharastra , U.P. , Punjab , Gujrat etc. | 0.60-0.70 Lack per year |
| KANPURA | 95 | | | | | |
| CHITAR | 425 | | | | | |
| LAKHINA PANABAORI | 0 | | | | | |
| GIRI | 510 | | | | | |
| NANANA | 380 | | | | | |
| NAHARPURA | 250 | | | | | |
| PRATAPGARH | 205 | | | | | |
| RATDIYA | 310 | | | | | |
| SAILPURA | 95 | | | | | |
| DEOLI KHURD | 40 | | | | | |
| KANECHA UDAWATAN | 50 | | | | | |
| **Total** | **2810** | | | | | |

The migration can be check by creation of employment opportunities, enhancing farm level economy, increases the income of the people engaged in animal husbandry by dairy, poultry and marketing and value addition. (As discussed earlier) and diversification in livelihoods.

The existing livelihoods Village are given below

**Table 2.12 (a)** Major activities (On Farm)

| Name of activity | No of House holds | Average annual income from the |
|---|---|---|
| (1.) Cultivators | 3907 | 0.40 – 0.52 Lac |
| (2.) Dairying | 3308 | 0.55 - 0.50 Lac |
| (3.) Poultry | 0 | 0 |
| (4.) Piggery | 0 | 0 |
| (5.) Landless Agri. Laborers | 945 | 0.20 - 0.25 Lac |

**Table 2.12 (b) Major activities (Off Farm)**

| Name of activity | Households/ individuals | Average annual income from the |
|---|---|---|
| Artisans | 10 | 25000-30000 |
| Carpenter | 25 | 35000-40000 |
| Blacksmith | 15 | 50000-60000 |
| Leather Craft | 5 | 40000-45000 |
| Porter | 20 | |
| Mason | 50 | 60000-70000 |
| Others specify (Cycle Repair ,STD,Craft etc) | 115 | 50000-60000 |

The efforts for increase in income through off farm activities will be made under livelihood component through assistance to SHG or individuals

**Table 2.13 ( a ) Status of Existing SHG**

| S. No | Name of Gram Panchyat | Name of SHG | Members | Activity involved | Monthly income | Fund available | Assistance available | Source of assistance | Training received |
|---|---|---|---|---|---|---|---|---|---|
| 1. | pkax | 1- Lo;a lgk;rk leqg pkax | 20 | | 2000 | | | | |
| | | | | | | | | | |
| 2. | fprkM+ | 1- Lo;a lgk;rk leqg fprkM+ | 27 | | 2700 | | | | |
| | | | | | | | | | |
| 3. | uku.kk | 1- efgyk Lo;a lgk;rk leqg uku.kk | 32 | | 3200 | | | | |
| | | | | | | | | | |
| 4. | izrkix<+ | 1- Lo;a lgk;rk leqg izrkix<+ | 20 | | 2000 | | | | |
| | | | | | | | | | |
| 5. | jkrfM+;k | 1- efgykLo;a lgk;rk leqg jkrfM+;k | 20 | | 2000 | | | | |
| | | | | | | | | | |
| 6. | jsyM+k | 1- Lo;a lgk;rk leqg nsoyh [kqnZ | 20 | | 2000 | | | | |
| | | 2- Lo;a lgk;rk leqg dk.kspk | 20 | | 2000 | | | | |
| | | 3- Lo;a lgk;rk leqg jsyM+k | 20 | | 2000 | | | | |
| | | | | | | | | | |

The table indicates existence of number of groups in the area also these need to be strengthened through trainings and financial assistance

## II. Technical Features

**Table 2.14 Ground Water**

| S. No | Source | No. | Functional depth | Dry | Area irrigated | Water availability(days) |
|---|---|---|---|---|---|---|
| i) | Dug wells | 365 | 80-90 feet | 42 | 245 | 6-8 month |
| ii) | Shallow tube wells | 55 | 150-220 Feet | 17 | 0 | 10-12 month |
| iii) | Dug well with Pumping sets | 150 | 120-200 Feet | 5 | 455 | 8-10 month |
| iv) | Deep Tube Wells | 125 | 250-300 feet | 7 | 122 | 8-10 month |
| | **Total** | **545** | | **71** | **822** | |

**Table 2.15 Availability of drinking water**

| S. No. | Name of the village | Drinking water requirement Litre/day | Present availability of drinking water Litre/day | No. of drinking water sources available | No. functional | No. requires repairs | No. defunct |
|---|---|---|---|---|---|---|---|
| | Total Village | 15039x30= 767790/-day | 667585/-day | 90 | 71 | 19 | - |

**Table 2.16 Water Use efficiency**

| Name of major crop | Area (Hectare) | | | |
|---|---|---|---|---|
| | through water saving devices(Drip/Sprinklers) | through water conserving agronomic practices# | Any other (pl. specify) | Total |
| Cotton | Drip Irrigation | 40 | PVC Pipe | 50 |

- The tables above indicate need for judicious use of available Water.
- Encouraging optimum use of water through installation of sprinklers on every operational wells



**Table 2.17 Slope details.**

**Slope of Watershed**

| S. No. | Slope percentage | Area in hectares |
|---|---|---|
| 1 | 0 to 3% | 4361 Ha |
| 2 | 3 to 8% | 0 |
| 3 | 8 to 25% | 0 |
| 4 | > 25% | 0 |

As most of the area has slope less than 3% construction of contour bunds can solve the problem of water erosion in agriculture fields and protect washing of top soil and manures/fertilisers.

# Table 2.18 Water Budgeting

**Good Catchment –** Normally a funnel shaped catchment in hilly terrain with less vegetation.

**Average Catchment –** Catchment in the plains where there is no dense growth of vegetation.

**Bad Catchment –** Catchment with dense growth of vegetation & highly permeable top soil & sub soil.

**Total available runoff(cum) use Strangest table Rain fall 568.90 mm**

| Type of Catchment | Area in ha. | Yield of runoff from catchment per ha.(cum.) use Strangest table | Total Runoff in cum |
|---|---|---|---|
| Good | 1209 | 997.30 | 1205735 |
| Average | 755 | 748.00 | 564740 |
| Bad | 2397 | 498.60 | 1195144 |
| Total | 4361 | | **2965619** |

**Runoff trapped in existing structures**

| S. No. | Name | No. | Storage Capacity (cum) |
|---|---|---|---|
| i) | WHS(earthen) | 9 | 8500 |
| ii) | Khadin/Talab | 7 | 65000 |
| iii) | Farm Ponds | | - |
| iv) | Tanka | | - |
| v) | Anicuts | 14 | 23500 |
| | **Total** | **30** | **97000** |

**Runoff to be Trapped in proposed structures:**

| S. No. | Name | No. | Storage Capacity (cum) |
|---|---|---|---|
| i) | WHS (earthen) | 29 | 5800 |
| ii) | Khadin/Talab | 7 | 10500 |
| iii) | Farm Ponds | 9 | 4500 |
| iv) | Masonry Check Dam | 0 | 0 |
| v) | Medium Masonry Structure | 14 | 19200 |
| | **Total** | **59** | **40000** |

**% Runoff Trapped = Total runoff trapped x 100/ Total Available runoff = 137000/2965619x100 = 4.61%cum.**

Height of all the structures proposed is between 0.60 metre to 1.50 metre. There is no structures whose water impounding height is more than 2 metre.

**Table 2.19 Soil details**

| | Soil Profile | |
|---|---|---|
| S. No. | Major Soil Classes | Area in hectares |
| 1 | Sandy Loam | 4361 Ha |
| 2 | Degraded | 0Ha |
| | Soil Depth : | |
| B | Depth (Cm.) | Area in hectares |
| 1 | 0.00 to 7.50 | 215 Ha |
| 2 | 7.50 to 45.00 | 365 Ha |
| 3 | > 45.00 | 3781 |

| C | Soil fertility Status | Kg/ha | Recommended |
|---|---|---|---|
| | N | 127 | 100 Kg/Ha |
| | P | 17.9 | 25.0 Kg/Ha |
| | K | 182 | 350 Kg /Ha |
| | Micronutrients | PPM | Magnet |
| | | | |

The analysis of table shows need to improve and maintain soil fertility. Soil health card to every farmer every crop season will be provided, which will include the recommendation for Application micro nutrient and fertilizers.

**Table 2.20 Erosion details**

| **Erosion status in project Area** | | | | |
|---|---|---|---|---|
| Cause | Type of erosion | Area affected (ha) | Run off(mm/ year) | Average soil loss (Tones/ ha/ year) |
| **Water Erosion** | | | | |
| a | Sheet | 3781 | 121 | 15.25 |
| b | Rill | 215 | | |
| c | Gully | 365 | | |
| Sub-Total | | **4361** | | |
| Wind erosion | | 0 | 0 | 0 |
| **Total for project** | | 4361 Ha | 121 | 15.25 |



**The need is:**

- To check land degradation
- To reduce excessive biotic pressure by containing the number and increase of livestock

- To check cultivation on sloping lands without adequate precautions of soil and water conservation measures
- To discourage cultivation along susceptible nallah beds
- To check Faulty agriculture techniques
- To check Uncontrolled grazing and developed cattle tracks
- To check Deforestation of steep slopes

# CHAPTER - III Proposed Development Plan:

The Activities are indicative addition /deletion in activities will be as per local conditions

### A) Preparatory phase activities Capacity Building Trainings and EPA

The IEC activities like Kalajathas, Group meetings, door to door campaign, slogans and wall writings etc. were carried out in all the habitations of 12/1,2,3,4&5 Micro Watershed. A series of meetings were conducted with GP members, community and discussed about the implementation of IWMP programme. User groups were also formed.

Gram Sabah were conducted for approval of EPA (Village), for selecting the watershed committee and approval of DPR.

| S. No | Name of the Gram Panchayat | Date on which Gram Sabah approved EPA |
|---|---|---|
| 1 | CHANG | 20–03–2013 |
| 2 | CHITAR | |
| 3 | GIRI | |
| 4 | NANANA | 28–02–2012 |
| 5 | PRATAPGARH | |
| 6 | RATDIYA | 27–02–2012 |
| 7 | RELRA | 12–08–2013 |

Rs. In Lac

| S. No. | Names of Village/G.P. | Amount earmarked for EPA | Entry Point Activities planned Drinking Water, Solar Light | Estimated cost | Expenditure incurred (up to 2013) | Balance | Expected outcome |
|---|---|---|---|---|---|---|---|
| 1 | Chang | 3.114 | 5 | 0.195 | 0.975 | 2.139 | |
| 2 | Chitar | 3.21 | 6 | 0.195 | 1.17 | 2.04 | |
| 3 | Giri | 1.848 | | 0.195 | 0 | 1.848 | |
| 4 | Nanana | 1.268 | 6 | 0.195 | 1.17 | 0.098 | |
| 5 | Pratapura | 7.108 | 6 | 0.195 | 1.17 | 5.938 | |
| 6 | Ratdiya | 8.256 | 7 | 0.195 | 2.72 | 5.536 | |
| 7 | Relra | 1.362 | 6 | 0.195 | 1.17 | 0.192 | |
| **Total** | | **26.166** | | | **8.375** | **17.791** | |

The PRA exercise was carried out in all the villages on the dates shown below:

| S. No | Name of the Village | Date on which PRA conducted |
|---|---|---|
| 1 | CHANG | 20–05–2013 |
| 2 | CHITAR | 20–05–2013 |
| 3 | DEOLI KHURD | 23–05–2013 |
| 4 | GIRI | 23–05–2013 |
| 5 | KANECHA UDAWATAN | 24–05–2013 |
| 6 | KANPURA | 21–05–2013 |
| 7 | LAKHINA PANABAORI | 22–05–2013 |
| 8 | NAHARPURA | 28–05–2013 |
| 9 | NANANA | 24–05–2013 |
| 10 | PRATAPGARH | 27–05–2013 |
| 11 | RATDIYA | 25–05–2013 |
| 12 | SAILPURA | 27–05–2013 |

Transact walk were carried out involving the community for Social mapping, Resource mapping. Detailed discussions and deliberations with all the primary stakeholders were carried out.

Socio-economic survey was carried out during 20–05–2013 to 28–05–2013 (dates) period covering all the households and primary data on demography, Land holdings, Employment status, Community activities etc. was collected as mentioned in chapter 2.

## . CAPACITY BUILDING

**Table- List of approved Training Institutes[@] for Capacity Building in the project area**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| S. No. | Name of Stake holders | Name of the Training Institute | Full Address with contact no., website & e-mail | Name & Designation of the Head of Institute | Type of Institute | Area(s) of speciali-zation[$] | Accredita-tion details |
| 1 | PIAs | IGPRS | JAIPUR | Director IGPRS | GOR | W/S Management | |
| | | NIRD | JAIPUR hksolanki@nird.gov.in | Course coordinator choupal NIRD Jaipur | GOI | GIS Base | |
| 2 | WDTs | PTC | AJMER | Training co-ordinator PTC | GOR | W/S development works | |
| | | IGPRS | JAIPUR | | | W/S development works | |
| | | State Agri. Management Training Institute | JAIPUR | Director-SAMI Jaipur | | W/S development works | |
| 3 | UGs/SHGs/WCs/ GPs/Community | Pali dairy | Pali | M.D. Pali | GOR | W/S development works | |
| | | KVK pali | Pali | Seior Scientist KVK | Research Institutes | W/S development works | |
| | | Research station | Pali | Seior Scientist | GOR | W/S development works | |
| | | Rajigandi seva Kendra | At Gram Panchayat | | GOR | W/S development works | |
| 4 | PM/SLNA | NIRD | Hydrabad | | GOI | | |
| 5 | | | | | | | |

# Central govt. Dept./ State govt. Dept./ Autonomous Body/ Research Institutes/ Universities/ Others (pl. specify)

$ Capacity Building/ Agriculture/ Horticulture/ Animal Husbandry/ Pisciculture/ Remote Sensing/ Water conservation/ Ground water/ Forestry/ livelihoods/ entrepreneurship development/ others (pl. specify)

[@] The training institutes must full fill the conditions mentioned in the operations guidelines.

**IWMP- Raipur (Pali)**

Table- **Capacity Bulding activities in the project** (FINANCIAL) ***4% OF TOTAL PROJECT COST.**

| S. No. | Project Stackholders | Total No. of Persons | Total No. of Training | Rate per Trainning | UNIT | Total Amount | Year wise Amount vifergation | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 2012-13 | | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17 | | Total | |
| | | | | | | | I Year No. of Tranning | | II Year No. of Tranning | | III Year No. of Tranning | | IV Year No. of Tranning | | V Year No. of Tranning | | | |
| **A** | **Disst. WCDC** | | | | | | Phy | Fin | Phy | Fin | Phy | Fin | Phy | Fin | Phy | Fin | Phy | Fin |
| 1 | PIAs at State Level (3 Days) | 2 | 10 | 10160 | No | 1.016 | 0 | 0 | 3 | 0.305 | 3 | 0.305 | 2 | 0.2 | 2 | 0.2 | 10 | 1.016 |
| 2 | WDTs at State (3 Days) | 4 | 11 | 20320 | No | 2.235 | 0 | 0 | 2 | 0.406 | 4 | 0.813 | 3 | 0.61 | 2 | 0.41 | 11 | 2.235 |
| 3 | 2 Days Tranning for WDT & PRIS at Distt Level | 30 | 18 | 25600 | No | 4.598 | 0 | 0 | 4 | 1.024 | 6 | 1.536 | 6 | 1.54 | 2 | 0.50 | 18 | 4.598 |
| | | | **39** | | | **7.849** | **0** | **0.00** | **9** | **1.74** | **13** | **2.65** | **11** | **2.35** | **6** | **1.11** | **39** | 7.849 |
| **B** | **PIA. level trainning** | | | | | | | | | | | | | | | | | |
| 1 | WDTs(4X4300=17200) | 4 | 14 | 17200 | No | 2.408 | 3 | 0.52 | 4 | 0.688 | 4 | 0.688 | 2 | 0.34 | 1 | 0.17 | 14 | 2.408 |
| 2 | Ugs | 30 | 14 | 6800 | No | 0.952 | 3 | 0.2 | 4 | 0.272 | 4 | 0.272 | 2 | 0.14 | 1 | 0.07 | 14 | 0.952 |
| 3 | SHGs | 30 | 14 | 6800 | No | 0.952 | 2 | 0.14 | 5 | 0.34 | 4 | 0.272 | 2 | 0.14 | 1 | 0.07 | 14 | 0.952 |
| 4 | WCs | 30 | 15 | 6800 | No | 1.020 | 3 | 0.20 | 4 | 0.272 | 4 | 0.272 | 2 | 0.14 | 2 | 0.14 | 15 | 1.020 |
| 5 | GPs | 30 | 15 | 6800 | No | 1.020 | 3 | 0.20 | 7 | 0.476 | 3 | 0.204 | 2 | 0.14 | 0 | 0 | 15 | 1.02 |
| 6 | Community | 30 | 15 | 6800 | No | 1.020 | 2 | 0.14 | 5 | 0.34 | 3 | 0.204 | 3 | 0.2 | 2 | 0.14 | 15 | 1.02 |
| 7 | EXPOSURE TOUR (INTER STATE) | 50 | 4 | 136160 | No | 5.446 | | 0.00 | 2 | 2.723 | 2 | 2.723 | 0 | 0 | | 0 | 4 | 5.446 |
| 8 | EXPOSURE TOUR (OUTER STATE) | 40 | 2 | 210500 | No | 4.190 | | 0 | 1 | 2.105 | 1 | 2.085 | | 0 | | 0 | 2 | 4.19 |
| | **Total** | | **93** | | | **17.008** | **16** | **1.40** | **32** | **7.22** | **25** | **6.72** | **13** | **1.09** | **7** | **0.58** | **93** | **17.008** |
| **C** | **PM/SLNA (10X5080=50800)** | 6 | 3 | 50800 | No | **1.308** | 0 | 0 | 1 | 0.508 | 1 | 0.508 | 1 | 0.29 | 0 | 0 | 3 | 1.308 |
| **11** | **TOTAL PHYSICAL** | | **135** | | | | **16** | | **42** | | **39** | | **25** | | **13** | | **135** | |
| **12** | **TOTAL FINANCIAL** | | | | | **26.166** | | **1.40** | | **9.46** | | **9.88** | | **3.73** | | **1.69** | | **26.166** |

Table- **Capacity Bulding activities in the project** (PHYSICAL) ***4% OF TOTAL PROJECT COST.**

| 1 | 2 | 3 | | | | | 4 | | | | | | 5 | | | | | | 6 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. No. | Project Stackholders | Total No. of Persons | Total No. of Training | Rate per Trainning | No of Days of Trai. | Total Am | No. of Person to be trained during project period | | | | | | No. of Training to be organized during project period | | | | | | No. of Person days to be trained during project period | | | | | |
| | | | | | | | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total |
| | | | | | | | I Year | II Year | III Year | IV Year | V Year | | I Year | II Year | III Year | IV Year | V Year | | I Year | II Year | III Year | IV Year | V Year | |
| **A** | **WCDC** | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | PIAs at State Level (3 Days) | 2 | 10 | 10160 | 3 | 1.016 | 0 | 6 | 6 | 4 | 4 | 20 | 0 | 3 | 3 | 2 | 2 | 10 | 0 | 18 | 18 | 12 | 12 | 60 |
| 2 | WDTs at State (3 Days) | 4 | 11 | 20320 | 3 | 2.235 | 0 | 8 | 16 | 12 | 8 | 44 | 0 | 2 | 4 | 3 | 2 | 11 | 0 | 24 | 48 | 36 | 24 | 132 |
| 3 | 2 Days Tranning for WDT & PRIS at Distt Level | 30 | 18 | 25600 | 2 | 4.598 | 0 | 120 | 180 | 180 | 60 | 540 | 0 | 4 | 6 | 6 | 2 | 18 | 0 | 240 | 360 | 360 | 120 | 1080 |
| | | | **39** | | | **7.849** | **0** | **134** | **202** | **196** | **72** | **604** | **0** | **9** | **13** | **11** | **6** | **39** | **0** | **282** | **426** | **408** | **156** | **1272** |
| **B** | **PIA** | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | WDTs(4X4300=17200) | 4 | 14 | 17200 | 4 | 2.408 | 12 | 16 | 16 | 8 | 4 | 56 | 3 | 4 | 4 | 2 | 1 | 14 | 48 | 64 | 64 | 32 | 16 | 224 |
| 2 | Ugs | 30 | 14 | 6800 | 1 | 0.952 | 90 | 120 | 120 | 60 | 30 | 420 | 3 | 4 | 4 | 2 | 1 | 14 | 90 | 120 | 120 | 60 | 30 | 420 |
| 3 | SHGs | 30 | 14 | 6800 | 1 | 0.952 | 60 | 150 | 120 | 60 | 30 | 420 | 2 | 5 | 4 | 2 | 1 | 14 | 60 | 150 | 120 | 60 | 30 | 420 |
| 4 | WCs | 30 | 15 | 6800 | 1 | 1.020 | 90 | 120 | 120 | 60 | 60 | 450 | 3 | 4 | 4 | 2 | 2 | 15 | 90 | 120 | 120 | 60 | 60 | 450 |
| 5 | GPs | 30 | 15 | 6800 | 1 | 1.020 | 90 | 210 | 90 | 60 | 0 | 450 | 3 | 7 | 3 | 2 | 0 | 15 | 90 | 210 | 90 | 60 | 0 | 450 |
| 6 | Community | 30 | 15 | 6800 | 1 | 1.020 | 60 | 150 | 90 | 90 | 60 | 450 | 2 | 5 | 3 | 3 | 2 | 15 | 60 | 150 | 90 | 90 | 60 | 450 |
| 7 | EXPOSURE TOUR (INTER STATE) | 50 | 4 | 136160 | 6 | 5.446 | 0 | 100 | 100 | 0 | 0 | 200 | | 2 | 2 | 0 | | 4 | 0 | 600 | 600 | 0 | 0 | 1200 |
| 8 | EXPOSURE TOUR (OUTER STATE) | 40 | 2 | 210500 | 6 | 4.190 | 0 | 40 | 40 | 0 | 0 | 80 | | 1 | 1 | | | 2 | 0 | 240 | 240 | 0 | 0 | 480 |
| | **Total** | | **93** | | | **17.00** | **402** | **906** | **696** | **338** | **184** | **2526** | **16** | **32** | **25** | **13** | **7** | **93** | **438** | **1654** | **1444** | **362** | **196** | **4094** |
| **C** | **PM/SLNA (10X5080=50800)** | 6 | 3 | 50800 | 3 | 1.3080 | 0 | 6 | 6 | 6 | 0 | 18 | 0 | 1 | 1 | 1 | 0 | 3 | 0 | 18 | 18 | 18 | 0 | 54 |
| **11** | **TOTAL PHYSICAL** | | **135** | | | **26.166** | **402** | **1046** | **904** | **540** | **256** | **3148** | **16** | **42** | **39** | **25** | **13** | **135** | **438** | **1954** | **1888** | **788** | **352** | **5420** |

**Table-, Education & Communication (IEC) activities in the project area (1% of total Project cost.)**

| 1 | 2 | 3 | 4 | 5 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| S. No. | Activity | Executing Agency | Allocation out of 1% of total Project cost | Allocation in lacs | | | | | |
| | | | | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total |
| | | | | I year | II year | III year | IV year | V year | |
| 1 | tyxzg.k {ks= xfrfof/k;kas dks n'kkZrk gqvk POP/ CLAY / WOOD / PLASTIC ls cuk gqvk ekWMyA0-15 | P.I.A. | 0.981 | | 0.490 | 0.491 | | | 0.981 |
| 2 | MhLiys cksMZs@lysxDlh cksMZ@ | | | | | | | | |
| 3 | okWyisfUVax&tyxzg.k xfrfof/k;ksa] y{;ks o izkfIr vkfn dks n'kkZrh gqbZA0-05 | P.I.A. | 0.327 | | | | 0.327 | | 0.327 |
| 4 | tyxzg.k fodkl laca/kh eqfnzr iEiysVl@fyQ ysVl@pkVZ@iksLVj@vkfn0-05 | P.I.A. | 0.328 | | 0.328 | | | | 0.328 |
| 5 | Ukkjk ys[ku 0-20 | P.I.A. | 1.308 | 1.209 | 0.099 | | | | 1.308 |
| 6 | lQyrk dh dgkuh;ksa dh ohfM;ksaxzkQh@ QksVksxzkQh @ y?kqfQYe ,oa d`"kdks ls lk{kjkrdkj@okrkZ A 0-20 | P.I.A. | 1.308 | | | | 0.196 | 1.112 | 1.308 |
| 7 | lkaLd`frd R;kSgkj @ esys vkfn ds volj ij iznZ'kuh@ uqDdM+ ukVd@ dViqryh izn'kZu 0-15 | P.I.A. | 0.981 | | | 0.490 | 0.491 | | 0.981 |
| 8 | jkf= xks"Bh @ Hkw laj{k.k lIrkg@ psruk jSyh (in ;k=k) @ tyxzg.k fodkl dk lans'k nsus okys lkaLd`frd dk;ZØe@ d`"kd fnol dk vk;kstu ,oa {ks= Hkze.k fnol dk | P.I.A. | 1.308 | | 0.784 | 0.130 | 0.394 | | 1.308 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | vk;kstu bR;kfn@ 0-20 | | | | | | | | |
| | dqy | | 6.541 | 1.209 | 1.701 | 1.111 | 1.408 | 1.112 | 6.541 |

WAPCOS LIMITED GURGAON was assigned the work of preparing various thematic layers **using** Cartosat-1 and LISS-3 imageries for **Creation**, development and management of geo-spatial database depicting present conditions of land (terrain), water and vegetation with respect to watershed under different ownerships at village level

Various thematic layers provided by WAPCOS LIMITED GURGAON are :

- Delineation of Macro/Micro watershed boundaries.
- Digitised Khasra maps of the villages falling in project area.
- Network of Drainage lines, existing water bodies, falling in the project area.
- Base maps (transport network, village/boundaries, and settlements).
- Land Use / Land cover map.
- Contours at 1 meter interval, slope map

Based on GIS thematic layers, Field visits , PRA and analysis of benchmark data (as discussed in chapter 2) final Treatment plan on revenue map for implementation has been framed. Thus each intervention identified has been marked on revenue map (map enclosed in DPR as annexure VIII).The GIS based intervention map, PRA based intervention map are annexed as VIII.

**B)Livelihood Action Plan (LAP):**

An awareness programme has been undertaken at Gram Sabah for communication & sensitization of the target beneficiaries. Livelihood Action Plan is a pre requisite for availing the funds under the livelihood component. LAP has been prepared by the PIA in consultation with WDT, WC & the members of SHG,SC/ST, women, landless/ asset less households. Details of funds available & their utilisation is as under :

**(i) Total project cost Rs.654.15Lacs.**

(ii) Funds available under livelihood component is 9% of total project cost= Rs. 58.574 Lac.

**(a) Seed money for SHGs as revolving fund = Rs. 42.125 Lac.**

(minimum 60% of livelihood component)

- - No. Of SHG to be formed--**169**-Nos.

--- No of persons (members) in SHGs—**1690** Nos.



**(b) Seed money for enterprising individuals = Rs. 4.75 Lac.**

(minimum 10% of livelihood component)

-- No of persons identified as enterprising individuals **19** Nos.

List of persons & Proposed Activities.

| S. No | Watershed Committee | No. of Persons | Activity Proposed |
|---|---|---|---|
| 1 | Chang | 1 | 1. Carpenter<br>2. Mason<br>3. Sewing / Knitting |
| 2 | Chitar | 1 | |
| 3 | Giri | 1 | |
| 4 | Nanana | 1 | |
| 5 | Pratapura | 1 | |
| 6 | Ratdiya | 1 | |
| 7 | Relra | 1 | |

**(c) Funds for Enterprising SHG/Federations of SHG**

**(Maximum 30% of livelihood activities) = Rs. – 12.00Lac**

The funding for major livelihood activities will enable the enterprising SHGs/SHG federation to avail a composite loan for undertaking major livelihood activities or to upscale activities as recommended by the WC & approved by WCDC in consultation with line departments.

Details of enterprising SHG/federation is given below :

| S. No. | No. of SHG/ SHG federation | Project Name | Project Cost in Lac | Grant in aid 50% of project cost or 2 Lac whichever is less | Bank Loan |
|---|---|---|---|---|---|
| 1 | 6 | Dairy | 12 | | |
| 2 | | | | | |
| | **Total** | | **12** | | |

* Details of project activities can be prepared in coming years after formation of SHG federation or as the case may be.

**C) Production Plan:**

An awareness programme has been undertaken at Gram Sabah for communication & sensitization of the target beneficiaries. Production System & micro enterprises Action Plan is pre-requisite for availing the funds under the Production System & micro enterprises component. Production plan has been prepared by the PIA in consultation with WDT, WC & the members of Users Group. Details of funds available & their utilisation is as under :

**(iii)Total project cost Rs. 654.15 Lac.**

(iv) Funds available under Production System & Micro enterprises component is 10% of total project cost= Rs. - 65.415 Lac.

No. of persons & Proposed Activities for production system

| S. No | No./Area in Ha. of Beneficiaries Person | Activities Proposed |
|---|---|---|
| 1 | | Crop Demonstration |
| | 410 No./164 Ha. | 1. Kharif |
| | 184 No./74 Ha. | 2. Rabi |
| 2 | 49 Ha/ 123 No. | Horticulture |
| 3 | 328 No. | Nedap Compost |
| 4 | 1479 No. | Vegetable Kit |
| 5 | 5596 No. | A.I. |

**(viii) Funds for Animal Husbandry Activities 11.754 Lac.**

Details of is Animal Husbandry activities given below :

| S. No. | Name of Activity | Quantity | Unit cost | Cost of Activity in Lac | | Remark Convergence with |
|---|---|---|---|---|---|---|
| | | | | From Project Fund | From Convergence Fund | |
| 1 | A.I. No. | 5596 | 0.0015 | 8.394 | | A.H. Department |
| 2 | A.H. CAMP | 14 | 0.24 | 3.360 | | A.H. Department |
| | **TOTAL** | | | **11.754** | | |

**Awareness Programme**

-Slogan Wall Painting,

Scientific Animal Husbandry Practices ; Seminars / Debates / Pamphlet distribution/ Stickers/ Chetna Rally

Broadcasting / Telecasting Film Show

Visit- intra/ inter/ out of State/ Abroad

Fortnightly Meetings with Livestock keeper to discuss and decide all breedable females to be covered.

**Creation Of Disease Free Zone: Livestock's health coverage**

Establishment of Pashudhan Seva Kendra (PSK) (Convergence with peer department)

Deworming to reduce worm load and enhance disease resistance. (Convergence with peer department)

Distribution of mineral mixture. (Convergence with peer department)

Free of Cost Vaccination in IWMP area Livestock for H.S., B.Q., F.M.D., PPR, ETV and Sheep Pox.

Ensure Hygenic measures to check Zonosis.(DAH/ IWMP)

**Construction of Animal Sheds with Manger and Portable Manger With accessories**

**Provision of Cattle Water Troughs.**

**Infertility Management: To ensure Livestock's Productivity**

Expansion of AI Coverage/ reduction in no.of infertile females.

PCPD+ COMBAT INFERTILITY+ CAMPS INFERTILITY RLDB+ CAMPS INFERTILITY SC COMPONENT

Breed Improvment: To ensure Livestock's Productivity enhancement

A.I. (Convergence with peer department)

Incentive based Mass Castration at Door Step of Scrub Bulls to Check ND Recycling.

Registration of bulls (Convergence with peer department)

Bull / Buck Distribution for NS-.Gir, Murrah And Sirohi /Jamunapari Breed Bulls/ Bucks Should Be Distributed For 3yrs 6 (3 In Each Iwmp Area, Where Ever A.I. Facility Is Not Available Round's O Clock. On 100% Subsidized Rate To WC.

Financial Incentive to the Inseminator for Calf Borns.

Convergence with peer Department/DAH/Agriculture/ATMA/ Board/ Trust/ Goseva

An Assistance to control Malnutrition: Protein Supplementation

Feed & fodder production enhancement.

# : ANNUAL ACTION PLAN :

PIA will prepare annual action plan in the month of January indicating outgoing liabilities as well as new projects which they wish to take during next financial years & will submit to PM (WCDC). These plans will be placed for approval at P.S. (Standing Committee of Production and Agriculture) & Z.P. (Standing Committee of Production) level every year. While preparing Annual Action Plan (AAP) if rates of labour or material in DPR increased or decreased changed rates will be applicable for preparing AAP & the effect of same can be met by converging the remaining works with other schemes.

# Proposed Development Plan

Signatures
Project Manager, WCDC
Distt. – Pali (Raj.)

## CHAPTER - I V
## Activity wise Total Abstract of cost

| Activity | Unit | Quantity | Unit cost | Total cost | Cost from Project Fund | | | Quantity | Unit cost | Convergence Fund | Beneficiary Contribution |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Labour | Material | TOTAL | | | | |
| **tyxzg.k fodkl dk;Z pj.k ( 56%)** | | | | | | | | | | | |
| **d`f"k Hkwfe dk;Z ¼flafpr½** | | | | | | | | | | | |
| Earthen Bunding | Ha | 1449 | 0.0842 | **122.035** | 118.485 | 3.550 | 122.035 | 0 | 0.1078 | 0.000 | 9.763 |
| Pipe spilway (Weste Weir) | No | 292 | 0.0470 | **13.724** | 3.697 | 10.027 | 13.724 | 0 | 0.0500 | 0.000 | 1.098 |
| KHADIN | No | 4 | 4.0700 | **51.700** | 13.440 | 2.840 | 16.280 | 7 | 5.0600 | 35.420 | 1.302 |
| Farm pond | No | 9 | 1.3500 | **27.810** | 11.703 | 0.447 | 12.150 | 9 | 1.7400 | 15.660 | 0.972 |
| **Total** | | | | **215.269** | **147.325** | **16.864** | **164.189** | | | **51.080** | **13.135** |
| **¼vd`f"k Hkwfe½** | | | | | | | | | | | |
| pjkxkg fodkl | Ha | 120 | 0.6966 | **83.587** | 72.316 | 11.272 | 83.587 | 0 | | 0.000 | |
| NADI IN P.D BLOCK | No | 3 | 4.0700 | **17.270** | 10.080 | 2.130 | 12.210 | 1 | 5.0600 | 5.060 | |
| TANKA IN P.D BLOCK | No | 6 | 1.4400 | **10.490** | 3.000 | 5.640 | 8.640 | 1 | 1.8500 | 1.850 | |
| Open Contour Trench | Ha | 198 | 0.0907 | **41.359** | 17.382 | 0.576 | 17.959 | 200 | 0.1170 | 23.400 | |
| pjkxkg fodkl (Private Farmer) | Ha | 164 | 0.0842 | **16.400** | 13.410 | 0.402 | 13.812 | 24 | 0.1078 | 2.587 | 0.801 |
| **Total** | | | | **169.105** | **116.188** | **20.020** | **136.208** | | | **32.897** | **0.80** |
| **ukyk mipkj dk;Z** | | | | | | | | | | | |
| M.M.S.(Anicut) | No | 3 | 4.82000 | **25.420** | 6.960 | 7.500 | 14.460 | 2 | 5.4800 | 10.960 | |
| M.M.S.(Anicut 5m) | No | 11 | 3.800 | **54.550** | 17.517 | 24.283 | 41.800 | 3 | 4.2500 | 12.750 | |
| L.S.C.D | No | 81 | 0.058 | **17.856** | 1.900 | 2.832 | 4.732 | 207 | 0.0634 | 13.124 | |
| Gali plug | Ha | 29 | 0.110 | **4.450** | 3.090 | 0.100 | 3.190 | 9 | 0.1400 | 1.260 | |
| Gabion Structure | No | 26 | 0.067 | **1.747** | 0.826 | 0.922 | 1.747 | 0 | | 0.000 | |
| **Total** | | | | **104.023** | **30.293** | **35.637** | **65.929** | | | **38.094** | **0.00** |
| **GRAND TOTAL** | | | | **488.397** | **293.806** | **72.520** | **366.326** | | | **122.071** | **13.936** |
| **Livelihood System ( 9 %)** | | | | | | | | | | | |
| Revolving Fund to SHG (60 % minimum) | No | 169 | 0.25000 | **42.125** | 0 | 42.125 | 42.125 | | | | |
| Revolving Fund to enterprising individual (10 % maximum ) | No | 19 | 0.25000 | **4.750** | 0 | 4.750 | 4.750 | | | | |
| Grant in aid to enterprising SHG or Federation of SHGs individual (30 % maximum ) | No | 6 | 2.00000 | **36.000** | 0 | 12.000 | 12.000 | 12 | 2.0000 | 24.000 | |
| **Total** | | | | **82.875** | **0.000** | **58.875** | **58.875** | | | **24.000** | |
| **Production System (10%)** | | | | | | | | | | | |
| A.I. | No | 5596 | 0.0015 | **8.994** | 0 | 8.394 | 8.394 | 400 | 0.0015 | 0.600 | 1.679 |
| A.H. CAMP | No | 14 | 0.24 | **3.360** | 0 | 3.360 | 3.360 | | | | |
| [kjhQ | No | 410 | | **8.425** | 0 | 8.425 | 8.425 | | | | 1.685 |
| jch | No | 184 | | **4.744** | 0 | 4.744 | 4.744 | | | | 0.949 |
| Qynkj ikS/kkjksi.k | Ha | 92 | 0.24 | **51.799** | 13.815 | 8.289 | 22.104 | 59 | 0.5033 | 29.695 | 4.421 |
| usMsi dEiksLV | No | 328 | 0.02 | **6.560** | 0 | 6.560 | 6.560 | | | | 1.312 |
| Kitchen garden KIT | No | 1479 | 0.008 | **11.832** | 0 | 11.832 | 11.832 | | | | 2.366 |
| **Total** | | | | **95.714** | **13.815** | **51.604** | **65.419** | | | **30.295** | **12.412** |
| **GRAND TOTAL** | | | | **666.99** | **307.62** | **183.00** | **490.62** | | | **176.37** | **26.35** |

***Tentative and will vary during execution according to beneficiary**

Signatures
PIA P.S. Raipur

Signatures
Project Manager, WCDC
Distt. - PALI

## CHAPTER – V

**Annual Action Plan** : The project period can vary from 4 to 7 years and accordingly the table given below be prepared. Also the activities mentioned below are indicative and can vary from project to project. Also this if PIA feels necessary to make it GP Wise it can add pages.

### Through Project Fund

| (A) | Preparatory phase activities capacity building trainings & EPA | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Activity** | **Unit** | **Quantity** | **Unit Cost** | **Total cost** | **1st year** | | **2nd year** | | **3rd year** | | **4th year** | | **5th year** | | **6th year** | | **Total** | |
| | | | | | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** |
| Admn. | | | | 65.415 | | | | 3.271 | | 9.812 | | 20.933 | | 18.316 | | 13.084 | | **65.416** |
| Monitoring | | | | 6.542 | | | | 0.000 | | 1.308 | | 2.617 | | 0.000 | | 2.617 | | **6.542** |
| Evaluation | | | | 6.542 | | | | 0.000 | | 1.962 | | 0.000 | | 2.290 | | 2.290 | | **6.542** |
| EPA | | | | 26.166 | | | | 26.166 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | **26.166** |
| I & CB | | | | 32.708 | | | | 3.271 | | 16.354 | | 10.793 | | 2.290 | | 0.000 | | **32.708** |
| DPR | | | | 6.542 | | | | 6.542 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | **6.542** |
| **Total (A) 22%** | | | | **143.91** | | | | **39.250** | | **29.436** | | **34.343** | | **22.896** | | **17.991** | | 143.92 |
| **(B)** | **Natural resource management(56%)** | | | | | | | | | | | | | | | | | |
| **Conservation measures for arable land(private land)** | | | | | | | | | | | | | | | | | | |
| Earthen Bunding | Ha | 1449 | 8422 | 122.035 | | | | | 512 | 43.121 | 646 | 54.406 | 291 | 24.508 | | | **1449** | **122.035** |
| Pipe spilway(Weste Weir) No | No | 292 | 4700 | 13.724 | | | | | 104 | 4.888 | 131 | 6.157 | 57 | 2.679 | | | **292** | **13.724** |
| Khadin | No | 4 | 407000 | 16.280 | | | | | 2 | 8.140 | 2 | 8.140 | 0 | 0.000 | | | **4** | **16.280** |
| Farm pond | No | 9 | 135000 | 12.150 | | | | | 2 | 2.700 | 3.5 | 4.725 | 3.5 | 4.725 | | | **9** | **12.150** |
| | | | | | | | | | | | | | | | | | | |
| **pkjkxkg fodkl** | | | | | | | | | | | | | | | | | | |
| Pasture Development Ha. | Ha | 120 | 69656 | 83.587 | | | | | 43 | 29.952 | 53 | 36.918 | 24 | 16.717 | | | **120** | **83.587** |
| NADI IN P.D BLOCK | No | 3 | 407000 | 12.210 | | | | | 1 | 4.070 | 1.5 | 6.105 | 1 | 2.035 | | | **3** | **12.210** |
| TANKA IN P.D BLOCK | | 6 | 144000 | 8.640 | | | | | 2 | 2.880 | 2.0 | 2.880 | 2 | 2.880 | | | **6** | **8.640** |
| Open Contour Trench Ha | Ha | 198 | 9070 | 17.959 | | | | | 66 | 5.986 | 98 | 8.889 | 34 | 3.084 | | | **198** | **17.959** |
| Pasture Development (privete Farmer) | Ha | 164 | 8422 | 13.812 | | | | | 48 | 4.043 | 79 | 6.653 | 37 | 3.116 | | | **164** | **13.812** |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Drainage line treatment** | | | | | | | | | | | | | | | | | | |
| M.M.S.(Anicut) | No | 3 | 482000 | 14.460 | | | | | 1.5 | 7.230 | 1.5 | 7.230 | 0 | 0.000 | | | **3** | **14.460** |
| M.M.S.(Anicut 5m) | | 11 | 380000 | 41.800 | | | | | 4.0 | 15.200 | 4.5 | 17.100 | 2.5 | 9.500 | | | **11** | **41.800** |
| L.S.C.D | No | 81 | 5842 | 4.732 | | | | | 28 | 1.636 | 35.5 | 2.074 | 17.5 | 1.022 | | | **81** | **4.732** |
| Gali plug | Ha | 29 | 11000 | 3.190 | | | | | 4 | 0.440 | 14 | 1.540 | 11 | 1.210 | | | **29** | **3.190** |
| Gabion Structure | No | 26 | 6721 | 1.747 | | | | | 9 | 0.605 | 11 | 0.739 | 6 | 0.403 | | | **26** | **1.747** |
| **Total (B)** | | | | **366.326** | | | | | | **130.890** | | **163.556** | | **71.880** | | | | **366.326** |
| **( C )** | **Production System (10%)** | | | | | | | | | | | | | | | | | |
| **Production measures for arable land** | | | | | | | | | | | | | | | | | | |
| **Qynkj ikS/kkjksi.k dk;Z** | | | | | | | | | | | | | | | | | | |
| A.I | No | 5596 | 150 | 8.394 | | | | | 2410 | 3.615 | 1486 | 2.229 | 868 | 1.302 | 832 | 1.248 | **5596** | **8.394** |
| A.H. CAMP | No | 14 | 24000 | 3.360 | | | | | 3 | 0.720 | 3.5 | 0.840 | 4 | 0.960 | 3.5 | 0.840 | **14** | **3.360** |
| [kjhQ | No | 410 | | 8.425 | | | | | 85 | 1.753 | 128 | 2.628 | 125 | 2.572 | 72 | 1.473 | **410** | **8.426** |
| jch | No | 184 | | 4.743 | | | | | 34 | 0.879 | 57 | 1.454 | 58 | 1.522 | 35 | 0.889 | **184** | **4.744** |
| Qynkj ikS/kkjksi.k | Ha | 92 | 24000 | 22.104 | | | | | 9 | 2.255 | 38 | 9.022 | 41 | 9.924 | 4 | 0.902 | **92** | **22.104** |
| usMsi dEiksLV | No | 328 | 2000 | 6.560 | | | | | 54 | 1.080 | 136 | 2.720 | 109 | 2.180 | 29 | 0.580 | **328** | **6.560** |
| **Inovative Works** | | | | 0.000 | | | | | | | | | | | | | | **0.000** |
| Vegitable Kit | No | 1479 | 800 | 11.832 | | | | | 358 | 2.864 | 507 | 4.056 | 526 | 4.208 | 89 | 0.712 | **1480** | **11.840** |
| **Livelihood System 9%** | | | | | | | | | | | | | | | | | | |
| Lo;a lgk;rk lewg (R/F.) | No | 169 | 25000 | 42.125 | | | | | 24 | 6.000 | 47 | 11.750 | 51 | 12.750 | 47.000 | 11.625 | **169** | **42.125** |
| R.F To Indiual Enterprencurs | No | 19 | 25000 | 4.750 | | | | | 3 | 0.750 | 9 | 2.250 | 4 | 1.000 | 3.000 | 0.750 | **19** | **4.750** |
| Grant in aid to Federation | No | 6 | 200000 | 12.000 | | | | | 0 | 0.000 | 3 | 6.000 | 3 | 6.000 | 0.000 | 0.000 | **6** | **12.000** |
| **Total (C)** | | | | **124.29** | | | | | | **19.916** | | **42.949** | | **42.418** | | **19.019** | | **124.30** |
| **(D) Consolidation** | | | | 19.6245 | | | | | | | | | | 19.625 | | | | **19.625** |
| **Grand Total** | | | | **654.16** | | | | **39.250** | | **180.243** | | **240.848** | | **156.819** | | | | **654.17** |

## Through Convergance Fund

| (A) | Preparatory phase activities capacity building trainings & EPA | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Activity** | **Unit** | **Quantity** | **Unit Cost** | **Total cost** | **1st year** | | **2nd year** | | **3rd year** | | **4th year** | | **5th year** | | **6th year** | | **Total** | |
| | | | | | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** | **Phy** | **Fin** |
| **(B)** | **Natural resource management(56%)** | | | | | | | | | | | | | | | | | |
| **Conservation measures for arable land(private land)** | | | | | | | | | | | | | | | | | | |
| Khadin | No | 7 | 506000 | 35.420 | | | | | 2 | 10.626 | 3 | 14.168 | 2 | 10.626 | | | **7** | **35.420** |
| Farm pond | No | 9 | 174000 | 15.660 | | | | | 3 | 4.698 | 3 | 6.264 | 3 | 4.698 | | | **9** | **15.660** |
| **pkjkxkg fodkl** | | | | | | | | | | | | | | | | | | |
| NADI IN P.D BLOCK | No | 1 | 506000 | 5.060 | | | | | 0 | 1.518 | 1.0 | 2.024 | 0 | 1.518 | | | **1** | **5.060** |
| TANKA IN P.D BLOCK | | 1 | 185000 | 1.850 | | | | | 0 | 0.555 | 1.0 | 0.740 | 0 | 0.555 | | | **1** | **1.850** |
| Open Contour Trench | Ha | 200 | 11700 | 23.400 | | | | | 60 | 7.020 | 80 | 9.360 | 60 | 7.020 | | | **200** | **23.400** |
| Pasture Development (privete Farmer) | Ha | 24 | 10780 | 2.587 | | | | | 7 | 0.776 | 10 | 1.035 | 7 | 0.776 | | | **24** | **2.587** |
| **Drainage line treatment** | | | | | | | | | | | | | | | | | | |
| M.M.S.(Anicut) | No | 2 | 548000 | 10.960 | | | | | 1 | 3.288 | 1 | 4.384 | 1 | 3.288 | | | **2** | **10.960** |
| M.M.S.(Anicut 5m) | | 3 | 425000 | 12.750 | | | | | 1 | 3.825 | 1 | 5.100 | 1 | 3.825 | | | **3** | **12.750** |
| L.S.C.D | No | 207 | 6340 | 13.124 | | | | | 62 | 3.937 | 83 | 5.250 | 62 | 3.937 | | | **207** | **13.124** |
| Gali plug | Ha | 9 | 14000 | 1.260 | | | | | 3 | 0.378 | 4 | 0.504 | 3 | 0.378 | | | **9** | **1.260** |
| **Total (B)** | | | | **122.071** | | | | | | **36.621** | | **48.828** | | **36.621** | | | | **122.071** |
| **( C )** | **Production System (10%)** | | | | | | | | | | | | | | | | | |
| **Production measures for arable land** | | | | | | | | | | | | | | | | | | |
| **Qynkj ikS/kkjksi.k dk;Z** | | | | | | | | | | | | | | | | | | |
| A.I. | No | 400 | 150 | 0.600 | | | | | 100 | 0.150 | 100 | 0.150 | 100 | 0.150 | 100 | 0.150 | **400** | **0.600** |
| Qynkj ikS/kkjksi.k | Ha | 59 | 50330 | 29.695 | | | | | 15 | 7.550 | 15 | 7.550 | 15 | 7.550 | 14 | 7.046 | **59** | **29.695** |
| **Livelihood System 9%** | | | | | | | | | | | | | | | | | | |
| Grant in aid to Federation | No | 12 | 200000 | 24.000 | | | | | 3 | 6.000 | 3 | 6.000 | 3 | 6.000 | 3.000 | 6.000 | **12** | **24.000** |
| **Total (C)** | | | | **54.29** | | | | | | **13.700** | | **13.700** | | **13.700** | | **13.196** | | **54.29** |
| **Grand Total** | | | | **176.37** | | | | | | **50.32** | | **62.53** | | **50.32** | | **13.20** | | **176.37** |

Signatures
PIA P.S. Raipur

Signatures
Project Manager, WCDC
Distt. - PALI

## CHAPTER – VI EXPECTED OUT COMES

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| **S. No.** | **Item** | **Unit of measurement** | **Pre-project Status** | **Expected Post-project Status** | **Remarks** |
| 1 | Status of water table (Depth to Ground water level) | Meters | 15.00 | 13.50 | |
| 2 | Ground water structures repaired/ rejuvenated | No. | - | - | |
| 3 | Quality of drinking water | Description | N.A | N.A | |
| 4 | Availability of drinking water | Description | 667585lit/ day | 767840Lit/Day | |
| 5 | Change in irrigated Area | Ha | 948 | 1070 | |
| 6 | Change in cropping/ land use pattern | Description | | | |
| 7 | Area under agricultural crop | Ha | 2397 | 2640 | |
| | I Area under single crop | Ha | 1785 | 1910 | |
| | Ii Area under double crop | Ha | 900 | 1070 | |
| | Iii Area under multiple crop | Ha | 0 | | |
| 8 | Change in cultivated Area | Ha | | | |
| 9 yield of major crops of area | Yield of Bajra | q/ha | 16.23 | 17.00 | |
| | Yield of Wheat | q/ha | 27.40 | 28.37 | |
| | Yield of Gram | q/ha | 8.14 | 8.75 | |
| | Yield of Mustard | q/ha | 10.15 | 11.00 | |
| 10 production of major crops of area | Production of Bajra | ton | 907.80 | 1050.00 | |
| | Production of Wheat | ton | 784.00 | 901.00 | |
| | Production of Gram | ton | 98.32 | 120.00 | |
| | Production of Mustard | ton | 312.50 | 467.50 | |
| 11 | Area under vegetation | Ha | 10 | 50 | |
| 12 | Area under horticulture | Ha | 11 | 271 | |
| 13 | Area under fuel | Ha | 5 | 10 | |
| 14 | Area under Fodder | Ha | 2397 | 3750 | |
| 15 | Fodder production | Q | 109660 | 130850 | |
| 16 | Milk production | Litres/day | 18890 | 25000 | |
| 17 | SHGs Active | No. | 25 | 194 | |
| 18 | No. of enterprising individuals | No. | 16 | 35 | |
| 19 | Income | Rs.in la | 0.124 | 0.20 | |
| 20 | Migration | No. | 2810 | 2250 | |
| 21 | SHG Federations formed | No. | | 15 | |

wondershare™

# PDF Editor

## Critical Assumption

- No severe droughts/ unexpected floods/ natural disasters
- Adequate funds are allocated for the same and released on time.
- There is no significant pest/ disease attack, and if so, then it will have been contained before irreversible damage is done.
- Adverse market conditions do not persist long.
- Sound macro-economic and growth conditions continue and the benefits are widely distributed particularly in the rural areas.
- Facilitating agencies and resource providers have the required competent staff so that timely and appropriate technical advice and services are provided to farmers whenever required.
- The Capacity Building Plan is implemented, monitored and modified to address evolving needs and feedback from participants.

## Means of Verification of indicators

- Baseline surveys like household income ,expenditure, health and nutrition etc at the beginning, mid-term and end of the project period
- Annual participatory assessment by communities during project period.
- Regular project monitoring reports prepared by project monitoring teams/ agencies.
- Membership and other Records, Minutes of Meetings maintained by the SHGs, WCs/ Individual beneficiaries/project-related village and local bodies/PRIs.
- External review missions
- Data maintained by Government department (Revenue, Agriculture, Groundwater, Irrigation, Animal Husbandry

# CHAPTER - VIII Enclosures -

a. Location –District, block, village, Watershed Location Map
b. Map of **RAIPUR (PALI IWMP – XXI)** Project (Watershed Boundary demarcation in cadastral & Topo Sheet)
c. PRA Map (along with photos & paper drawing)
d. Treatment map (Indicate proposed works)
e. Cadastral Map on watershed boundary
f. Information on Soils, Soil fertility, Land capability, Soil chemical problems like salinity, alkalinity
g. Land Use Land Cover map
h. Information on existing water harvesting structures & well inventory along with GPS co-ordinates.
i. High resolution, latest Remote Sensing Satellite data

## Documents of Agreements:

Proceedings of gram Sabah for EPA approval
Proceedings of gram Sabah Resolution for committee constitution
Proceedings of gram Sabah for DPR approval
Proceeding of Standing Committee of P.S. for DPR approval.
Proceeding of Standing Committee of Z.P. for DPR approval.

Assistant Engineer, PIA
WD & SC P.S. RAIPUR

Project Manager, WCDC
WD & SC. Distt.- PALI