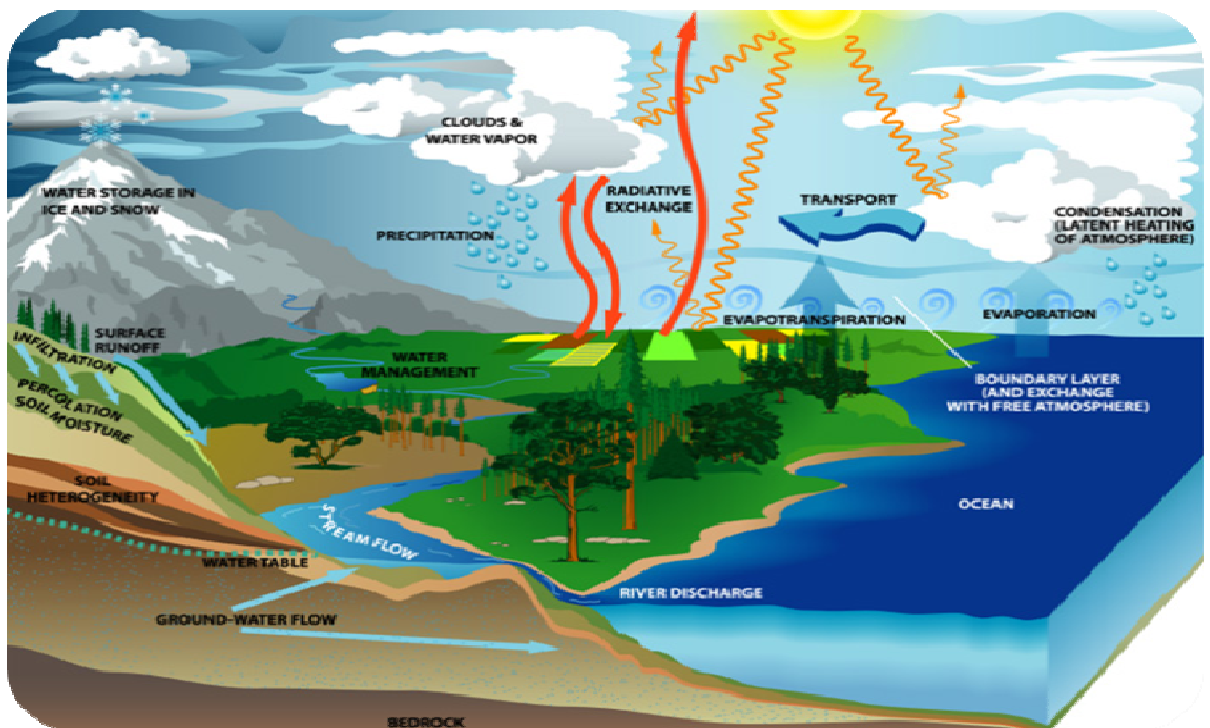


GOVERNMENT OF RAJASTHAN
RURAL DEVELOPMENT & PANCHAYATI RAJ
DEPARTMENT
Watershed Development & Soil Conservation
Department-Jaipur, Rajasthan
Integrated Watershed Management Programme



D.P.R(Detail Project Report)

Name of Project:KHETARLI-II, Area:5150 Hact. ,Total cost: 772.5 LACS
Macro/Micro

No.:17/2,5,6,7,8,9,10,11,12,13,14,15,16,18,18/12,13,16,17,18,19,

Name of P.S:BALI(PALI), Period of project:2010-2016,

AgroClimatic Zone:II B,Lat-E-73°16'40",Longt-N-24°51'54"

:Submitted By:

Project Manager,WCDC-ZP-PALI

PIA-ASSISTANT ENGINEER,W.D&S.C P.S-BALI(PALI)

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WHY WATERSHED MANAGEMENT

Historically arid and semi-arid rain fed regions have received attention, that is by and large non-commensurable to their extent by the development planners and researchers. It is only during the recent years, the past impasse of neglect has paved way for serious commitment to the problems of these areas. Arid and semi-arid regions have concentration of eroded and degraded natural resources. Loss of vegetative cover followed by soil degradation through various forms of erosion have resulted into lands which are thirsty in terms of water as well as hungry in terms of soil nutrients. All these regions have predominantly livestock-centered farming systems; less biomass for animals not only reduces animal productivity. The inevitable uncontrolled grazing pressure on already eroded lands further accelerates the problem and deteriorates the ecological balance. Growing population pressure, higher demands for food and fodder coupled with impact of rapidly changing socio-economic conditions have added fuel to the fire. The piecemeal approaches such as contour bundling or terracing on individual holdings or a group of farms only marginally benefit as they are done ignoring to what happens to other areas which are influencing the hydrological characteristics. Such sporadic actions generally fail to attract farmers as they do not yield benefits proportional to the efforts and investment made. Thus, for maximizing the advantages, all developmental activities should be undertaken in a comprehensive way on watershed basis. The main principles of watershed management are:

- i) Utilizing the land according to its capability
- ii) Putting adequate vegetal cover on the soil during the rainy season
- iii) Conserving as much rain water as possible that the place where it falls
- iv) Draining out excess water with a safe velocity and diverting it to storage ponds and store it for future use
- v) Avoiding gully formation and putting checks at suitable intervals to control soil erosion and recharge ground water
- vi) Maximizing productivity per unit area, per unit time and per unit of water etc. *In situ* conservation practices, carried out in the inter-banded areas like contour farming and dead furrow formation etc. are integral part of software components. Government may not take responsibility of fully financing the software components.

Of late, there have been some significant innovations in the watershed management technology, and model watershed programme has earned very good name subsequent chapters have been drafted for the description of some of the advances in details. In addition, based on the experiences in the model watersheds, other promising minor interventions and options for the management of rain fed and dry land areas are also discussed in detail with the major focus on maximizing dividends from rain fed agriculture.

Five J's (ज) of Watershed Management



SOIL AND WATER CONSERVATION

IMPORTANCE OF SOIL AND WATER CONSERVATION

Soil and water are the basic resources essential for survival of human kind on earth. Ironically, very few people realize the importance of conserving and judiciously utilizing the soil, the greatest gift of nature. According to Dr. H.H. Bennelt, “soil without water is desert and water without soil is useless”. In fact, every kind of farm activity is connected with land and prosperity of a nation depends on the quality of its land resources.

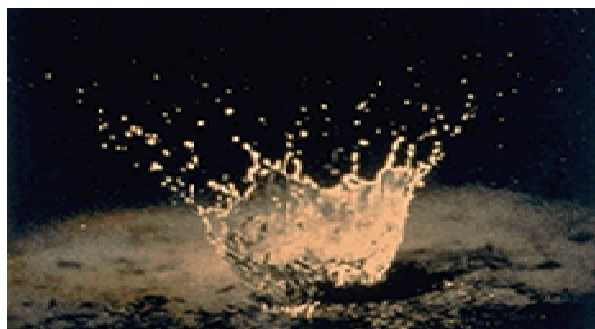
Transformation of rocky earth’s crust into the soil by weathering is a very long process. It is estimated that it takes anything from 400 to 1000 years for formation of just 2.5 cm of top soil. Left to nature, the soil is protected by in-born vegetation. Under undisturbed conditions, geological erosion of ‘abrading’ and ‘aggrading’ is well balanced; thus, a state of equilibrium is reached between climate, soil, rainfall, land slope and vegetal cover.

It is only one man’s interference, the protective shield of land is disturbed and it is torn into pieces by the erosion process – starting from splash erosion to formation of gullies and ravines. Unprecedented expansion in man’s needs is at the root of felling the trees and removal of grasses. As a result, erosion problem has assumed threatening dimensions.

According to the National Commission on Agriculture (1975) an estimated 150 million ha out of the total geographical area of 328 million ha

of the country are subjected to serious water and wind erosion; 69 million ha are at the critical stage of deterioration due to erosion; and 32 million ha are prone to wind erosion. The area affected by gullies and ravines accounts for about 4 million ha while the area affected by shifting cultivation is about 3 million ha. There is 70 million ha area under rain fed farming in the country.

Because of fragile nature of the rain fed eco-system, soil and water conservation programmed is of paramount importance. Realizing this, government of India has given top priority for treating catchment areas of different river valley projects with intensive soil and water conservation measures. Of late, experiences with different model watersheds have also suggested to initiate serious action on treating lands; in that conservation of soil and water is maximized, and production of food, fodder and fiber is not only increased but is stabilized as well.



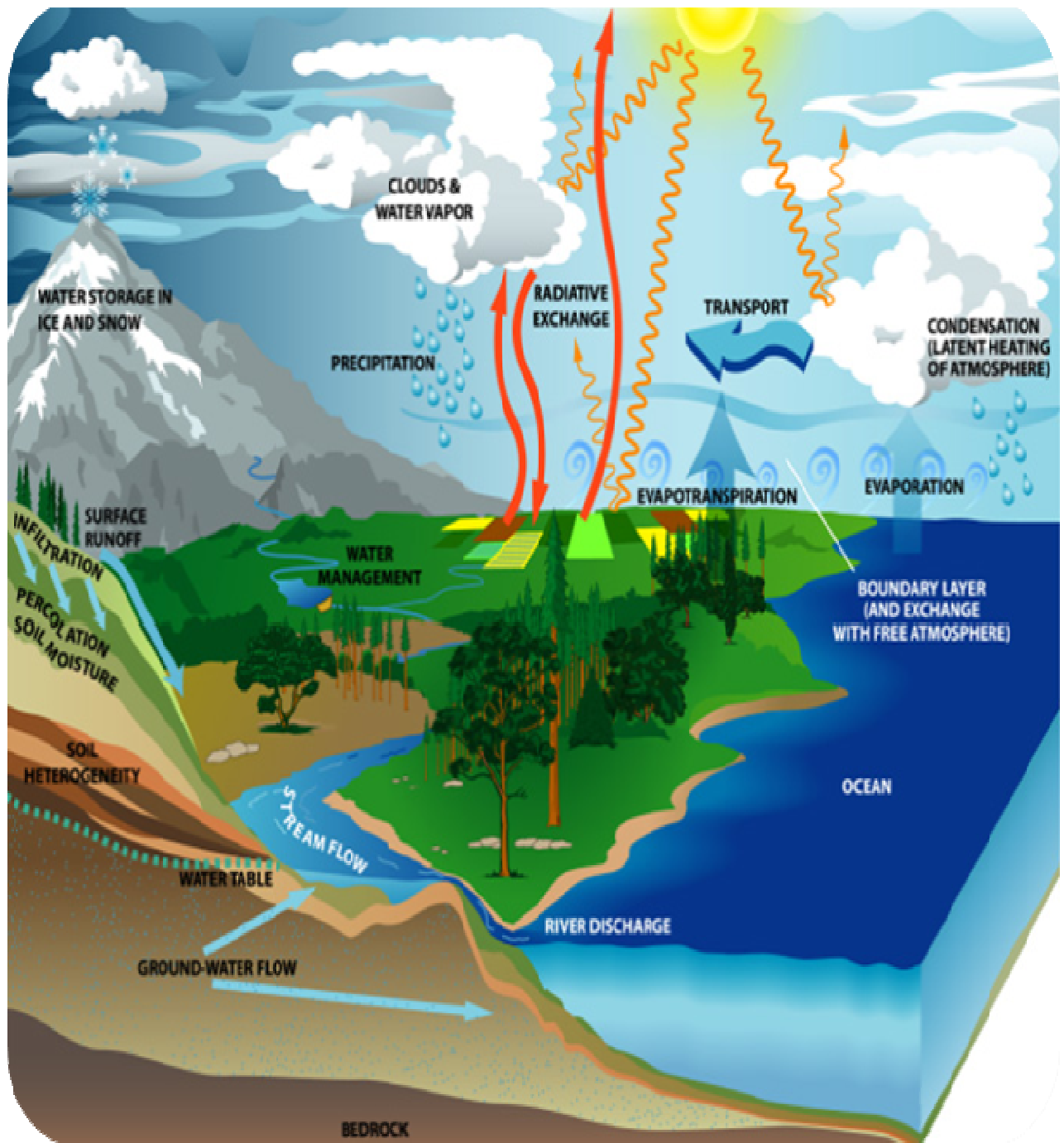
A DROP OF RAIN THAT CAUSES THE PURPOSE TO SERVE

WATERSHED APPROACH

Planning and design of soil and water conservation structures such as bunds and terrace, waterways, grade stabilization and gully control

structures, water harvesting structure etc. are the major mechanical interventions in the development of a watershed. Anticipated peak runoff governs the designed placement of these structures. Peak runoff and its aggregate-volume, in turn, depend upon the runoff causing rainfall events and donor area of a watershed. Since a watershed represents a distinct hydrological unit, it is essential to use it as the basis for planning and implementation of the various soil and water conservation programmes. Obviously, planning for runoff disposal systems for individual fields may prove inadequate in safe handling of the self directing runoff. Additionally it is likely to result in repetition of efforts involving extra expenditure. Based on these considerations, the watershed has been rightly recognized as a convenient unit in planning for overall development of an area, and thus, the concept of watershed management – a holistic approach aimed at optimizing the use of land, water and vegetation in an area, so as to provide an answer – to alleviate drought, moderate floods, prevent soil erosion, improve water availability and increase fuel, fodder and agricultural production on a sustained basis – has emerged. In this programme, the development is not confined just to agricultural lands alone but covers the entire watershed area starting from the highest point (ridge line) to the outlet of the *nallah* or natural stream. This involves implementation of ameliorative measures on barren hill slopes, marginal lands, privately owned agricultural lands, badly cut *nallahs* and river courses.

Soil and water conservation practices very rightly receive top priority for planning watershed management as they form the foundation of the sustainable rain fed agriculture. Water resource development stimulates ally further developments in t he watershed. Every action is directed to store effectively the rainfall in the soil profile, between the bunds and check dams, self directing runoff is conducted to the water storage reservoirs so that maximum amount of rainfall is effectively utilized and conserved in the watershed. Subsequently, crop improvement measures such as contour farming, timely implementation of necessary agricultural inputs and operations, adoption of improved varieties of suitable crops are introduced. Those are the essential components of the integrated package of watershed management technology. Introduction of alternate land use system involving forestry, pasture and agro-forestry, are necessary to plan capability biased resource. Use Tree-based cropping systems are known to stabilize productivity and enhance profitability of dry land regions. An integrated package on soil and water conservation measures, standard agronomy and diversified land use will mitigate severity of drought effects in the catchment and arrest floods in the commands areas besides reducing soil erosion and increasing ground water recharge. Watershed management, thus, not only improves the productivity of lands which at present are producing dismally low yields; in addition it is also an investment in the nation's future. Above all, watershed development offers a unique possibility to reserves land degradation and to promote more favorable ecological balance leading to healthy environment.



Environment Cycle in watershed area

SOIL AND WATER CONSERVATION TREATMENTS

As is evident from a review of the traditional practices and also supported by the research experiences, different mechanical structures are dependable means in checking soil erosion and increasing rain water infiltration opportunity time. Such steps show their effectiveness in preventing the land degradation as soon as they are formed.

Bundling

Bunds - small earthen barriers are provided in agricultural lands with slopes ranging from 1 to 6 percent. They control the effective length of slope and thereby reduce the gain in velocity of runoff flow to avoid rill and gully formations.

Objectives

Important objectives of bunding are

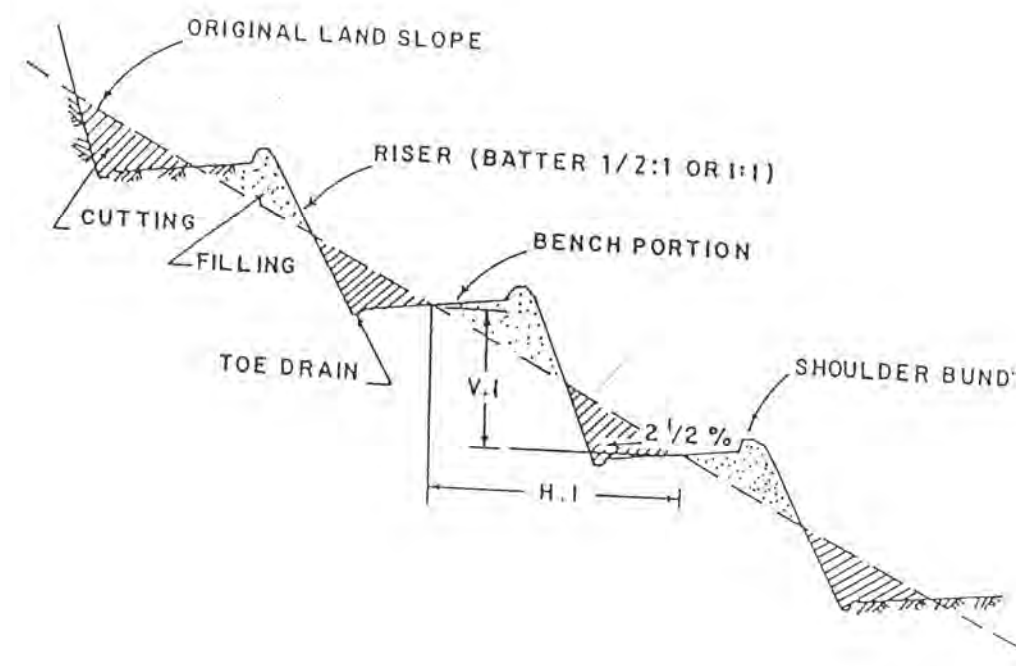
- i) To increase the time of concentration of rain water where it falls and thereby allowing more opportune time for rain water to be absorbed in the soil profile
- ii) Converting a long slope into several short ones so as to minimize velocity and thereby reducing the erosive power of runoff water
- iii) To provide field to field access for man and animals for undertaking agronomic operations

- iv) To divert runoff water either for water harvesting purpose or for saving lower lands from excessive sand deposition or getting it severely eroded

Broadly, bunds have been classified into two categories (i) Graded bunds and (ii) Contour bunds.

Bench Terracing

Bench terrace are usually constructed for cultivating sloppy areas by converting the land into series of platforms one above the other. These measures are popular in hill areas.



Stone Bund - Puerto Rico Terrace

Objectives

- i) To control the velocity of overland flow and to check excessive soil erosion on hill slopes
- ii) Optimum rain water utilization by increasing infiltration time for it
- iii) To ensure equitable soil moisture distribution and for providing required drainage

Vegetative Barriers

Vegetative barriers are closely spaced grass hedges or plantations – usually a few rows of grasses or shrubs – grown along contours or with little grade for erosion control in agricultural lands. Of late, opinions are gaining ground those vegetative barriers (eg. *Vetiver* hedge rows or *leucaena*, lemongrass, *Cenchrus ciliaris*) alone at suitable vertical interval may be sufficient for runoff and erosion control in relatively flat and slightly undulating topography. But it is, safer to have vegetative barriers only as inter-terrace treatments.

WATER HARVESTING STRUCTURES

Supplemental irrigation at times becomes essential for survival of horticultural and agricultural crops in drought-prone areas with undependable and erratic rainfall. In order to accomplish this, excess rain water has to be conserved/stored in soil profiles and in different storage structures.

Earn Ponds

Farm ponds are bodies of water; made either by construction an embankment across a water course or by excavating a pit or the combination of both.

Objectives

- i) To provide water storage for life saving irrigation in a limited area
- ii) To provide drinking water for livestock and human beings in arid areas
- iii) To serve as water storage for providing critical irrigations to limited number of fruit plants for establishment
- iv) To moderate the hydrology of small watersheds

Minor Irrigation Tanks/Low Earthen Dams

Low earthen dams, designed on the basis of engineering principles, are constructed across the streams for creating water reservoirs for providing one or two irrigations to the crops at critical periods.

Objectives

- i) To provide irrigation source for the crops grown under its command
- ii) For mitigation of drought by providing much needed water

Stop Dams

Stop dams are permanent engineering structures created for raising the water level in the *nala* for providing life-saving irrigation to the surrounding fields.

Objectives

- i) To provide storage of surface runoff during the runoff availability period for subsequent irrigation
- ii) To hold a part of the flood water during peak periods so that there is no damage at the downstream of the gully due to excessive erosion
- iii) To provide adequate infiltration opportunity for rain water for recharging ground water table.

WATER SURPLUSsing AND GRADE STABILISATION STRUCTURES

In many watershed situations, runoff water attains erosive velocity while flowing down the steep slopes. It is, therefore, essential to check the velocity of flow by dissipating energy by forming hydraulic jumps – at the down-stream of the structure. In addition to this, hydraulic jumps regulate the runoff flow by creating temporary hold up of water.

Waste Weirs in Bunds

Waste Weirs in bunds are outlets or surplussing arrangements provided to dispose of safely the excess water from agricultural fields.

Objectives

- i) To provide a stable outlet for safe runoff disposal
- ii) To guard against excessive submergence of crops on the upstream side of bunds
- iii) To prevent breaching of bunds by heavy runoff

A list of common type of outlet arrangements made at suitable places on the contour bunds is given below:

- Clear overfall waste weir
- Pipe outlet
- Boulder or rubble waste weir

The following type of waste weirs is located at the bund end

- Channel weir
- Cut outlet
- Grass outlet

The selection of one or the other kind of outlet arrangement is made considering the availability of construction materials and the site conditions like rainfall, topography and nature of soil. For example, grass outlets can be adopted where the rainfall and soils are conducive for establishment of good vegetation. Easy availability of stones or slabs will decide whether to adopt a clear over fall type or slab type. If pipes are available, pipe outlets can be provided but due care against clogging of pipes is necessary.

Drop Spillways

Drop spillways are engineering structures constructed across the channels for facilitating runoff water to flow through a weir over an apron, in which energy of the water is dissipated.

Objectives

To modify the bed gradients in *nala* so that the runoff flow velocities are within non-erosive limits after runoff water leaves the structure at downstream

- i) To store a part of surface runoff behind the structure so that it can be used for life saving irrigation
- ii) To augment the water resources in nearby wells
- iii) To control gully erosion

Grass Outlets and Emergency Spillways

Emergency spillways are provided in farm ponds and reservoirs to safely handle the peak flows and these are generally located above the level of mechanical spillways.

Objective

The objective of providing emergency spillways is to discharge occasional peak flows safely without endangering the main embankment.

Gully Plugs

Gully plugs are earthen embankments usually constructed for blocking the active and erosion prone gullies for their stabilization.

Objective

- i) To encourage vegetation for stabilization of gullies
- ii) To reduce silt load going to the downstream
- iii) To increase ground water recharge

Crop production programmed includes:

i) Efficient cropping systems

- Timely sowing of crops a must
- Introduction of high yielding cultivars matching the rainfall pattern
- Inclusion of legume components to build up soil fertility and save on fertilizer use
- Stable, productive and remunerative intercropping systems
- Double crop systems, wherever feasible
- Inclusion of oilseed crops
- Inclusion of fodder component

ii) Optimal fertilizer use

- Conjunctive use of organics and inorganic, including lopping from top-feed tree species
- Use of crop residues and stubbles management
- Starter dose of fertilizers to impart seedling vigor

- Timely top dressing
- Matching fertilizer dose with soil moisture availability
- Precision placement of fertilizer

iii) Timely and effective weed management

- Timely weeding is a pre-requisite to water use efficiencies
- Timely weeding means :
 - ❖ Within 20 days with short duration crops (Green Gram, Black Gram, Cowpeas etc.)
 - ❖ Within 30 to 35 days with sorghum and pearl millet
 - ❖ Two weeding with pigeon pea and castor (each after 35 and 50 days of sowing)
- Timely and need based plant protection
- Timely harvesting at physiological maturity

CROPS AND VARIETIES MATCHING THE RAINFALL PATTERNS

Since water is the major limiting factor in dry land areas, duration of crops, their varieties and cropping systems should be tailored to match with the length of the rain water availability period. Over the last 25 years through the efforts of dry land research centers network, a number of crops and their varieties have been identified to suit different soil types across contrasting rainfall zones. Information on major soil types, mean annual rainfall or temperature, length of growing season and corresponding pre-dominant rain fed crops or cropping system.

OTHER IMPROVED PRACTICES FOR CONSERVATION OF RESOURCES

No doubt, imposition of appropriate mechanical measures retard runoff flow minimizes erosion and recharge water table. These do not necessarily ensure uniform infiltration and moisture distribution in inter-banded areas. Special agronomic practices are, therefore essential for creating more or less uniform - infiltration opportunity in the cultivated lands.

Contour Farming

In contour farming tillage operations are done along the contour lines as far as possible. It creates numerous ridge and furrows for harvesting adequate amount of runoff water. It has been experimentally shown at Bangalore and Hyderabad (Alf sols) that contours farming reduces runoff and prevents soil erosion when compared with up and down cultivation. Apart from conserving soil and water, contour farming builds up soil fertility and increases crop yields. Contour cultivation is quite effective in reducing soil erosion even in high rainfall areas.

Other Software's for Minimizing Erosion

Improved crop management options are based on modifying farming techniques and making rational use of land. The aim of the technologies for checking soil erosion is to protect soil aggregates against the beating action of the rain drops and to create hurdles for runoff causing soil erosion.

Thus, in many situations improved crop management alone may be sufficient to prevent soil degradation; especially in gently sloping areas.

By and large, for reducing soil erosion, the crop cover may be raised in contour strips. On several occasions, effective covers are established by cropping legumes. Rotations which encourage uniform cover in time and space are more effective in erosion control. Mixed or intercropping covers maximum surface area and over a longer period of time, it thus, offers better opportunities to control soil erosion.

In the course of crop production, the effect of tillage upon erosion is a function of its effect on such factors as aggregation, surface sealing, infiltration and resistance to wind movement. Information generated thus far shows that red soils are benefited by tillage; black soils are insensitive to it, while desert sandy soils (Arid soils) are harmed by excess tillage because it increases their vulnerability to wind erosion. Deep tillage once in 3 years particularly of soils with textural profiles has been found to pay rich dividends.

Mulching and crop Residue Management

Mulching is the process of covering the soil between crop rows with a layer of crop residues. Mulch reduces the impact of rain drops on the soil; it also hinders runoff flow and checks wind erosion. Mulching helps in reducing evaporation by its physical presence on the soil. This, more moisture is conserved in the soil profile as a result of mulching. This effect

is particularly distinct during the *Rabi* season. By mulching of *Rabi* crops, up to 30% increase in yield has been noticed. Indirectly, mulching improves soil fertility and builds up useful soil biology. Similarly, crop residues in the form of mulch act in two ways : (i) reducing wind velocity and (ii) trapping the soils which otherwise is susceptible to erosion.

Strip Cropping

Strip cropping is the method of growing alternate strips of different crops in the same field for controlling water erosion. The strips are invariably laid out on the contour. In contrast, in the dry areas, strips are sometimes placed cross-wise to the prevailing wind direction for wind erosion control.

A strip of erosion resisting close growing crop reduces the velocity of runoff and checks the eroded soil from being washed away. Strips should be rotated from year to year by shifting the erosion resisting crop strips in regular sequence. In strip cropping fast and dense canopy producing crops such as legumes, pulses or grasses are known examples of erosion resisting crops.

Agro-horticulture System

Agro-horticulture system is one form of agro-forestry adopted in arable lands having fruit trees as components. Thus, the system provides higher income per unit area (Das *et al.* 1993). Well maintained and established orchards bring better returns than the field crops. This alternative enterprise, however, needs a high initial investment and long

gestation period. The amount of rainfall and its distribution decide largely the type of fruit species that can be successfully grown. From climatic point of view, temperate sub-tropical regions are ideally suited for fruit cultivation. In addition to climate, soil plays a vital role in the performance of most fruit trees. In general, porous, aerated and deep soils should be preferred for growing of fruit plants. Guava (*Psidium guajava*), custard apple (*Annona squamasa*), ber (*Zizyphus mauritiana*), phalsa (*Grewia subinaequalis*) and pomegranate (*Punica granatum*) have shown wide adaptation to harsh environments of drylands. Success with dry land horticulture is ensured if provision for minimum irrigation during critical periods is made.

The spacing of the trees may vary from 5 m to 10 m between and within lines. Wider spacing's are recommended if arable farming is to be accommodated within the tree row spaces. However, when crops are raised between the tree row spaces they need to be judiciously managed. Poor attention in their maintenance not only affects their productivity but influence adversely the tree growth also.

SYSTEMS FOR MARGINAL LANDS

Marginal lands yield very poor productivity. At times, they are devoid of any significant vegetative cover. Alternative systems of utilizing marginal lands have been worked out. Important ones are described in the following paragraphs.

Pasture Raising

Majority of the marginal lands are not able to sustain arable crops particularly during the drought years. Such lands can be developed into dependable pastures by following soil and water conservation measures like contour trenches and contour furrows. Controlled grazing may also help in building the forage resources.

At times, native pastures are inhabited by low productivity and less palatable species. These pastures lack legume component, thus, making the pasture lands nutritionally deficient. Artificial renovation of such pastures is likely to provide forage of good quality as well as of sufficient quantity. In rain fed areas, different legumes from the genera *Doritos*, *Luciana*, *Clitoris*, *Cassia* and *Stylosanthes* have been found to do well with or without grasses like *Centrums ciliaris*. Among these *Stylosanthes* has been found to be excellent in most situations with regard to persistence, nutritive value and palatability. Different grasses from the genera *Dishanthium*, *Censhurs*, *Lasiurus*, *Chloris*, *Urochloa*, *Panicum*, *Pennisetum*, etc., have been observed to do well. *Cenchrus ciliaris* particularly has been found to survive well across divergent rainfall and soil situations.

The Pastures are easily established if they are seeded at the beginning of rainy season. Seeds of *Cenchrus ciliaris* @ 1.0 kg, *Stylosanthes hamata* @ 4.0 kg and *Stylosanthes scabra* @ 1.0 kg/ha may be used as seed mixture. The seed mixture may be broadcasted on a drizzling day. After that, light raking of the soil may improve germination considerably.

Research investigations have revealed that application of 20 to 25 kg N/ha increase substantially the dry matter yield of grass species. Similarly, 30 to 40 kg P₂O₅/ha application produces good response of legume component. For the establishment of pasture as well as for getting increased forage production, the access of livestock to pastures should be controlled so that grazing pressure is managed within the carrying capacity limits.

GENERAL GUIDELINES FOR PREPARATION AND IMPLEMENTATION OF WATERSHED MANAGEMENT PROJECTS

GENERAL

The basic concept of watershed management is to conserve all the basic resources of the watershed and to plan for their optimal utilization. As a matter of fact, each river catchment should have a land and water development plan, but the size of the river basin may be so large that planning and implementation may run into decades; sometimes major parts of the river basin may also remain uncovered, defeating the very objective of watershed approach. Small watersheds should therefore be preferred as natural planning units. The viable size of the watershed should be such that planning and development may be completed within a reasonable period of 3 to 5 years. Hence it is advisable to restrict the size of the watershed to 5000 ha. At times, the size of the watershed may be kept 500 to 1000 ha to facilitate intensive planning. In this connection, priority has to be given to micro-watersheds which may have high erodibility but should have adequate production potential after development.

CRITERIA FOR SITE SELECTION

Selection of a suitable site is very essential as otherwise the different components of watershed programmed may not be properly implemented and also the farmers may subsequently revert back to the traditional

system of management. The following criteria may, therefore be considered while selecting the site for the above purpose.

Physical Features

- The watershed area should be easily accessible and located at least along a fair weather road. It should however, be away from urban or industrial influence; otherwise farmers' attention would be diverted to alternate occupations rather than towards their own agricultural fields.
- The soils of the sites must be similar to those of the research from where the technology is to be adopted. This will be helpful in introducing relevant technology as well as in providing a better technical support by the scientists.
- Major portion of the watershed area should be under cultivation of crops but provision for improved pasture, forestry, etc. should also be there in a part of the catchment area so that working experience on management of different production components could be achieved. By and large, the existing land use system in the selected watershed site should be representative of the given agro-climatic region.
- The watershed site should represent the resources and management problems like erosion, drainage, etc. as are found in the region. If most of the area is already treated for soil conservation works (as in case of some districts of Rajasthan), other problems like dug-outs, gully control etc. should be taken up.

Socio-economic Factors

- Majority of participants should be 'practicing farmers' and dry land agriculture should be their important sources of income. The percentage of irrigated area should be as low as possible (preferably below 15%) so that clash of operations between dry land and irrigated land would not become severe.
- Selection of site should be restricted only in such villages where majority of participants (particularly the village leaders) are credit worthy. This may be helpful for continuation of the programmed even after the project support is withdrawn.
- Willingness of the farmers towards watershed technology is the most crucial requirement. In the beginning, 2-3 alternate sites may be identified on the basis of the above criteria. Afterwards, first-hand discussion with the participating farmers should be made before finalization of the site. Care should be taken to discuss the project programmed on the basis of its technical strength. Subsidies, if any, should be kept in the background at this stage. In substance, the farmers of the watershed area should be willing to cooperate and strengthen the local organizations, particularly for subsequent maintenance of community works.

Infrastructural Facilities

- Preference may be given to such watersheds where facilities for credit, inputs and marketing are readily available at nearby place, so

that continuation of programmed during subsequent years is not held up for want of such requirements.

RESOURCE SURVEY

Before preparing detailed master plan, the following data/information may be obtained:

Topography

It is advisable to obtain toposheets of the watershed area. In addition to this, engineering surveys may be undertaken for preparation of topographical maps showing contour lines at desired contour interval and all important land features of the watershed. In this project report of IWMP Khetarli-II-contours given on thematic maps has been developed by WAPCOS-NEW DELHI by using CARTOSET-I,datas purchased from ISRO-Hydrabad, INDIA.

Soils

Detailed soil and land capability survey should be carried out for preparation of land capability maps. The detailed data for geology and soils should be collected. The soil data to be collected are the soil structure, texture, depth, occurrence of hard pans, slope, degree of erosion, permeability and soil reaction.

Climate

It is needless to emphasize the importance of climatic data in the watershed management programme. The data from climatologically stations situated near the watershed may be collected. The data may cover rainfall amount, rainfall intensity, temperature, evaporation, wind speed etc.

Hydrology

Hydrological features of the watershed may be recorded. This may include high water marks in the streams, water storage levels in the ponds and ground water table in the wells.

Vegetation

Data about the type and distribution of natural vegetation should be recorded.

Socio-economic data

Socio-economic data including per capita income and social status may be recorded. In addition to this, livestock data and information about infrastructure facilities should be compiled.

IMPLEMENTATION AND NEED FOR FARMERS' PARTICIPATION

The watershed treatments being multidisciplinary involving agronomy, silviculture, engineering and vegetative disciplines, different line departments are required to be involved in the execution of works. Therefore, significant interactions among various line departments are must; but at times, it may be advisable for one department to take the lead.

Active participation of farmers is essential in watershed development programmed. An effective involvement can occur only if they participate in decision-making process. In fact, farmers' participation should begin at the planning stage itself so that due priorities could be given to the relevant programmers. Sometimes, lack of interest in subsequent maintenance of community works is an index of poor participation of farmers at implementation stage.

FOLLOW UP PRACTICES

After the sub-plans are implemented, and improved production plan in super-imposed to get maximum benefit. This envisages induction of inputs, like good seeds, fertilized, plant protection chemicals, modern implements, management of grasslands and forests, horticulture, pisciculture, animal husbandry etc., besides, operation and maintenance of water harvesting programme. The aim is to make the community prosperous and to keep the lands under sustained high productivity. Conservation education by laying out relevant demonstrations, bringing out technical bulletins and hand outs is necessary.

MAINTENANCE

Maintenance of works is of utmost importance. This is especially true about engineering treatments. In general, 15 per cent of the finance should be earmarked for maintenance and follow up of engineering works.

INTRODUCTION

Project Background :-

Khetarli-II (IWMP-9) project is located in Bali Taluka, Pali district of Rajasthan state. The project is a cluster of 10 micro-watersheds with a being their respective codes. The total project area of the watershed is about 5150 ha of which 5000 ha has been undertaken to be treated under integrated watershed management programme (IWMP) starting year 2010-2011.



PROJECT AREA IWMP-9-PALI-P.S-BALI(RAJASTHAN)

The nearest town is Bali which is about 32 km from Khetarli-II and is well connected by pucca/kaccha road .the project area lies in the belt of arawali hills. The watershed includes 8 village i.e. Khetarli,Goriya,Korva,Aradwa,Danverli,Koelwab,Chingabhata,Nana,Bhander,Srerava, Sendla, Bhrala, Kakradi, Kolwara, and ST/BPL communities (Garasiya, Bheel, Gameti) are the primary inhabitants of the village. The livelihood of these people is primarily based on rainfed agriculture, animal husbandry, wage labour, goat and sheep rearing.

The project area falls under the DDP area according to dolor classification. It is a very poor and desolate village on the Arawali Hills. Resident of these villages are tribal people called Garasiya, Bheel, Gameti their culture is base on ancient ages. Literacy

Basic Project Information

| Sr. No. | Name of the project | Villages | | Gram Panchayats | Tehsil | District | Area of the project | Area proposed to be treated | Total project cost (Rs. In lakh) | PIA |
|---------|---------------------|---|-------------|-------------------------------|--------|----------|---------------------|-----------------------------|----------------------------------|-------------|
| | | Name | Census code | | | | | | | |
| 1 | Pali IWMP-09 | Goriya,Korva,Danverly, Aradawa,Kakradi,Sambarwara, Koelwab,Chingatabhata,Nana, Bhander,Bharla | | Goriya,Kakradi,Koelwab ,Nana, | Bali | Pali | 5150 Hect. | 5150 Hect. | 772.5 Lakhs | AEN PS Bali |

Need Of Watershed Development Programme :-

Watershed development programme is prioritised on the basis of thirteen parameters namely poverty index, percentage of SC/ST, actual wages, percentage of small and marginal farmers, ground water status, moisture index, area under rainfed agriculture, drinking water situation in the area, percentage of the degraded land, productivity potential of the land, continuity of another watershed that has already developed/treated, cluster approach for plain or for hilly terrain, based on these thirteen parameters a composite ranking was given to Khetarli-II watershed project as given in table no.2.

The total number of families under BPL is 2564, which is less than 90% of the total households of the village. Rainfed agriculture forms the primary occupation of the village due to the fact that ground water table is very low and hence unfit for usage. More than 90 per cent of the farmers are small and marginal by nature and the actual wages earned by the labour is less than minimum wages .

Since the rainfall received is erratic and irregular, the moisture index is low and the area is classified under DDP block. Drinking water is problematic in the village. Majority of land is degraded due to inherent aslope and high velocity of run-off. The soil is very permeable and production of the land can be significantly enriched with the availability of timely irrigation. Khetarli watershed falls in continuity with other watersheds namely Bhimana, Kakradi, Koelwab of Haryali scheme. Cluster

approach was followed taking into consideration ten micro-watersheds covering a total area of 5150 ha. Thus a cumulative score of 120.5.

All the parameters taken together give a cumulative score of 120.5 to the watershed (reference table below).

Weightage of the project

| Project Name | Project type | Weightage | | | | | | | | | | | | |
|--------------|--------------|-----------|----|---|---|---|----|----|-----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| IWMP 6 | Desert | 10 | 10 | 5 | 5 | 3 | 15 | 15 | 7.5 | 15 | 15 | 10 | 10 | NA |

Criteria and weightage for selection of watershed

| S. No. | Criteria | Maximum score | Ranges & scores | | | |
|--------|---|---------------|--|--|--------------------------|------------------|
| 1 | Poverty index (% of poor to population) | 10 | Above 80% (10) | 80 to 50 % (7.5) | 50 to 20 % (5) | Below 20 % (2.5) |
| 2 | % of SC/ST population | 10 | More than 40% (10) | 20 to 40 % () | Less than 20 % (3) | |
| 3 | Actual wages | 5 | Actual wages are significantly lower than minium wages (5) | Actual wages are equal to or higher than minimum wages () | | |
| 4 | % of small and marginal farmers | 10 | More than 80% (10) | 50 to 80 % () | Less than 50 % (3) | |
| .5 | Ground water status | 5 | Over exploited (5) | Critical (3) | Sub critical (2) | Safe (0) |
| 6 | Moisture index / DPAP/DDP block | 15 | -66.7 & below (15) DDP block | -33.3 to - 66.6 (10) DPAP block | 0 to -33.2 (0) non DPAP/ | |

| S. No. | Criteria | Maximum score | Ranges & scores | | | |
|--------|---|---------------|---|--|---|----------------------|
| | | | | | DDP block | |
| 7 | Area under rain-fed agriculture | 15 | More than 90% (15) | 80 to 90 % () | 70 to 80% (5) | Above 70 % (reject) |
| 8 | Drinking water | 10 | No source (10) | Problematic villages (7.5) | Partially covered (5) | Fully covered (0) |
| 9 | Degraded land | 15 | High - above 20% (15) | Medium - 10 to 20 % (10) | Low- less than 10 % of TGA (5) | |
| 10 | Productivity potential of the land | 15 | Lands with low production & where productivity can be significantly enhanced with reasonable efforts (15) | Land with moderate production & where productivity can be enhanced with reasonable efforts (10) | Land with high productin & where productivity can be marginally enhanced with reasonable efforts (5) | |
| 11 | Contiguity to another watershed that has already been developed / treated | 10 | Contiguous to previously treated water shed & contiguity within the microwatersheds in the project (10) | Contiguity with in the microwatersheds in the project but non contiguous to previously treated watershed (5) | Neither contiguous to previously treated watershed nor contiguity within the microwatersheds in the project (0) | |
| 12 | Cluster approach in the plains (more than one contiguous micro- | 15 | Above 6 micro-watersheds in cluster (15) | 4 to 6 microwatersheds in cluster (10) | 2 to 4 microwatersheds in cluster (5) | |

| S. No. | Criteria | Maximum score | Ranges & scores | | | |
|--------------|--|---------------|--|--|---------------------------------------|------------|
| | | | | | | |
| | watersheds in the project | | | | | |
| 13 | Cluster approach in the hills (more than one contiguous micro-watersheds in the project) | 15 | Above 5 micro-watersheds in cluster (15) | 3 to 5 microwatersheds in cluster (10) | 2 to 3 microwatersheds in cluster (5) | |
| Total | | 150 | 150 | 90 | 41 | 2.5 |

Watersheds information

| Name of the project | No. of watersheds to be treated | Watershed code | Watershed regime / type / order |
|---------------------|---------------------------------|---|---------------------------------|
| IWMP 9-Khetarli-II | 1 | Macro-061017,061018,,Micro-06101702,705,706,7,8,9,10,11,12,13,14,15,16,18-12,13,16,17,18,19 | Mini watersheds |

Other Development Project/Schemes Running In The Khetarli-II Village

This village being very back ward, but people live close to nature with less wants and needs has been on top priority of a number of developmental project. These programmes are Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Desert Development

Programme (DDP), Total Sanitation Campaign (TSC), Swarnajayanti Gram Swarojgar Yojana (SGSY), Indira Awas Yojana (IAY), C.M Awas Yojana

1. MGNREGS: construction of two check dams, deepening of three village pond, two earthen bands and afforestation activity has been taken up under NREGA.
2. DESERT DEVELOPMENT PROGRAMME (DDP): DDP-HARYALI Watershed programme is going in near by areas .
3. TOTAL SANITATION CAMPAIGN (TSC): eight individual toilets are constructed under TSC programme. All the remaining house hold will be covered under the scheme.
4. SWARNJAYANTI GRAM SWAROZGAR YOJANA (SGSY): two families are linked with bank and given loan of Rs.25000/- with subsidy of Rs.1000/- each for animal husbandry.
5. INDRA AWAS YOJANA/C.M Awas Yajona: (total 103 house have been constructed In the Khetarli-II project area under various Awas Yojana
6. Developmental programmes running in the project area:

| S. No. | Name of the programme/ scheme | Sponsoring agency | Objectives of the programme / scheme | Year of commencement | Villages covered | Estimated number of beneficiaries |
|--------|----------------------------------|-------------------------|--------------------------------------|----------------------|------------------|-----------------------------------|
| 1 | TFC/SFC,MPLAD,MLALAD, SAWA-VWVAK | Rural development dept. | SANITATION,CLEANNESS | 2005 | 3 | 233 |

| | | | | | | |
|---|---------|-----------------------------|------------|---------|---|--------------|
| 2 | MGNREGS | Rural developm ent dept. | Employment | 2009 | 1 | 91 household |
| 3 | IAY/CMY | Rural developm ent dept. | Housing | 2005 | 2 | 50 |
| 4 | DDP | Central & State share govt. | | 2009-11 | 1 | |

Previous watershed programmes in the project area

| S. No | Project name | Year started | Name of villages | No. Of micro watershed | Watershed codes | Area under treatment | Funding source | Nodal agency |
|-------|--------------|--------------|------------------|------------------------|-----------------|----------------------|----------------|--------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | DDP | 06-07 | Verdi | 20 | | 500 ha | Govt | DRDA |

PROJECT IMPLEMENTING AGENCY

Project Implementing Agency :-



The project implementing agencies (PIA) A.En P.S Bali is selected by an appropriate mechanism by Rajasthan, the state level nodal agency (SLNA) for integrated watershed management programme (IWMP) in Rajasthan . The pias are responsible for implementation of watershed project. These Pias may include relevant line department autonomous organization under state/ central government, government institutes/ research bodies. The PIA for Khetarli-II watershed project Is A.En WD&SC Panchyat Samity-Bali & District watershed development unit (WCDC), Pali.

About District Watershed Development Unit (WCDC), Pali

The Organization And Its Objectives :-

The watershed Cell Cum Data Centre (WCDC), ZILA PARISHAD, Pali is a district level nodal agency has dedicated and experienced staff comprising one project manager , X.En Watershed Development and Soil Conservation, Department, Govt. Of Rajasthan, a technical expert and a multidisciplinary team of accountant UDC, LDC, & Peon. The objectives of the WCDC, Pali are supervising, planning, implementing, documenting and promoting watershed development project and related development activities in the district as per guidelines. The WCDC, Pali also works as a Project Officer (Land Resources) Under Zila Parishad - Pali for some DDP, Haryali project.

Programmes/Projects Of WCDC, Pali :-

At present 7 IWMP project have been sanctioned by government of India for Pali district. The entry point activities of all the seven IWMP project have been identified .Apart from the 7 IWMP project, WCDC Pali is involved in a total of 290 pre-hariyali & hariyali project (DDP & IWDP).

The WCDC, Pali is also monitoring a Central government sponsored scheme on “ artificial recharge of groundwater through dugwells” in the district.

SWOT Analysis Of The WCDC :-

Strength :-

- (1) Local team of WDT is engaged.
- (2) Villagers are participating.
- (3) Scientific planning In watershed project with the help of SRSAC,
- (4) Condigious area with previous Haryali project.

Weakness :-

- (1) Transfer of funds is lengthy process.
- (2) Lack of technical infrastructure.

Opportunities :-

- (1) A number of different other development schemes of the government are running so, there can be horizontal integration and convergence of programmes
- (2) Better financial provision under IWMP
- (3) Usage of new ICT tools like GIS, GPS

Threats :-

- (1) Rainfall being very scarce and unreliable in the project area, the activities planned to be taken up may yield limited impact
- (2) Irregularities in fund flow can derail the smooth functioning
- (3) Lack of contribution and cooperation from local people
- (4) Low literacy rate in the project are

PIA:

| Sr. No. | Names of project | Details of PIA | |
|---------|----------------------------|---------------------------|--|
| 1 | IWMP-9 Khetarli-II project | (1) type of organization | District level nodal agency (society) |
| | | (2) name of organization | WCDC, Pali |
| | | (3) designation & address | Project manager, WCDC, Pali |
| | | (4) telephone | 02932-221682 |
| | | (5) fax | 02932-252806 |
| | | (6) e-mail | Pali.dwdu@gmail.com |

Staff at WCDC & PIA level:

| S. No. | Name | Designation | Sex | Qualification | Experience | Job assigned | Monthly remuneration (Rs.) |
|--------|-----------------------|--|-----|----------------------------------|------------|--------------------|----------------------------|
| 1 | Sh. U.S. Rao (WCDC) | X.En (WD&SC) Z.P.Pali,M.Tech | M | M.Tech | 20 year | Project management | As per GOR norms |
| 2 | Sh.J.P.Joshi | A.En(WD&SC) P.S Bali | M | B.TECH. | 30 year | Monitoring | -do- |
| 3 | Sh.Tanmay Sen | J.En(WD&SC) P.S Bali | | B.E. (Agri), AMICE (Civil) | 14 year | Monitoring | -do- |
| 4 | Kundan Singh Sonigara | Retd A.En W.D &S.C Pant Krishi Bhawan. | M | B.E (Civil) | 39year | Engg. Works | Rs.10000.00 |

| | | | | | | | |
|---|-----------------------|--|---|-----|---------|--|-----------|
| 5 | Bhawani Singh | B.Sc(Agri) | M | WDT | 4 year | Agriculturist | Rs.8000.0 |
| 6 | Dimpal kuwar | B.A | F | WDT | 6 year | Social Worker | -do- |
| 7 | Bhagwat Singh Ranawat | XII Veternary,10 year working experience as veterinary compunder in project area | M | WDT | 10 year | Live Stock Dev.Veternary camps, doassing of small and large rumminants | -do- |

BASIC INFORMATION OF THE PROJECT AREA

Geography And Geo-Hydrology



Land Use Pattern :-The net geographical area of khetrali watershed is about 5150 ha out of which . Cultivable and rest is uncultivable and hilly.

: Land use pattern:

| S. No. | Names of villages | Geographical area of the village (ha) | Forest area (ha) | Land under agricultural use (ha) | Rain-fed area (ha) | Permanent pastures (ha) | Wasteland | |
|--------|-------------------|---------------------------------------|------------------|----------------------------------|--------------------|-------------------------|-----------------|---------------------|
| | | | | | | | Cultivable (ha) | Non-cultivable (ha) |
| 1 | Khetarli-II | 11413ha | 6228.13 | 1738 | 5150 | 54 | 1046 | 2365 |

Soil And Topography :-

Khetarli-II watershed project falls under south-west rajasthan agro climatic zone IIB. The soil is mainly sandy loam and wasteland. The depth of soil moderate to deep about 15 to 50 cm. The predominant texture of soil is loamy sand and silt and clay. The soil fertility is very poor with low nitrogen, phosphorus and potash. The soil falls in afidsol and inceptisols order. The topography of the area is moderate ranging from 0.5-10% slope.

Soil type and topography:

| S. No. | Name of the agro-climatic zone covers project area | Area in ha | Name of the villages | Major soil types | | Topography |
|--------|--|------------|--|------------------------------|---------------|----------------|
| | | | | A) type | B) area in ha | |
| 1 | South- west Rajasthan agro climatic zone IIB | 5150 Ha | Goriya, Korva, Danverly, Aradawa, Kakr adi, Sambarwara, Koelwab, Chingatabhta, Nana, Bhandar, Bharla | Sandy loam , rocky wasteland | 1589 | moderate slope |

: Flood And Drough Condition :

| S.no. | Village | Flood (incidence) | Drough (incidence) |
|-------|-------------|-------------------|--------------------|
| 1 | Khetarli-II | Nil | Once in 2 year |

: Soil erosion

| Cause | Type of erosion | Area affected (ha) | Run off (mm/year) | Average soil loss (tones/ha/year) |
|---------------|-----------------|--------------------|-------------------|-----------------------------------|
| Water erosion | | | | |
| A | Sheet | 1156 | 124 | - |
| B | Rill | 720 | 320 | 20% |
| C | Gully | 80 | 240 | 15% |
| Sub-total | | 1400 | | |
| Wind edrosion | | 1400 | NA | 25% |
| Total | | | | |

: Soil salinity/alkalinity

| Name of the village | | Soil ph | |
|---------------------|--|---------|--|
| Khetarli-II | | 7.6 | |

The rainfall is scanty which has resulted in recurrent phenomenon of drought is every two to three years. The average rainfall of this area is about 430 mm (from past five year data) with a highest intensity of 84 mm within span of a day. This uneven distribution is leading to runoff of soil every year to the streams, rivulets and depressed area of rann of Kutch.

Physiography and relief

| Project name | Elevation (MSL) | Slope range (%) | Major streams |
|--------------|-----------------|-----------------|---------------|
| Khetarli-II | 318Meters | 0-15% | Goriya River |

Land And Agriculture :-

Lack of surface water source and high slope the ground water has limited the sufficient base for irrigation as well as for drinking purpose. The average land holding is from 1 to 4 ha. Lack of irrigation source forces the majority of the farmers to migrate to ensure their livelihood. This affects directly the demographic profile of the village. The major crops cultivated by the farmers are Maize. Some of the farmers take up Rabi Gram and Wheat crop if rainfall is good. The land conservation measures

such as earthen bunds and farm bunds in the area will help them to take up a rabi crop of mustard or cumin in the residual moisture.

Land Ownership Details

| S.No | Village | Total owned land (in ha) | | | |
|------|-------------|--------------------------|-----|-----|----|
| | | Gen. | OBC | SC | ST |
| | Khetarli-II | 389 | 978 | 586 | 0 |

Agriculture

| S.No. | Village | Net sown area (ha) | | |
|-------|-------------|--------------------|-----------|-------------|
| | | One time | Two times | Three times |
| | Khetarli-II | 1400 | NA | NA |

Irrigation

| S. No. | Village | Source 1: canal | | | Source 2: check dam/ pond | | | Source 3: well | | |
|--------|-------------|---------------------|----------|------------|---------------------------|----------|------------|--------------------|----------|------------|
| | | Availability months | Net area | Gross area | Availability months | Net area | Gross area | Availability month | Net area | Gross area |
| | Khetarli-II | 0 | 0 | 0 | 1 | 26 | 54 | 7 month | 12 | 12 |

Livestock :-

The village has 44 cows, 41 buffaloes, 7 bullocks, 434 goats and 372 sheep. Majority of Rebari community depends on goat and sheep rearing for their livelihood. Cows and buffaloes are of local breed. Lack of rain and surface water has reduced the fodder and pasture availability for their animals. This leads to heavy migration to other parts of the state with their herds of goats and sheep. Milk production is so low that there is no dairy cooperative in the village.



WALL PAINTAINGS IN WATERSHED PROJECT AREA-KHETARLI-II



WALL PAINTAINGS IN WATERSHED PROJECT AREA-KHETARLI-II



WALL PAINTAINGS IN WATERSHED PROJECT AREA-KHETARLI-II

Drinking water

| Sr. No. | Village | Ground water table (M) | Source of drinking water | Availability in months | Quality |
|---------|------------|------------------------|--------------------------|------------------------|-----------------|
| 1 | KhetarliII | 28 | Well | 12 | Slightly saline |

Socio-Economic Profile

Demographic Status :-

Khetarli-II watershed project has a total of 658 households with a population of 1489 (as per base-line survey) out of which 745 are male and 744 female. The sex ratio is 862 female to 1000 male. There are 1207 BPL families. The average family size is 5. The literacy rate is very low i.e. 17.7 per cent; male literacy rate is 09.7 per cent (of total male population) and female literacy rate is as low as 3.75 per cent (of total female population).it is noticeable that only five persons have reached up to ninth standard. The major castes in the village are schedule Tribes. Majority of population is involved in agriculture and animal husbandry.

Migration Pattern :

People migrate during summer season to different parts of the state like as daily wagers, agricultural labours and construction workers, lack of fodder availability and grazing land for smaller ruminant force these people to migrate to other places.

Migration details

| Sr. no | Village | Total population | Migration | | | Migration by months | | | Main reason for migration | Income during migration/month |
|--------|------------|------------------|-----------|------|--------|---------------------|------------|--------------------|---------------------------|-------------------------------|
| | | | Total | Male | Female | Up to 3 months | 3-6 months | More than 6 months | | |
| 1 | Khetrali-2 | 1489 | 60 | 34 | 26 | 12 | 33 | 16 | Lack of fodder | Rs 3000 /month |

Infrastructure Facilities :-

Khetrali-II watershed is well connected with Bijapur Gram Panchayat with pucca roads. The village has no electricity connectivity. Khetrali village has a primary school, middle and secondary education. For senior secondary education, this also contributes to lower education level of the people. The village do not have a primary health centre for which villagers have to go to Nana and Bera which is 14 km. Away.

Livelihood Pattern :-

The villagers earn their livelihood from animal husbandry and agriculture and during lean seasons they migrate for daily wage labourers in Udaipur and as agriculture labour in other parts of the state. Another major occupation of the people is charcoal making.

Dependence on common property resource



The vast majority of the denizens of this region depend on common property resources. Most of them continue to live a virtually hand - to-mouth existence. Their pathetic poverty seems, in fact, to have further worsened in recent years, as their traditional pasture lands have been rapidly depleting due to over-grazing and persistent drought - like conditions in the region. This has forced large numbers of families living around the rann to literally ' charcoal the desert' around two decades ago, in a bid to check the advance of the encroaching desert, the government authorities arranged for a thorny desert bush, commonly known in India as the babul (*acacia nilotica*) and in rann as the jangli or ganda baval (*prosopis juliflora*) to be imported from Israel and to be broadcasted in semi-desert parts of northern kutch. This bush grows about ten feet and further spreads laterally like a wild fire. The cutting of ganda baval was banned in this area

three years ago, but now, almost every family in this area supplements its meager income by felling the tree and burning its wood in large pyramid-shaped piles to make charcoal.

QUALITY AND SUSTAINABILITY ISSUES

Quality and Sustainability Issues

Plans For Monitoring And Evaluation

A web - based GIS system is being development for monitoring and evaluating the project in its planning & implementation phases. The system would be available on a public domain and can be accessed by all the stakeholders of the project, the system shows the entire state of Rajasthan and all of those areas selected over the next 18 year. Filtering allows the user to zoom onto one particular project. Details related to soil type. Land - use classification inhabitation etc. Can be obtained village-wise furthermore survey-number wise detail related to ownership irrigation source yield etc. Can also be accessed by the users of the system. This system is being used for pooling up the details obtained from the DPR in other words, the DPR is made available online in the form of a database which will help the stakeholder know areas of importance viz. Already treated areas/ historical works in the area proposed areas for treatment etc., for further treatment and planning the system would also show the satellite imageries of various year from the project inception stage to the project closing stages. This allows the user to evaluate the effectiveness of the treatment and thereby plan corrective measures for the project area.

The system would serve as an aiding tool to the planners and evaluators for judging the efficacy of the project

Yet another component of the web-based GIS system is the mobile based monitoring & evaluation system, which will help the ground staff aloas wdts (watershed development team) to transmit information from the ground level to the central server. Also, any higher- up official in charge of the project can obtain information regarding the project area on their mobile phone by means of an SMS. The system works in the following manner. The WDT equipped with a GPS instrument marks the latitude longitude information of various treatment areas during the DPR. The probable sites are then transferred onto the central server during the works phase, any progress in the treatment areas is reported to the server by means of an SMS by the WDT. Similarly any nodal officer or higher-up official can view the progress in a project by means of summarized reports generated over frequent periods of time.

Plans For Project Management:

The project management of any watershed programme is very important it mainly depends upon the community organization and the village level institutes. In Khetarli-II-II watershed committee an various user group have been formulated for post project operation and maintenance of assets created during project period with various institutes and capacity building organization they will act as a major kingpin during post implementation for scaling up the successful experience during project.

Watershed Development Fund:

The major source of financial assistance after post implementation period is watershed development fund the contribution of it will comes mainly fund the following:

User Charges: Various user group will be formed in village. These user group will collect user charges according to the designated rules formed during the formation of user group. These funds will be transferred to the WDF funds as per these formulated rules. The secretary of watershed committee (WC) shall maintain the records of the following.



SUSTAINABLE GROWTH OF PROJECT AREA

VILLAGE WISE LAND USE DETAILS

Name of watershed - IWMP-9-Pali,P.S.Bali(khetarli-II)

| S.No. | Land use | Area in different villages covered in the watershed (Hact.) | | | | | | | | | | | |
|----------|--|---|----------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|---------------|-----------------|
| | | Goriya | Korva | Danverli | Aradwa | Kakradi | Koelwab | Chingtabhata | Sambarwada | Bhander | Bharla | Nana | Total |
| 1 | Total geographical area | | | | | | | | | | | | |
| | Non areable land | 2384.54 | 1152.15 | 652.45 | 316.34 | 407.74 | 1670.31 | 101.52 | 183.94 | 644.6 | 2031.94 | 128.57 | 9674.10 |
| | Arable land | 350.98 | 129.29 | 75.07 | 29.47 | 56.09 | 520.07 | 93.18 | 84.15 | 224.09 | 99.57 | 76.94 | 1738.90 |
| | Total Geo. Area | 2735.52 | 1281.44 | 727.52 | 345.81 | 463.83 | 2190.38 | 194.70 | 268.09 | 868.69 | 2131.51 | 205.51 | 11413.00 |
| 2 | Non areable land | | | | | | | | | | | | |
| i | Forest land | 1324.88 | 230.09 | 344.02 | 187.78 | 349.11 | 1397.78 | 47.28 | 141.62 | 208.11 | 1941.54 | 55.92 | 6228.13 |
| ii | Panchayat & pasture land | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| iii | Govt.waste land | 1051.89 | 918.84 | 307.31 | 127.99 | 56.91 | 264.96 | 51.92 | 41.21 | 433.49 | 89.51 | 67.07 | 3411.10 |
| iv | Area not available for development (Habitation, roads,mines,rails etc. | 7.77 | 3.22 | 1.12 | 0.57 | 1.72 | 7.57 | 2.32 | 1.11 | 3.00 | 0.89 | 5.58 | 34.87 |
| | Total non arable | 2384.54 | 1152.15 | 652.45 | 316.34 | 407.74 | 1670.31 | 101.52 | 183.94 | 644.60 | 2031.94 | 128.57 | 9674.10 |
| 3 | Arable land | | | | | | | | | | | | |
| i | Irrigated | 176.65 | 36.53 | 7.56 | 11.56 | 31.73 | 89.69 | 48.23 | 42.28 | 9.94 | 9.94 | 19.85 | 483.96 |
| ii | Unirrigated | 174.33 | 92.76 | 67.51 | 17.91 | 24.36 | 430.38 | 44.95 | 41.87 | 214.15 | 89.63 | 57.09 | 1254.94 |
| | Total arable land | 350.98 | 129.29 | 75.07 | 29.47 | 56.09 | 520.07 | 93.18 | 84.15 | 224.09 | 99.57 | 76.94 | 1738.90 |
| 4 | Land available for treatment | | | | | | | | | | | | |
| i | Non areable land | 1051.89 | 918.84 | 307.31 | 127.99 | 56.91 | 264.96 | 51.92 | 41.21 | 433.49 | 89.51 | 67.07 | 3411.10 |
| ii | Arable land | 350.98 | 129.29 | 75.07 | 29.47 | 56.09 | 520.07 | 93.18 | 84.15 | 224.09 | 99.57 | 76.94 | 1738.90 |
| | Total | 1402.87 | 1048.13 | 382.38 | 157.46 | 113.00 | 785.03 | 145.10 | 125.36 | 657.58 | 189.08 | 144.01 | 5150.00 |

THE PRESNET LAND USE

Name of watershed - IWMP-9-
Pali,P.S.Bali(khetarli-II)

| S.No | Present land use | Area in Hact. |
|------|--|----------------|
| 1 | Total geographical area | |
| i | Non areable land | 3411.10 |
| ii | Arable land | 1738.90 |
| | Non areable land | 5150.00 |
| i | Forest land | 6228.13 |
| ii | Panchayat & pasture land | 0.00 |
| iii | Govt.waste land | 3411.10 |
| iv | Area not available for development (Habitation, roads,mines,rails etc. | 34.87 |
| | Total Non Arable | 9674.00 |
| | Arable land | |
| i | Irrigated | 483.00 |
| ii | Unirrigated | 1254.00 |
| | Total arable land | 1738.00 |
| 4 | Land available for treatment | |
| i | Non areable land | 3411.00 |
| ii | Arable land | 1738.00 |
| | Total | 5150.00 |

VILLAGE WISE DETAILS OF LANDS IN THE WATERSHED

| Name of watershed - IWMP-9-Pali,P.S.Bali(khetarli-II) | | | | | | | | Panchayat Samiti - Bhinmal | | | Bali |
|---|----------------------|----------------|--------------------------|----------------|-------------|------------------------------|----------------|-------------------------------|----------------|--------|----------------|
| S.No. | Name of village | Govt. land | | | | | | Cultivators land | | | G.Total |
| | | Forest land | Pasture & Panchayat Land | Waste land | Deptt. Land | Area under road & habitation | Total | Irrigated | Unirrigated | Total | |
| 1 | Goriya | 1324.88 | 0 | 1051.89 | 0 | 7.77 | 2384.54 | 176.65 | 174.33 | 350.98 | 2735.52 |
| 2 | Korva | 230.09 | 0 | 918.84 | 0 | 3.22 | 1152.15 | 36.53 | 92.76 | 129.29 | 1281.44 |
| 3 | (A)Total | 1554.97 | 0 | 1970.73 | 0 | 10.99 | 3536.69 | 213.18 | 267.09 | 480.27 | 4016.96 |
| 4 | Danverli | 344.02 | 0 | 307.31 | 0 | 1.12 | 652.45 | 7.56 | 67.51 | 75.07 | 727.52 |
| 5 | Aradwa | 187.78 | 0 | 127.99 | 0 | 0.57 | 316.34 | 11.56 | 17.91 | 29.47 | 345.81 |
| 6 | Kakradi | 349.11 | 0 | 56.91 | 0 | 1.72 | 407.74 | 31.73 | 24.36 | 56.09 | 463.83 |
| | Sambarwada | 141.62 | 0 | 41.21 | 0 | 1.11 | 183.94 | 42.28 | 41.87 | 84.15 | 268.09 |
| | (B)Total | 1022.53 | 0 | 533.42 | 0 | 4.52 | 1560.47 | 93.13 | 151.65 | 244.78 | 1805.25 |
| | Koelwab | 1397.78 | 0 | 264.96 | 0 | 7.57 | 1670.31 | 89.69 | 430.38 | 520.07 | 2190.38 |
| | Chingtabhata | 47.28 | 0 | 51.92 | 0 | 2.32 | 101.52 | 48.23 | 44.95 | 93.18 | 194.7 |
| | (C)-Total | 1445.06 | 0 | 316.88 | 0 | 9.89 | 1771.83 | 137.92 | 475.33 | 613.25 | 2385.08 |
| | Nana | 55.92 | 0 | 67.07 | 0 | 5.58 | 128.57 | 19.85 | 57.09 | 76.94 | 205.51 |
| | Bhander | 208.11 | 0 | 433.49 | 0 | 3 | 644.6 | 9.94 | 214.15 | 224.09 | 868.69 |
| | Bharla | 1941.54 | 0 | 89.51 | 0 | 0.89 | 2031.94 | 9.94 | 89.63 | 99.57 | 2131.51 |
| | (D)-Total | 2205.57 | 0 | 590.07 | 0 | 9.47 | 2805.11 | 39.73 | 360.87 | 400.6 | 3205.71 |
| | Grand Total(A+B+C+D) | 6228.13 | 0.00 | 3411.10 | 0.00 | 34.87 | 9674.10 | 483.96 | 1254.94 | 1738.9 | 11413 |

| S.No. | Category | Category of farmers No. | | |
|-------|------------------|-------------------------|--|--|
| 1 | Small farmers | 2514 | | |
| 2 | Marginal farmers | 312 | | |
| 3 | Others farmers | 1024 | | |
| | Total | 3850 | | |

$$3411.1 \text{ plus } 1738.9 = 5150.00 \text{ Ha.}$$

★ **NREGA Status :-**

IWMP-9-PALI(10-11)

P.S-BALI

| Sr. no. | Name of village | G.Panchyat | Total no.of job cards | Activity taken in Anual plan 2011-12 | |
|---------|-----------------|------------|-----------------------|--------------------------------------|--------------|
| | | | | Category 1-9 | |
| | | | | Total | Project area |
| 1 | Khetarli | Kuran | 1253 | 53 | 11 |
| 2 | Kolwara | | | 10 | 1 |
| 3 | Verdi | Kakradi | 1261 | 102 | 21 |
| 4 | Aradwa | | | 93 | 3 |
| 5 | Sambarwada | | | 140 | 15 |
| 6 | Kakradi | | | 174 | 42 |
| 7 | Serawa | Kumtiya | 774 | 46 | 9 |
| 8 | Sendla | | | 22 | 5 |
| 9 | Bharla | | | 37 | 2 |

★ **Development Indicators :-**

- 1 Stop surface runoff flowing out side from watershed area.
Develope pasture land for villagers to full fill there need of fuel, toddler,cattle grazing resultsb
- 2 to stop migration.
- 3 Increase productivity per Ha.
- 4 Stablise livelihood supporting activities to support land less labours.
- 5 Divert cropping patterns form traditional system to horticulture and modern agronomical practices.
- 6 Improve water use efficiency by drip & sprinkler irrigation
- 7 Provide potable water for drinking purpose.
- 8 Rise in water table in confined aquifers and artesian wells which results increasing in crop sowing area.

Part II - Technical feature

- ★ **Revenue Maps** :- Revenue maps is based on scale 1 : 4000. Revenue records like khasra maps, khasra list has been collected and printed. All records are available at PIA level. Ridge line & contour line has been marked by WAPCOS NEW DELHI.
 - ★ **Topo Maps / Maps with drainage line** :- Revenue maps traced on plastic sheets and scanned by WAPCOS has marked all topography, D.L.T. It has been attached to DPR anuxure.
 - ★ **Hydro-Geological maps** :- As per anuxure attached sattalite imagery maps given by WAPCOS.
 - ★
- Ground water status and prospect maps** :- Watershed area falls under of Pali region. This zone comes under Dark Zone as per GWD, GOR. The watershed area Khetarli comes under up stream Catchment Area of Jawai Dam. Which is main source of Drinking Water of the

Chapter II

IWMP-9-PALI(10-11)

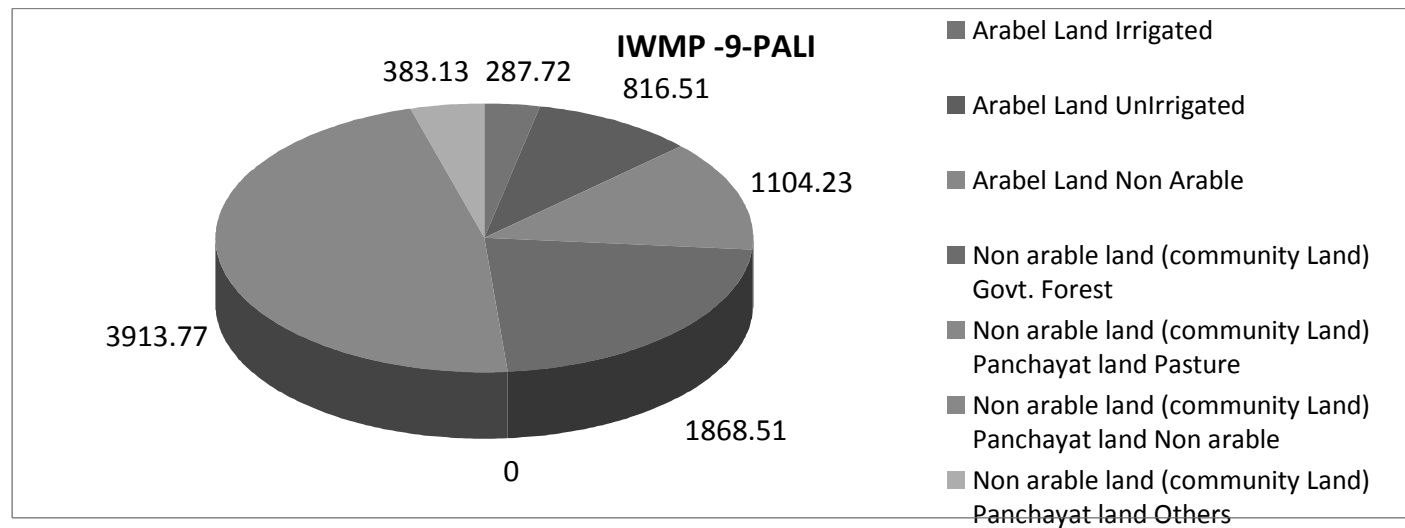
P.S-BALI

Basic Features : - Land use perterns is as follows

Land use & land classification

| | Arabel Land | | | Non arable land (community Land) | | | |
|------------------|-------------|-------------|------------|----------------------------------|----------------|------------|--------|
| | Irrigated | UnIrrigated | Non Arable | Govt. | Panchayat land | | |
| | | | | Forest | Pasture | Non arable | Others |
| IWMP -6 Khetarli | 287.72 | 816.51 | 1104.23 | 1868.51 | 0 | 3913.77 | 383.13 |

Diagram no :- IWMP-9-Pali(10-11) PS-Bali



IWMP-9-PALI(10-11)**P.S-BALI****Net sown Area**

There is no source of irrigation other than artesian wells, and rain water.

Net sown Area

| Sr.no | Village | Total cultivated | Net sown area (Ha) | | |
|-------|--------------|------------------|--------------------|--------------|-------------|
| | | | One time | Two times | Three times |
| 1 | Goriya | 350.98 | 147 | 25.3 | Nil |
| 2 | Korva | 129.29 | 56 | 45.2 | Nil |
| 3 | Danverli | 75.07 | 111 | 29.3 | Nil |
| 4 | Aradwa | 29.47 | 18 | 8.21 | Nil |
| 5 | Kakradi | 56.09 | 45.1 | 21.33 | Nil |
| 6 | Sambarwada | 84.15 | 63.2 | 36.7 | Nil |
| 7 | Koelwab | 520.07 | 245 | 25.04 | Nil |
| 8 | Chingtabhata | 93.18 | 24.1 | 28.02 | Nil |
| 9 | Nana | 76.94 | 36.2 | 12.3 | Nil |
| 10 | Bhander | 224.09 | 114 | 59.2 | Nil |
| 11 | Bharla | 99.57 | 33.2 | 62.3 | Nil |
| | Total | 1738.90 | 893 | 352.9 | |

Total Area of watershed 5018 ha. Out of this project area only 1104.23 ha is cultivable land according to revenue records. The watershed area is having non arable land which is part of Arawali Hills. Mainly residents are Schedule Tribes by caste 'Garas

Crop productivity

IWMP-9-PALI(10-11) P.S-BALI

Crop details (Kharif)

| s. no | Village | Kharif (Mansoon) | | | | | | | | | | | | | | | | | |
|-------|--------------|------------------|------------------|------------------------|------------|------------------|------------------------|--------------|------------------|------------------------|------------|------------------|------------------------|-----------|------------------|------------------------|------------|------------------|------------------------|
| | | Til | | | Maize | | | Mung | | | Gwar | | | Cowpea | | | Pigeon pea | | |
| | | Area Ha | Productions Qntl | Productivity (Qntl/Ha) | Area Ha | Productions Qntl | Productivity (Qntl/Ha) | Area Ha | Productions Qntl | Productivity (Qntl/Ha) | Area Ha | Productions Qntl | Productivity (Qntl/Ha) | Area Ha | Productions Qntl | Productivity (Qntl/Ha) | Area Ha | Productions Qntl | Productivity (Qntl/Ha) |
| 1 | Goriya | 10 | 40.00 | 4 | 120 | 240.00 | 20 | 15.53 | 93.18 | 6 | 30 | 150.00 | 5 | 2 | 11 | 3 | 1 | 8 | 8 |
| 2 | Korva | 15 | 60.00 | 4 | 40 | 800.00 | 20 | 2.42 | 14.52 | 6 | 5 | 25.00 | 5 | 4 | 24 | 2 | 2 | 15 | 8 |
| 3 | Danverli | 10 | 40.00 | 4 | 30 | 600.00 | 20 | 3.59 | 21.54 | 6 | 10 | 50.00 | 5 | 4 | 25 | 3 | 1 | 8 | 8 |
| 4 | Aradwa | 4 | 16.00 | 4 | 10 | 200.00 | 20 | 7.59 | 45.54 | 6 | 5 | 25.00 | 5 | 5 | 30 | 4 | 3 | 8 | 8 |
| 5 | Kakradi | 5 | 20.00 | 4 | 30 | 600.00 | 20 | 2 | 12.00 | 6 | 5 | 25.00 | 5 | 7 | 35 | 4 | 1 | 8 | 8 |
| 6 | Sambarwada | 20 | 80.00 | 4 | 70 | 1400.00 | 20 | 19.66 | 117.96 | 6 | 10 | 50.00 | 5 | 8 | 47 | 3 | 1 | 8 | 8 |
| 7 | Koelwab | 9.01 | 36.04 | 4 | 40 | 800.00 | 20 | 12 | 72.00 | 6 | 8 | 40.00 | 5 | 8 | 47 | 4 | 1 | 87 | 8 |
| 8 | Chingtabhata | 8 | 32.00 | 4 | 30 | 600.00 | 20 | 6.56 | 39.36 | 6 | 10 | 50.00 | 5 | 6 | 31 | 4 | 2 | 14 | 8 |
| 9 | Nana | 6 | 24.00 | 4 | 30 | 600.00 | 20 | 6.55 | 39.30 | 6 | 15 | 150.00 | 5 | 5 | 25 | 4 | 3 | 21 | 8 |
| 10 | Bhander | 9 | 36.00 | 4 | 25 | 500.00 | 20 | 8.33 | 49.98 | 6 | 23 | 230.00 | 5 | 6 | 30 | 4 | 2 | 14 | 8 |
| 11 | Bharla | 12 | 120.60 | 4 | 14 | 280.00 | 20 | 2.6 | 15.60 | 6 | 9 | 90.00 | 5 | 8 | 40 | 4 | 4 | 7 | 8 |
| | Total | 108 | 176.00 | 44 | 439 | 6620.00 | 220 | 86.83 | 520.98 | 66 | 130 | 885.00 | 55 | 22 | 125.00 | 39 | 8 | 47.00 | 88 |

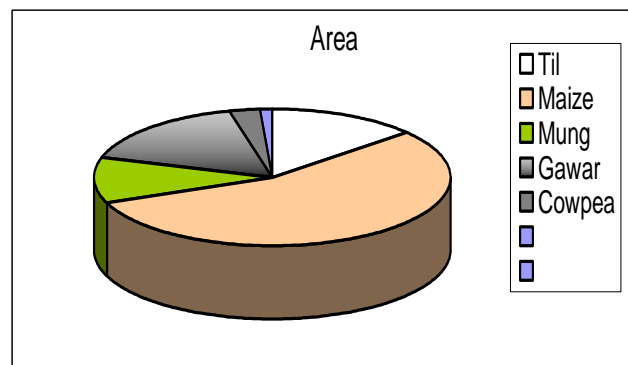
Crop details (Rabi) of watershed area

| s. no | Village | Rabi (Winter) | | | | | | | | | | | |
|-------|--------------|---------------|------------------|--------------------------|-----------|-------------------|--------------------------|------------|------------------|--------------------------|-------------|-------------------|--------------------------|
| | | Wheat | | | Gram | | | Musterd | | | Barley | | |
| | | Area Ha | Productions Qntl | Produ ctivity (Qntl/ Ha) | Area Ha | Production s Qntl | Produc tivity (Qntl/ Ha) | Area Ha | Productions Qntl | Produc tivity (Qntl/ Ha) | Area Ha | Productio ns Qntl | Produ ctivity (Qntl/ Ha) |
| 1 | Goriya | 60 | 1680.00 | 28 | 4 | 59.00 | 12 | 35 | 280.00 | 8 | 12 | 192.00 | 16 |
| 2 | Korva | 10 | 280.00 | 28 | 5 | 74.00 | 12 | 5 | 40.00 | 8 | 2 | 32.00 | 16 |
| 3 | Danverli | 20 | 560.00 | 28 | 6 | 85.00 | 12 | 6 | 48.00 | 8 | 4 | 64.00 | 16 |
| 4 | Aradwa | 6 | 168.00 | 28 | 7 | 99.00 | 12 | 18 | 144.00 | 8 | 1.2 | 19.20 | 16 |
| 5 | Kakradi | 5 | 140.00 | 28 | 1 | 14.00 | 12 | 6 | 48.00 | 8 | 1 | 16.00 | 16 |
| 6 | Sambarwada | 15 | 420.00 | 28 | 3 | 41.00 | 12 | 14 | 112.00 | 8 | 3 | 48.00 | 16 |
| 7 | Koelwab | 18 | 504.00 | 28 | 6 | 81.00 | 12 | 12 | 96.00 | 8 | 1.5 | 24.00 | 16 |
| 8 | Chingtabhata | 16 | 448.00 | 28 | 8 | 111.00 | 12 | 17 | 136.00 | 8 | 3.2 | 51.20 | 16 |
| 9 | Nana | 14 | 392.00 | 28 | 4 | 56.00 | 12 | 18 | 144.00 | 8 | 5.3 | 84.80 | 16 |
| 10 | Bhander | 12 | 336.00 | 28 | 5 | 70.00 | 12 | 14 | 112.00 | 8 | 4.2 | 67.20 | 16 |
| 11 | Bharla | 16 | 448.00 | 28 | 6 | 84.00 | 12 | 14 | 112.00 | 8 | 1.9 | 30.40 | 16 |
| | Total | 192 | 5376.00 | 28 | 55 | 331.00 | 6018 | 159 | 560.00 | 3522 | 20.2 | 323.20 | 16000 |

Crop wise Kharif Crops

| Crop | Til | Maize | Mung | Gawar | Cowpea | Peigonpea |
|------|--------|-------|-------|-------|--------|-----------|
| Area | 108.01 | 439 | 86.83 | 130 | 22 | 8 |

Digrame no :- 2.3.1 Kharif crops (Net sown Area)



Result:-

Low productivity

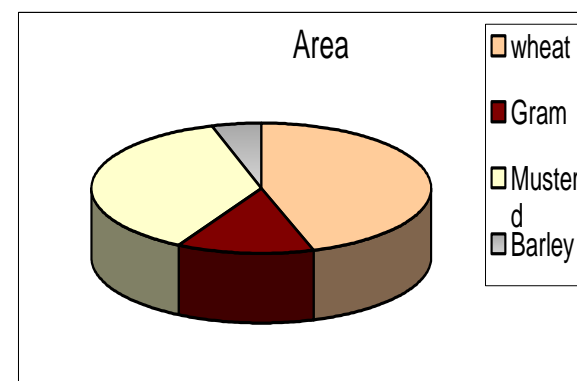
Reason

Lack of Drinking as well as irrigation water low fertility of land,erosion of land,slope in land area & using traditional cropping peterns.

Crop wise Rabi crops

| Crop | wheat | Gram | Musterd | Barley |
|------|-------|------|---------|--------|
| Area | 192 | 55 | 159 | 20.2 |

Digrame no :- 2.3.2 Rabi crops (Net sown Area)



Comparative Study of Agriculture Productivity for various crops

IWMP-9-PALI(10-11) P.S-BALI

Digrame no :- 2.4.1 Agriculture status.

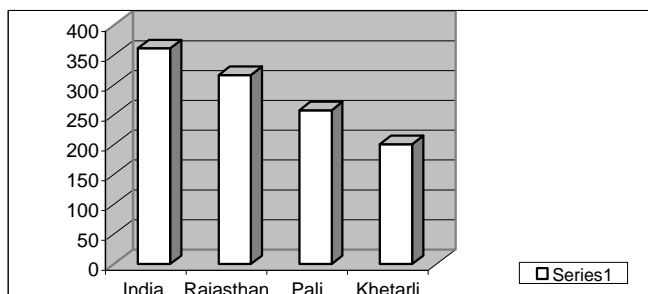
Til Productivity (Kg/Ha)

Botenical Name Sesanium aritinam

Family Teliaceae

Origen India

| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 362 | 317 | 258 | 201 |



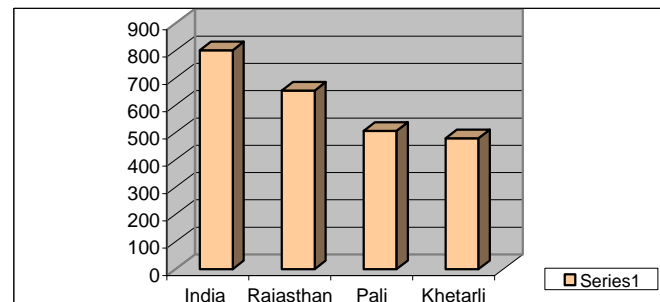
Maize Productivity (Kg/Ha)

Botenical Name ZeaMays

Family Gramineae

Origen India / Africa

| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 802 | 655 | 507 | 480 |



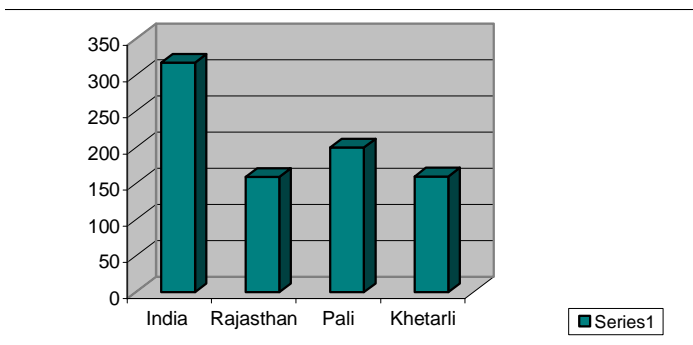
Mung Productivity (Kg/Ha)

Botenical Name Vigna radiata

Family Leguminaceae

Origen India

| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 317 | 159 | 200 | 160 |



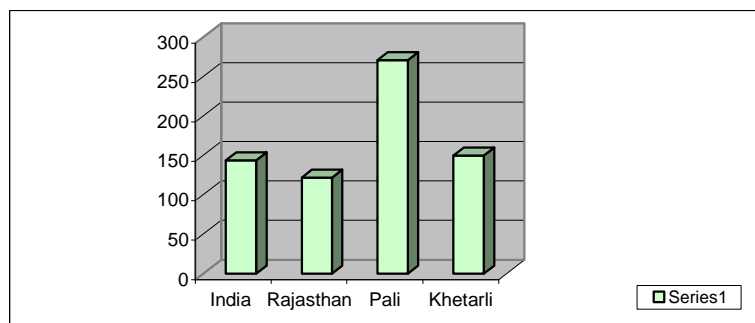
Cowpea Productivity (Kg/Ha)

Botenical Name Vigna unguiculata

Family Leguminaceae

Origen India

| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 144 | 122 | 271 | 150 |



Ref. :- Nirma el.al in Ag. Statistics & base line survey.And Agri Deptt.

IWMP-9-PALI(10-11) P.S-BALI

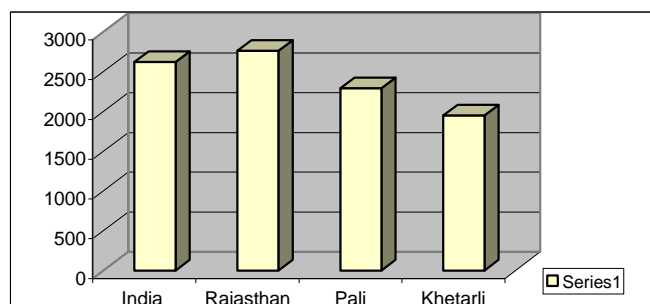
Comparative Study of Agriculture Productivity for various crops

Digrame no :- 2.4.2 Agriculture status.

Wheat Productivity (Kg/Ha)

Botenical Name Triticum species
Family Gramineae
Origen India

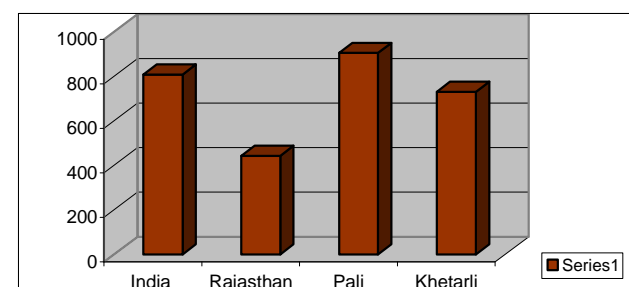
| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 2619 | 2762 | 2292 | 1950 |



Gram Productivity (Kg/Ha)

Botenical Name Cice arietinum
Family Leguminaceae
Origen South West Asia

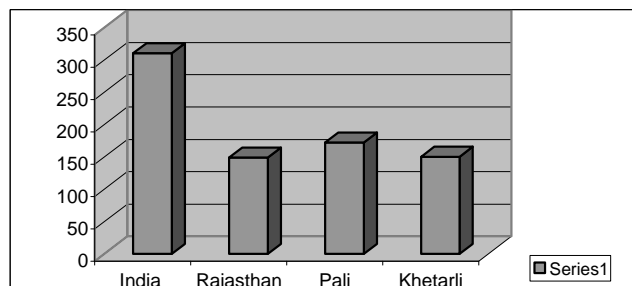
| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 808 | 443 | 905 | 730 |



Barley Productivity (Kg/Ha)

Botenical Name Hordeum Vulgare
Family Gramineae
Origen Africa

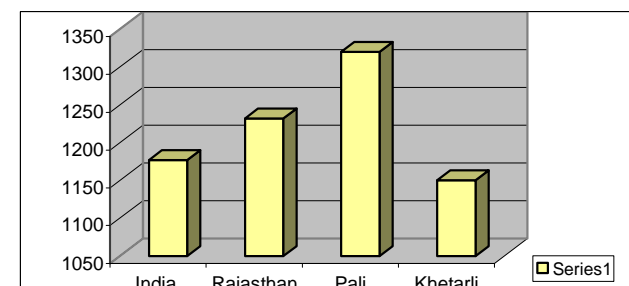
| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 310 | 149 | 172 | 150 |



Musterd Productivity (Kg/Ha)

Botenical Name Brassica compestris
Family Cruferae
Origen India

| India | Rajasthan | Pali | Khetarli |
|-------|-----------|------|----------|
| 1177 | 1232 | 1320 | 1150 |



Ref. :- Nirma el.al in Ag. Statistics & base line survey.And Agri Deptt.

IWMP-9-PALI(10-11) P.S-BALI

Socio-Economic Parameters

Household and Economic Activity

| S.No. | Description of Households | Total No.of household | Population in No. | | | | SC | | ST | | Total | |
|--------|---------------------------|-----------------------|-------------------|--------------|------------|--------------|-------------|------------|-------------|--------------|-------------|--------------|
| | | | M | F | Ch | Total | No. of h.h. | Members | No. of h.h. | Members | No. of h.h. | Members |
| 1 | 2 | 3 | 4a | 4b | 4c | 4d | 5a | 5b | 6a | 6b | 7a | 7b |
| (i) | Cultivators | 648 | 1668 | 1428 | 300 | 3396 | 78 | 344 | 570 | 2850 | 648 | 3378 |
| (ii) | Dairying | 519 | 1400 | 1390 | 51 | 2841 | 59 | 234 | 460 | 2300 | 519 | 2678 |
| (iii) | Poultry | 517 | 1327 | 1280 | 62 | 2669 | 42 | 239 | 475 | 2234 | 517 | 4532 |
| (iv) | Piggery | 528 | 1320 | 1300 | 94 | 2714 | 37 | 98 | 491 | 2455 | 528 | 5643 |
| (v) | Landless Agri. Labourers | 1055 | 1972 | 1726 | 9 | 3707 | 45 | 124 | 886 | 4432 | 1044 | 5678 |
| (vi) | Artisans | 441 | 1100 | 1017 | 171 | 2288 | 44 | 189 | 397 | 1982 | 443 | 2345 |
| (vii) | BPL | 2699 | 6449 | 6001 | 43 | 12493 | 78 | 342 | 2345 | 12344 | 345 | 4321 |
| (viii) | Others(specify) | 460 | 1168 | 1123 | 21 | 2312 | 33 | 121 | 345 | 2134 | 234 | 2345 |
| | Total | 4843 | 11189 | 10172 | 523 | 21884 | 245 | 999 | 3628 | 18758 | 2480 | 15722 |

M= Male, F=Female, Ch=Children (below 14 years) h.h.=house hold

Indicate only households with main occupation in the case of more than one occupation in a household .

Indicate against the occupation with income more than 50%

IWMP-9-PALI(10-11)**P.S-BALI****Existing SHG & Their work assistance**

| Sr. no. | Name of SHG | Members | Activity involved | Monthly income | Fund available | Assistance available | Source of assistance | Training received |
|---------|------------------|---------|-------------------|----------------|----------------|-----------------------|-----------------------|-------------------|
| 1 | Bheru Ji shg | 11 | Small saving | 200 | 7700 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 2 | Mata ji shg | 10 | Small saving | 200 | 8400 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 3 | Bhawani Maa | 10 | Small saving | 200 | 7400 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 4 | Rupan Mata | 11 | Small saving | 200 | 5400 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 5 | Ramvev ji | 11 | Small saving | 200 | 4000 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 6 | Mahedev | 10 | Small saving | 200 | 7150 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 7 | Uparli Kali | 11 | Small saving | 200 | 7700 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 8 | Jai Ashapura Maa | 11 | Small saving | 200 | 4000 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 9 | Ashapura | 11 | Small saving | 200 | 7200 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 10 | Bheru Ji shg | 12 | Small saving | 200 | 4500 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |
| 11 | Mahadev ji | 16 | Small saving | 200 | 6000 | M-Power(IFAD-Project) | M-Power(IFAD-Project) | 2 |

Migration Details of IWMP-9-PALI(10-11),Khetarli,P.S Bali

| S.no | Name of village | No. of persons migrating | No. of days per year of migration | Major reason(s) for migrating | Distance of destination of migration | Occupation during migration | Income from such occupation (Rs. in lakh) per annum |
|------|-----------------|--------------------------|-----------------------------------|-------------------------------|--------------------------------------|------------------------------|---|
| 1 | Goriya | 14 | 2 months | unavalbility of fodder | 300 | cattel rearing | 0.25 |
| 2 | Korva | 385 | 4 months | unemploment | 40-110 | skilled work at wolkem mines | 0.55 lacs |
| 3 | Danverli | 205 | 4 months | low fooder production | out of state | cattel rearing | 0.68 |
| 4 | Aradwa | 35 | 2 months | unemploment | 110 | skilled work at wolkem mines | 0.40 lacs |
| 5 | Kakradi | 30 | 3 months | low fooder production | out of state | cattel rearing | 0.35 |
| 6 | Sambarwada | 30 | 4 months | low fooder production | out of state | cattel rearing | 0.65 |
| 7 | Koelwab | 30 | 5 months | low fooder production | out of state | cattel rearing | 0.23 |
| 8 | Chingtabhata | 30 | 6 months | low fooder production | out of state | cattel rearing | 0.58 |
| 9 | Nana | 45 | 4month | low fooder production | within state | cattel rearing | 0.68 |
| 10 | Bhander | 30 | 7 months | low fooder production | out of state | cattel rearing | 0.65 |
| 11 | Bharla | 15 | 5month | low fooder production | within state | cattel rearing | 0.26 |

IWMP-9-PALI(10-11) P.S-BALI

Only one project of horticulture had been started last year by agriculture ext.deparment under Rastriya bagwani mission programme. That is at growing stage not getting economy. In adjoining W/S of DDP scheme provide horticulture plant to farmers wich are full filling there daily needs only. Such that economy or revenu earn is zero. Farmers are full filling there demand of fuel wood by juli flora and Jetropha-Nana

Horticulture & fuel avilability

| Existing area under horticulture (ha) | | | Existing area under fuel-wood (ha) | | | Existing area under | |
|---------------------------------------|-------------------|---------------------------------|------------------------------------|-------------------|------------------------------|---------------------------------|-------------------|
| Source/ Name of report | Year of reference | Area already under horticulture | Source/ Name of report | Year of reference | Area already under fuel-wood | Source/ Name of report | Year of reference |
| NRHM | 2009 | 1.5 ha. | not available | | | no pasture maneged by villagers | |

DPR proposed two pastuer of 10 ha. Each to meet requirement of villagers for fuel & fodder.

Live stock status :-

In the Khetarli IWMP project, there are 93 cows, 322 buffalos, 393 goats, 1322 sheeps, 68 bullock & 10 other. Mainly cows & buffaloes are of local breeds like Nagouri & Murra respectively. Avalability of surface watar, fodder and pasture for these animals reducing day by day. Less nnumber of animals surveive by eating crop reduces. No parmanent pasture is there. This leads to heavy migration of villagers for grazing sheeps rearing to out of state. Milk production is low in area. There is no dairy co-operative in project area. Not a singal liter of milk is available to sell out,out of project area. Insufficient production of milk leads poor health to children.

Tabel no. 2.7.1 Live stock status

| Sr.no. | Village | Buffalo | | Cow | | Goat | | Total milk | Sheep | Wool Kg. | Camel | Poultry |
|--------|--------------|---------|------|------|------|-------|--------|------------|-------|----------|-------|---------|
| | | No. | Milk | No. | Milk | No. | Milk | | | | | |
| 1 | | | | | | | | | | | | |
| 2 | Goriya | 196 | 784 | 425 | 1275 | 1210 | 1331 | 3390 | 782 | 1173 | 7 | 400 |
| 3 | Korva | 142 | 568 | 247 | 741 | 997 | 1096.7 | 2405.7 | 491 | 736.5 | 9 | 127 |
| 4 | Danverli | 177 | 708 | 375 | 1125 | 986 | 1084.6 | 2917.6 | 912 | 1368 | 2 | 912 |
| 5 | Aradwa | 135 | 540 | 216 | 648 | 1145 | 1259.5 | 2447.5 | 645 | 967.5 | 5 | 575 |
| 6 | Kakradi | 155 | 620 | 315 | 945 | 875 | 962.5 | 2527.5 | 255 | 382.5 | 3 | 797 |
| 7 | Sambarwada | 75 | 300 | 125 | 375 | 616 | 677.6 | 1352.6 | 707 | 1060.5 | 4 | 185 |
| 8 | Koelwab | 245 | 980 | 927 | 2781 | 1525 | 1677.5 | 5438.5 | 441 | 661.5 | 3 | 219 |
| 9 | Chingtabhata | 185 | 740 | 155 | 465 | 675 | 742.5 | 1947.5 | 757 | 1135.5 | 5 | 181 |
| 10 | Nana | 309 | 1236 | 1027 | 3081 | 1721 | 1893.1 | 6210.1 | 868 | 1302 | 2 | 312 |
| 11 | Bhander | 104 | 416 | 303 | 909 | 1381 | 1519.1 | 2844.1 | 312 | 468 | 4 | 429 |
| | Bharla | 109 | 436 | 412 | 1236 | 1069 | 1175.9 | 2847.9 | 237 | 355.5 | 3 | 527 |
| | Total | 1832 | 3220 | 4527 | 4734 | 12200 | 5734.3 | 13688.3 | 6407 | 9610.5 | 47 | 4664 |

Other infrastructure facility available :-

Khetarli watershed is not well connected with Bali it is 50km away from the sil H.Q and 125 kms from Distt H.Q Pali. All villages are now getting connected with Gravel Road which are being made by Gram Panchayat under MG-NREGS ,previously these gravel road

Tabel no. 2.8.1 Other infrastructure facility available

| Facilities available | Goriya | Korva | Danverli | Aradwa | Kakradi | Sambarwada | Koelwab | Chingtabhata | Bhander,Bharla | Nana | Remark |
|----------------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|------------------------------|
| Road | Bitumin-Tar Road | Gravel Road | Gravel Road | Gravel Road | Gravel Road | Gravel Road | Gravel Road | Gravel Road | Gravel Road | Gravel Road | Need of all basic infra str. |
| Co-Operative society | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Bhander,Bharla | Nana,Bhander | |
| Medical facility | ANM Centre | 0 | ANM Centre | 0 | 0 | 0 | Anm centre | 0 | 0 | PHC | |
| Bank / Post office | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Nana,Bijapur | Bhander,Bharla | Nana,Bhander | |

IWMP-9-PALI(10-11)

P.S-BALI

Slope of watershed area

Slope details

| Macro/ Micr no | S.No | Name of village | Area (Ha.) | Highest contour level | Lowest contour level | Level difference | Length of travel in Mts | % slope |
|-------------------|------|-----------------|------------|-----------------------|----------------------|------------------|-------------------------|---------|
| 17/2 | 1 | | 5050 | 675 | 340 | 335 | 12500 | 2.680 |
| 17/5 | 2 | | 300 | 619 | 479 | 140 | 2375 | 5.895 |
| 17/6 | 3 | | 405 | 579 | 479 | 100 | 2000 | 5.000 |
| 17/7 | 4 | | 400 | 735 | 504 | 231 | 3000 | 7.700 |
| 17/8 | 5 | | 50 | 562 | 505 | 57 | 1125 | 5.067 |
| 17/9 | 6 | | 200 | 747 | 508 | 239 | 2000 | 11.950 |
| 17/10 | 7 | | 75 | 750 | 555 | 195 | 1100 | 17.727 |
| 17/11 | 8 | | 175 | 640 | 530 | 110 | 2125 | 5.176 |
| 17/12 | 9 | | 1050 | 900 | 532 | 368 | 8000 | 4.600 |
| 17/13 | 10 | | 320 | 687 | 532 | 155 | 2750 | 5.636 |
| 17/14 | 11 | | 130 | 580 | 475 | 105 | 2250 | 4.667 |
| 17/15 | 12 | | 250 | 565 | 463 | 102 | 2500 | 4.080 |
| 17/16 | 13 | | 150 | 580 | 416 | 164 | 2500 | 6.560 |
| 17/18 | 14 | | 1400 | 700 | 411 | 289 | 6700 | 4.313 |
| 18/12 | 15 | | 288 | 500 | 464 | 36 | 3700 | 0.973 |
| 18/13 | 16 | | 175 | 632 | 452 | 180 | 2000 | 9.000 |
| 18/16 | 17 | | 75 | 530 | 443 | 87 | 1500 | 5.800 |
| 18/17 | 18 | | 450 | 687 | 427 | 260 | 2250 | 11.556 |
| 18/18 | 19 | | 150 | 500 | 411 | 89 | 2000 | 4.450 |
| 18/19 | 20 | | 300 | 563 | 401 | 162 | 3500 | 4.629 |

It is average slope Maximum slope identified is 11.95 % in micro no 17/9. There is area shown slope minimum then 0.97% in 18/12

Area shown in table more then 3% slope

| Micro no | S.No | Total Area | Slope <3% | Slope>3% | Location of land having more then 3% slope |
|----------|------|------------|-----------|----------|---|
| 17/5 | 1 | 300 | | 5.89 | Near to ridge and village Goriya very steep slope |
| 17/6 | 2 | 425 | | 5 | Near to ridge and village Danverli very steep slope |
| 17/7 | 3 | 400 | | 7.7 | Near to ridge and village Danverli very steep slope |
| 17/8 | 4 | 50 | | 5.06 | Near to ridge and village Danverli very steep slope |
| 17/9 | 5 | 200 | | 11.95 | Near to ridge and village Danverli very steep slope |
| 17/10 | 6 | 75 | | 17.73 | Near to ridge and village Goriya very steep slope |
| 17/11 | 7 | 175 | | 5.17 | Near to ridge and village Goriya very steep slope |
| 17/12 | 8 | 1050 | | 4.6 | Near to ridge and village Goriya very steep slope |
| 17/13 | 9 | 320 | | 5.64 | Near to ridge and village Danverli very steep slope |
| 17/14 | 10 | 130 | | 4.66 | Near to ridge and village Danverli very steep slope |
| 17/15 | 11 | 250 | | 4.08 | Near to ridge and village Danverli very steep slope |
| 17/16 | 12 | 150 | | 6.56 | Near to ridge and village Danverli very steep slope |
| 17/18 | 13 | 1400 | | 4.31 | Near to ridge and village Danverli very steep slope |
| 18/12 | 14 | 175 | | 9 | Near to ridge and village Danverli very steep slope |

IWMP-9-PALI(10-11)**P.S-Bali****Run off tapped in existing structure**

According to Base line survey of field only three structure fullfilled in last 10 years such that remaining structure do not require waste weir. So nadi no 10 in micro 6,nadi no 3 in micro no1 & dam in micro 8 considered on basis of time of concentration.

Net runoff tapped

| Name of Upp Samity | Existing structure | Area | Yield of runoff from catchment per ha.(cum.) | Type of catchment | Submergence area Ha. | average depth (mtr.) | Capacity of structure in mcft | Net runoff tapped in existing structure Mcum |
|--------------------|--------------------|---------|--|-------------------|----------------------|----------------------|-------------------------------|--|
| Goriya | 3 | 4016.96 | 845.25 | Good | 4.231 | 0.26 | 0.00154 | 0.386688 |
| Danverli | 6 | 1805.25 | 845.25 | Good | 3.214 | 0.25 | 0.00231 | 0.51345 |
| Koelwab | 15 | 2384.38 | 845.25 | Good | 4.125 | 0.24 | 0.0536 | 0.08571 |
| Nana | 4 | 3205.81 | 845.25 | Good | 6.147 | 0.18 | 0.00412 | 0.16654 |
| | | 11412.4 | | | | | 0.06157 | 1.15239 |



Site photo of pasture

Table no.2.19.1 :- Climatic & Hydrological information

| 1 Average Annual Rainfall(mm) | | | 2 Monthly rain fall in rainy season | | | | | | |
|-------------------------------|------|-----------------------------|-------------------------------------|------|------|------|-----|------|---------------------|
| s.no. | Year | Average Annual Rainfall(mm) | s.no. | Year | June | july | Aug | Sept | Total in four month |
| 1 | 2000 | 531.6 | 1 | 2000 | 8 | 452 | 57 | 13 | 530 |
| 2 | 2001 | 535 | 2 | 2001 | 32 | 478 | 12 | 12 | 534 |
| 3 | 2002 | 268 | 3 | 2002 | 25 | 98 | 123 | 22 | 268 |
| 4 | 2003 | 630 | 4 | 2003 | 8 | 444 | 165 | 13 | 630 |
| 5 | 2004 | 373 | 5 | 2004 | 85 | 148 | 7 | 90 | 330 |
| 6 | 2005 | 479 | 6 | 2005 | 44 | 245 | 142 | 24 | 455 |
| 7 | 2006 | 1105.5 | 7 | 2006 | 40 | 208 | 802 | 34 | 1084 |
| 8 | 2007 | 598 | 8 | 2007 | 80 | 232 | 182 | 73 | 567 |
| 9 | 2008 | 379 | 9 | 2008 | 19 | 45 | 66 | 70 | 200 |
| 10 | 2009 | 265 | 10 | 2009 | 18 | 195 | 204 | 123 | 540 |

| 3 Maximum rainfall intensity | | | 4 Temperatue (Degree C) | | | |
|------------------------------|--------------------|------------------------|-------------------------|---------------|-----|-----|
| s.no. | Duration | rainfall intensity(mm) | s.no. | Season | Max | Min |
| (i) | 15 minute duration | 65 mm | (i) | Summer Season | 49 | 32 |
| (ii) | 30 minute duration | 72 mm | (ii) | Winter Season | 28 | 2 |
| (iii) | 60 minute duration | 100 mm | (iii) | Rainy Season | 38 | 15 |

Problem demand and scope for comprehensive area development

NRM (Natural resource management) :-

Erosion take place every where and in runoff table total runoff of area is 68645 cum / sec. existing structures teped runoff 6291 cum / sec. according to there capecity. So that watershed project require natural resource managment activities. To chack all runoff of project DPR comprises activities like earthan bunds with waste weir, only waste weir where Bund had made by farmers in arable and nonarable land to stop sheet & gully erosion. Productivity of watershed is low due to erosion hence earthenbund with weste weir are proposed

DPR also comprises LSCD and Anicuts for drinage line treatment to chack gully erosion. Khettalai and Tanka activity taken to conserve water and harvest water for production of fruit plants.

Agriculture and horticulture productivity gap analysis :-

Farmers of area using tradional metherd for cropping & productivity is below averege. They are not using drip & sprinkalar irrigation fascility to save water and using chemical fertilizer for production. Project facilates to farmers for sprinklar & drip irrigation fascility by convergence with Agriculture extention dept. and fascility also by vermicompost unit to replace chemical fertilizer.

The Neel gay is major problem to improve horticultuer plantation so that project fascilite farmer for barbed wire fencing of 6 feet hight in production measurs.

Post for barbed wire fencing will be mamufactured in watershed area through livelihood activities.

livestock - gap or fodder avability :-

Project area don' t have managed pasture area to ensure about fodder. Project comprises two pasture of 10 Ha. each to meet requirment of fodder. Such that number milky animal can increase. Milk production of area will increase.

Project will also run breed improvement programme and timely care of animals by veccination. A WDT member is working for this.

Livelihood & micro interprises :-

To overall development of area project connects farmers for various activities to earn money in there free time or regularly. This activity fullfill there regular need as well as earn money by working in microinterprises.

Water-Budgeting of project area IWMP-9-Pali-Bali

AVERAGE ANNUAL RAINFAL DATA (AVAILABLE AT TEHSIL)

Proportion of Estimated Runoff to Rainfall : To be worked out from Strange's Table for Tehsil Bali District Pali for **525 mm** total monsoon rainfall.

(a) Percentage of runoff to rainfall from Strange's table.

| | | | | | |
|------------------------|---|---------|-----------------------|---|--------|
| In Good Catchment | - | 11.60 % | $526 \times 11.60/10$ | = | 610.16 |
| In Average Catchment - | | 8.70 % | $526 \times 8.70/10$ | = | 457.62 |
| In Bad Catchment - | | 5.80 % | $526 \times 5.80/10$ | = | 305.08 |

STORAGE OF RUNOFF BY EXISTING STRUCTURES

| S.No. | Name of Structure | No./Area | StorageCapacity(Cum) |
|-------|---------------------------|-----------|----------------------|
| 1. | Tank/Talab/Nadi | 38 | 11453 |
| 2. | Anicut/WHS/ Khadin | 12 | 10858 |
| 3. | Local Depression Pondsetc | 0 | 1221 |
| | Total | 46 | 23532 |

STORAGE OF RUNOFF BY PROPOSED STRUCTURES

| S.No. | Name of Structure | No./Area | Storage Capacity(Cum) |
|-------|---------------------|-----------|-----------------------|
| 1 | Nadi / Talab | 14 | 1422 |
| 2 | Soil Detention Str. | 67 | 9340 |
| | Total | 66 | 10762 |

Total Runoff trapped = Existing Strs +Proposed Strs. = 23532 + 10762 = 34294

% Runoff trapped = $[34294/492100] * 100 = 6.92 \%$

IWMP-9,PALI, P.S.BALI(10-11)

प्रयोक्ता समूह उप समिति जलग्रहण नाना

अ. नाला उपचार प्रयोक्ता समूह

1. भूराराम / धीराराम
2. नगाराम / जगाराम
3. पुनाराम / जामताराम
4. सवाराम / बदाराम

ब. कृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. चुनाराम / भोपाराम
2. चौपाराम / मगाराम
3. कन्हैया लाल / उदाराम
4. पकाराम / छोगाराम

स. अकृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. लच्छाराम / स्वामी राम
2. उदाराम / वक्ताराम
3. छोगाराम / जीवाराम
4. निम्बाराम / गुल्लाराम

य. कृषि एवं अकृषि भूमि उत्पादकता प्रयोक्ता समूह

1. भारताराम / लालाराम
2. रावताराम / जालाराम
3. नारायण / हदाराम
4. भाणाराम / मगाराम

IWMP-9,PALI, P.S.BALI(10-11)

स्वयं सहायता समुह उप समिति जलग्रहण नाना

1. प्रथम समूह :- भैरूनाथ स्वयं सहायता समुह

1. चौपाराम / नगाजी
2. सामताराम / नगाजी
3. कालाराम / जीवाजी
4. बाबूराम / जीवाजी
5. उमाराम / रताजी
6. मोगाराम / रताजी
7. जोगाराम / रताजी
8. भूराराम / कालाजी
9. सुरमाराम / चम्नाजी
10. मेगाराम / लालाजी
11. हराराम / हंसाजी

2. द्वितीय समुह :- महादेव स्वयं सहायता समुह

1. जटाराम / खेताजी
2. रामाराम / वक्ताजी
3. बाबूराम / वक्ताजी
4. मांगाराम / वक्ताजी
5. कालाराम / लालाराम
6. देवाराम / समीराराम
7. मीठाराम / भोपाजी
8. चुनाराम / भोपाजी
9. गैमाराम / रूपाजी
10. फगनाराम / वक्ताजी

3. तृतीय समुह :- अम्बे माता स्वयं सहायता समुह

1. पकाराम / गलाजी
2. भूराराम / धीराजी
3. नगाराम / भूराजी
4. वीरमाराम / हरारामजी
5. करमाराम / भूरारामजी
6. धन्नाराम / हरारामजी
7. हठाराम / भूरारामजी
8. अण्दाराम / हरारामजी
9. नोपाराम / समीरारामजी
10. प्रभूराम / समीरारामजी

IWMP-9,PALI, P.S.BALI(10-11)

ग्राम- धरोइया, उपसमिति जलग्रहण नाना निम्नानुसार है।

| क्र.सं. | सदस्य का नाम | पद |
|---------|--------------------------------------|---------|
| 1 | गोमाराम मीणा | अध्यक्ष |
| 2 | डुंगाराम / बाबूलाल जी | सचिव |
| 3 | चौपाराम / मगाराम जी | सदस्य |
| 4 | लच्छाराम / सामीराराम जी | सदस्य |
| 5 | मेगाराम / पूनाराम जी | सदस्य |
| 6 | भूराराम / धीराराम जी | सदस्य |
| 7 | भारता राम / लालाराम जी | सदस्य |
| 8 | श्रीमति दाडमी पत्नी श्री भूराराम जी | सदस्य |
| 9 | श्रीमति सकीबाई पत्नी श्री भैराराम जी | सदस्य |
| 10 | अर्जुन कुमार / जोगाराम जी | सदस्य |
| 11 | मेहन राम / धन्नाराम जी | सदस्य |
| 12 | भाणाराम / देवाराम जी | सदस्य |

IWMP-9,PALI, P.S.BALI(10-11)

प्रयोक्ता समूह उप समिति जलग्रहण कोयलवाव

अ. नाला उपचार प्रयोक्ता समूह

1. धूपाराम / हकमाराम
2. अण्दाराम / खुमाराम
3. मदन / सवाराम
4. भालाराम / हरदाराम

ब. कृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. मोहन राम / राजाराम
2. नगाराम / रूपाराम
3. सोनाराम / डुंगाराम
4. बदाराम / लालाराम

स. अकृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. लाडुराम / लालाराम
2. गोमाराम / भुराराम
3. हुसाराम / नानाराम
4. जगाराम / धन्नाराम



PRA EXERCISE IN KAKRADI OF KHETARLI-II-WATERSHED



PRA EXERCISE IN KHETARLI WATERSHED



MAKING OF SHG AND U.G IN GRAM SHABA OF G.P-KAKRADI



TRAINING PROGRAMME OF "JAN PRATHI NIDHI WITH GRAMSEVAK"



TRAINING PROGRAMME OF "JAN PRATHI NIDHI AND GRAMSEVAK"

IWMP-9,PALI, P.S.BALI(10-11)

ग्राम- चिंगंटाभाटा, कोयलवाव, उपसमिति जलग्रहण कोयलवाव निम्नानुसार है।

| क्र.सं. | सदस्य का नाम | पद |
|---------|---------------------|---------|
| 1 | भाणाराम गरासीया | अध्यक्ष |
| 2 | मोहन राम / राजाराम | सचिव |
| 3 | धुपाराम / हकमाराम | सदस्य |
| 4 | ननाराम / कालाराम | सदस्य |
| 5 | सेवनाराम / डूंगाराम | सदस्य |
| 6 | टोकाराम / बालाराम | सदस्य |
| 7 | गणाराम / नारायण राम | सदस्य |
| 8 | चुनाराम / रताराम | सदस्य |
| 9 | लाडुराम / लालाराम | सदस्य |
| 10 | बाबूराम सांकलाराम | सदस्य |

IWMP-9,PALI, P.S.BALI(10-11)

प्रयोक्ता समूह उप समिति जलग्रहण दानवरली (काकराडी)

अ. नाला उपचार प्रयोक्ता समूह

1. नाथाराम / लुम्बाराम
2. अजी बाई पत्नी श्री मंशाराम
3. ओगी बाई पत्नी श्री धन्नाराम
4. रूपाराम / आशाराम
5. मंशाराम / पुनाराम

ब. कृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. अनी बाई पत्नी श्री रताराम
2. मुगलाराम / किसनाराम
3. विरमाराम / केसाराम
4. बालाराम / हिराराम
5. गलबी बाई पत्नी श्री रताराम

स. अकृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. बालाराम / रताराम
2. केशी बाई पत्नी श्री चुनाराम
3. पेपी बाई पत्नी श्री तेजाराम
4. नाथाराम / लालाराम
5. चेलाराम / दिताराम

द. पशु संवर्धन विकास प्रयोक्ता समूह

1. रमेश कुमार / वक्ताराम
2. भूलाराम / लसाराम
3. सामणी बाई पत्नी श्री
4. भुराराम / धिराराम
5. हिरी बाई पत्नी श्री देवाराम

य. कृषि एवं अकृषि भूमि उत्पादकता प्रयोक्ता समूह

1. निम्बाराम / गोगाराम
2. अण्दाराम / किशनाराम
3. लसी बाई पत्नी श्री रणचा राम
4. शान्ति बाई पत्नी श्री लालाराम
5. जीवाराम / धिराराम

IWMP-9,PALI, P.S.BALI(10-11)

स्वयं सहायता समुह उप समिति जलग्रहण दानवरली (काकराडी)

1. प्रथम समूह :- आशापुरा स्वयं सहायता समुह

1. पेपी बाई पत्नी श्री तेजाराम
2. लसी बाई पत्नी श्री चेनाराम
3. पेपी बाई पत्नी श्री मगनाराम
4. धनी बाई पत्नी श्री मानाराम
5. हसी बाई पत्नी श्री रामाराम
6. बाबली बाई पत्नी श्री मोहन राम
7. मीरा बाई पत्नी श्री लकाराम
8. सुमी बाई पत्नी श्री लसाराम

9. धापु बाई पत्नी श्री सोमाराम
10. सवी बाई पत्नी श्री बालाराम
11. कमला बाई पत्नी श्री सींगाराम
12. कन्या बाई पत्नी श्री नैनाराम

2. द्वितीय समुह :- अम्बे माता स्वयं सहायता समुह

1. अनी बाई पत्नी श्री रताराम
2. रामी बाई पत्नी श्री नगाराम
3. सुमी बाई पत्नी श्री विरमाराम
4. कन्या बाई पत्नी श्री कालाराम
5. कंकु बाई पत्नी श्री केसाराम
6. मीठी बाई पत्नी श्री भुराराम
7. सोपी बाई पत्नी श्री भीमाराम
8. चम्पा बाई पत्नी श्री वरदाराम
9. लसी बाई पत्नी श्री मीठाराम
10. सोमी बाई पत्नी श्री लुम्बाराम

3. तृतीय समुह – रक्षा स्वयं सहायता समूह

1. केली बाई पत्नी श्री बालाराम
2. धीसा बाई पत्नी श्री नोमाराम
3. मीरा बाई पत्नी श्री चुनाराम
4. लसी बाई पत्नी श्री दीताराम
5. रेशमी बाई पत्नी श्री बाबुराम
6. रमी बाई पत्नी श्री चमनाराम
7. गंगा बाई पत्नी श्री धुलाराम
8. वचनी बाई पत्नी श्री जालमाराम
9. सोदरी बाई पत्नी श्री हंसाराम
10. सुगना बाई पत्नी श्री बालाराम

4. चतुर्थ समुह – अम्बे मां स्वयं सहायता समुह

1. इन्द्रा बाई पत्नी श्री सोमाराम
2. जीजो बाई पत्नी श्री हराराम
3. कंकु बाई पत्नी श्री जीताराम
4. अन्ती बाई पत्नी श्री हंसाराम
5. मेगी बाई पत्नी श्री जीवाराम
6. मोगरी बाई पत्नी श्री अण्दाराम
7. चुमी बाई पत्नी श्री थावराराम
8. पेपी बाई पत्नी श्री आशाराम
9. मोवनी बाई पत्नी श्री किकाराम
10. मोगी बाई पत्नी श्री अम्बाराम

5. पंचम समुह – शीतला माता स्वयं सहायता समुह

1. रूपी बाई पत्नी श्री निम्बाराम
2. सवी बाई पत्नी श्री पीराराम
3. चम्पा बाई पत्नी श्री कालाराम
4. धापु बाई पत्नी श्री गोमाराम
5. सुरमी बाई पत्नी श्री हुसाराम
6. तारकी बाई पत्नी श्री हकमाराम
7. सुरमी बाई पत्नी श्री बाबुराम
8. पांची बाई पत्नी श्री धरमाराम
9. पारती बाई पत्नी श्री लालाराम
10. सीता बाई पुत्री श्री जीवाराम



GRAM PANCHYAT KAKRADI,P.SBALI(PALI)RAJASTHAN

IWMP-9,PALI, P.S.BALI(10-11)

ग्राम— दानवरली,अरडवा,काकराडी उपसमिति जलग्रहण दानवरली निम्नानुसार है।

| क्र.सं. | सदस्य का नाम | पद |
|---------|-----------------------------|---------|
| 1 | निम्बाराम / गोगाराम गरासीया | अध्यक्ष |
| 2 | नाथाराम गरासीया | सचिव |
| 3 | मुगलाराम / किसनाराम | सदस्य |
| 4 | नाथाराम / लालाराम | सदस्य |
| 5 | रमेश कुमार / वगताराम | सदस्य |
| 6 | पेपी बाई पत्नी श्री तेजाराम | सदस्य |
| 7 | अमी बाई पत्नी श्री रताराम | सदस्य |

| | | |
|----|--------------------------------|-------|
| 8 | केली बाई पत्नी श्री बालाराम | सदस्य |
| 9 | इन्द्रा बाई पत्नी श्री सोमाराम | सदस्य |
| 10 | रूपी बाई पत्नी श्री निम्बाराम | सदस्य |

IWMP-9,PALI, P.S.BALI(10-11)

प्रयोक्ता समूह उप समिति जलग्रहण गोरिया

अ. नाला उपचार प्रयोक्ता समूह

1. दलाराम / जवानाराम
2. भापाराम / देवाराम
3. हीराराम / धुलाराम
4. भूराराम / जवानाराम
5. नवली बाई / रूपाराम

ब. कृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. सिंगाराम / भगाराम गरा.
2. वेलाराम / भीखाराम
3. भूराराम / मुगलाराम
4. राणाराम / अम्बाराम
5. सुखी बाई / लालाराम

स. अकृषि योग्य भूमि उपचार प्रयोक्ता समूह

1. अण्दाराम / डुंगाराम
2. मुगलाराम / खेताराम
3. ताराराम / नाथाराम
4. मोतिराम / थावराम
5. मनुबाई / कवेलाराम

द. पशु संवर्धन विकास प्रयोक्ता समूह

1. पीथाराम / किशनाराम
2. मालाराम / सोमाराम
3. रेशमाराम / भारताराम
4. बाबूराम / रामाराम
5. इन्द्रा बाई / बागाराम

य. कृषि एवं अकृषि भूमि उत्पादकता प्रयोक्ता समूह

1. रिजमाराम / लच्छाराम
2. धुलाराम / धर्माराम
3. कालुराम / बाबुराम
4. वेहताराम / खेताराम
5. टिमाराम / पीथाराम

IWMP-9,PALI, P.S.BALI(10-11)

स्वयं सहायता समुह उप समिति जलग्रहण गोरिया

1. प्रथम समूह :- चामुण्डा माता स्वयं सहायता समुह

1. फुली बाई पत्नी श्री वेहताराम
2. अण्डू बाई पत्नी श्री प्रेमराम
3. वेलकी बाई पत्नी श्री मांगाराम
4. चम्पा बाई पत्नी श्री अम्बाराम
5. गलबी बाई पत्नी श्री हीराराम
6. कानी बाई पत्नी श्री खेताराम
7. रूपी बाई पत्नी श्री मकनाराम
8. खीमी बाई पत्नी श्री रतनाराम

9. हाजरी बाई पत्नी श्री सकाराम
10. मनु बाई पत्नी श्री कनाराम

2. द्वितीय समुह :- हिंगलाज माता स्वयं सहायता समुह

1. सोमी बाई पत्नी श्री गोरखाराम
2. लाली बाई पत्नी श्री शकराराम
3. सामणी बाई पत्नी श्री कानाराम
4. अबु बाई पत्नी श्री चुनाराम
5. बदी बाई पत्नी श्री धनाराम
6. चम्पा बाई पत्नी श्री सोमिडाराम
7. पुनी बाई पत्नी श्री रामाराम
8. साकली बाई पत्नी श्री नथाराम
9. खीमी बाई पत्नी श्री लुम्बाराम
10. रंगी बाई पत्नी श्री रेंगाराम

3. तृतीय समुह – भैरुजी स्वयं सहायता समूह

1. बाबली बाई पत्नी श्री अमराराम
2. फुली बाई पत्नी श्री फुलाराम
3. मोति बाई पत्नी श्री राजाराम
4. पांची बाई पत्नी श्री रामाराम
5. सणगी बाई पत्नी श्री बाबुराम
6. लसी बाई पत्नी श्री नरसाराम
7. सरमी बाई पत्नी श्री परताराम
8. लाली बाई पत्नी श्री नेनाराम
9. रंगी बाई पत्नी श्री मोहनाराम
10. मनु बाई पत्नी श्री हिमताराम

4. चतुर्थ समुह – कालका माता स्वयं सहायता समुह

1. पूनी बाई पत्नी श्री थावराराम
2. मनु बाई पत्नी श्री शेराराम
3. सुरती बाई पत्नी श्री मंशाराम
4. रेशमी बाई पत्नी श्री मांगाराम
5. वरजू बाई पत्नी श्री कालाराम
6. नाथरी बाई पत्नी श्री विशाराम
7. सिंगरी बाई पत्नी श्री छोगाराम
8. सोमी बाई पत्नी श्री भुराराम
9. इन्द्रा बाई पत्नी श्री बागाराम
10. मुगली बाई पत्नी श्री सोमाराम

5. पंचम समुह – आशापुरा माता स्वयं सहायता समुह

1. पुरकी बाई पत्नी श्री परताराम
2. हंसी बाई पत्नी श्री लसाराम
3. चौपी बाई पत्नी श्री रेशमाराम
4. बाबली बाई पत्नी श्री चतराराम
5. पुनी बाई पत्नी श्री प्रेमाराम
6. इन्द्रा बाई पत्नी श्री भुराराम
7. केसी बाई पत्नी श्री भीखाराम
8. अमरी बाई पत्नी श्री सदाराम
9. लसी बाई पत्नी श्री भुराराम
10. शांति बाई पुत्री श्री शान्ताराम



GRAM PANCHYAT GORIYA,P.SBALI(PALI)RAJASTHAN



GRAM PANCHYAT GORIYA,P.SBALI(PALI)RAJASTHAN

IWMP-9,PALI, P.S.BALI(10-11)

ग्राम— गोरिया,कोरवा उपसमिति जलग्रहण गोरिया निम्नानुसार है।

| क.सं. | सदस्य का नाम | पद |
|-------|------------------------------|---------|
| 1 | दलाराम / जवानाराम गरासीया | अध्यक्ष |
| 2 | ताराराम / नाथाराम गरासीया | सचिव |
| 3 | सिंगाराम / भगाराम गरासीया | सदस्य |
| 4 | अण्दाराम / डुंगाराम | सदस्य |
| 5 | पिथाराम / किशनाराम | सदस्य |
| 6 | रिजमाराम / लच्छाराम | सदस्य |
| 7 | फुली बाई पत्नी श्री वेहताराम | सदस्य |
| 8 | सोमी बाई पत्नी श्री गोरखाराम | सदस्य |
| 9 | बाबली बाई पत्नी श्री अमराराम | सदस्य |
| 10 | पुनी बाई पत्नी श्री थावराराम | सदस्य |

कार्यालय पंचायत समिति बाली जिला पाली

IWMP-9,PALI, P.S.BALI(10-11)

| क.सं. | जलग्रहण उपसमिति का नाम | गावों के नाम | ग्राम पंचायत का नाम |
|-------|------------------------|--------------|---------------------|
| 1 | गोरिया | गोरिया | गोरिया |
| 2 | | कोरवा | गोरिया |
| 3 | दानवरली | दानवरली | काकराडी |
| 4 | | अरडवा | काकराडी |
| 5 | | काकराडी | काकराडी |

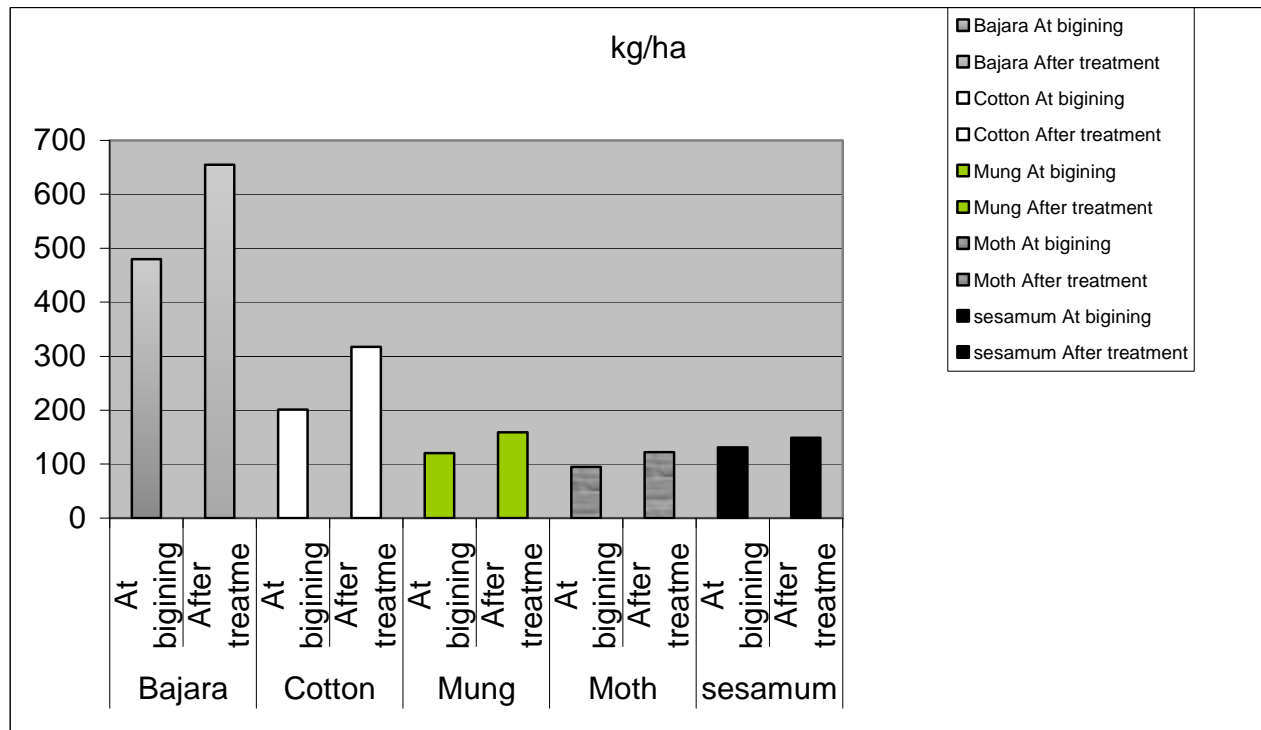
| | | | |
|----|---------|-------------|---------|
| 6 | कोयलवाव | सींगटा भाटा | कोयलवाव |
| 7 | | कोयलवाव | कोयलवाव |
| 8 | | पाटरिया | कोयलवाव |
| 9 | | कोलवाडा | कोयलवाव |
| 10 | | खेतरली | कोयलवाव |
| 11 | नाना | धरोईया | नाना |
| 12 | | नाना | नाना |
| 13 | | भारला | नाना |

Project outcomes IWMP-9-PALI ,Bali(10-11)

(a) Productivity

IWMP-6-PALI,(09-10) P.S Bali

| | Bajara | | Cotton | | Mung | | Moth | | sesamum | |
|-------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| | At bigining | After treatment | At bigining | After treatment | At bigining | After treatment | At bigining | After treatment | At bigining | After treatment |
| kg/ha | 480 | 655 | 201 | 317 | 120 | 159 | 95 | 122 | 131 | 149 |

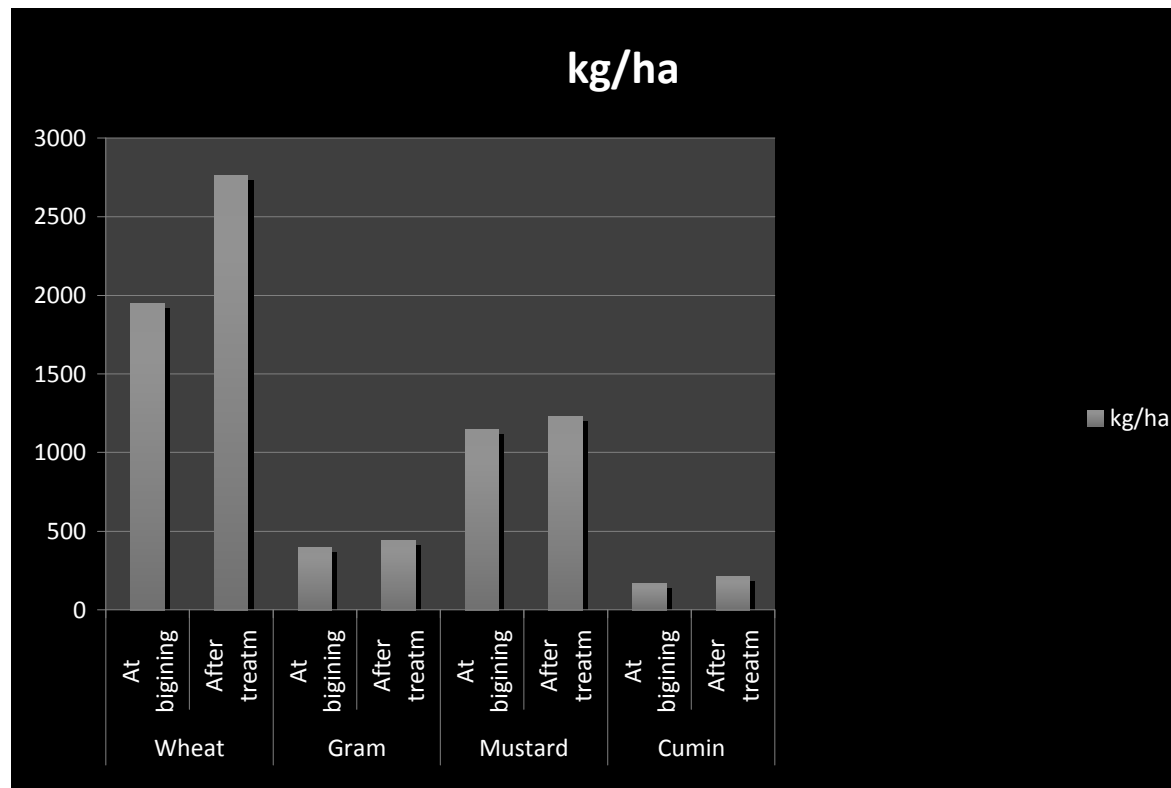


Project outcomes

IWMP-9-PALI ,Bali(10-11)

(a) Productivity

| | Wheat | | Gram | | Mustard | | Cumin | |
|-------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| | At bigining | After treatment | At bigining | After treatment | At bigining | After treatment | At bigining | After treatment |
| kg/ha | 1950 | 2762 | 398 | 443 | 1150 | 1232 | 170 | 210 |

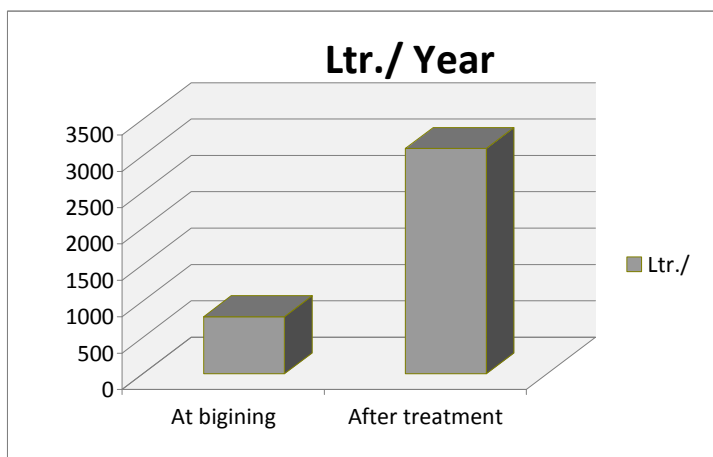


IWMP-9-PALI ,Bali(10-11)

Project outcomes

Milk Production

| | Milk | |
|------------|-------------|-----------------|
| | At bigining | After treatment |
| Ltr./ Year | 787 | 3098 |



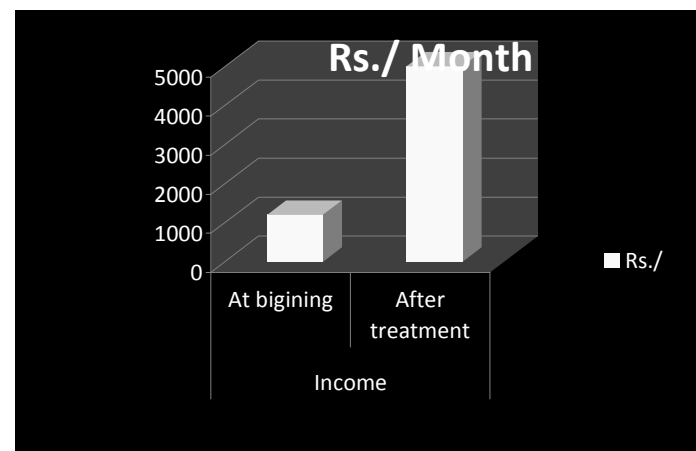
Source of information: Milk collection centre village- Kumtiya,Bera,Mr.Bhagwat Singh Ranawat,Mr.Vijay Singh

IWMP-9-PALI ,Bali(10-11)

Project outcomes

Average Income Per Family

| | Income | |
|------------|-------------|-----------------|
| | At bigining | After treatment |
| Rs./ Month | 1200 | 5000 |



Source of information: Milk collection centre village- Kumtiya,Bera,Mr.Bhagwat Singh Ranawat,Mr.Vijay Singh

IWMP-9-PALI(10-11),P.S-Bali
P.S-BALI

Area Unit Cost Total Cost in Lacs

5150 0.15 772.5

Chapter-V

(A)

Preparatory phase activities capacity building trainings & EPA

| S.No | Activity | Yearwise | | | | | | | | | | | | | |
|------|--------------|--------------|---------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|
| | | Total | | 1st year | | 2nd year | | 3rd year | | 4th year | | 5th year | | 6th year | |
| | | % | Fin | % | Fin | % | Fin | % | Fin | % | Fin | % | Fin | % | Fin |
| 1 | Admn. | 10.00 | 77.25 | 1.00 | 7.73 | 2.00 | 15.45 | 2.00 | 15.45 | 2.00 | 15.45 | 2.00 | 15.45 | 1.00 | 7.73 |
| 2 | Monitoring | 1.00 | 7.73 | 0.10 | 0.77 | 0.20 | 1.55 | 0.20 | 1.55 | 0.20 | 1.55 | 0.20 | 1.55 | 0.10 | 0.77 |
| 3 | Evaluation | 1.00 | 7.73 | 0.00 | 0.00 | 0.30 | 2.32 | 0.00 | 0.00 | 0.35 | 2.70 | 0.00 | 0.00 | 0.35 | 2.70 |
| 4 | EPA | 4.00 | 30.90 | 4.00 | 30.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | I & CB | 5.00 | 38.63 | 1.50 | 11.59 | 1.50 | 11.59 | 0.50 | 3.86 | 1.00 | 7.73 | 0.00 | 0.00 | 0.50 | 3.86 |
| 6 | DPR | 1.00 | 7.73 | 1.00 | 7.73 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total | 22.00 | 169.95 | 7.60 | 58.71 | 4.00 | 30.90 | 2.70 | 20.86 | 3.55 | 27.42 | 2.20 | 17.00 | 1.95 | 15.06 |

(B) Work Phase & consolidation phase

| S.No | Work Watershed Phase | Unit | Cost | Physical | Total Cost | Yearwise | | | | | | | | | | | |
|------|--|----------|----------|-------------------|---------------|----------|-----|----------|-----|----------|--------|----------|--------|----------|--------|----------|-----|
| | | | | | | 1st year | | 2nd year | | 3rd year | | 4th year | | 5th year | | 6th year | |
| | | | | | | Phy | Fin | Phy | Fin | Phy | Fin | Phy | Fin | Phy | Fin | Phy | Fin |
| 7 | Peuto rico terrace | PerRmt | 456.55 | 9425.04 | 43.03 | 0 | 0 | 0 | 0 | 3141.7 | 14.343 | 3141.7 | 14.343 | 3141.7 | 14.343 | 0 | 0 |
| 8 | Gully control str. | PerNo. | 4777 | 58.11 | 2.776 | 0 | 0 | 0 | 0 | 19.371 | 0.9253 | 19.371 | 0.9253 | 19.371 | 0.9253 | 0 | 0 |
| 9 | field bunding | PerRmt | 113.71 | 18195.41 | 20.69 | 0 | 0 | 0 | 0 | 6065.1 | 6.8967 | 6065.1 | 6.8967 | 6065.1 | 6.8967 | 0 | 0 |
| 10 | Sunken pond | PerNo. | 140000 | 11.00 | 15.4 | 0 | 0 | 0 | 0 | 3.6667 | 5.1333 | 3.6667 | 5.1333 | 3.6667 | 5.1333 | 0 | 0 |
| 11 | Saran | PerRmt | 1580.65 | 1562.02 | 24.69 | 0 | 0 | 0 | 0 | 520.67 | 8.23 | 520.67 | 8.23 | 520.67 | 8.23 | 0 | 0 |
| | Conservation measures for non arable land | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | Stone wall fencing | PerRmt. | 197.15 | 12934.31 | 25.5 | 0 | 0 | 0 | 0 | 4311.4 | 8.5 | 4311.4 | 8.5 | 4311.4 | 8.5 | 0 | 0 |
| 13 | Contour furrow | PerHact. | 24875.74 | 65.12 | 16.2 | 0 | 0 | 0 | 0 | 21.708 | 5.4 | 21.708 | 5.4 | 21.708 | 5.4 | 0 | 0 |
| 14 | Staggered trenches | PerHact. | 11140.77 | 113.64 | 12.66 | 0 | 0 | 0 | 0 | 37.879 | 4.22 | 37.879 | 4.22 | 37.879 | 4.22 | 0 | 0 |
| 15 | Ditch cum Bund fencing | PerRmt. | 119.35 | 9052.37 | 10.804 | 0 | 0 | 0 | 0 | 3017.5 | 3.6013 | 3017.5 | 3.6013 | 3017.5 | 3.6013 | 0 | 0 |
| 16 | Plantation | PerHact. | 28572.2 | 134.85 | 38.53 | 0 | 0 | 0 | 0 | 44.95 | 12.843 | 44.95 | 12.843 | 44.95 | 12.843 | 0 | 0 |
| 17 | over seeding | PerHact. | 7210.57 | 439.91 | 31.72 | 0 | 0 | 0 | 0 | 146.64 | 10.573 | 146.64 | 10.573 | 146.64 | 10.573 | 0 | 0 |
| 18 | Nadi/Johad with outlet | PerNo. | 566000 | 3.00 | 16.98 | 0 | 0 | 0 | 0 | 1 | 5.66 | 1 | 5.66 | 1 | 5.66 | 0 | 0 |
| | Drainage line treatment | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19 | Slit Detention str.Lenth 3m | PerNo. | 23022.3 | 189.25 | 43.57 | 0 | 0 | 0 | 0 | 63.084 | 14.523 | 63.084 | 14.523 | 63.084 | 14.523 | 0 | 0 |
| 20 | Silt Detention str.Lenth 5m | PerNo. | 55857 | 90.62 | 50.62 | 0 | 0 | 0 | 0 | 30.208 | 16.873 | 30.208 | 16.873 | 30.208 | 16.873 | 0 | 0 |
| 21 | L.S.C.D Lenth 5m | PerNo. | 4777 | 410.09 | 19.59 | 0 | 0 | 0 | 0 | 136.7 | 6.53 | 136.7 | 6.53 | 136.7 | 6.53 | 0 | 0 |
| a | Lenth 10m | PerNo. | 9554 | 240.84 | 14.3 | 0 | 0 | 0 | 0 | 80.281 | 4.7667 | 80.281 | 4.7667 | 80.281 | 4.7667 | 0 | 0 |
| b | Lenth 15m | PerNo. | 14334 | 147.69 | 15.2 | 0 | 0 | 0 | 0 | 49.23 | 5.0667 | 49.23 | 5.0667 | 49.23 | 5.0667 | 0 | 0 |
| 22 | Sunken pond | PerNo. | 123319 | 7.00 | 13.4 | 0 | 0 | 0 | 0 | 2.3327 | 4.4667 | 2.3327 | 4.4667 | 2.3327 | 4.4667 | 0 | 0 |
| 23 | Retaining Wall | PerNo. | 2398.76 | 854.86 | 17.9 | 0 | 0 | 0 | 0 | 284.95 | 5.9667 | 284.95 | 5.9667 | 284.95 | 5.9667 | 0 | 0 |
| | 56% | | | Total WS/W | 433.56 | 0 | 0 | 0 | 0 | | 144.52 | | 144.52 | | 144.52 | 0 | 0 |
| | Livelihoods | C | 9% | | 69.48 | | | | | | 23.16 | | 23.16 | | 23.16 | | |

| | | | | | | | | | | | | | | | | | |
|----|---|---------|------------|----------|----------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|--------------|
| | Livelihoods | C | 9% | | 69.48 | | | | | | 23.16 | | 23.16 | | 23.16 | | |
| | Revolving fund for SHG(60%) | | | | 41.688 | | | | | | 13.896 | | 13.896 | | 13.896 | | |
| | Revolving fund for individual enterprising(10%) | | | | 7.78 | | | | | | 2.5933 | | 2.5933 | | 2.5933 | | |
| | Grant in aid to Fedration of SHG(30%) | | | | 20 | | | | | | 6.6667 | | 6.6667 | | 6.6667 | | |
| | Production measures, Micro entripises | D | | | | | | | | | 0 | | 0 | | 0 | | 0 |
| 25 | Horticulture plantation | PerNo. | 101 | 5742.57 | 5.8 | 0 | 0 | 0 | 0 | 1914.2 | 1.9333 | 1914.2 | 1.9333 | 1914.2 | 1.9333 | 0 | 0 |
| 26 | Agroforestry | PerNo. | 32.73 | 6653.83 | 2.1778 | 0 | 0 | 0 | 0 | 2217.9 | 0.7259 | 2217.9 | 0.7259 | 2217.9 | 0.7259 | 0 | 0 |
| 27 | Vermi compost | PerNo. | 31000 | 68.00 | 21.08 | 0 | 0 | 0 | 0 | 22.667 | 7.0267 | 22.667 | 7.0267 | 22.667 | 7.0267 | 0 | 0 |
| 28 | Vegetable kit demo | PerNo. | 1250 | 506.40 | 6.26 | 0 | 0 | 0 | 0 | 168.8 | 2.0867 | 168.8 | 2.0867 | 168.8 | 2.0867 | 0 | 0 |
| 29 | Crop Demostration | PerNo. | 1000 | 1015.00 | 10.15 | 0 | 0 | 0 | 0 | 338.33 | 3.3833 | 338.33 | 3.3833 | 338.33 | 3.3833 | 0 | 0 |
| 30 | Sprinkler Irrigation | PerNo. | 15789 | 22.99 | 3.63 | 0 | 0 | 0 | 0 | 7.6636 | 1.21 | 7.6636 | 1.21 | 7.6636 | 1.21 | 0 | 0 |
| 31 | Drip irrigation Demo. | PerNo. | 19096 | 14.92 | 2.85 | 0 | 0 | 0 | 0 | 4.9749 | 0.95 | 4.9749 | 0.95 | 4.9749 | 0.95 | 0 | 0 |
| 30 | Carpentry tools,Mason tools,Pottery tools,Footwear(Mojri) tools,Blacksmith tools,Cycle machnic tools,Hand seed dril,Padle operated Thresher,Maize sheeler Hand Operated,Wheel type hoe manual operated,Padel operated cleaner,Animal operated broad bund former | | | 69.00 | 25.1 | 0 | 0 | 0 | 0 | 22.999 | 8.3667 | 22.999 | 8.3667 | 22.999 | 8.3667 | 0 | 0 |
| | Total | | | | 77.0478 | 0 | 0 | 0 | 0 | | 25.683 | | 25.683 | | 25.683 | 0 | 0 |
| 31 | Consolidation Phase 3% | E | | | 23.175 | 0 | 0 | 0 | 0 | | 0 | | 0 | | 0 | | 23.175 |
| | | In Lacs | GrandTotal | 5150 Ha. | 597.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 191.57 | 0.00 | 191.57 | 0.00 | 191.57 | 0.00 | 23.18 |

Check 597.89280

| | | |
|-----------------------------|------|---------|
| Total of Preparatory phase | 22% | 169.95 |
| Total of Works phase | 75% | 579.375 |
| Total of Cosolidation phase | 3% | 23.175 |
| Total Area 5150 Hact. | 100% | 772.5 |

IWMP-9-PALI(10-11),P.S-Bali

Entry Point Activity

| Name of upp-samiti w/c | Area | Amount earmarked for EPA | Activity | Estimated Cost | Expected outcome |
|------------------------|--------|--------------------------|---|----------------|---|
| Goriya | 2451 | 14.71 | Solar light, Soil retention structure,Cremination Shade | 14.71 | peoples participation will increase awariness of project will increase |
| Danverli | 778.2 | 4.67 | Solar light Demo.Cremination Shade | 4.67 | peoples participation will increase awariness of project will increase |
| Koelwab | 930.13 | 5.58 | Solar light, Ground level reservior with pipeline for drinking water purpose Cremination Shade | 5.58 | peoples participation will increase awariness of project will increase |
| Nana | 990.67 | 5.94 | Solar light, Ground level reservior with pipeline for drinking water purpose Cremination Shade | 5.94 | peoples participation will increase awariness of project will increase |
| Total | 5150 | 30.90 | | 30.90 | |

| IWMP-9-PALI(10-11),P.S-Bali | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------|------------|----------------------------|-------------|----------------------------|-------------|----------------------------|----------|----------------------------|------------|----------------------------|--------------------------|----------------------------|-------------------|----------------------------|-------------|----------------------------|---------------------------|----------------------------|------------------|----------------------------|------------|----------------------------|
| Area | | | | | | | | | | 5150 Ha. | | P.S-Bali, Pali Rajasthan | | | | | 7725000 | | | | | | |
| Budget Control of IWMP as per SLNA guideline order No.F18 (13)/dwsc/iwmp/2011/6867-6951/Dt.15.12.11 | | | | | | | | | | | | | | | | | | | | | | | |
| | | Admn.% | Amount as per project area | Monitoring% | Amount as per project area | Evaluation% | Amount as per project area | EPA% | Amount as per project area | I & CB% | Amount as per project area | DPR% | Amount as per project area | Water-shed Works% | Amount as per project area | LIVELIHOODS | Amount as per project area | Production system & Micro | Amount as per project area | Consoli-dation % | Amount as per project area | Total | Amount as per project area |
| 1st | | | | | | | | | | | | | | | | | | | | | | | |
| -20% | SLNA | | 0 | 0.05 | 38625 | 0.3 | 231750 | | 0 | 0.05 | 38625 | | 0 | | 0 | | | | 0 | | 0 | 0.4 | 309000 |
| | WCDC | | 0 | 0.05 | 38625 | | 0 | | 0 | 0.75 | 579375 | | 0 | | 0 | | | | 0 | | 0 | 0.8 | 618000 |
| | PIA | 1.5 | 1158750 | 0.1 | 77250 | | 0 | | 0 | 2.2 | 1699500 | 1 | 772500 | | 0 | | | | 0 | | 0 | 4.8 | 3708000 |
| | WC | 0.5 | 386250 | | 0 | | 0 | 4 | 3090000 | | 0 | | 0 | 7.5 | 5793750 | 1 | 772500 | 1 | 772500 | | 0 | 14 | 10042500 |
| | Total | 2 | 1545000 | 0.2 | 154500 | 0.3 | 231750 | 4 | 3090000 | 3 | 2317500 | 1 | 772500 | 7.5 | 5793750 | 1 | 772500 | 1 | 772500 | | 0 | 20 | 14677500 |
| 2nd | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | | | 0 | | 0 | 0 | 0 |
| -50% | SLNA | | 0 | 0.075 | 57937.5 | 0.35 | 270375 | | 0 | 0 | 0 | | 0 | | 0 | | | | 0 | | 0 | 0.425 | 328312.5 |
| | WCDC | | 0 | 0.075 | 57937.5 | | 0 | | 0 | 0.4 | 309000 | | 0 | | 0 | | | | 0 | | 0 | 0.475 | 366937.5 |
| | PIA | 4 | 3090000 | 0.25 | 193125 | | 0 | | 0 | 1.1 | 849750 | | 0 | | 0 | | | | 0 | | 0 | 5.35 | 4132875 |
| | WC | 1.4 | 1081500 | | 0 | | 0 | | 0 | | 0 | | 0 | 30.35 | 23445375 | 6 | 4635000 | 6 | 4635000 | | 0 | 43.75 | 29161875 |
| | Total | 5.4 | 4171500 | 0.4 | 309000 | 0.35 | 270375 | | 0 | 1.5 | 1158750 | | 0 | 30.35 | 23445375 | 6 | 4635000 | 6 | 4635000 | | 0 | 50 | 33990000 |
| 3rd | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | | | 0 | | 0 | 0 | 0 |
| -30% | SLNA | | 0 | 0.075 | 57937.5 | 0.35 | 270375 | | 0 | | 0 | | 0 | | 0 | | | | 0 | 0.1 | 77250 | 0.525 | 405562.5 |
| | WCDC | | 0 | 0.075 | 57937.5 | | 0 | | 0 | 0.15 | 115875 | | 0 | | 0 | | | | 0 | 0.1 | 77250 | 0.325 | 251062.5 |
| | PIA | 1.5 | 1158750 | 0.25 | 193125 | | 0 | | 0 | 0.35 | 270375 | | 0 | | 0 | | | | 0 | 0.2 | 154500 | 2.3 | 1776750 |
| | WC | 1.1 | 849750 | | 0 | | 0 | | 0 | | 0 | | 0 | 18.15 | 14020875 | 2 | 1545000 | 3 | 2317500 | 2.6 | 2008500 | 26.85 | 19196625 |
| | Total | 2.6 | 2008500 | 0.4 | 309000 | 0.35 | 270375 | | 0 | 0.5 | 386250 | | 0 | 18.15 | 14020875 | 2 | 1545000 | 3 | 2317500 | 3 | 2317500 | 30 | 21630000 |
| Total (100%) | SLNA | 0 | 0 | 0.2 | 154500 | 1 | 772500 | 0 | 0 | 0.05 | 38625 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0.1 | 77250 | 1.35 | 1042875 |
| | WCDC | 0 | 0 | 0.2 | 154500 | 0 | 0 | 0 | 0 | 1.3 | 1004250 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0.1 | 77250 | 1.6 | 1236000 |
| | PIA | 7 | 5407500 | 0.6 | 463500 | 0 | 0 | 0 | 0 | 3.65 | 2819625 | 1 | 772500 | 0 | 0 | | 0 | 0 | 0 | 0.2 | 154500 | 12.45 | 9617625 |
| | WC | 3 | 2317500 | 0 | 0 | 0 | 0 | 4 | 3090000 | 0 | 0 | 0 | 0 | 56 | 43260000 | 9 | 6952500 | 10 | 7725000 | 2.6 | 2008500 | 84.6 | 58401000 |
| | Total | 10 | 7725000 | 1 | 772500 | 1 | 772500 | 4 | 3090000 | 5 | 3862500 | 1 | 772500 | 56 | 43260000 | 9 | 6952500 | 10 | 7725000 | 3 | 2317500 | 100 | 77250000 |

Total of works taken in Three Upp-Samity-IWMP-6-PALI(09-10)

IWMP-9-Pali (10-11) P.S-Bali

Goriya+Koelwab+Nana+Danverli

Area of Total Project

5150 Hact.

For Upp-W/C

Cost as per GOI

65353500

84.60%

| S.No | Activity as per GOI & SLNA NORMS | Unit | Cost | Physical | Total Cost |
|--|----------------------------------|----------|------------|----------|------------|
| 1 | Admn. | | | 0 | 23.18 |
| 2 | Monitoring | | | 0 | 0.00 |
| 3 | Evaluation | | | 0 | 0.00 |
| 4 | EPA | | | 0 | 30.90 |
| 5 | I & CB | | | 0 | 0.00 |
| 6 | DPR | | | 0 | 0.00 |
| TOTAL | | | | 0 | 54.08 |
| Watershed Phase | | | | | 0.00 |
| 7 | Peuto rico terrace | PerRmt | 456.55 | 7705.62 | 38.68 |
| 8 | Gully control str. | PerNo. | 4777 | 92.44 | 5.42 |
| 9 | field bunding | PerRmt | 113.71 | 10210.18 | 13.11 |
| 10 | Sunken pond | PerNo. | 140000 | 25.43 | 41.10 |
| 11 | Saran | PerRmt | 1580.65 | 1321.61 | 25.89 |
| Conservation measures for non arable land | | | | | 0.00 |
| 12 | Stone wall fencing | PerRmt. | 197.15 | 12609.69 | 28.67 |
| 13 | Contour furrow | PerHact. | 24875.74 | 65.12 | 19.07 |
| 14 | Staggered trenches | PerHact. | 11140.77 | 112.02 | 16.17 |
| 15 | Ditch cum Bund fencing | PerRmt. | 119.35 | 9052.37 | 11.80 |
| 16 | Plantation | PerHact. | 28572.2 | 83.61 | 25.39 |
| 17 | over seeding | PerHact. | 7210.57 | 338.39 | 27.92 |
| 18 | Nadi/Johad with outlet | PerNo. | 566000 | 3.00 | 22.64 |
| Drainage line treatment | | | | | 0.00 |
| 19 | Slit Detention str.Lenth 3m | PerNo. | 23022.3 | 135.13 | 39.01 |
| 20 | Silt Detention str.Lenth 5m | PerNo. | 55857 | 56.48 | 37.05 |
| 21 | L.S.C.D Lenth 5m | PerNo. | 4777 | 253.72 | 14.62 |
| a | Lenth 10m | PerNo. | 9554 | 138.69 | 14.75 |
| b | Lenth 15m | PerNo. | 14334 | 80.65 | 13.06 |
| 22 | Sunken pond | PerNo. | 123319 | 10.06 | 15.90 |
| 23 | Retaining Wall | PerNo. | 2398.76 | 717.29 | 21.76 |
| | | | Total WS/W | | 432.01 |

| | | | | | |
|--|---|---------|-----------|----------|--------|
| Livelihoods,Animal Husbandry Camp,SHG funding | | | | | 69.51 |
| Production measures &Micro Entp. | | | | | 0.00 |
| 25 | Horticulture plantation | PerNo. | 101.00 | 3217.82 | 4.00 |
| 26 | Agroforestry | PerNo. | 32.73 | 6416.13 | 2.60 |
| 27 | Vermi compost | PerNo. | 31000 | 35.65 | 12.25 |
| 28 | Vegetable kit demo | PerNo. | 1250 | 600.00 | 9.50 |
| 29 | Crop Demostration | PerNo. | 1000 | 865.00 | 10.80 |
| 30 | Sprinkler Irrigation | PerNo. | 15789 | 21.60 | 4.20 |
| 31 | Drip irrigation Demo. | PerNo. | 19096 | 20.16 | 4.42 |
| 32 | Carpentry tools,Mason tools,Pottery tools,Footwear(Mojri) tools,Blacksmith tools,Cycle machnic tools,Hand seed dril,Padle operated Thresher,Maize sheeler Hand Operated,Wheel type hoe manual operated,Padel operated cleaner,Animal operated broad bund former | | | 28.80 | 30.53 |
| | | Total | | | 78.30 |
| 31 | Consolidation Phase | | | | 19.80 |
| | | In Lacs | GrandTota | 5018 Ha. | 653.69 |

Summary of works taken in Upp-Samity-Goriya,G.P-Goriya

IWMP-9-Pali (10-11) P.S-Bali

Area of Upp-Samity Goriya
Cost in Rs.

2451

Hact.
31103190

| S.No | Activity as per GOI & SLNA NORMS | Unit | Cost | Physical | Total Cost |
|--|-------------------------------------|----------|----------|------------|----------------|
| 1 | Admn. | | | | 11.0295 |
| 2 | Monitoring | | | | |
| 3 | Evaluation | | | | |
| 4 | EPA | | | | 14.706 |
| 5 | I & CB | | | | |
| 6 | DPR | | | | |
| TOTAL | | | | | 25.7355 |
| Watershed Phase | | | | | |
| 7 | Peuto rico terrace | PerRmt | 456.55 | 5475.85 | 25 |
| 8 | Gully control str. | PerNo. | 4777 | 23.15 | 1.106 |
| 9 | field bunding | PerRmt | 113.71 | 4819.28 | 5.48 |
| 10 | Sunken pond | PerNo. | 140000 | 20.00 | 28 |
| 11 | Saran | PerRmt | 1580.65 | 449.81 | 7.11 |
| Conservation measures for non arable land | | | | | |
| 12 | Stone wall fencing | PerRmt. | 197.15 | 8242.45 | 16.25 |
| 13 | Contour furrow | PerHact. | 24875.74 | 26.65 | 6.63 |
| 14 | Staggered trenches | PerHact. | 11140.77 | 20.56 | 2.29 |
| 15 | Ditch cum Bund fencing | PerRmt. | 119.35 | 3996.65 | 4.77 |
| 16 | Plantation | PerHact. | 28572.2 | 50.01 | 14.29 |
| 17 | over seeding | PerHact. | 7210.57 | 227.17 | 16.38 |
| 18 | Nadi/Johad with outlet | PerNo. | 566000 | 1.00 | 5.66 |
| Drainage line treatment | | | | | |
| 19 | Slit Detention str.Lenth 3m | PerNo. | 23022.3 | 69.98 | 16.11 |
| 20 | Silt Detention str.Lenth 5m | PerNo. | 55857 | 35.00 | 19.55 |
| 21 | L.S.C.D Lenth 5m | PerNo. | 4777 | 169.98 | 8.12 |
| a | Lenth 10m | PerNo. | 9554 | 96.82 | 9.25 |
| b | Lenth 15m | PerNo. | 14334 | 49.95 | 7.16 |
| 22 | Sunken pond | PerNo. | 123319 | 2.00 | 2.47 |
| 23 | Retaining Wall | PerNo. | 2398.76 | 389.78 | 9.35 |
| | | | | Total WS/W | 204.976 |

205.88

| | | | | | |
|--|---|---------|------------|---------|--------|
| Livelihoods,Animal Husbandry Camp,SHG funding | | No. | 25000 | 132 | 33.09 |
| Production measures,Microentp. | | | | | |
| 25 | Horticulture plantation | PerNo. | 101.00 | 1485.15 | 1.5 |
| 26 | Agroforestry | PerNo. | 32.73 | 3971.89 | 1.3 |
| 27 | Vermi compost | PerNo. | 31000 | 25.00 | 7.75 |
| 28 | Vegetable kit demo | PerNo. | 1250 | 200.00 | 2.5 |
| 29 | Crop Demostration | PerNo. | 1000 | 400.00 | 4 |
| 30 | Sprinkler Irrigation | PerNo. | 15789 | 8.99 | 1.42 |
| 31 | Drip irrigation Demo. | PerNo. | 19096 | 11.21 | 2.14 |
| 32 | Carpentry tools,Mason tools,Pottery tools,Footwear(Mojri) tools,Blacksmith tools,Cycle machnic tools,Hand seed dril,Padle operated Thresher,Maize sheeler Hand Operated,Wheel type hoe manual operated,Padel operated cleaner,Animal operated broad bund former | | | | 17.03 |
| | | Total | | | 37.64 |
| 33 | Consolidation Phase | | | | 9.5589 |
| | | In Lacs | GrandTotal | | 311.00 |

36.765

Summary of works taken in Upp-Samity-Koelwab ,G.P-Koelwab

IWMP-9-Pali (10-11) P.S-Bali

Area of upp-Samity-Koelwab

930.13

Hact.

Cost in Rs.

11803349.7

| S.No | Activity as per GOI & SLNA NORMS | Unit | Cost | Physical | Total Cost |
|--|----------------------------------|----------|----------|------------|------------|
| 1 | Admn. | | | | 4.19 |
| 2 | Monitoring | | | | |
| 3 | Evaluation | | | | |
| 4 | EPA | | | | 5.58 |
| 5 | I & CB | | | | |
| 6 | DPR | | | | |
| TOTAL | | | | | 9.77 |
| Watershed Phase | | | | | |
| 7 | Peuto rico terrace | PerRmt | 456.55 | 1007.56 | 4.6 |
| 8 | Gully control str. | PerNo. | 4777 | 52.33 | 2.5 |
| 9 | field bunding | PerRmt | 113.71 | 1670.92 | 1.9 |
| 10 | Sunken pond | PerNo. | 140000 | 4.43 | 6.2 |
| 11 | Saran | PerRmt | 1580.65 | 158.16 | 2.5 |
| Conservation measures for non arable land | | | | | |
| 12 | Stone wall fencing | PerRmt. | 197.15 | 2434.69 | 4.8 |
| 13 | Contour furrow | PerHact. | 24875.74 | 26.93 | 6.7 |
| 14 | Staggered trenches | PerHact. | 11140.77 | 58.34 | 6.5 |
| 15 | Ditch cum Bund fencing | PerRmt. | 119.35 | 2999.58 | 3.58 |
| 16 | Plantation | PerHact. | 28572.2 | 8.75 | 2.5 |
| 17 | over seeding | PerHact. | 7210.57 | 62.41 | 4.5 |
| 18 | Nadi/Johad with outlet | PerNo. | 566000 | 1.00 | 5.66 |
| Drainage line treatment | | | | | |
| 19 | Silt Detention str. Lenth 3m | PerNo. | 23022.3 | 23.89 | 5.5 |
| 20 | lenth 5m | PerNo. | 55857 | 11.64 | 6.5 |
| 21 | L.S.C.D.Lenth 5m | PerNo. | 4777 | 31.40 | 1.5 |
| | Lenth 10 m | PerNo. | 9554 | 26.17 | 2.5 |
| | Lenth 15 m | PerNo. | 14334 | 13.26 | 1.9 |
| 22 | Sunken pond | PerNo. | 123319 | 4.00 | 4.93 |
| 23 | Retaining Wall | PerNo. | 2398.76 | 137.57 | 3.3 |
| | | | | Total WS/W | 78.07 |

9.766365

78.13092

| | | | | | | |
|--|---|-------------|-------|---------|--------|----------|
| Livelihoods,Animal Husbandry Camp,SHG funding | | No. | 25000 | 0.00 | 12.55 | 12.55676 |
| Production measures &micro Entp. | | | | | | |
| 25 | Horticulture plantation | PerNo. | 101 | 990.10 | 1 | |
| 26 | AgroForestry | PerNo. | 32.73 | 1069.36 | 0.35 | |
| 27 | Vermi compost | PerNo. | 31000 | 3.87 | 1.2 | |
| 28 | Vegetable kit demo | PerNo. | 1250 | 200.00 | 2.5 | |
| 29 | Crop Demonstration | PerNo. | 1000 | 250.00 | 2.5 | |
| 30 | Sprinkler Irrigation | PerNo. | 15789 | 7.60 | 1.2 | |
| 31 | Drip irrigation Demo. | PerNo. | 19096 | 5.97 | 1.14 | |
| 32 | Carpentry tools,Mason tools,Pottery tools,Footwear(Mojri) tools,Blacksmith tools,Cycle machnic tools,Hand seed dril,Padle operated Thresher,Maize sheeler Hand Operated,Wheel type hoe manual operated,Padel operated cleaner,Animal operated broad bund former | | | | 4.5 | |
| | | Total | | 0.00 | 14.39 | 13.95 |
| 33 | Consolidated Phase | | | 0.00 | 3.35 | 3.63 |
| | | Grand Total | | | 118.13 | 118.03 |

Summary of works taken in Upp-Samity-Nana,G.P-Nana

IWMP-9-Pali (10-11) P.S-Bali

Area of Upp-samity-Nana

990.67 Hact.

Cost in Rs.

12571602.3

| S.No | Activity as per GOI & SLNA NORMS | Unit | Cost | Physical | Total Cost |
|--|----------------------------------|----------|----------|------------|--------------|
| 1 | Admn. | | | | 4.46 |
| 2 | Monitoring | | | | |
| 3 | Evaluation | | | | |
| 4 | EPA | | | | 5.94 |
| 5 | I & CB | | | | |
| 6 | DPR | | | | |
| TOTAL | | | | | 10.40 |
| Watershed Phase | | | | | |
| 7 | Peuto rico terrace | PerRmt | 456.55 | 1222.21 | 5.58 |
| 8 | Gully control str. | PerNo. | 4777 | 16.96 | 0.81 |
| 9 | field bunding | PerRmt | 113.71 | 3719.99 | 4.23 |
| 10 | Sunken pond | PerNo. | 140000 | 1.00 | 1.4 |
| 11 | Saran | PerRmt | 1580.65 | 713.63 | 11.28 |
| Conservation measures for non arable land | | | | | |
| 12 | Stone wall fencing | PerRmt. | 197.15 | 1932.54 | 3.81 |
| 13 | Contour furrow | PerHact. | 24875.74 | 11.54 | 2.87 |
| 14 | Staggered trenches | PerHact. | 11140.77 | 33.12 | 3.69 |
| 15 | Ditch cum Bund fencing | PerRmt. | 119.35 | 2056.14 | 2.454 |
| 16 | Plantation | PerHact. | 28572.2 | 24.85 | 7.1 |
| 17 | over seeding | PerHact. | 7210.57 | 48.82 | 3.52 |
| 18 | Nadi/Johad with outlet | PerNo. | 566000 | 1.00 | 5.66 |
| Drainage line treatment | | | | | |
| 19 | Silt Detention str.Lenth 3m | PerNo. | 23022.3 | 41.26 | 9.5 |
| 20 | Slit Detention str.Lenth 5m | PerNo. | 55857 | 9.85 | 5.5 |
| 21 | L.S.C.D.Lenth 5m | PerNo. | 4777 | 52.33 | 2.5 |
| | Lenth 10m | PerNo. | 9554 | 15.70 | 1.5 |
| | Lenth 15m | PerNo. | 14334 | 17.44 | 2.5 |
| 22 | Sunken pond | PerNo. | 123319 | 4.05 | 5 |
| 23 | Retaining Wall | PerNo. | 2398.76 | 189.93 | 4.556 |
| | | | | Total WS/W | 83.46 |

83.216

| | | | | | | |
|--|---|--------|-------|------------|--------|--------|
| Livelihoods,Animal Husbandry Camp,SHG funding | | | 25000 | 0.01869858 | 13.37 | 13.374 |
| Production measures &micro Entp | | | | | | |
| 25 | Horticulture plantation | PerNo. | 101 | 742.57 | 0.75 | 14.86 |
| 26 | Agroforestry | PerNo. | 32.73 | 1374.89 | 0.45 | |
| 27 | Vermi compost | PerNo. | 31000 | 6.77 | 2.1 | |
| 28 | Vegetable kit demo | PerNo. | 1250 | 200.00 | 2.5 | |
| 29 | Crop Demonstration | PerNo. | 1000 | 215.00 | 2.15 | |
| 30 | Sprinkler Irrigation | PerNo. | 15789 | 5.00 | 0.79 | |
| 31 | Drip irrigation Demo. | PerNo. | 19096 | 2.98 | 0.57 | |
| 32 | Carpentry tools,Mason tools,Pottery tools,Footwear(Mojri) tools,Blacksmith tools,Cycle machnic tools,Hand seed dril,Padle operated Thresher,Maize sheeler Hand Operated,Wheel type hoe manual operated,Padel operated cleaner,Animal operated broad bund former | PerNo. | 19096 | 28.80 | 5.500 | |
| | | | | Total | 14.81 | 14.86 |
| 33 | Consolidation Phase | | | | 3.86 | 3.8636 |
| | | Total | | | 125.90 | 125.72 |
| | | | | | | |

Summary of works taken in Upp-Danverli-Serawa,G.P-Danverli

IWMP-9-Pali (10-11) P.S-Bali

Area of Upp-samity-Danverli

778.2 Hact.

Cost in Rs.

9875358

| S.No | Activity as per GOI & SLNA NORMS | Unit | Cost | Physical | Total Cost |
|--|----------------------------------|----------|----------|------------|---------------|
| 1 | Admn. | | | | 3.50 |
| 2 | Monitoring | | | | |
| 3 | Evaluation | | | | |
| 4 | EPA | | | | 4.67 |
| 5 | I & CB | | | | |
| 6 | DPR | | | | |
| TOTAL | | | | | 8.17 |
| Watershed Phase | | | | | |
| 7 | Peuto rico terrace | PerRmt | 456.55 | 766.62 | 3.5 |
| 8 | Gully control str. | PerNo. | 4777 | 20.93 | 1 |
| 9 | field bunding | PerRmt | 113.71 | 1319.15 | 1.5 |
| 10 | Sunken pond | PerNo. | 140000 | 3.93 | 5.5 |
| 11 | Saran | PerRmt | 1580.65 | 316.33 | 5 |
| Conservation measures for non arable land | | | | | |
| 12 | Stone wall fencing | PerRmt. | 197.15 | 1932.54 | 3.81 |
| 13 | Contour furrow | PerHact. | 24875.74 | 11.54 | 2.87 |
| 14 | Staggered trenches | PerHact. | 11140.77 | 33.12 | 3.69 |
| 15 | Ditch cum Bund fencing | PerRmt. | 119.35 | 837.87 | 1 |
| 16 | Plantation | PerHact. | 28572.2 | 5.25 | 1.5 |
| 17 | over seeding | PerHact. | 7210.57 | 48.82 | 3.52 |
| 18 | Nadi/Johad with outlet | PerNo. | 566000 | 1.00 | 5.66 |
| Drainage line treatment | | | | | |
| 19 | Silt Detention str.Lenth 3m | PerNo. | 23022.3 | 34.31 | 7.9 |
| 20 | Slit Detention str.Lenth 5m | PerNo. | 55857 | 9.85 | 5.5 |
| 21 | L.S.C.D.Lenth 5m | PerNo. | 4777 | 52.33 | 2.5 |
| | Lenth 10m | PerNo. | 9554 | 15.70 | 1.5 |
| | Lenth 15m | PerNo. | 14334 | 10.46 | 1.5 |
| 22 | Sunken pond | PerNo. | 123319 | 2.84 | 3.5 |
| 23 | Retaining Wall | PerNo. | 2398.76 | 189.93 | 4.556 |
| | | | | Total WS/W | 65.506 |

65.369

| | | | | | | |
|--|---|--------|-------|---------|-------|--------|
| Livelihoods,Animal Husbandry Camp,SHG funding | | | 25000 | 42 | 10.5 | 10.506 |
| Production measures & micro Entp. | | | | | | |
| 25 | Horticulture plantation | PerNo. | 101 | 742.57 | 0.75 | |
| 26 | Agroforestry | PerNo. | 32.73 | 1527.65 | 0.5 | |
| 27 | Vermi compost | PerNo. | 31000 | 3.87 | 1.2 | |
| 28 | Vegetable kit demo | PerNo. | 1250 | 160.00 | 2 | |
| 29 | Crop Demostration | PerNo. | 1000 | 215.00 | 2.15 | |
| 30 | Sprinkler Irrigation | PerNo. | 15789 | 5.00 | 0.79 | |
| 31 | Drip irrigation Demo. | PerNo. | 19096 | 2.98 | 0.57 | |
| 32 | Carpentry tools,Mason tools,Pottery tools,Footwear(Mojri) tools,Blacksmith tools,Cycle machnic tools,Hand seed dril,Padle operated Thresher,Maize sheeler Hand Operated,Wheel type hoe manual operated,Padel operated cleaner,Animal operated broad bund former | PerNo. | 19096 | 18.33 | 3.500 | |
| | | | | Total | 11.46 | 11.673 |
| 33 | Consolidation Phase | | | | 3.03 | 3.035 |
| | | Total | | | 98.67 | 98.75 |

| IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II | | |
|--|--------------|----------------|
| Budget Component for PIA A.En P.S Bali-Pali | | |
| Area | 5150 | Hact. |
| Budget Component | | |
| Adminstrative Cost | 7 | 5407500 |
| Monitering | 0.6 | 463500 |
| Prepatory Phase,including | | |
| institution and capacity | | |
| building | 3.65 | 2819625 |
| Detail Project Report | 1 | 772500 |
| Watershed work phase | | |
| consolidation phase | 0.2 | 154500 |
| Total | 12.45 | 9617625 |

| IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II | | |
|---|------------|----------------|
| Budget Component for DWDU-Z.P-Pali | | |
| Budget Component | | |
| Monitering | 0.2 | 154500 |
| Prepatory Phase,including | | |
| institution and capacity | | |
| building | 1.3 | 1004250 |
| consolidation phase | 0.1 | 77250 |
| Total | 1.6 | 1236000 |

| IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II | | |
|--|-------------|-----------------|
| Budget Component for SLNA-WD&SC(R.D) JAIPUR | | |
| Budget Component | | |
| Monitering | 0.2 | 154500 |
| Evaluation | 1 | 772500 |
| institution and capacity | | |
| building | 0.05 | 38625 |
| consolidation phase | 0.1 | 77250 |
| Total | 1.35 | 1042875 |
| Total Area | 5018 | For cross check |
| Cost per Hact. | 15000 | |
| Total Cost of project | 75270000 | 43665938.7 |

| IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II | | |
|--|-------------|-----------------|
| Name of upp samiti-GORIYA,G.P-Kumtiya | | |
| Area 2451 Hact. | | |
| Budget Component | | |
| Adminstrative Cost | 3 | 1102950 |
| Monitering | 0 | 0 |
| Evaluation | 0 | 0 |
| Prepatory Phase,including | | |
| Entrypoint activity | 4 | 1470600 |
| institution and capacity building | 0 | 0 |
| Detail Project Report | 0 | 0 |
| Watershed work phase | | |
| Watershed development works | 56 | 20588400 |
| Livelihood | 9 | 3308850 |
| Production system and micro enterprise | 10 | 3676500 |
| consolidation phase | 2.6 | 955890 |
| Total | 84.6 | 31103190 |

| IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II | | |
|--|-------------|----------------|
| Name of upp samiti-GORIYA,G.P-Kumtiya | | |
| Area 778.2 Hact. | | |
| Budget Component | | |
| Adminstrative Cost | 3 | 350190 |
| Monitering | 0 | 0 |
| Evaluation | 0 | 0 |
| Prepatory Phase,including | | |
| Entrypoint activity | 4 | 466920 |
| institution and capacity building | 0 | 0 |
| Detail Project Report | 0 | 0 |
| Watershed work phase | | |
| Watershed development works | 56 | 6536880 |
| Livelihood | 9 | 1050570 |
| Production system and micro enterprise | 10 | 1167300 |
| consolidation phase | 2.6 | 303498 |
| Total | 84.6 | 9875358 |

| IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II | | |
|--|-------------|-------------------|
| Name of upp samiti-GORIYA,G.P-Kumtiya | | |
| Area | 930.13 | Hact. |
| Budget Component | | |
| Adminstrative Cost | 3 | 418558.5 |
| Monitering | 0 | 0 |
| Evaluation | 0 | 0 |
| Prepatory Phase,including | | |
| Entrypoint activity | 4 | 558078 |
| institution and capacity building | 0 | 0 |
| Detail Project Report | 0 | 0 |
| Watershed work phase | | |
| Watershed development works | 56 | 7813092 |
| Livelihood | 9 | 1255675.5 |
| Production system and micro enterprise | 10 | 1395195 |
| consolidation phase | 2.6 | 362750.7 |
| Total | 84.6 | 11803349.7 |

| IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II | | |
|--|-------------|-------------------|
| Name of upp samiti-GORIYA,G.P-Kumtiya | | |
| Area | 990.67 | Hact. |
| Budget Component | | |
| Adminstrative Cost | 3 | 445801.5 |
| Monitering | 0 | 0 |
| Evaluation | 0 | 0 |
| Prepatory Phase,including | | |
| Entrypoint activity | 4 | 594402 |
| institution and capacity building | 0 | 0 |
| Detail Project Report | 0 | 0 |
| Watershed work phase | | |
| Watershed development works | 56 | 8321628 |
| Livelihood | 9 | 1337404.5 |
| Production system and micro enterprise | 10 | 1486005 |
| consolidation phase | 2.6 | 386361.3 |
| Total | 84.6 | 12571602.3 |

Budget component prespricebed in common Guide Lines GOI

IWMP-9-Pali (10-11) P.S-Bali,Khetarli-II

As per order no.F18(i-13)WD&SC/IWMP/2011/6867-6951 Dt:15.12.11

Area **5150**

| Budget Component | | |
|--|------------|-----------------|
| Adminstrative Cost | 10 | 7725000 |
| Monitering | 1 | 772500 |
| Evaluation | 1 | 772500 |
| Prepatory Phase,including | | |
| Entrypoint activity | 4 | 3090000 |
| institution and capacity building | 5 | 3862500 |
| Detail Project Report | 1 | 772500 |
| Watershed work phase | | |
| Watershed development works | 56 | 43260000 |
| Livelyhood | 9 | 6952500 |
| Production system and micro enterprise | 10 | 7725000 |
| consolidation phase | 3 | 2317500 |
| Total | 100 | 77250000 |
| | | |
| 5150 | 15000 | 77250000 |

Inter Field Vegetative Bund at Lower Reaches of Field (Details)

कृषि भूमि पर कार्य तकमीना

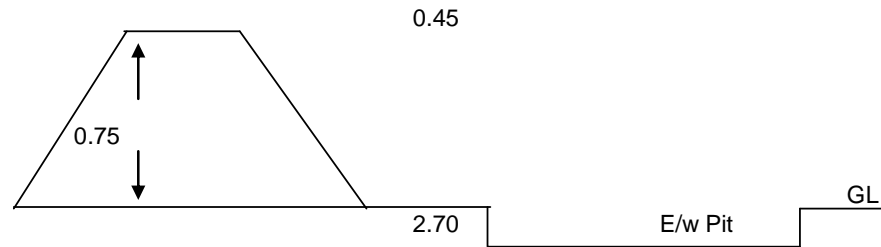
जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यु.एम.पी.(10-11)

पंचायत समिति - बाली

कुल लम्बाई

1

| क्र.सं. | कार्य विवरण | नाप | मात्रा |
|---------|--|---|-------------|
| 1 | डाग बेलिंग देना | 1.00 X 1 = 1 | 1 र.मी. |
| 2 | बंड हेतु मिट्टी का कार्य (सुखी या गीली) 15 सेमी परत में डालना ढेलों को तोड़ना, घास-पात तथा कंकर बीनकर अलग करना तथा मिट्टी की ड्रेसिंग करना कठोर मिट्टी में | $1 \times (2.70 + 0.45) / 2.00 \times 0.75 = 1.181$ | 1.181 घ.मी. |
| 3 | धामण घास के बीज की बुवाई बंड पर | 1.00 X 5.00 = 5 | 5 र.मी. |



Inter Field Vegetative Bund at Lower Reaches of Field (Abstract)

कृषि भूमि पर लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

पंचायत समिति - बाली

| क्र.सं. | कार्य विवरण | मात्रा | कुल लम्बाई | | 1 |
|-----------------|--|--------|------------|-------|---------------|
| | | | दर | इकाई | राशि |
| 1 | डाग बेलिंग देना | 1.000 | 0.470 | र.मी. | 0.47 |
| 2 | बंड हेतु मिट्टी का कार्य (सुखी या गीली) 15 सेमी परत में डालना ढेलों को तोड़ना, घास-पात तथा कंकर बीनकर अलग करना तथा मिट्टी की ड्रेसिंग करना कठोर मिट्टी में | 1.181 | 92.000 | घ.मी. | 108.68 |
| 3 | धामण घास के बीज की बुवाई बंड पर | 5.000 | 0.250 | र.मी. | 1.25 |
| TOTAL unit cost | | | | | 110.40 |
| Contengency 3% | | | | | 3.31 |
| G. TOTAL | | | | | 113.71 |

Stone bund-Puerto -rico terracing For Slope More Than 3% Cultivable Land

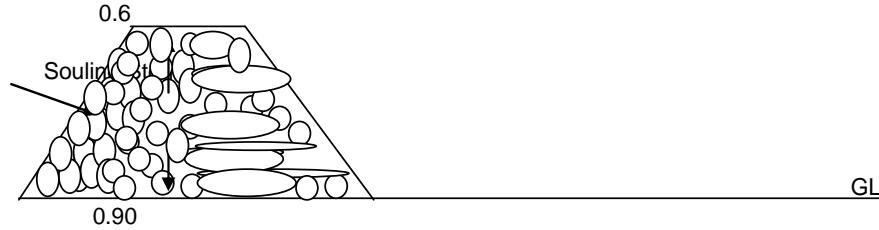
कृषि भूमि पर कार्य तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

पंचायत समिति - बाली

कुल लम्बाई

| क्र.सं. | कार्य विवरण | नाप | मात्रा | 1 |
|---------|--|---|--------|-------|
| 1 | सुखे पत्थरों से मेडबंदी का कार्य अधिक ढलान कृषि योग्य भूमि हेतु। | $1 \times (0.60 + 0.90) / 2.00 \times 0.60 = 0.450$ | 0.450 | घ.मी. |



Peuto -reco taracing For Slope More Than 3% Cultivable Land

कृषि भूमि पर लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यु.एम.पी.(10-11)

पंचायत समिति - बाली

कुल लम्बाई

1

| क्र.सं. | कार्य विवरण | मात्रा | दर श्रम | कुल दर | इकाई | श्रम राशि | कुल राशि |
|---------|--|--------|---------|--------|----------------|-----------|---------------|
| 1 | सुखे पत्थरों से मेडबंदी का कार्य अधिक ढलान कृषि योग्य भूमि हेतु। | 0.450 | 320.30 | 985.00 | घ.मी. | 144.14 | 443.25 |
| | | | | | TOTAL | | 443.25 |
| | | | | | Contengency 3% | | 13.30 |
| | | | | | G. TOTAL | | 456.55 |

Stagred Trenches in areas slop more than 3%

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

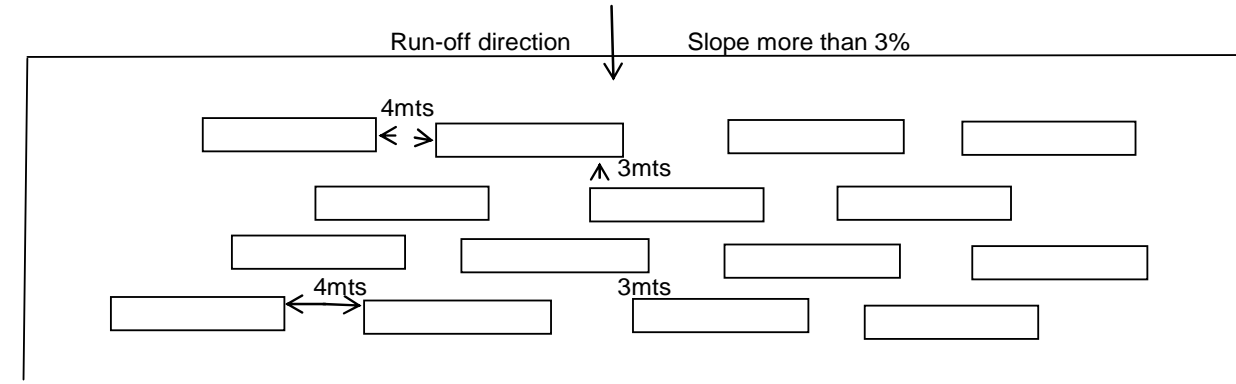
प्रभावी क्षेत्रफल है.

1

पंचायत समिति - बाली

No. of stagred Trenches 139 per Hact. With H.I 4mts & V.I 3mts

| क्र.सं. | कार्य विवरण | Hact No. | | | | | | | | | मात्रा | प्रति | |
|---------|---|----------|-----|-----|-----|---|------|---|-------|---|--------|--------|--------|
| | | l | b | h/d | | | | | | | | | |
| 1 | डाग बैलिंग कार्य | | 2 | x | 139 | | | | | = | 278.00 | 278.00 | मी. |
| 2 | नींव व ट्रेंचेच मे मिट्टी की खुदाई का कार्य, खुदी हुई मिट्टी का निस्तारण तथा समतल करना। | 1.00 | 139 | x | 4 | x | 0.45 | x | 0.45 | = | 112.59 | 112.59 | घ.मी. |
| 3 | वानिकी बिज रोपण का कार्य नोचिंग द्वारा | 1.00 | | | | | 3.00 | X | 139 | = | 417.00 | 417.00 | न0 |
| 4 | वानिकी बिज की सप्लाई | 1.00 | 139 | | | | 3.00 | X | 0.001 | = | 0.42 | 0.417 | किग्रा |



Plan of stagred Trenches

Staged Trenches in areas slop more than 3%(Abstract)

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

प्रभावी क्षेत्रफल है. 1

पंचायत समिति - बाली

No. of staged Trenches 139 per Hact. With H.I 4mts & V.I 3mts

| क्र.सं. | कार्य विवरण | मात्रा | श्रम दर | कुल दर | प्रति | श्रम राशि | कुल राशि |
|---------|--|---------|---------|--------|--------|--------------------|-----------|
| 1 | डाग बैलिंग कार्य | 278.000 | 0.470 | 0.470 | मी. | 130.660 | 130.660 |
| 2 | नीव व ट्रेंचेच मे मिट्टी की खुदाई का कार्य, खुदी हुई मिट्टी का निस्तारण तथा समतल करना। | 112.590 | 92.00 | 92.00 | घ.मी. | 10358.280 | 10358.280 |
| 3 | वानिकी बिज रोपण का कार्य नोचिंग द्वारा | 417.000 | 0.710 | 0.710 | र.मी. | 296.070 | 296.070 |
| 4 | वानिकी बिज की सप्लाई (कांटेदार पैधा) | 0.417 | 0.00 | 75.00 | किग्रा | 0.000 | 31.275 |
| | | | | | | TOTAL | 10816.29 |
| | | | | | | Add 3% Contengency | 324.49 |
| | | | | | | Grand Total | 11140.77 |

अकृषि भूमि पर घास बीज बुवाई का लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

पंचायत समिति - बाली

| क्र.सं. | कार्य विवरण | मात्रा | प्रभावी दर | | क्षेत्रफल प्रति | राशि | |
|---------|---|--------|------------|--------|-----------------|-----------------------|-----------------|
| | | | श्रम | कुल | | श्रम | कुल |
| 1 | चारागाह हेतु घास बीज बुवाई का कार्य 6 से 8 किलो प्रति हैक्टर ट्रेक्टर द्वारा जुताई सहित | 7.200 | 67.500 | 972.30 | हैक्टर | 486 | 7000.560 |
| | | | | | | Total | 7000.560 |
| | | | | | | Contengency 3% | 210.0168 |
| | | | | | | Grand Total | 7210.577 |

अकृषि भूमि पर वेजिटेटिव ट्रेंच का कार्य तकमीना

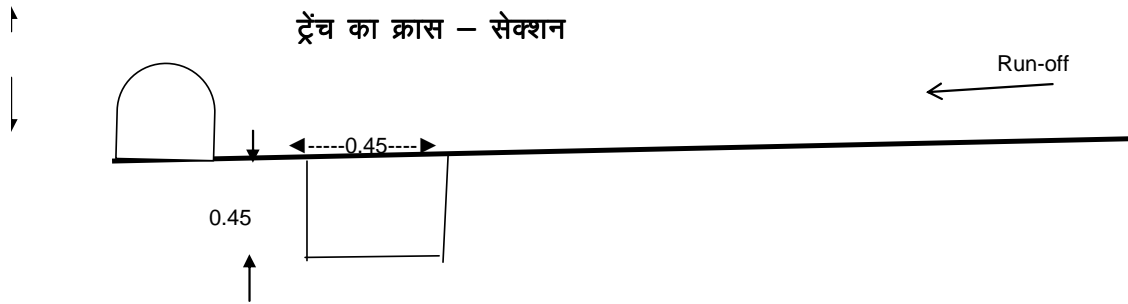
जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यू.एम.पी.(10-11)

पंचायत समिति - बाली

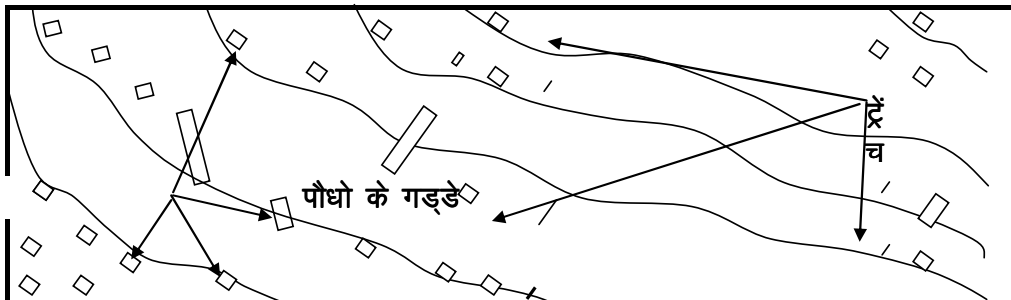
प्रभावी लम्बाई

1

| क्र.सं. | कार्य विवरण | नाप | मात्रा |
|---------|---|-------------------|------------|
| 1 | डॉग बेलिंग देना 2.50 से 5.00 सेमी गहरी | | 1.000 मी. |
| 2 | कन्दूर ट्रेंच हेतु खुदाई का कार्य सख्त मिट्टी में | 1 X 0.45 X 0.45 = | 0.203 मी. |
| 3 | धामण घास बीज की आपूर्ति | 3 X 0.001 = | 0.003 किलो |
| 4 | धामण घास बीज की बुवाई बनाये गये रिज पर | | 3.000 मी. |



ट्रेंच का ले-आउट



अकृषि भूमि पर वेजिटेटिव ट्रेच का लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यू.एम.पी.(10-11)

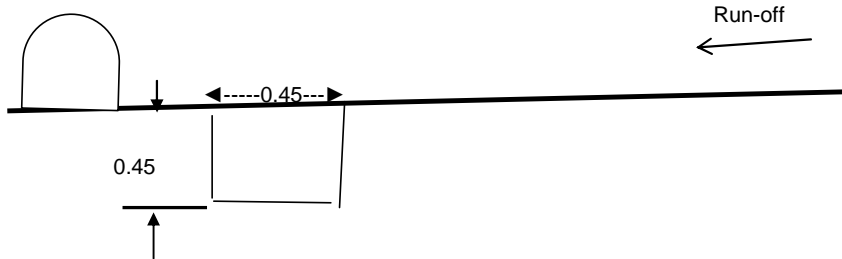
पंचायत समिति - बाली

प्रभावी लम्बाई

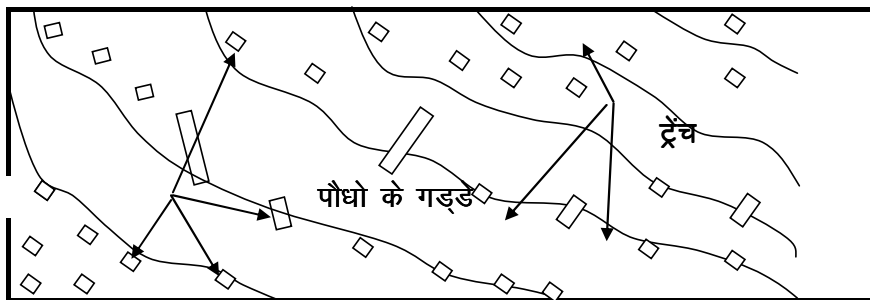
1

| क्र.सं. | कार्य विवरण | मात्रा | दर | प्रति | राशि |
|---------|--|--------------------------------------|----------|-----------------|----------|
| 1 | डॉग बेलिंग देना 2.50 से 5.00 सेमी गहरी | 1.000 | 0.470 | मी. | 0.470 |
| 2 | कन्दूर ट्रेच हेतू खुदाई का कार्य सख्त मिट्टी में | 0.203 | 92.000 | घ.मी. | 18.630 |
| 3 | धामण घास बीज की आपूर्ति | 0.003 | 85.000 | किलो | 0.255 |
| 4 | धामण घास बीज की बुवाई बनाये गये रिज पर | 3.000 | 0.257 | प्रति मी. | 0.771 |
| | योग | | | | 20.126 |
| | कुल लम्बाई | Length = Eff. Area X 1200 M/per Hact | | | 1200.000 |
| | धामण घास की मात्रा | Length X | .003 Kg= | 3.6 | Kg. |
| | कुल लागत | Length X | 20.126 | 24151.20 | |
| | Add 3% Contengency | | | 724.536 | |
| | Grand Total | | | 24875.74 | |

ट्रेच का क्रास - सेक्शन



ट्रेच का ले-आउट



Gully Plugging work in Arable Land of W/S area

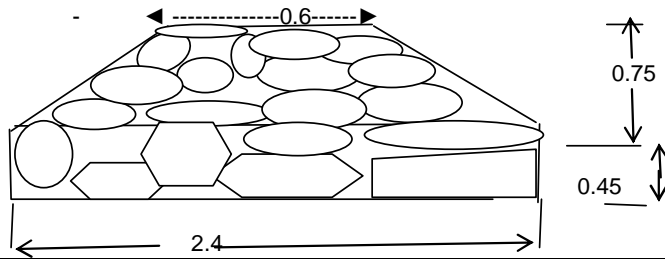
कृषि भूमि पर कार्य तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)
पंचायत समिति - बाली

संख्या : 1 No.
लम्बाई : 5.00 M

| क्र.सं. | कार्य विवरण | नाप | मात्रा |
|---------|---|---|-------------|
| 1 | डाग बेलिंग देना | 1 X 2.00 X 5.000 = 10.000 | 10.00 मी. |
| 2 | नींव ट्रेंचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 1 X 5.00 X 2.40 X 0.45 = 5.400 1 X 5.00 X 1.50 X 0.30 = 2.250 7.650 | 7.65 घ.मी. |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु मुख्य दिवार प्रथम चरण | 1 X 5.00 X 2.40 X 0.45 = 5.400 1 X 5.00 X 1.50 X 0.30 = 2.250 1 X 5.00 X (2.4 + 0.6)/2 X 0.75 = 5.625 13.275 | 13.28 घ.मी. |

Length 5.00 mts



Gully Plugging work in Arable Land of W/S area

कृषि भूमि पर कार्य तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

संख्या :

1 No.

पंचायत समिति - बाली

लम्बाई :

5.00 M

| क्र.सं. | कार्य विवरण | मात्रा | श्रम दर | कुल दर | प्रति | श्रम राशि | कुल राशि |
|---------|---|--------|---------|--------|-------|--------------------|----------------|
| 1 | डॉग बेलिंग देना | 10.000 | 0.470 | 0.470 | घ.मी. | 4.700 | 4.700 |
| 2 | नींव ट्रेंचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 7.650 | 92.0 | 92.0 | घ.मी. | 703.800 | 703.80 |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एंव नींव हेतु | 13.28 | 296.0 | 296.0 | घ.मी. | 3929.400 | 3929.40 |
| | | | | | | योग - | 4637.90 |
| | | | | | | Add 3% Contengency | 139.14 |
| | | | | | | Grand Total | 4777.04 |

ड्रेनेज लाईन ट्रीटमेंट कार्य हेतु-अस्थायी अवसाद अवरोध बंध/लूज स्टोन चैकडैम का विस्तृत लागत तकमीना

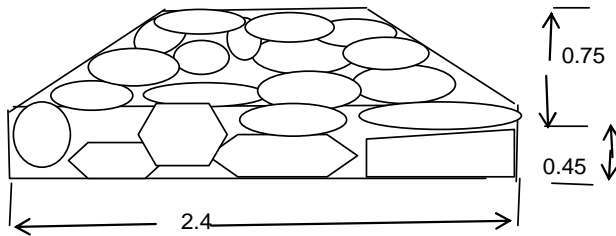
जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

चैक डेम की संख्या : 1 No.

पंचायत समिति - बाली

चैक डेम की लम्बाई : 15.0 Mts

| क्र.सं. | कार्य विवरण | नाप | मात्रा |
|---------|---|--|--------------|
| 1 | डाग बेलिंग देना | 1 X 2.00 X 15.000 = 30.000 | 30.000 मी. |
| 2 | नींव ट्रेन्चेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 1 X 15.00 X 2.40 X 0.45 = 16.200 1 X 15.00 X 1.50 X 0.30 = 6.750 22.950 | 22.950 घ.मी. |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु मुख्य दिवार प्रथम चरण | 1 X 15.00 X 2.40 X 0.45 = 16.200 1 X 15.00 X 1.50 X 0.30 = 6.750 1 X 15.00 X (2.4 + 0.6)/2 X 0.75 = 16.875 39.825 | 39.825 घ.मी. |



ड्रेनेज लाईन ट्रीटमेंट कार्य हेतु-अस्थाई अवसाद अवरोध बंध/लूज स्टोन चैकडैम का विस्तृत लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

चैक डेम की संख्या : 1 No.

पंचायत समिति - बाली

चैक डेम की लम्बाई : 15.0 Mts

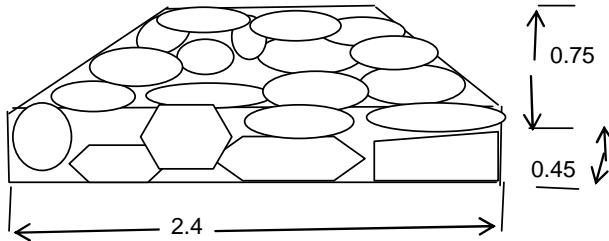
| क्र.सं. | कार्य विवरण | मात्रा | श्रम दर | कुल दर | प्रति | श्रम राशि | कुल राशि |
|---------|--|--------|---------|--------|-------|----------------|----------|
| 1 | डॉग बेलिंग देना | 30.000 | 0.470 | 0.470 | घ.मी. | 14.100 | 14.100 |
| 2 | नीव ट्रेंचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 22.950 | 92.0 | 92.0 | घ.मी. | 2111.400 | 2111.4 |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नीव हेतु | 39.825 | 296.0 | 296.0 | घ.मी. | 11788.200 | 11788.2 |
| | | | | | | योग - | 13913.7 |
| | | | | | | Contengency 3% | 417.4 |
| | | | | | | Grand Total | 14331.1 |

ड्रेनेज लाईन ट्रीटमेंट कार्य हेतु-अस्थायी अवसाद अवरोध बंध/लूज स्टोन चैकडैम का विस्तृत लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)
पंचायत समिति - बाली

चैक डेम की संख्या : 1 No.
चैक डेम की लम्बाई : 10.00 M

| क्र. सं. | कार्य विवरण | नाप | मात्रा |
|----------|---|---|--------------|
| 1 | डाग बेलिंग देना | 1 X 2.00 X 10.000 = 20.000 | 20.000 मी. |
| 2 | नींव ट्रेचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 1 X 10.00 X 2.40 X 0.45 = 10.800 | 15.300 घ.मी. |
| | | 1 X 10.00 X 1.50 X 0.30 = 4.500 | |
| | | 15.300 | |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु | 1 X 10.00 X 2.40 X 0.45 = 10.800 | 26.550 घ.मी. |
| | | 1 X 10.00 X 1.50 X 0.30 = 4.500 | |
| | मुख्य दिवार प्रथम चरण | 1 X 10.00 X (2.4 + 0.6) / 2 X 0.75 = 11.250 | |
| | | 26.550 | |



ड्रेनेज लाईन ट्रीटमेंट कार्य हेतु—अस्थाई अवसाद अवरोध बंध/लूज स्टोन चैकडैम का विस्तृत लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)
पंचायत समिति - बाली

चैक डेम की संख्या : 1 No.
चैक डेम की लम्बाई : 10.00 M

| क्र.सं. | कार्य विवरण | मात्रा | श्रम दर | कुल दर | प्रति | श्रम राशि | कुल राशि |
|---------|---|--------|---------|--------|-------|--------------------|-----------------|
| 1 | डॉग बेलिंग देना | 20.000 | 0.470 | 0.470 | घ.मी. | 9.400 | 9.400 |
| 2 | नींव ट्रेंचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 15.300 | 92.0 | 92.0 | घ.मी. | 1407.600 | 1407.60 |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु | 26.550 | 296.0 | 296.0 | घ.मी. | 7858.800 | 7858.80 |
| | | | | | | योग - | 9275.80 |
| | | | | | | Add 3% contengency | 278.27 |
| | | | | | | Grand Total | 9554.074 |

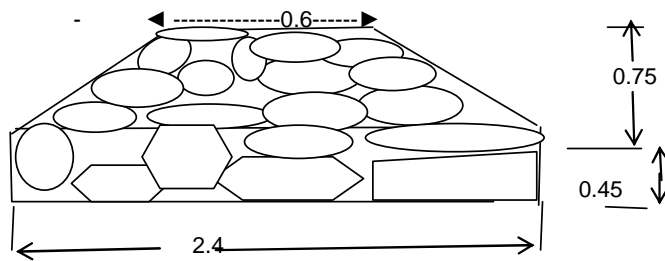
ड्रेनेज लाईन ट्रीटमेंट कार्य हेतु—अस्थाई अवसाद अवरोध बंध/लूज स्टोन चैकडैम का विस्तृत लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)
पंचायत समिति - बाली

संख्या : 1 No.
लम्बाई : 5.00 M

| क्र. सं. | कार्य विवरण | नाप | मात्रा |
|----------|---|---|-------------|
| 1 | डाग बेलिंग देना | 1 X 2.00 X 5.000 = 10.000 | 10.00 मी. |
| 2 | नींव ट्रेंचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 1 X 5.00 X 2.40 X 0.45 = 5.400 1 X 5.00 X 1.50 X 0.30 = 2.250 7.650 | 7.65 घ.मी. |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु मुख्य दिवार प्रथम चरण | 1 X 5.00 X 2.40 X 0.45 = 5.400 1 X 5.00 X 1.50 X 0.30 = 2.250 1 X 5.00 X (2.4 + 0.6)/2 X 0.75 = 5.625 13.275 | 13.28 घ.मी. |

Length 5.00 mts



ड्रेनेज लाईन ट्रीटमेंट कार्य हेतु-अस्थाई अवसाद अवरोध बंध/लूज स्टोन चैकडैम का विस्तृत लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)
पंचायत समिति - बाली

संख्या : 1 No.
लम्बाई : 5.00 M

| क्र.सं. | कार्य विवरण | मात्रा | श्रम दर | कुल दर | प्रति | श्रम राशि | कुल राशि |
|---------|---|--------|---------|--------|-------|--------------------|----------------|
| 1 | डॉग बेलिंग देना | 10.000 | 0.470 | 0.470 | घ.मी. | 4.700 | 4.700 |
| 2 | नींव ट्रेचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में | 7.650 | 92.0 | 92.0 | घ.मी. | 703.800 | 703.80 |
| 3 | सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु | 13.28 | 296.0 | 296.0 | घ.मी. | 3929.400 | 3929.40 |
| | | | | | | योग - | 4637.90 |
| | | | | | | Add 3% Contengency | 139.14 |
| | | | | | | Grand Total | 4777.04 |

खाई फेंसिंग का विस्तृत कार्य तकमीना

जलग्रहण क्षेत्र का नाम :- खेतारली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

प्रभावी क्षेत्रफल

पंचायत समिति - बाली

फेंसिंग की कुल ल0

1

| क्र. सं. | कार्य विवरण | | | | | | | | | | | | मात्रा |
|----------|---|--|--|--|--|------|---|-------|---|-------|--|--|--------------|
| 1 | डाग बैलिंग कार्य | | | | | 1.00 | X | 2 | = | 2.000 | | | 2.000 मी. |
| 2 | (1.5 + 0.9)/2 x 1.2 मी. माप की खड्डा वार बनाना तथा खोदी हुई मिट्टी से किनारों पर टिला बनाना आदि, ताकि उसमें काटेदार जाड़िया लगाई जा सकें । कठारे मिट्टी में | | | | | 1.00 | x | 1.00 | = | | | | 1.000 र.मी. |
| 3 | वानिकी बिज रोपण का कार्य नोचिंग द्वारा | | | | | 3.00 | X | 1 | = | 3.000 | | | 3.000 न0 |
| 4 | वानिकी बिज की सप्लाई | | | | | 3.00 | X | 0.001 | = | 0.003 | | | 0.003 किग्रा |

खाई फेसिंग का विस्तृत लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

पंचायत समिति - बाली

फेंसिंग की कुल ल0

1

| क्र.सं. | कार्य विवरण | मात्रा | श्रम दर | कुल दर | प्रति | श्रम राशि | कुल राशि |
|---------|---|--------|---------|--------|--------|--------------------|----------|
| 1 | डाग बैलिंग कार्य | 2.000 | 0.470 | 0.470 | मी. | 0.940 | 0.940 |
| 2 | (1.5 +0.9)/2 x 1.2 मी. माप की खड्डा वार बनाना तथा खोदी हुई मिट्टी से किनारों पर टिला बनाना आदि, ताकि उसमें काटेदार जाडिया लगाई जा सकें । कठारे मिट्टी में | 1.000 | 132.00 | 132.00 | घ.मी. | 132.000 | 132.000 |
| 3 | वानिकी बिज रोपण का कार्य नोचिंग द्वारा | 3.000 | 0.710 | 0.710 | र.मी. | 2.130 | 2.130 |
| 4 | वानिकी बिज की सप्लाई (कांटेदार पैधा) | 0.003 | 0.00 | 75.00 | किय्रा | 0.000 | 0.225 |
| | | | | | | TOTAL | 135.30 |
| | | | | | | Add 3% Contengency | 4.06 |
| | | | | | | Grand Total | 139.35 |

Stone Wall fencing for Non arable Land

अकृषि भूमि पर कार्य तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

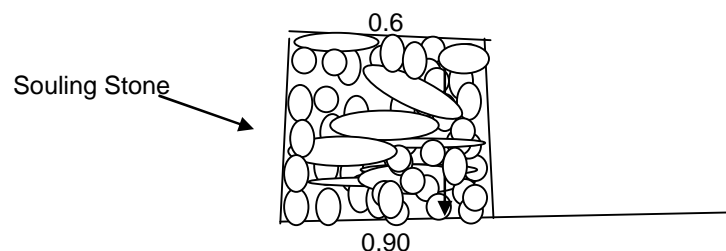
पंचायत समिति - बाली

कुल लम्बाई

1

| क्र. सं. | कार्य विवरण | नाप | मात्रा | |
|----------|--|-----|--------|------|
| 1 | Stone wall fencing Random Ruble loose stone fencing of size .08 at base, .06 at top and 1.2m height including iayout and alingment(0.84 cubic meter per running meter) | 1 = | 1.00 | र.मी |
| 2 | Spreading layer of 2-3cm of soil on top of the stone wall(including excavation of soil) | 1 = | 1.00 | र.मी |

Rates are taken from Forest Deptt.BSR 1.1.2011



Stone Wall fencing for Non arable Land

अकृषि भूमि पर लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यु.एम.पी.(10-11)

पंचायत समिति - बाली

कुल लम्बाई

1

| क्र.सं. | कार्य विवरण | मात्रा | दर | इकाई | श्रम राशि | कुल राशि |
|--|---|--------|--------|----------------|-----------|---------------|
| 1 | Stone wall fencing Random Ruble loose stone fencing of size .08 at base, .06 at top and 1.2m height including iayout and alingnment(0.84 cubic meter per running meter) | 1.000 | 184.01 | र.मी | 184.01 | 184.01 |
| 2 | Spreading layer of 2-3cm of soil on top of the stone wall(including excavation of soil) | 1.000 | 7.40 | र.मी | 7.40 | 7.40 |
| Rates are taken from Forest Deptt.BSR 1.1.2011 | | | | TOTAL | | 191.41 |
| | | | | Contengency 3% | | 5.74 |
| | | | | G. TOTAL | | 197.15 |

कृषि वानिकी (Agro Forestry)

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

पंचायत समिति - बाली

पौधो की संख्या

1

| क्र.सं. | कार्य विवरण | मात्रा | दर | | इकाई | राशि | | |
|------------|--|--------|--------|--------|--------|--------|--------------------|-------|
| | | | श्रम | कुल | | श्रम | कुल | |
| 1 | साधारण मिट्टी में 0.45 X 0.45 X 0.45mts मी आकार का खड्डा खोदना | 1.0 | 13.400 | 13.400 | संख्या | 13.400 | 13.40 | |
| | थावला बनना कम से कम 50से.मी. अर्ध व्यास का | 1.0 | 2.400 | 2.400 | संख्या | 2.400 | 2.40 | |
| 3 | पौधो की कीमत | 1.0 | 0.000 | 8.000 | संख्या | 0.000 | 8.00 | |
| 4 | पौधों का परिवहन नर्सरी से साईट तक 50 किमी | 1.0 | 0.510 | 0.510 | संख्या | 0.510 | 0.51 | |
| 5 | साईट पर उतारने के बाद पौधो का परिवहन श्रमिकों द्वारा 500 मी0 | 1.0 | 0.540 | 0.540 | संख्या | 0.540 | 0.54 | |
| 5 | पौध रोपण करना पथरीली जमीन पर | 1.0 | 3.600 | 3.600 | संख्या | 3.600 | 3.60 | |
| 6 | पौधों को उपलब्ध पानी पिलाना | 1.0 | 1.800 | 1.800 | संख्या | 1.800 | 1.80 | |
| 7 | पानी का परिवहन प्रति 1000 ली. (प्रति पैधो 15 ली.पानी)5कि.मी | 1.0 | 0.330 | 0.330 | संख्या | 0.330 | 0.33 | |
| 8 | निराई गुडाई कराना | 1.0 | 1.200 | 1.200 | संख्या | 1.200 | 1.20 | |
| योग | | | | | | | | 31.78 |
| | | | | | | | Add 3% Contengency | 0.95 |
| | | | | | | | Grand Total | 32.73 |

पंचायत समिति, बाली जिला-पाली (राज.)
सारण निर्माण कार्य (सिंचाई हेतु)

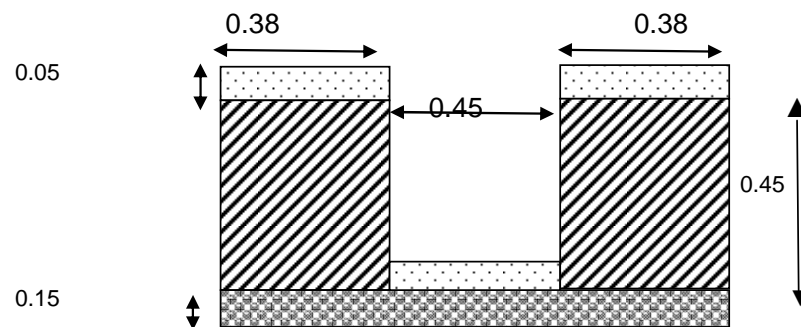
IWMP-9-PALI(10-11)

P.S-Bali

| क.स. | आईटम नं. | कार्य का विवरण | परिमाण | | | | कुल मात्रा | दर | | | राशि | | |
|------|----------|---|--------|--------|--------|-------|------------|--------|---------|------|-----------|--------------|----------|
| | | | संख्या | लम्बाई | चौड़ाई | ऊंचाई | | श्रम | सामग्री | कुल | श्रम राशि | सामग्री राशि | कुल राशि |
| 1 | 2 (ब) | नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना। सख्त, चिकनी, कंकर मिट्टी में | 0.5 | 1 | 1.35 | 0.75 | 0.51 | 92 | 0 | 92 | 46.58 | 0.00 | 46.58 |
| 2 | 11 (ब) | सीमेंट काक्रीट नींव में 40 मि.मी. नामीय माप की पत्थर गिट्टी (Crusher Broken) / ईंट की गिट्टी सीमेंट रेत मसाला 1 सीमेंट : 4 रेत : 8 गिट्टी अनुपात में मिलाकर, डालना तथा कुटाई करना, तराई समेत। पत्थर की गिट्टी (Crusher Broken) के साथ | 1 | 1 | 1.35 | 0.15 | 0.20 | 327.55 | 1281.45 | 1609 | 66.33 | 259.49 | 325.82 |
| 3 | 24 (अ) | नींव तथा कुर्सी में पत्थर की वे रद्धा-ढोका सीमेंट-बजरी 1 : 3, 1 : 6 या 1 : 8 मसाले में, मय बगल की झिरी बन्द करना तथा तराई आदि। सीमेंट बजरी 1:6 | 2 | 1 | 0.45 | 0.45 | 0.405 | 473 | 1130 | 1603 | 191.565 | 457.65 | 649.215 |

| | | | | | | | | | | | | | | | | |
|---|--------|--|---|---|------|---|------|-------|-------|-----|---------------|---------------|----------------|---------------|---------------|----------------|
| 4 | 58 | 50 मी. मी. मोटाई में सीमेंट कंक्रीट 1:2:4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की या ईंट की 12 . मी. नाभीय गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत । | 3 | 1 | 0.45 | 0 | 1.35 | 91 | 117 | 208 | 122.85 | 157.95 | 280.8 | | | |
| 5 | 66 (अ) | सीमेंट प्लास्टर दीवार पर 1:6 अनुपात में सीमेंट-बजरी मिलाकर जोड़ों को कुरेदने तथा तराई समेत । 25 मी. मी. | 3 | 1 | 0.6 | 0 | 2 | 77.65 | 51.54 | 129 | 139.77 | 92.772 | 232.2 | | | |
| Total | | | | | | | | | | | 567.09 | 967.87 | 1534.61 | | | |
| Contengency 3% | | | | | | | | | | | 17.01 | 29.04 | 46.04 | | | |
| Rates are as per BSR pali distt of 11.02.2011 | | | | | | | | | | | Grand Total | | | 584.10 | 996.90 | 1580.65 |

| | |
|----------------|---------------|
| TOTAL LABOUR | 584.10 |
| TOTAL METERIAL | 996.90 |
| GRAND TOTAL | 1581.0 |

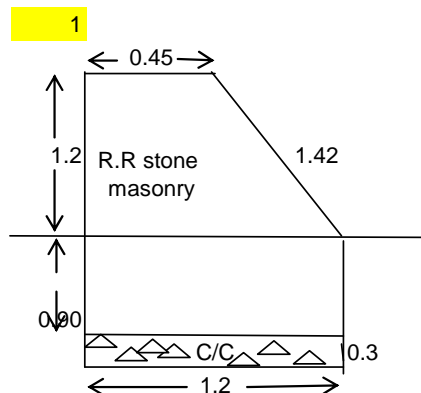


Retaining Wall for arable lands along the Drainage for Bank stablization

IWMP-9-PALI(10-11)

DLT

Length



| Sr.no. | Item of work | Item no. | No | Length | Width | Hight | Qty | rate | | Amount | | | |
|----------------|---|----------|----|--------|-------|-------|---------|--------|-------|--------|----------------|------|---|
| | | | | | | | | Labour | Total | Labour | Total | | |
| 1 | नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना। | 2B | 2 | 1.00 | 1.20 | 0.90 | 2.16 | | 92 | 0.00 | 198.72 | | |
| 2 | सीमेंट कार्क्रीट 1 सीमेंट, 4 बजरी तथा 8 गिट्टी पत्थर की 40 मि.मी. नामीय माप की नींव में डालना एनीकट के लिए। by mixture & vibrator | 125 B | 2 | 1.00 | 1.20 | 0.3 | 0.72 | 327.55 | 1894 | 235.84 | 1363.68 | | |
| 3 | पत्थर की चिनाई 1:6 अनुपात सीमेंट-बजरी मसाले में, | 25C | 2 | 1.00 | 1.20 | 0.6 | 1.44 | 473 | 1603 | 681.12 | 2308.32 | | |
| 4 | पत्थर की चिनाई 1:6 अनुपात सीमेंट-बजरी मसाले में, | 25C | 2 | 1.00 | 0.825 | 1.2 | 2 | 473 | 1603 | 936.54 | 3173.94 | | |
| 5 | सीमेंट प्लास्टर दीवार पर 1:4 अनुपात में सीमेंट-बजरी मिलाकर कर जोड़ों को कुरेदने तथा तराई सहित 25 मि.मी./20 मि.मी./12 मि.मी. में। | 71A | 2 | 1.00 | 1.2 | | 2.40 | | | | 0.00 | 0 | |
| | | | 2 | 1.00 | 1.415 | | 2.83019 | | | | 0.00 | 0 | |
| | | | 2 | 1.00 | 0.45 | | 0.9 | | | | | 0.00 | 0 |
| | | | | | | | 6.13 | 77.55 | 147 | 475.40 | 901.1386 | | |
| 6 | Piching | 146 | 2 | 1.00 | 0.9 | 0.15 | 0.135 | | 709 | | 95.715 | | |
| Total | | | | | | | | | | | 2328.89 | | |
| 3% contengency | | | | | | | | | | | 69.87 | | |
| | | | | | | | | | | | 2398.76 | | |

Silt Detention Structure(Masonry)

Work Area:- Area of slope above 3% & DLT

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यू.एम.पी.(10-11)

पंचायत समिति - बाली

5mts

| क्र.सं. | कार्य विवरण | नाप | मात्रा | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|--|---|--------|-------------------------|------|-------------------------|-------------------------|--------------|------|---|--------------|----|----|------|------|------|------|------|--------------|--------------|----|-----|------|------|-------------------------|------|-------------------------|--------------|--------------|-------------|-----|------|------|------|------|------|--------------|--------------|-----|----|------|------|-------------------------|------|------|--------------|--------------|--------------|---|---|------|---|------|---|--------------|--------|--------------|--|--|--|--|--|--|--------|--------------|
| 1 | साधारण मुर्रम मिट्टी में खुदाई का कार्य 30 मी० लोड तथा 1.5 मी लिफ्ट के लिए | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td></td> <td style="text-align: center;">L</td> <td></td> <td style="text-align: center;">B</td> <td></td> <td style="text-align: center;">H/D</td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;">HW</td> <td>1</td> <td>X</td> <td>5.00</td> <td>X</td> <td>1.50</td> <td>X</td> <td>1.20 = 9.000</td> </tr> <tr> <td></td> <td style="text-align: right;">SW</td> <td>2</td> <td>X</td> <td>2.50</td> <td>X</td> <td>0.90</td> <td>X</td> <td>1.20 = 5.400</td> </tr> <tr> <td></td> <td style="text-align: right;">HWE</td> <td>2</td> <td>X</td> <td>1.00</td> <td>X</td> <td>0.90</td> <td>X</td> <td>1.20 = 2.160</td> </tr> <tr> <td></td> <td style="text-align: right;">APR</td> <td>1</td> <td>X</td> <td>5.00</td> <td>X</td> <td>1.20</td> <td>X</td> <td>0.30 = 1.800</td> </tr> <tr> <td></td> <td style="text-align: right;">WW</td> <td>2</td> <td>X</td> <td>0.90</td> <td>X</td> <td>0.80</td> <td>X</td> <td>1.00 = 1.440</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">19.800</td> </tr> </table> | | | L | | B | | H/D | | | HW | 1 | X | 5.00 | X | 1.50 | X | 1.20 = 9.000 | | SW | 2 | X | 2.50 | X | 0.90 | X | 1.20 = 5.400 | | HWE | 2 | X | 1.00 | X | 0.90 | X | 1.20 = 2.160 | | APR | 1 | X | 5.00 | X | 1.20 | X | 0.30 = 1.800 | | WW | 2 | X | 0.90 | X | 0.80 | X | 1.00 = 1.440 | | | | | | | | | 19.800 | 19.800 घ.मी. |
| | | L | | B | | H/D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HW | 1 | X | 5.00 | X | 1.50 | X | 1.20 = 9.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SW | 2 | X | 2.50 | X | 0.90 | X | 1.20 = 5.400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HWE | 2 | X | 1.00 | X | 0.90 | X | 1.20 = 2.160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | APR | 1 | X | 5.00 | X | 1.20 | X | 0.30 = 1.800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | WW | 2 | X | 0.90 | X | 0.80 | X | 1.00 = 1.440 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 19.800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | सीमेंट कंक्रीट का कार्य 1 : 3 : 6 में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: right;">HW</td> <td></td> <td></td> <td>5.00</td> <td>X</td> <td>1.50</td> <td>X</td> <td>0.20 = 1.500</td> </tr> <tr> <td></td> <td style="text-align: right;">SW</td> <td>2</td> <td>X</td> <td>2.50</td> <td>X</td> <td>0.90</td> <td>X</td> <td>0.20 = 0.900</td> </tr> <tr> <td></td> <td style="text-align: right;">HWE</td> <td>2</td> <td>X</td> <td>1.00</td> <td>X</td> <td>0.90</td> <td>X</td> <td>0.20 = 0.360</td> </tr> <tr> <td></td> <td style="text-align: right;">WW</td> <td>2</td> <td>X</td> <td>0.90</td> <td>X</td> <td>0.80</td> <td>X</td> <td>0.20 = 0.288</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">3.048</td> </tr> </table> | | HW | | | 5.00 | X | 1.50 | X | 0.20 = 1.500 | | SW | 2 | X | 2.50 | X | 0.90 | X | 0.20 = 0.900 | | HWE | 2 | X | 1.00 | X | 0.90 | X | 0.20 = 0.360 | | WW | 2 | X | 0.90 | X | 0.80 | X | 0.20 = 0.288 | | | | | | | | | 3.048 | 3.048 घ.मी. | | | | | | | | | | | | | | | | | |
| | HW | | | 5.00 | X | 1.50 | X | 0.20 = 1.500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SW | 2 | X | 2.50 | X | 0.90 | X | 0.20 = 0.900 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HWE | 2 | X | 1.00 | X | 0.90 | X | 0.20 = 0.360 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | WW | 2 | X | 0.90 | X | 0.80 | X | 0.20 = 0.288 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 3.048 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | रेन्डम रबल स्टोन मेशनरी का कार्य नीव में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: right;">HW</td> <td></td> <td></td> <td>5.00</td> <td>X</td> <td>1.30</td> <td>X</td> <td>1.00 = 6.500</td> </tr> <tr> <td></td> <td style="text-align: right;">SW</td> <td>2</td> <td>X</td> <td>2.50</td> <td>X</td> <td>0.75</td> <td>X</td> <td>1.00 = 3.750</td> </tr> <tr> <td></td> <td style="text-align: right;">HWE</td> <td>2</td> <td>X</td> <td>1.00</td> <td>X</td> <td>0.75</td> <td>X</td> <td>1.00 = 1.500</td> </tr> <tr> <td></td> <td style="text-align: right;">WW</td> <td>2</td> <td>X</td> <td>0.90</td> <td>X</td> <td>0.60</td> <td>X</td> <td>0.80 = 0.864</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">12.614</td> </tr> </table> | | HW | | | 5.00 | X | 1.30 | X | 1.00 = 6.500 | | SW | 2 | X | 2.50 | X | 0.75 | X | 1.00 = 3.750 | | HWE | 2 | X | 1.00 | X | 0.75 | X | 1.00 = 1.500 | | WW | 2 | X | 0.90 | X | 0.60 | X | 0.80 = 0.864 | | | | | | | | | 12.614 | 12.614 घ.मी. | | | | | | | | | | | | | | | | | |
| | HW | | | 5.00 | X | 1.30 | X | 1.00 = 6.500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SW | 2 | X | 2.50 | X | 0.75 | X | 1.00 = 3.750 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HWE | 2 | X | 1.00 | X | 0.75 | X | 1.00 = 1.500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | WW | 2 | X | 0.90 | X | 0.60 | X | 0.80 = 0.864 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 12.614 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | सुपर स्ट्रक्चर में मेशनरी का कार्य 1:6 में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: right;">HW</td> <td>5.00</td> <td>X</td> <td>$\frac{1.30 + 0.50}{2}$</td> <td>X</td> <td>1.00</td> <td>=</td> <td>4.500</td> </tr> <tr> <td></td> <td style="text-align: right;">SW</td> <td>2.00</td> <td>X</td> <td>2.50</td> <td>X</td> <td>0.60</td> <td>X</td> <td>1.00 = 3.000</td> </tr> <tr> <td></td> <td style="text-align: right;">SW</td> <td>2</td> <td>X</td> <td>$\frac{2.50 + 1.30}{2}$</td> <td>X</td> <td>$\frac{0.60 + 0.45}{2}$</td> <td>X</td> <td>0.90 = 1.796</td> </tr> <tr> <td></td> <td style="text-align: right;">HWE</td> <td>2.00</td> <td>X</td> <td>1.00</td> <td>X</td> <td>0.60</td> <td>X</td> <td>1.90 = 2.280</td> </tr> <tr> <td></td> <td style="text-align: right;">WW</td> <td>2.00</td> <td>X</td> <td>0.90</td> <td>X</td> <td>0.50</td> <td>X</td> <td>1.00 = 0.900</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">12.476</td> </tr> </table> | | HW | 5.00 | X | $\frac{1.30 + 0.50}{2}$ | X | 1.00 | = | 4.500 | | SW | 2.00 | X | 2.50 | X | 0.60 | X | 1.00 = 3.000 | | SW | 2 | X | $\frac{2.50 + 1.30}{2}$ | X | $\frac{0.60 + 0.45}{2}$ | X | 0.90 = 1.796 | | HWE | 2.00 | X | 1.00 | X | 0.60 | X | 1.90 = 2.280 | | WW | 2.00 | X | 0.90 | X | 0.50 | X | 1.00 = 0.900 | | | | | | | | | 12.476 | 12.476 घ.मी. | | | | | | | | |
| | HW | 5.00 | X | $\frac{1.30 + 0.50}{2}$ | X | 1.00 | = | 4.500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SW | 2.00 | X | 2.50 | X | 0.60 | X | 1.00 = 3.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SW | 2 | X | $\frac{2.50 + 1.30}{2}$ | X | $\frac{0.60 + 0.45}{2}$ | X | 0.90 = 1.796 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HWE | 2.00 | X | 1.00 | X | 0.60 | X | 1.90 = 2.280 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | WW | 2.00 | X | 0.90 | X | 0.50 | X | 1.00 = 0.900 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 12.476 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | सीमेंट प्लास्टर का कार्य 1:4 में 25 मिमी | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td></td> <td></td> <td></td> <td>5.00</td> <td>X</td> <td>1.00</td> <td>=</td> <td>5.000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>5.00</td> <td>X</td> <td>1.30</td> <td>=</td> <td>6.500</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>2.00</td> <td>X</td> <td>0.90</td> <td>X</td> <td>1.00 = 1.800</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>2.00</td> <td>X</td> <td>2.50</td> <td>X</td> <td>1.00 = 5.000</td> </tr> <tr> <td></td> <td></td> <td>2.00</td> <td>X</td> <td>$\frac{2.50 + 1.30}{2}$</td> <td>X</td> <td>0.90</td> <td>X</td> <td>3.420</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">21.720</td> </tr> </table> | | | | | 5.00 | X | 1.00 | = | 5.000 | | | | | 5.00 | X | 1.30 | = | 6.500 | | | | | 2.00 | X | 0.90 | X | 1.00 = 1.800 | | | | | 2.00 | X | 2.50 | X | 1.00 = 5.000 | | | 2.00 | X | $\frac{2.50 + 1.30}{2}$ | X | 0.90 | X | 3.420 | | | | | | | | | 21.720 | 21.720 घ.मी. | | | | | | | | |
| | | | | 5.00 | X | 1.00 | = | 5.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 5.00 | X | 1.30 | = | 6.500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 2.00 | X | 0.90 | X | 1.00 = 1.800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 2.00 | X | 2.50 | X | 1.00 = 5.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2.00 | X | $\frac{2.50 + 1.30}{2}$ | X | 0.90 | X | 3.420 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 21.720 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | कापिंग का कार्य 1 : 2 : 4 में 50 मिमी मोटाई में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: right;">HW</td> <td></td> <td></td> <td>5.00</td> <td>X</td> <td>0.50</td> <td>=</td> <td>2.500</td> </tr> <tr> <td></td> <td style="text-align: right;">SW</td> <td>2.00</td> <td>X</td> <td>2.80</td> <td>X</td> <td>0.50</td> <td>=</td> <td>2.800</td> </tr> <tr> <td></td> <td style="text-align: right;">HWE</td> <td>2.00</td> <td>X</td> <td>1.00</td> <td>X</td> <td>0.50</td> <td>=</td> <td>1.000</td> </tr> <tr> <td></td> <td style="text-align: right;">WW</td> <td>2.00</td> <td>X</td> <td>0.90</td> <td>X</td> <td>0.50</td> <td>=</td> <td>0.900</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">7.200</td> </tr> </table> | | HW | | | 5.00 | X | 0.50 | = | 2.500 | | SW | 2.00 | X | 2.80 | X | 0.50 | = | 2.800 | | HWE | 2.00 | X | 1.00 | X | 0.50 | = | 1.000 | | WW | 2.00 | X | 0.90 | X | 0.50 | = | 0.900 | | | | | | | | | 7.200 | 7.200 घ.मी. | | | | | | | | | | | | | | | | | |
| | HW | | | 5.00 | X | 0.50 | = | 2.500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SW | 2.00 | X | 2.80 | X | 0.50 | = | 2.800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HWE | 2.00 | X | 1.00 | X | 0.50 | = | 1.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | WW | 2.00 | X | 0.90 | X | 0.50 | = | 0.900 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 7.200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | पत्थर की फिटिंग समस्त उठाव एवं आपूर्ति के साथ | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td></td> <td>1.00</td> <td>X</td> <td>5.00</td> <td>X</td> <td>1.20</td> <td>X</td> <td>0.30 = 1.800</td> </tr> <tr> <td></td> <td></td> <td>0.00</td> <td>X</td> <td>0.00</td> <td>X</td> <td>0.00</td> <td>X</td> <td>0.00 = 0.000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">1.800</td> </tr> </table> | | | 1.00 | X | 5.00 | X | 1.20 | X | 0.30 = 1.800 | | | 0.00 | X | 0.00 | X | 0.00 | X | 0.00 = 0.000 | | | | | | | | | 1.800 | 1.800 घ.मी. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1.00 | X | 5.00 | X | 1.20 | X | 0.30 = 1.800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0.00 | X | 0.00 | X | 0.00 | X | 0.00 = 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 1.800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Silt Detention Structure(Masonry)

Work Area:- Area of slope above 3% & DLT

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

पंचायत समिति - बाली

5mts

No.

1

| क्र.सं. | कार्य विवरण | मात्रा | दर | | प्रति | राशि | |
|----------------------------------|---|--------|--------|---------|-------|-----------------|----------|
| | | | श्रम | कुल | | श्रम | कुल |
| 1 | साधारण मुर्रम मिट्टी मे खुदाई का कार्य 30 मी0 लोड तथा 1.5 मी लिफ्ट के लिए | 19.800 | 92.00 | 92.00 | व.मी. | 1821.60 | 1821.60 |
| 2 | सीमेंट कंक्रीट का कार्य 1 : 3 : 6 में | 3.048 | 327.00 | 2081.00 | घ.मी. | 996.70 | 6342.89 |
| 3 | रेन्डम रबल स्टोन मेशनरी का कार्य नींव में | 12.614 | 473.00 | 1603.00 | मी. | 5966.42 | 20220.24 |
| 4 | सुपर स्ट्रक्चर में मेशनरी का कार्य 1:6 में | 12.476 | 473.00 | 1603.00 | घ.मी. | 5900.91 | 19998.23 |
| 5 | सीमेंट प्लास्टर का कार्य 1:4 में 25 मिमी | 21.720 | 77.50 | 147.00 | घ.मी. | 1683.30 | 3192.84 |
| 6 | कापिंग का कार्य 1 : 2 : 4 में 50 मिमी मोटाई में | 7.200 | 91.00 | 208.00 | व.मी. | 655.20 | 1497.60 |
| 7 | पत्थर की पिचिंग समस्त उठाव एवं आपूर्ति के साथ | 1.800 | 199.50 | 643.00 | व.मी. | 359.10 | 1157.40 |
| TOTAL COST FOR 1No. STR. | | | | | | 54230.80 | |
| Add 3% contengency | | | | | | 1626.92 | |
| NOTE: | | | | | | 55857.72 | |
| No. of Str. 1 Grand Total | | | | | | 55857.72 | |

Cost may varie as per location of the Structure, for project a model has been given

Silt Detention Structure(Masonry)

Material Consumption statement 5mts

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यु.एम.पी.(10-11)

पंचायत समिति - बाली

5mts

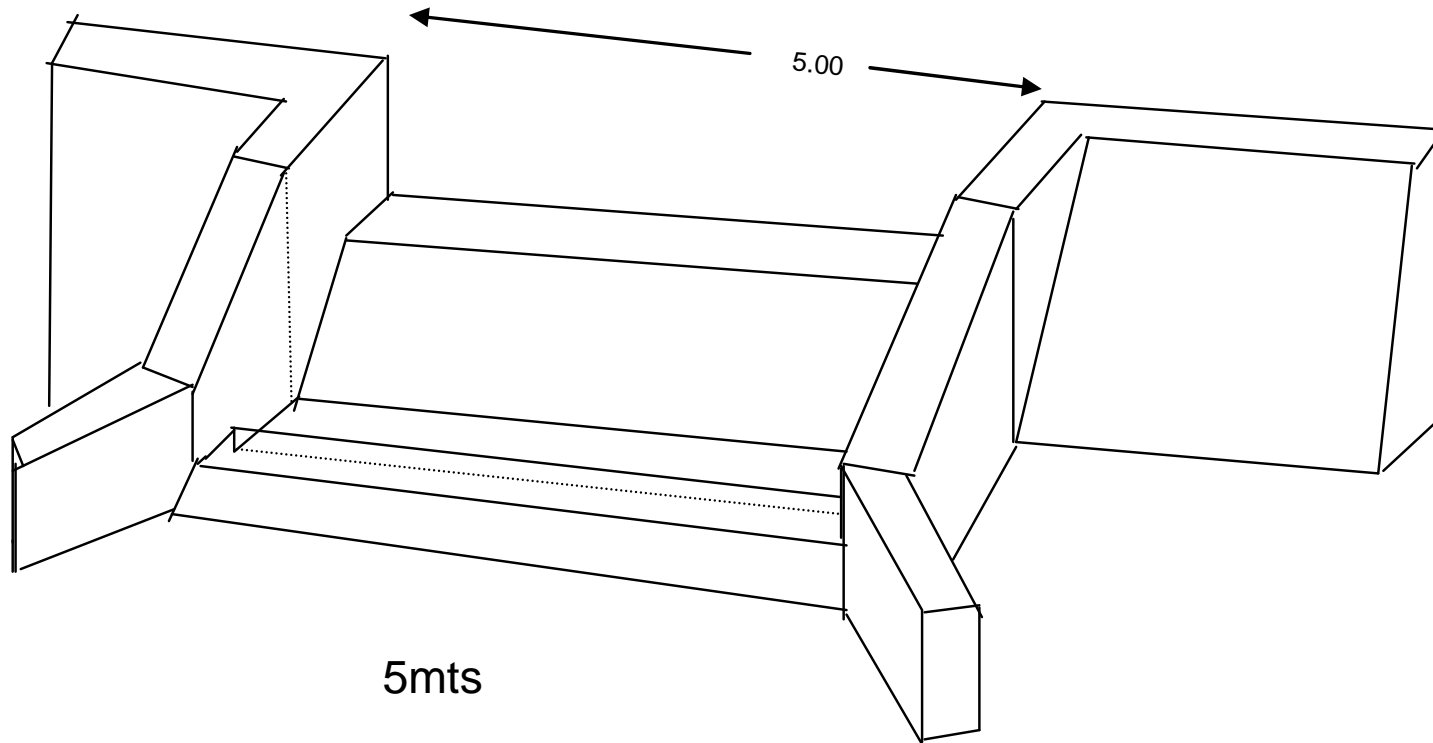
| क्र. सं. | विवरण | मात्रा | सीमेन्ट थैले | बजरी घन मी. | रोडी घन मी. | पत्थर घन मी. |
|----------|---|--------|--------------|-------------|-------------|--------------|
| 1 | Cement Concrete (1:3:6) | 3.048 | घन मी. | 12.344 | 1.311 | 2.621 |
| 2 | Copping in C.C. (1:2:4) | 7.200 | वर्ग मी. | 2.246 | 0.158 | 0.324 |
| 3 | Massonary in Cement Mortar (1:6) (Foundation + Super structure + Stone Kharanja) | 25.090 | घन मी. | 34.874 | 7.527 | 25.090 |
| 4 | Plaster in Cement Mortar (1:4) | 21.720 | वर्ग मी. | 4.865 | 0.695 | |
| 5 | Stone for dry pitching | 1.800 | घन मी. | | | 2.160 |
| | TOTAL | | | 54.330 | 9.691 | 2.945 |

Note: This consumption of material is for one structure only

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

Model Diagram of Silt Detention Structure

Work Area:- Area of Slope above 6% & DLT
Length of HW 5.00



Silt Detention Structure(Masonry)

Work Area:- Area of slope above 3% & DLT

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यू.एम.पी.(10-11)

पंचायत समिति - बाली

Length 3 Mts

| क्र.सं. | कार्य विवरण | नाप | मात्रा | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|--|---|-------------------------|------|-------------------------|------|--------------|-------------------------|-----|--------------|----|------|---|-------------------------|---|-------------------------|---|--------------|----|---|---|------|---|------|---|--------------|-------------|---|---|------|---|------|---|--------------|--|--|--|--|--|--|--|-------|-------------|
| 1 | साधारण मुरम मिट्टी में खुदाई का कार्य 30 मी0 लोड तथा 1.5 मी लिफ्ट के लिए | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td></td> <td style="text-align: center;">L</td> <td></td> <td style="text-align: center;">B</td> <td></td> <td style="text-align: center;">H/D</td> <td></td> </tr> <tr> <td style="text-align: right;">HW</td> <td style="text-align: center;">1</td> <td style="text-align: center;">X</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.90 = 2.700</td> </tr> <tr> <td style="text-align: right;">SW</td> <td style="text-align: center;">2</td> <td style="text-align: center;">X</td> <td style="text-align: center;">2.70</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.90</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.75 = 3.645</td> </tr> <tr> <td style="text-align: right;">APR</td> <td style="text-align: center;">1</td> <td style="text-align: center;">X</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">1.10</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.30 = 0.990</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">7.335</td> </tr> </table> | | | L | | B | | H/D | | HW | 1 | X | 3.00 | X | 1.00 | X | 0.90 = 2.700 | SW | 2 | X | 2.70 | X | 0.90 | X | 0.75 = 3.645 | APR | 1 | X | 3.00 | X | 1.10 | X | 0.30 = 0.990 | | | | | | | | 7.335 | 7.335 घ.मी. |
| | | L | | B | | H/D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HW | 1 | X | 3.00 | X | 1.00 | X | 0.90 = 2.700 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SW | 2 | X | 2.70 | X | 0.90 | X | 0.75 = 3.645 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APR | 1 | X | 3.00 | X | 1.10 | X | 0.30 = 0.990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 7.335 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | सीमेंट कंक्रीट का कार्य 1 : 3 : 6 में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">HW</td> <td></td> <td></td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.15 = 0.450</td> </tr> <tr> <td style="text-align: right;">SW</td> <td style="text-align: center;">2</td> <td style="text-align: center;">X</td> <td style="text-align: center;">2.70</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.90</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.15 = 0.729</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">1.179</td> </tr> </table> | HW | | | 3.00 | X | 1.00 | X | 0.15 = 0.450 | SW | 2 | X | 2.70 | X | 0.90 | X | 0.15 = 0.729 | | | | | | | | 1.179 | 1.179 घ.मी. | | | | | | | | | | | | | | | | |
| HW | | | 3.00 | X | 1.00 | X | 0.15 = 0.450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SW | 2 | X | 2.70 | X | 0.90 | X | 0.15 = 0.729 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 1.179 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | रेन्डम रबल स्टोन मेशनरी का कार्य नींव में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">HW</td> <td></td> <td></td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.90</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.75 = 2.025</td> </tr> <tr> <td style="text-align: right;">SW</td> <td style="text-align: center;">2</td> <td style="text-align: center;">X</td> <td style="text-align: center;">2.70</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.75</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.60 = 2.430</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">4.455</td> </tr> </table> | HW | | | 3.00 | X | 0.90 | X | 0.75 = 2.025 | SW | 2 | X | 2.70 | X | 0.75 | X | 0.60 = 2.430 | | | | | | | | 4.455 | 4.455 घ.मी. | | | | | | | | | | | | | | | | |
| HW | | | 3.00 | X | 0.90 | X | 0.75 = 2.025 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SW | 2 | X | 2.70 | X | 0.75 | X | 0.60 = 2.430 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 4.455 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | सुपर स्ट्रक्चर में मेशनरी का कार्य 1:6 में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">HW</td> <td></td> <td></td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">$\frac{0.75 + 0.60}{2}$</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.75 = 1.519</td> </tr> <tr> <td></td> <td style="text-align: center;">2</td> <td></td> <td style="text-align: center;">$\frac{2.70 + 1.20}{2}$</td> <td style="text-align: center;">X</td> <td style="text-align: center;">$\frac{0.60 + 0.45}{2}$</td> <td style="text-align: center;">X</td> <td style="text-align: center;">1.50 = 3.071</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">4.590</td> </tr> </table> | HW | | | 3.00 | X | $\frac{0.75 + 0.60}{2}$ | X | 0.75 = 1.519 | | 2 | | $\frac{2.70 + 1.20}{2}$ | X | $\frac{0.60 + 0.45}{2}$ | X | 1.50 = 3.071 | | | | | | | | 4.590 | 4.590 घ.मी. | | | | | | | | | | | | | | | | |
| HW | | | 3.00 | X | $\frac{0.75 + 0.60}{2}$ | X | 0.75 = 1.519 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | $\frac{2.70 + 1.20}{2}$ | X | $\frac{0.60 + 0.45}{2}$ | X | 1.50 = 3.071 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 4.590 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | सीमेंट प्लास्टर का कार्य 1:4 में 25 मिमी | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">2.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">2.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.45 = 2.700</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">$\frac{2.70 + 0.45}{2}$</td> <td></td> <td></td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.75 = 2.363</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">5.063</td> </tr> </table> | | 2.00 | X | 2.00 | X | 3.00 | X | 0.45 = 2.700 | | | | $\frac{2.70 + 0.45}{2}$ | | | X | 0.75 = 2.363 | | | | | | | | 5.063 | 5.063 घ.मी. | | | | | | | | | | | | | | | | |
| | 2.00 | X | 2.00 | X | 3.00 | X | 0.45 = 2.700 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | $\frac{2.70 + 0.45}{2}$ | | | X | 0.75 = 2.363 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 5.063 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | कापिंग का कार्य 1 : 2 : 4 में 50 मिमी मोटाई में | <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">HW</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.45 = 1.350</td> </tr> <tr> <td style="text-align: right;">SW</td> <td></td> <td></td> <td style="text-align: center;">2.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">3.15</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.35 = 2.205</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">3.555</td> </tr> </table> | HW | | | | | 3.00 | X | 0.45 = 1.350 | SW | | | 2.00 | X | 3.15 | X | 0.35 = 2.205 | | | | | | | | 3.555 | 3.555 घ.मी. | | | | | | | | | | | | | | | | |
| HW | | | | | 3.00 | X | 0.45 = 1.350 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SW | | | 2.00 | X | 3.15 | X | 0.35 = 2.205 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 3.555 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | पत्थर की पिचिंग समस्त उठाव एवं आपूर्ति के साथ | <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">2.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">5.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">1.35</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.30 = 4.050</td> </tr> <tr> <td></td> <td style="text-align: center;">1.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">3.00</td> <td style="text-align: center;">X</td> <td style="text-align: center;">1.10</td> <td style="text-align: center;">X</td> <td style="text-align: center;">0.30 = 0.990</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">5.040</td> </tr> </table> | | 2.00 | X | 5.00 | X | 1.35 | X | 0.30 = 4.050 | | 1.00 | X | 3.00 | X | 1.10 | X | 0.30 = 0.990 | | | | | | | | 5.040 | 5.040 घ.मी. | | | | | | | | | | | | | | | | |
| | 2.00 | X | 5.00 | X | 1.35 | X | 0.30 = 4.050 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1.00 | X | 3.00 | X | 1.10 | X | 0.30 = 0.990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 5.040 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Silt Detention Structure(Masnory)

Work Area:- Area of slope above 3% & DLT

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

पंचायत समिति - बाली

3mts

No.

1

| क्र.सं. | कार्य विवरण | मात्रा | दर | | प्रति | राशि | |
|--------------------------|---|--------|--------|---------|--------------|-----------------|----------|
| | | | श्रम | कुल | | श्रम | कुल |
| 1 | साधारण मुरम मिट्टी मे खुदाई का कार्य 30 मी0 लोड तथा 1.5 मी लिफ्ट के लिए | 7.335 | 92.00 | 92.00 | व.मी. | 674.820 | 674.82 |
| 2 | सीमेंट कंकरीट का कार्य 1 : 3 : 6 में | 1.179 | 327.00 | 2081.00 | घ.मी. | 385.533 | 2453.50 |
| 3 | रेन्डम रबल स्टोन मेशनरी का कार्य नींव में | 4.455 | 473.00 | 1603.00 | मी. | 2107.215 | 7141.37 |
| 4 | सुपर स्ट्रक्चर में मेशनरी का कार्य 1:6 में | 4.590 | 473.00 | 1603.00 | घ.मी. | 2171.070 | 7357.77 |
| 5 | सीमेंट प्लास्टर का कार्य 1:4 में 25 मिमी | 5.063 | 77.50 | 147.00 | घ.मी. | 392.344 | 744.19 |
| 6 | कापिंग का कार्य 1 : 2 : 4 में 50 मिमी मोटाई में | 3.555 | 91.00 | 208.00 | व.मी. | 323.505 | 739.44 |
| 7 | पत्थर की पिचिंग समस्त उठाव एवं आपूर्ति के साथ | 5.040 | 199.50 | 643.00 | व.मी. | 1005.480 | 3240.72 |
| TOTAL | | | | | | 22351.80 | |
| Add 3%Contengency | | | | | | 670.55 | |
| G. TOTAL | | | | | | 23022.36 | |
| Total No. of Structure | | | 1 | | Total Amount | | 23022.36 |

Silt Detention Structure(Masonry)

Material Consumption statement 3mts

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबलु.एम.पी.(10-11)

पंचायत समिति - बाली

3mts

| क्र. सं. | विवरण | मात्रा | सीमेन्ट थैले | बजरी घन मी. | रोडी घन मी. | पत्थर घन मी. |
|----------|--|--------|--------------|-------------|-------------|--------------|
| 1 | Cement Concrete (1:3:6) | 1.179 | घन मी. | 4.775 | 0.507 | 1.014 |
| 2 | Copping in C.C. (1:2:4) | 3.555 | वर्ग मी. | 1.109 | 0.078 | 0.160 |
| 3 | Massonary in Cement Mortar (1:6) (Foundation + Super structure + Stone Kharanja) | 9.045 | घन मी. | 12.573 | 2.714 | 9.045 |
| 4 | Plaster in Cement Mortar (1:4) | 5.063 | वर्ग मी. | 1.134 | 0.162 | |
| 5 | Stone for dry pitching | 5.040 | घन मी. | | | 6.048 |
| | TOTAL | | | 19.591 | 3.461 | 1.174 |
| | | | | | | 15.093 |

Note: This consumption of material is for one structure

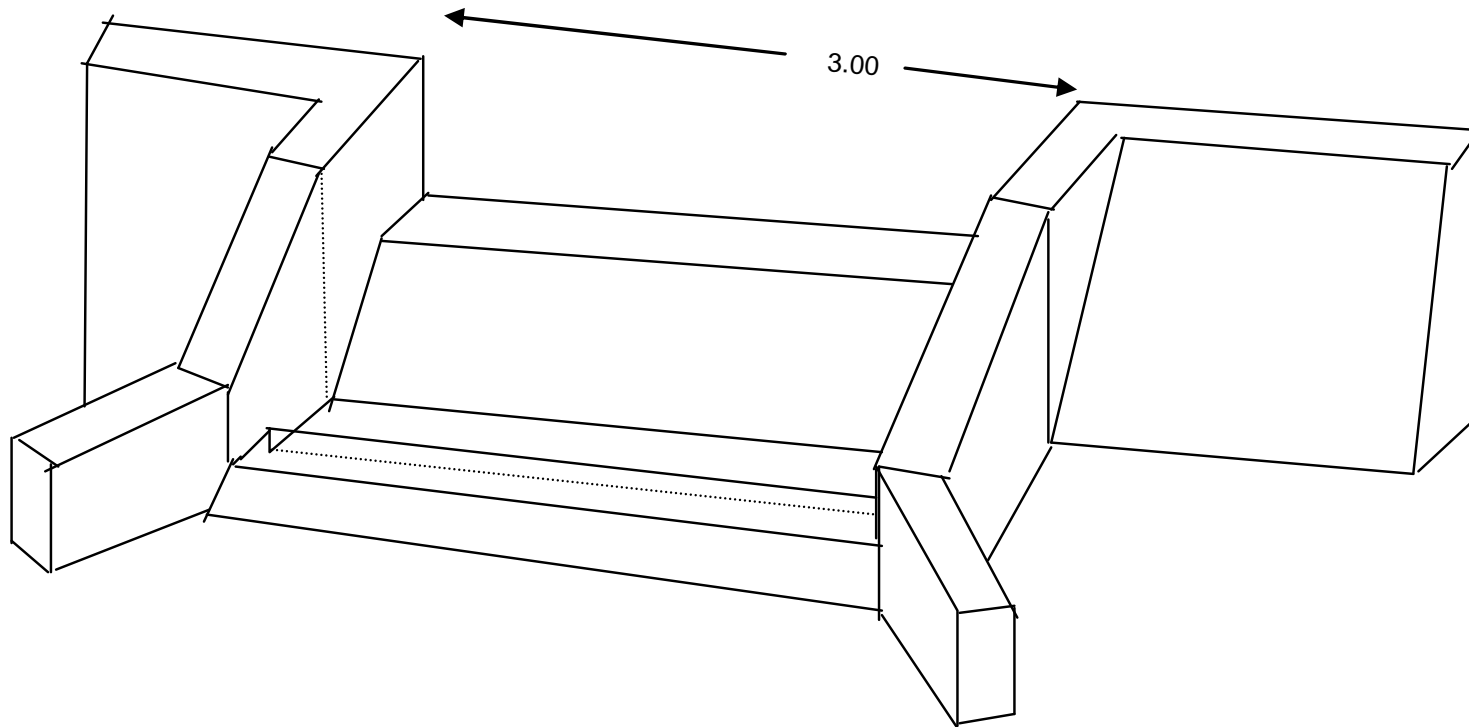
जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यू.एम.पी.(10-11)

Model Diagram of Silt Detention Structure

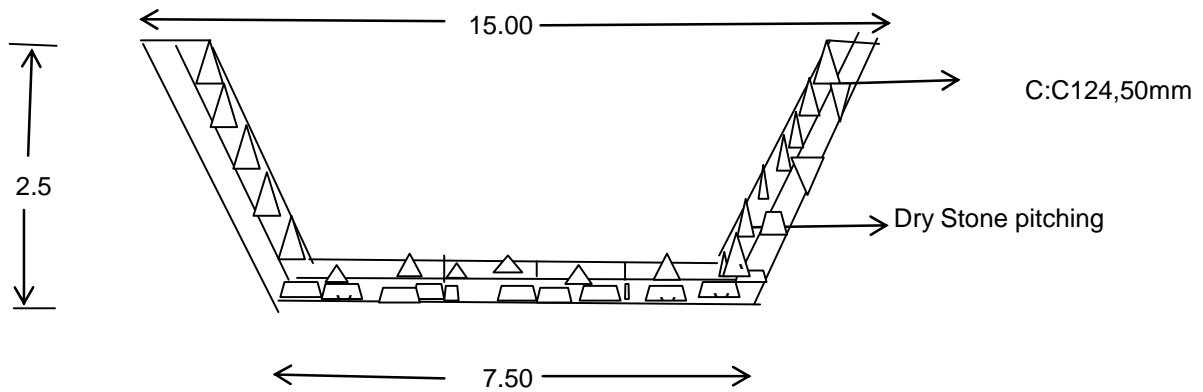
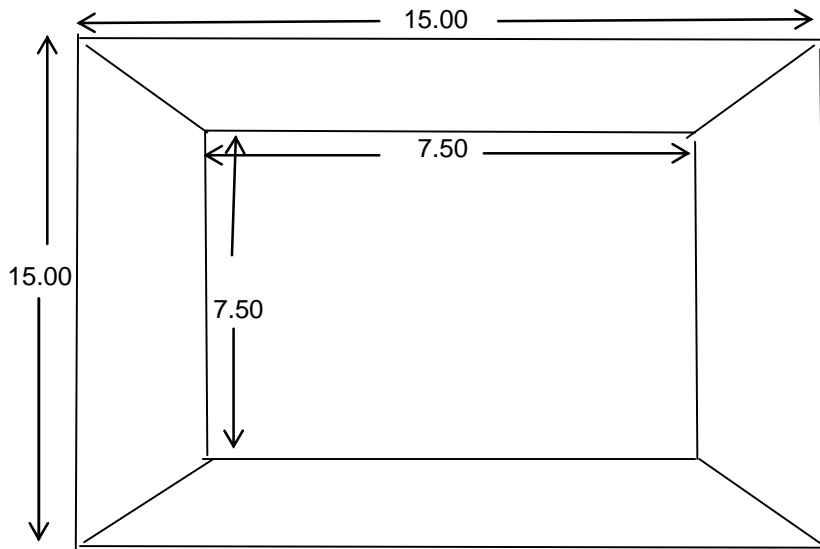
Work Area:- Area of Slope above 6% & DLT

Length of HW

3 mts



IWMP-9-PALI(10-11),P.S-BALI SUNKEN POND WITH C:C LINING



Detail of Sunken Pond With C:C Lining

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्यू.एम.पी.(10-11)

पंचायत समिति - बाली

No.

1

| क्र. सं. | कार्य विवरण | नाप | मात्रा |
|----------|---|--|---------------|
| 1 | डाग बेलिंग 5 सेमी से 7.5 सेमी गहरी | $1 \quad 2 \quad L \quad 2 \quad B \quad X \quad H/D \quad = \quad 45.0$ $15.00 \quad 7.50 \quad 0.00 = 45.0$ | 45.0 मी. |
| 2 | साधारण मुर्रम मिट्टी में खुदाई का कार्य 30 मी० लोड तथा 1.5 मी लिफ्ट के लिए | $1 \quad \frac{15+7.5}{2} \quad X \quad \frac{15.0+7.5}{2} \quad + \quad 2.50 \quad =$ $1 \quad x \quad 11.25 \quad x \quad 11.25 \quad x \quad 2.5 \quad 316.406$ | 316.406 घ.मी. |
| | क्वैरी रविस जिसमें 40 प्रतिशत पत्थर के स्पाल हो या कक्रंर या घांडला को बिछाना तथा आपूर्ति करना, पानी छिड़कना तथा दुरमुट से कूटना। | $1 \quad 4 \quad 7.9 \quad \frac{15+7.5}{2} \quad x \quad 0.1 \quad 35.55$ | |
| | | $1 \quad 7.5 \quad 7.5 \quad 0.1 \quad 5.625$ | 41.175 घ.मी. |
| 10 | पत्थर की पिचिंग समस्त उठाव एवं आपूर्ति के साथ | $1 \quad x \quad 4.00 \quad 7.9 \quad \frac{15+7.5}{2.0} \quad 0.23 \quad = \quad 81.765$ $1 \quad 10.00 \quad 10.00 \quad 0.23 \quad 23.000$ | 104.765 घ.मी. |
| 8 | कापिंग का कार्य 1 : 2 : 4 में 50 मिमी मोटाई में | $1 \quad 4.00 \quad 7.9 \quad \frac{15+7.5}{2.00} \quad 0.05 \quad 17.775$ $1 \quad 10.00 \quad 10.00 \quad 0.05 \quad 5.000$ | 22.775 घ.मी. |

Detail of Sunken Pond With C:C Lining

जलग्रहण क्षेत्र का नाम :- खेतरली-2'पाली-9 आइ.डबल्लु.एम.पी.(10-11)

पंचायत समिति - बाली

| क्र.सं. | कार्य विवरण | मात्रा | दर | | प्रति | राशि | |
|---------------------------|--|--------|--------|--------|----------|--------------------|------------------|
| | | | श्रम | कुल | | श्रम | कुल |
| 1 | डाग बेलिंग 5 सेमी से 7.5 सेमी गहरी | 45.00 | 0.47 | 0.470 | मी. | 21.150 | 21.15 |
| 2 | साधारण सख्त मिट्टी में खुदाई का कार्य 30 मी0 लोड तथा 1.5 मी लिफ्ट के लिए | 63.28 | 92.00 | 92.00 | ध.मी. | 5821.875 | 5821.88 |
| | मुरम | 253.13 | 134.00 | 134.00 | ध.मी. | 33918.750 | 33918.75 |
| 3 | क्वैरी रविस जिसमें 40 प्रतिशत पत्थर के स्पाल हो या ककरंर या घांडला को बिछाना तथा आपूर्ति करना, पानी छिड़कना तथा दुरमुट से कूटना। | 41.18 | 92.75 | 191.00 | ध.मी. | 3818.981 | 7864.43 |
| 4 | पत्थर की पिचिंग समस्त उठाव एवं आपूर्ति के साथ | 104.77 | 199.50 | 643.00 | व.मी. | 20900.618 | 67363.90 |
| 5 | कार्पिंग का कार्य 1 : 2 : 4 में 50 मिमी मोटाई में | 22.78 | 91.00 | 208.00 | व.मी. | 2072.525 | 4737.20 |
| TOTAL | | | | | | 119727.30 | |
| Add 3% Contengency | | | | | | 3591.82 | |
| No. of Str. | | | | | 1 | Grand Total | 123319.11 |

IWMP-9-PALI(10-11)

P.S-BALI

Nadi/Johad with waste wier

लम्बाई – 15.00 मीटर

ऊंचाई – 0.90 मीटर

| Item No. Of GKN- 11.2.11 | S.No. | Item | No. | L | B | H | Qty. | Amount | Labour Component |
|--------------------------|-------|---|-------|----------------------|---|---|--------|--------|------------------|
| 1/2ब | 1 | नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना। | | | | | | | |
| | (a) | सख्त, चिकनी, कंकर मिट्टी में | | | | | | | |
| | | HW | | 1x15x(1.4+0.45)x1.2 | | | 33.300 | cu.m | |
| | | SideWall | | 2x3.3x0.9x1.2 | | | 7.128 | cu.m | |
| | | WW-US-1 | | 1x0.9x0.9x1.2 | | | 0.972 | cu.m | |
| | | WW-US-2 | | 1x0.9x0.9x1.2 | | | 0.972 | cu.m | |
| | | WW-DS-1 | | 1x0.9x0.9x1.2 | | | 0.972 | cu.m | |
| | | WW-DS-2 | | 1x0.9x0.9x1.2 | | | 0.972 | cu.m | |
| | | HWE | | 2x2.3x1.08x(1.2+0.9) | | | 10.433 | cu.m | |
| | | Apron | | 1x15x3.3x0.3 | | | 14.850 | cu.m | |
| | | TW | | 1x15x0.6x0.7 | | | 6.300 | cu.m | |
| | | Hard soil + Hard Rock | | | | | Total | 75.899 | cu.m |
| | | Labour @ Rs. | 92.00 | Cu.m. | | | | | Labour 6982.71 |
| | | @Rs. | 92.00 | Cu.m. | | | | | Rs. 6982.71 |

Note : Add Extra Lift qt. @6/- cum

4/24अ
+25

4 अतिरिक्त जोड़ने योग्य राशि, अधिरचना चिनाई, आईटम नम्बर 21 से 24 तक में, कुर्सी तथा 4.5 मीटर ऊंचाई तक 30 से.मी. से अधिक मोटाई के लिये।

| | | |
|----------|---|--------------|
| HW | $1 \times 15 \times [(0.4 + 1.1) / 2] \times 0.9$ | 10.125 cu.m. |
| SideWall | $2 \times 3.3 \times [(0.45 + 0.9) / 2] \times 2.1$ | 9.356 cu.m. |
| WW-US-1 | $1 \times 0.9 \times [(0.45 + 0.9) / 2] \times [(2.1 + 2.1) / 2]$ | 1.276 cu.m. |
| WW-US-2 | $1 \times 0.9 \times [(0.45 + 0.9) / 2] \times [(2.1 + 2.1) / 2]$ | 1.276 cu.m. |
| WW-DS-1 | $1 \times 0.9 \times [(0.45 + 0.9) / 2] \times [(0.6 + 0.6) / 2]$ | 0.365 cu.m. |
| WW-DS-2 | $1 \times 0.9 \times [(0.45 + 0.9) / 2] \times [(0.6 + 0.6) / 2]$ | 0.365 cu.m. |
| HWE | $2 \times 2.3 \times [(0.45 + 1.08) / 2] \times 2.1$ | 7.390 cu.m. |
| TW | $1 \times 15 \times [(0.45 + 0.6) / 2] \times 0.45$ | 3.544 cu.m. |
| Total | | 33.697 cu.m. |

Labour @ Rs. 473.00 Cu.m.

@Rs. 1603.00 Cu.m.

Labour 15938.68

Rs. 54016.29

5/68 अ

5 सीमेंट प्लास्टर दीवार पर 1:6 अनुपात में सीमेंट-बजरी मिलाकर जोड़ों को कुरेदने तथा तराई समेत।

(a) 25 मी. मी.

| | | |
|----------|---|--------------|
| HW | $1 \times 15 \times [(1.2 - 0.3) + 0.9 + \sqrt{(0.9^2) + ((1.1 - 0.4)^2)}]$ | 44.103 Sq.m. |
| SideWall | $2 \times 3.3 \times [(1.2 - 0.15) + 2.1]$ | 20.790 Sq.m. |
| WW-US-1 | $1 \times 0.9 \times [(2.1 + 2.1) / 2]$ | 1.890 Sq.m. |
| WW-US-2 | $1 \times 0.9 \times [(2.1 + 2.1) / 2]$ | 1.890 Sq.m. |
| WW-DS-1 | $1 \times 0.9 \times [(0.6 + 0.6) / 2]$ | 0.540 Sq.m. |
| WW-DS-2 | $1 \times 0.9 \times [(0.6 + 0.6) / 2]$ | 0.540 Sq.m. |
| TW | $2 \times 15 \times 0.45$ | 13.500 Sq.m. |
| Total | | 83.253 Sq.m. |

Labour @ Rs. 77.65 Sq.m.

@Rs. 129.00 Sq.m.

Labour 6464.60

Rs. 10739.64

| | | | | | | |
|-------|---|--|------------------------------|------------|---------------|----------------|
| 6/5 | 6 | खुदी हुई मिट्टी/रेत को नीव में तथा कुर्सी में 50 मीटर तक दूरी में डालना तथा समतल करना, पानी डालना तथा दुरमुट से कूटना। | | | | |
| | | | Deduction as per item No.1 | | -75.899 Cu.m. | |
| | | Embk-1 | 22x[(1+4.375)/2]x[(1.5+0)/2] | | 44.344 Cu.m. | |
| | | Embk-2 | 22x[(1+4.375)/2]x[(1.5+0)/2] | | 44.344 Cu.m. | |
| | | | Total | | 12.789 Cu.m. | |
| | | Labour @ Rs. | 37.00 Cu.m. | | | Labour 473.19 |
| | | @Rs. | 37.00 Cu.m. | | | Rs. 473.19 |
| 7/123 | 7 | सीमेंट कार्कीट 1 सीमेंट : 2 बजरी : 4 पत्थर एग्रीगेट अनुपात में 12 मि.मी. नामीय माप की एग्रीगेट के साथ डालना। by mixture & vibrator | | | | |
| | | (a) 1 cement : 2sand : 4aggregate | | | | |
| | | | HW | 15x0.4x0.1 | 0.600 cu.m | |
| | | Coping | [0.9+0.9+0.9+0.9]x0.4x0.05 | 0.072 cu.m | | |
| | | SideWall | 2x3.3x0.45x0.05 | 0.149 cu.m | | |
| | | Apron | 15x3.3x0.1 | 4.950 cu.m | | |
| | | TW | 15x0.45x0.05 | 0.338 cu.m | | |
| | | HWE | 2x2.3x0.45x0.05 | 0.104 cu.m | | |
| | | | Total | | 6.213 cu.m. | |
| | | Labour @ Rs. | 329.55 Cu.m. | | | Labour 2047.49 |
| | | @Rs. | 2532.00 Cu.m. | | | Rs. 15731.32 |
| 98 | 8 | सड़क के निश्चित केम्बर तथा ग्रेड में, ग्रेबल, कक्रंर, क्वेरी रविश एंव कोर्स एग्रीगेट को 15 से.मी. से (बिना कुटी) कम मोटाई में बिछाना, फेलाना तथा 8-10 टन भार के रोलर से दबाना, कूटना तथा समस्त लीड के साथ पानी खर्च तथा औजार, मशीनरी का किराया सहित। | 2x10x2x0.1 = 4.00 cum @ | 29 | | Rs. 126.00 |
| | | Labour @ Rs. | 31.40 Cu.m. | | | |
| | | @Rs. | 38.00 Cu.m. | | | |
| 124 | 9 | 15 से 30 से.मी. मोटे, हथोड़े से तरासे हुए एकल पत्थर की पिचिंग समस्त उठान के साथ, आपूर्ति के साथ। | | | | |
| | | 23 cm thick | | | | |
| | | Embk-1 | 22x 2 x 0 | | 4.600 cum | |
| | | Embk-2 | 22x 2 x 0 | | 4.600 cum | |
| | | | Total | | 9.200 cum | |
| | | Labour @ Rs. | 116.00 Cu.m. | | | Labour 1067.20 |
| | | @Rs. | 382.00 Cu.m. | | | Rs. 3514.40 |

| | | | | | | |
|-----|----|--|---|--|---|---|
| 100 | 9 | वेरद्धा पत्थर का 23 से.मी. ऊंचाई में खंडजा लगाना तथा मिट्टी से भरना तथा खंडजे का होदा में से निकली अतिरिक्त मिट्टी का 50 मी. तक निस्तारण करना। 1:6 सीमेंट मसाले में | Apron 15x3.3 Total | 49.500 Sqm 49.500 Sqm | Labour @ Rs. 70.00 sqm @Rs. 133.00 sqm | Labour 3465.00 Rs. 6583.50 |
| 5 | 10 | खुदी हुई मिट्टी/रेत को नींव में तथा कुर्सी में 50 मीटर तक दूरी में डालना तथा समतल करना, पानी डालना तथा दुरमुट से कूटना। | 1x15x0.45x1.2 Total | 8.100 cum 8.100 cum | Labour @ Rs. 27.00 Cu.m. @Rs. 27.00 Cu.m. | Labour 218.70 Rs. 218.70 |
| 124 | 11 | 15 से 30 से.मी. मोटे, हथोड़े से तरासे हुए एकल पत्थर की पिचिंग समस्त उठान के साथ, आपूर्ति के साथ। | 22x2.02 x 0.23 22x2.02 x 0.23 Total | 10.221 cum 10.221 cum 20.442 cum | Labour @ Rs. 116.00 Cu.m. @Rs. 382.00 Cu.m. | Labour 2371.27 Rs. 7808.84 |

| | | | | | | | | |
|-------|----|--|--------------|-------|-------------------------|----------|--------|------------------|
| 186 | 12 | डाग बेलिंग 2.5 से 5 सेमी. गहराई तक | | | 2X1x142.5 | 285.000 | R.Mtr. | |
| | | | | | Total | 285.000 | R.Mtr. | |
| | | | Labour @ Rs. | 0.47 | R.Mtr. | | | Labour 134.66 |
| | | | @Rs. | 0.47 | R.Mtr. | | | Rs. 134.66 |
| 119 ब | 13 | मिट्टी का कार्य बन्ध मे (सूखी या गीली), 15 से.मी. परत मे डालना, ढेलों को तोड़ना, घास-पात तथा ककर बीनकर अलग करना तथा मिट्टी की दरेसी करना तथा शीप फूट रोलर/हैंड रैमर से मिट्टी दबाना, 1.5 मी उठान तथा 50 मी. दूरी के लिए। सख्त मिट्टी | | | 1x142.5x(3+12.45)/2x2.1 | 2311.706 | cum | |
| | | | | | Total | 2311.706 | cum | |
| | | | Labour @ Rs. | 92.00 | Cu.m. | | | Labour 212676.98 |
| | | | @Rs. | 92.00 | Cu.m. | | | Rs. 212676.98 |
| 2 ब | 14 | नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना। सख्त मिट्ट | | | 1x142.5x0.45x0.45 | 28.856 | cum | |
| | | | | | Total | 28.856 | cum | |
| | | | Labour @ Rs. | 92.00 | Cu.m. | | | Labour 2654.78 |
| | | | @Rs. | 92.00 | Cu.m. | | | Rs. 2654.78 |
| 21 ब | 15 | नींव तथा कुर्सी में पत्थर की वे रद्धा-ढोका चिनाई, गारा मसाले में या बिना मसाले मे सूखे पत्थर में। सूखे पत्थर की चिनाई | | | 1x142.5x0.45x0.45 | 28.856 | cum | |

Total 28.856 cum

Labour @ Rs. 320.30 Cu.m.
@Rs. 985.00 Cu.m.

Labour 9242.66

Rs. 28423.41

124

17 15 से 30 से.मी. मोटे, हथोड़े से तरासे हुए एकल पत्थर की पिचिंग समस्त उठान के साथ, आपूर्ति के साथ।

1x142.5x5.65x0.23 185.179 cum

Total 185.179 cum

Labour @ Rs. 199.50 cum
@Rs. 643.00 cum

Labour 36943.16

Rs. 119069.94

TOTAL Rs. 549713.64

Add. 3% Cont. Rs. 16491.41

Grand Total Rs. 566205.05

A- Labour Rs. 322191.00

B- 0.00

C- 0.00

D- 0.00

Total Cost (A+ C) 566205.05

Say Rs. 566200.00

LABOUR (B+C) Rs. 322191.00

MATERIAL Rs. 244009.00

Note - 1- Depth of foundation should be changed with respect to Scouring depth.

2-If height of Peir changed as per site conditions than width of Foundation of peir change proportionally. Slope 0.3:1

3-Head wall extension should be construct up to safer limit.

4-At no condition C.C. Flooring should be left in both sides of Opening.

5-if RCC work is not possible then stone patti of minimum 9" thick should be laid.

| | | | | | | | |
|---------------------------|--|---------------|--|--------------|-------------|--------------------|-------------------|
| FORM | Note - | | | | | | |
| | Please do not disturb the white Cells & Black Fonts | | | | | | |
| NOW- | तालाब व वेस्ट वियर निर्माण | | | | | | COST |
| Gram- GP- Location- | | | | | | | |
| Scheme-NREGS | IWMP | | | | | | 566200.00 |
| AREA in Hact. | 150 Hact. | | Please do not disturb the white Cells & Black Fonts | | | | |
| AREA under consideration | 45 | Hact. | Over Burden | 0 | | | |
| Crest Length | 15 | Mtr. | D/S Wing Wall Additional Length | 0 | | | |
| Height of Waste wier | 0.9 | Mtr. | Top Width of Side Wall & W.Wall | 0.45 | | | |
| Fetch Length | 0.25 | Km | TW - Top Width | 0.45 | | | |
| Density of Masonary-p | 2.3 | t/cum | TW Ht | 0.45 | | | |
| Depth of Foundation | 1.2 | Mtr. | | | | | |
| BUND | No. | L | B-1 | B-2 | H | US-Slope 1: | DS-Slope1: |
| | 1 | 142.50 | 3 | 12.45 | 2.10 | 2.50 | 2.00 |
| Quqrry Rubbish Thickness | | | 0.10 | | | | |
| Pitching Thickness | | | 0.23 | | | | |

| Part | Nos. | Length | Fd.W/ Width | Fd.D | CC-Th. | W.Th-Base | W.Th-Top | SS-H1 | SS-H2 |
|-----------------|------|--------|-------------|------|--------|-----------|----------|-------|-------|
| HW | 1 | 15 | 1.4 | 1.2 | 0.3 | 1.1 | 0.4 | 0.9 | |
| SideWall | 2 | 3.3 | 0.9 | 1.2 | 0.15 | 0.9 | 0.45 | 2.1 | 0.6 |
| WW-US-1 | 1 | 0.9 | 0.9 | 1.2 | 0.15 | 0.9 | 0.45 | 2.1 | 2.1 |
| WW-US-2 | 1 | 0.9 | 0.9 | 1.2 | 0.15 | 0.9 | 0.45 | 2.1 | 2.1 |
| | | | | | | | | | |
| WW-DS-1 | 1 | 0.9 | 0.9 | 1.2 | 0.15 | 0.9 | 0.45 | 0.6 | 0.6 |
| WW-DS-2 | 1 | 0.9 | 0.9 | 1.2 | 0.15 | 0.9 | 0.45 | 0.6 | 0.6 |
| HWE | 2 | 2.3 | 1.08 | 1.2 | 0.15 | 1.08 | 0.45 | 2.1 | 2.1 |
| Apron | 1 | 15 | 3.3 | 0.3 | | | | | |
| TW | 1 | 15 | 0.6 | 0.7 | 0.15 | 0.6 | 0.45 | 0.45 | |
| Embck-1 | | 22 | | | | 4.375 | 1 | 1.5 | 0 |
| Embck-2 | | 22 | | | | 4.375 | 1 | 1.5 | 0 |
| Pitching Y/N | y | | | | COST | 566200.00 | | | |
| Pitching Thick. | 0.23 | | | | | | | | |
| Coping on WW | 0.05 | | | | | | | | |
| Coping on HW | 0.1 | | | | | | | | |
| CC in Apron | 0.1 | | | | | | | | |

Note -
Please do not disturb the white Cells & Black Fonts

$$Q = CIA/36$$

C - Runoff Coefficient

I - Rainfall intensity-CM/Hr

A - Area in Hact.

| | | | | |
|-----|-------------|------|-----------|--------|
| 0.3 | SOIL | Agr. | Grassland | Forest |
| 9 | Sandy | | 0.29 | 0.15 |
| 45 | Alluvial | | 0.4 | 0.35 |
| | Black Cotto | | 0.5 | 0.45 |

$$Q = 3.375 \text{ Cum/Sec}$$

$$Q = CA^{3/4}$$

C = 11.4

A - Area in SqKm

11.4

0.45

$$Q = 6.263 \text{ Cum/Sec}$$

Discharge Max.of both

$$Q = 6.263 \text{ Cum/Sec}$$

Depth of Flow(Flood Lift)

$$Q = C_d L h^{3/2}$$

C_d -Coefficient of discharge for broad crested weir

1.71

L - Crest Length

15

$$h_f = (Q/C_d L)^{2/3}$$

$$h_f = 0.391 \text{ Mtr.}$$

$$\text{Say } 0.4 \text{ Mtr.}$$

Free Board - H_f

$$f_b = h_w$$

$$h_w = 0.384(F)^{1/2} + 0.763 - 0.217(F)^{1/4}$$

F - Fetch Length in Km

0.25

$$h_w = 0.802 \text{ Mtr.}$$

$$\text{Say } 0.8 \text{ Mtr.}$$

$$H_f = h + h_w$$

$$1.2 \text{ Mtr.}$$

$$\text{Say } 1.2 \text{ Mtr.}$$

| STRUCTURAL DESIGN | | | | |
|--|--|-----|-------------|-------------|
| Head Wall | | | | |
| Bottom Width | $b = (H+h_f)/(p-1)^{1/2}$ | | 1.14 | Mtr. |
| Top Width | $a = b - (0.80 \times H)$ | Say | 1.1 | Mtr. |
| | | | 0.38 | Mtr. |
| Width of Concrete Bed | $= b + 0.3$ | Say | 0.4 | Mtr. |
| | | | 1.4 | Mtr. |
| Head Wall Extension | | | | |
| Length | $= H + h + 1.00$ | | 2.3 | Mtr. |
| Top Width | | | 0.45 | Mtr. |
| Bottom Width | $= 0.45 + 0.30(H + \text{FreeBoard})$ | | 1.08 | Mtr. |
| Depth of Foundation | $= 1.2 + \text{Over Burden}$ | | 1.2 | Mtr. |
| Length of Apron | $= 0.696 \times C \times (H)^{1/2}$ | | | |
| C- Bligh's Coefficient=5 | | | | 3.3 Mtr. |
| Thickness of Apron | $t = (H/1.811)^{1/2}$ | Say | 3.3 | Mtr. |
| | | | | 0.7 Mtr. |
| | (Allowed 30 Cms 23Cms Stone Kharanja in CM & 10 Cm CC 1:2:4) | | 0.30 | Mtr. |
| Side Wall | | | | |
| Length= | $1.75H + 0.75h + 0.45$ | | 2.325 | Mtr. |
| Adopt Length of Side Wall=Apron | | | 3.3 | Mtr. |
| Height at Head Wall extension Junction | $H + \text{Flood Lift} + \text{FreeBoard}$ | | 2.1 | Mtr. |
| Height at Wing Wall Junction | $1.50 \times \text{Flood Lift}$ | | 0.6 | Mtr. |
| Top Width | | | 0.45 | Mtr. |
| Bottom Width= | $0.45 + 0.30 \times [(H + \text{FreeBoard}) + (1.5 \times \text{Flood Lift})]$ | | 0.86 | Mtr. |
| | | Say | 0.9 | Mtr. |

D/S Wing Wall

| | | | |
|---------------|--|-----------------|-----------|
| | Length = $2.25 \times \text{Flood Lift}$ | Length | 0.9 Mtr. |
| | | Length | 0.9 Mtr. |
| | | Top Width | 0.45 Mtr. |
| Bottom Width= | $0.45 + [0.30 \times (1.50 \times \text{Flood Lift})]$ | Top Width | 0.63 Mtr. |
| | Adopt | 0.9 Mtr. | |
| Height= | $1.50 \times \text{Flood Lift}$ | | 0.6 Mtr. |

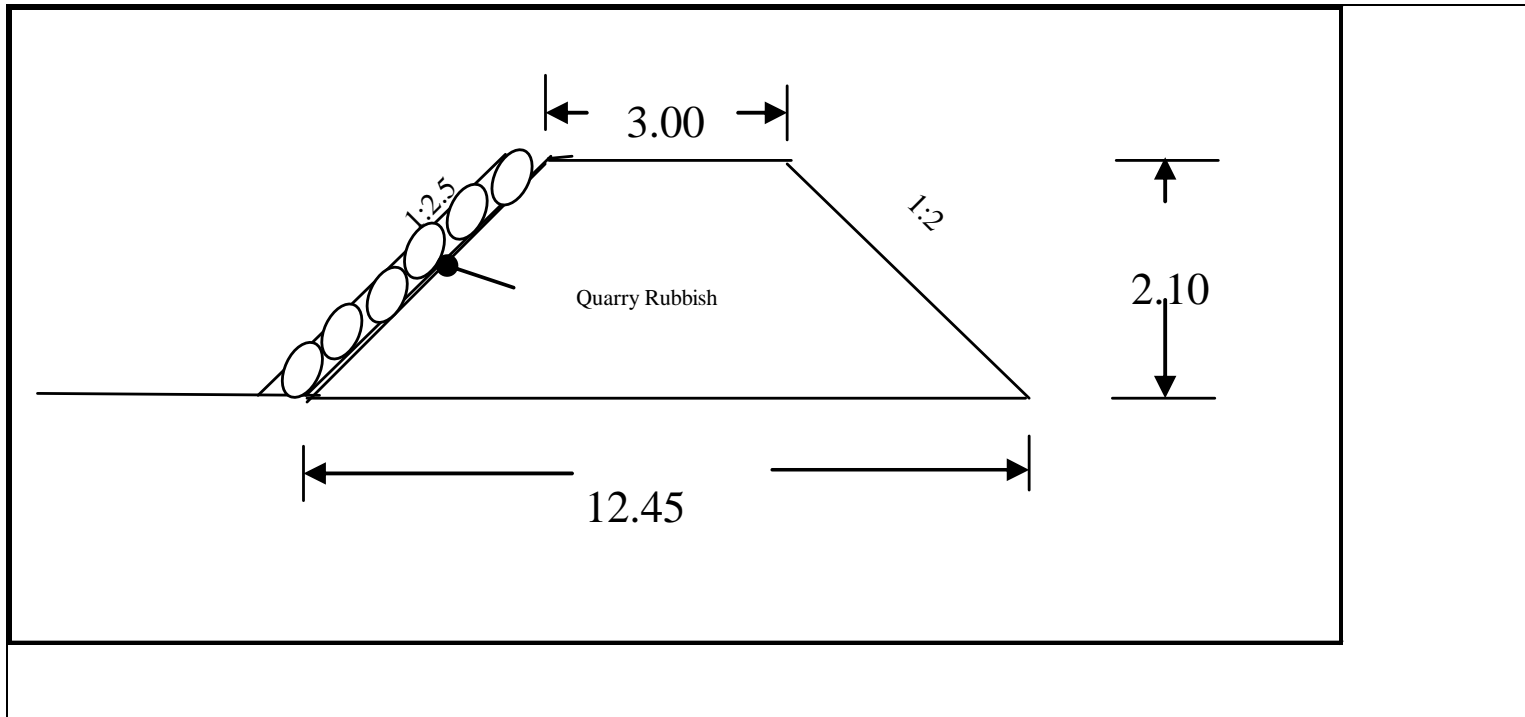
U/S Wing Wall

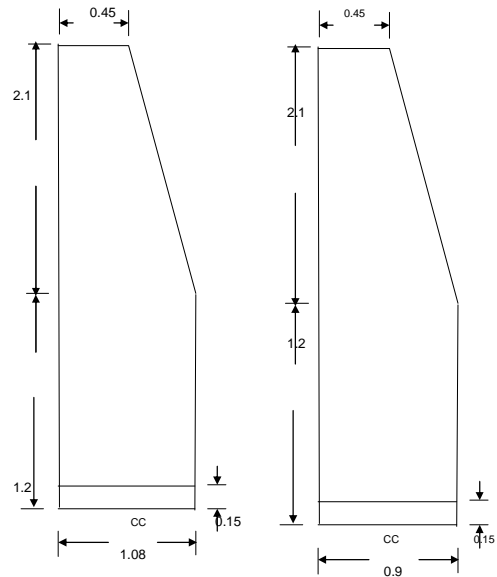
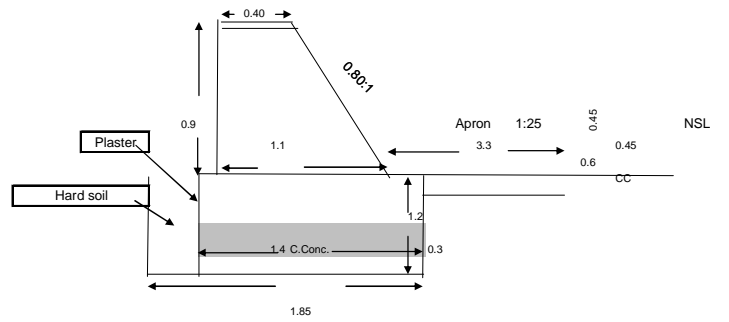
| | | | |
|---------------|--|-----------------|-----------|
| | Length = $2.25 \times \text{Flood Lift}$ | Length | 0.9 Mtr. |
| | | Length | 0.9 Mtr. |
| | | Top Width | 0.45 Mtr. |
| Bottom Width= | $0.45 + [0.30 \times (1.50 \times \text{Flood Lift})]$ | Top Width | 0.63 Mtr. |
| | Adopt | 0.9 Mtr. | |
| Height = | $H + \text{Flood Lift} + \text{Free Board}$ | | 2.1 Mtr. |

Toe Wall

| | | | |
|----------------------|-------------------------------|-----------------|-----------|
| | | Top Width | 0.45 Mtr. |
| | | Height | 0.45 Mtr. |
| Bottom Width= | $T_w + [0.30 \times H_t]$ | | 0.59 Mtr. |
| | Adopt | 0.6 Mtr. | |
| Depth of Foundation= | Thickness of Apron Calculated | | 0.7 Mtr. |

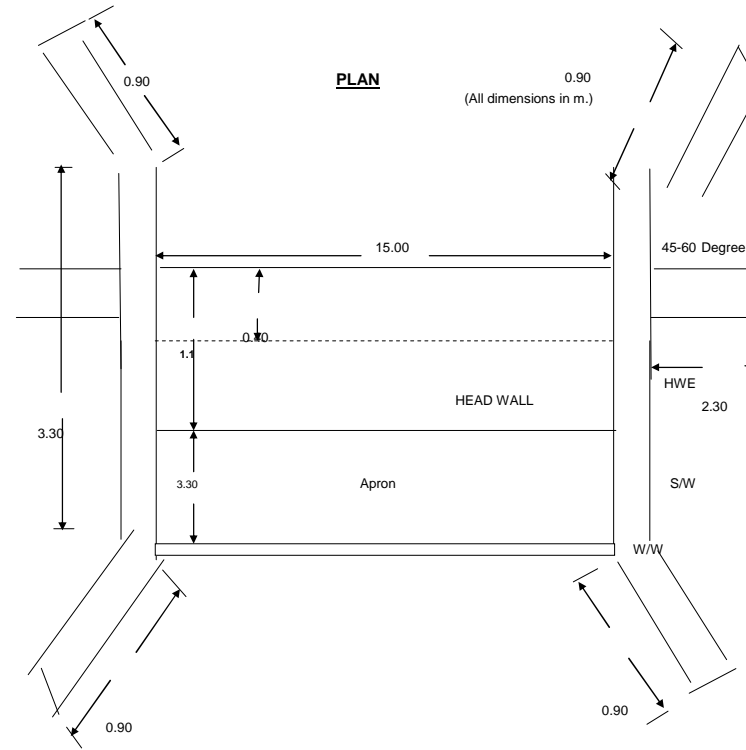
| FORCES | | Vertical Forces V | Horizontal Forces H | Lever arm from Toe | Moment at Toe | |
|-------------------|--------------------------|---------------------------------|------------------------|-----------------------|---------------|-------------|
| | | | | | Mr | Mo |
| W1=axHxLxp | 0.4x0.9x1x2.3 | 0.83 | | 0.9 | 0.75 | |
| W2=1/2(b-a)xHxLxp | 1/2x(1.1-0.4)x0.9x1x2.3 | 0.7245 | | 0.47 | 0.34 | |
| W3=aXhXLxw | 0.4x0.4x1x1 | 0.16 | | 0.9 | 0.14 | |
| P1=wxh X H | 1x0.4x2.3 | | 0.92 | 0.45 | | 0.41 |
| P2=wx(H x H)/2 | 1x(0.9x0.9)/2 | | 0.405 | 0.3 | | 0.12 |
| U=CxwHxb/2 | 0.50x1x0.9x1.1/2 | -0.2475 | | 0.73 | | 0.18 |
| TOTAL | | 1.47 | 1.33 | | 1.23 | 0.71 |
| CHECK | | FORMULA | | VALUES | LIMITS | REMARK |
| Over Turning | $\sum Mr / \sum Mo$ | 1.23 / 0.71 | | 1.73 | >1.5 | SAFE |
| Sliding | $\mu \sum V / \sum H$ | 0.65x1.465 / 1.325 | | 0.72 | >1 | Un-Safe |
| Stress at Toe | $(\sum V/b)x(1+6e/b)$ | $(1.465/1.1)x\{1+(6x0.2/1.1)\}$ | | 2.78 | <10 | SAFE |
| Stress at Heel | $(\sum V/b)x(1-6e/b)$ | $(1.465/1.1)x\{1-(6x0.2/1.1)\}$ | | -0.12 | >0 | Un-Safe |
| Eccentricity | $(b/2)-\sum Mr / \sum V$ | $(1.1/2)-(0.52/1.465)$ | | 0.2 | <0.18 | Un-Safe |





Head Wall Extension

Side Wall



PLAN

(All dimensions in m.)

IWMP-6-PALI(Khetarli) Model Estimate of Tool Kit

Household Production System(for Marginal farmer and Land less labour)

Service sector- Tool Kit Specification Trade wise Detail of tools requirement in one set

1. One set of carpentry tools

COST RS. 4000/ Kit

| S.No. | Name of tools | Specification | Quantity |
|-------|--|-------------------------------|----------|
| 1 | Hand saw | Size 15" | 1 No |
| 2 | Hand saw | Size 12" | 1 No |
| 3 | Screw driver | Size 8"x25mm | 1 No |
| 4 | Combination pliers | Size 8"Make – Taparia | 1 No |
| 5 | Charsi with handle | Size 25 mm | 1 No |
| 6 | Charsi with handle | Size 18 mm | 1 No |
| 7 | Charsi with handle | Size 10 mm | 1 No |
| 8 | Wooden Randda | Big- Made of Sagwan | 1 No |
| 9 | Wooden Randda | Small – Made of Sagwan | 1 No |
| 10 | File half round | Make JK | 1 No |
| 11 | File regular | Make JK | 1 No |
| 12 | Tee Bar carpenter frame (shikanja) for wooden frame | Size 4'x2" | 1 No |
| 13 | Stone silly | Size 6" - ISI Mark | 1 No |
| 14 | Basola with handle | Weight 800 gram | 1 No |
| 15 | Ball peen hammmer | Weight 300 gram Make Ambica | 1 No |
| 16 | Cross peen hammer | Weight 500 gram – Make Ambica | 1 No |
| 17 | Measurement tape | Size 10 feet- Make Freeman | 1 No |
| 18 | Pincer | Size 200 mm- | 1 No |

| | | | |
|----|---------------------|-----------------------------|------|
| 19 | Girmit | Size ½ “ | 1 No |
| 20 | Tri Square | Size 8” | 1 No |
| 21 | Hand Operated drill | Size ¼ “ | 1 No |
| 22 | Steel box for Tools | Size(22”x11”) – G.I. sheet | 1 No |

2. One set of Mason tools

COST RS. 2000/ Kit

| S.No. | Name of tools | Specification | Quantity |
|-------|-----------------------------|------------------------------|----------|
| 1 | Karni | Size – Big- | 1 No |
| 2 | Karni | Size – small | 1 No |
| 3 | Mashtar wooden | Size 36” Made of Sagwan | 1 No |
| 4 | Mashtar wooden | Size 24 “ Made of Sagwan | 1 No |
| 5 | Mashtar wooden | Size 15” Made of Sagwan | 1 No |
| 6 | Gurmala | | 1 No |
| 7 | Soot | | 1 No |
| 8 | Sabbal | Heavy iron | 1 No |
| 9 | L shape measurement (Gunia) | | 1 No |
| 10 | Level pipe(25 foot) | 5 mm | 1 No |
| 11 | Chiesal | Size 6” , 8” Make – Taparia | 1 No |
| 12 | Ball pine hammer | Weight 500 gm Make – Ambica | 1 No |
| 13 | Cross pine hammer | Weight 300 gm Make – Ambica | 1 No |
| 14 | Aluminium rib | Size 60” x 4”x 1.5” | 1 No |
| 15 | Measurement tape | Size 10 feet Make – Freemans | 1 No |
| 16 | Canvas bag for above tools | Made of Heavy canvas | 1 No |

3 . One set of Pottery Tools**COST RS. 12000/ Kit**

| S.No. | Name of tools | Specification | Quantity |
|-------|--------------------------|--|----------|
| 1 | Clay lump beating hammer | MS pat. Size – D 100 – 120 mm x T5-6mm. with iron pipe handle | 1 |
| 2 | Wooden hammer(Thapa) | Sheesam Wood. Size – D6-7"x T1.25". handle- L6" | 1 |
| 3 | Tasla | MS Sheet. Size- D15". SWG-20 | 1 |
| 4 | Spade (Phawda) | MS sheet. Size L 10 "x w10". SWGT-20. fitted with Wooden Handle | 1 |
| 5 | Kamdai | Wooden Size- 2"x 1-1.25" approx. Arc. Shap | |
| 6 | Pindi Cement | Various Sizes | 3 |
| 7 | Decoration tools | MS (Banki, Sua. Piyali. Patti) | 8 |
| 8 | Decoration Wheel | Size- H 16" x D 12-15". Tripod Structure. Fitted with double Ball Bearing. Iron sheet 5 mm | 1 |
| 9 | Manual Potter Wheel | Outer Dia- inner plate size – D-300mm x T-20mm. T-WT- 17 kg minimum (Casted iron body). Tripod Casted Iron Structure with Ball bearing. 2 nos. of outer rings made of T or steal of 12 mm Dia. Cross Wooden Support Structure. | 1 |
| 10 | Electric Potter wheel | Structure dimension (25"x16"x16") iron angle (iron angle structure 35-5) casted iron wheel dia 23". Ball bearing -2 (6206) sealed. Shaft dia 2". V- belt pully, WT 23-25 kg. | 1 |

4. One set of Footwear(Mojari) Tools**COST RS. 12000/ Kit**

| S.No. | Name of tools | Specification | Quantity |
|-------|--------------------------|---|----------------|
| 1 | Hummer Ball Pane | Drop forged steel. Induction hardened. Seasoned wood handle. WT- 300 gms with wooden handle. Nylon hammer (L 240 mm. head size L80x D300mm) | |
| 2 | Wooden Block | Size- L 18"x W4"x T 4" | 1 |
| 3 | Pincer | Size – 8" | 1 |
| 4 | Scissors | Size- 9". Steel Body. Brass Handle | 1 |
| 5 | Bodam / Shoe anvil | Graded CI with 3 phases. WT – 4 kg . approx. | 1 |
| 6 | Cutting Blade Set (Ramp) | Steel with Wooden Handle. Size- L 150x W30X T6mm | set |
| 7 | Stitching Awl | Steel with Sheesham Wood Handle | 1 |
| 8 | Sharpening Stone | Size- 150x50x25mm. 109 no. | 1 |
| 9 | Shoe measuring Tape | Size—2' fibre/ good quality plastic material | 1 |
| 10 | Lock Punch Set | Steel | 1 |
| 11 | Eye let setting tool | Steel | 1 |
| 12 | Round whole punch set | Steel, Size – L 100 Range- 1 to 10 | 1 set(10 pcs.) |
| 13 | Design punch Set | En-9 steel. Size – L100 | 1 set(3 pcs.) |
| 14 | Zig zag Steel Scissors | Steel, Size- 8 1/2". Grooves on cutting edge. | 1 |
| 15 | Pattern Cutting Knife | Steel, Size – 6" | 1 |
| 16 | PP Block | Size- L 6" x W 6" x T 20mm | 1 |
| 17 | Steel Scale | Size-12" and 24" | 1 |
| 18 | Leather Scraping Brush | Size- 8" with wooden Handle | 1 |

| | | | |
|----|---------------------------|--|-----------|
| 19 | Adhesive Brush | Size- 10 mm. 12 mm. 25 mm | 1 |
| 20 | Spring Divider | Steel- Size 9" | 1 |
| 21 | Sant | Steel- H 6" WT – 1 kg. | 1 |
| 22 | Sizeore Passing | Steel- Size 8" | 1 |
| 23 | Thread Cutter | Steel with plaste handle. Size- L 100 mm | 1 |
| 24 | Number sety | Steel | Set of 10 |
| 25 | Capsol Punch | Size (8-10-12-16) | Set |
| 26 | Brush | Size 10 mm. 12mm.25mm | 1 |
| | Machine Tools | | 1 |
| 27 | HD Flat Bad Swing Machine | 31 K. Branded Company | 1 |

5. One set of Blacksmith Tools**COST RS. 6000/ Kit**

| S.No. | Name of tools | Specification | Quantity |
|-------|-----------------------------------|----------------------------|----------|
| 1 | Big Hammer | Ghon – 5 kg | 1 |
| 2 | Hammer | Ghon – 1 kg | 1 |
| 3 | Hammer | Ghon – ½ kg | 1 |
| 4 | Anvil- chouka | Ghon – 10 kg | 1 |
| 5 | Chisel- 3 Nos | Ghon – 1 kg, 500 kg. 750gm | 1 |
| 6 | Meaurement tape | 3 MTR | 1 |
| 7 | Tringle | 6" | 1 |
| 8 | Plie Taparia | 8" | 1 |
| 9 | Scra drive | 10" Tapana | 1 |
| 10 | Tin | 10" | 1 |
| 11 | Hand operated electric hand drill | - | 1 |
| 12 | Sansasi- flat and round | - | 1 |
| 13 | Table Vice | - | 1 |
| 14 | Haksa Frame Poland type | - | 1 |

6 One set of Cycle Mechanic Tools**COST RS. 6000/ Kit**

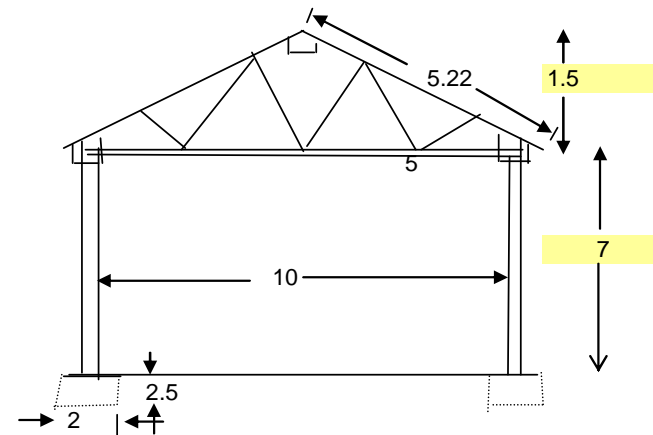
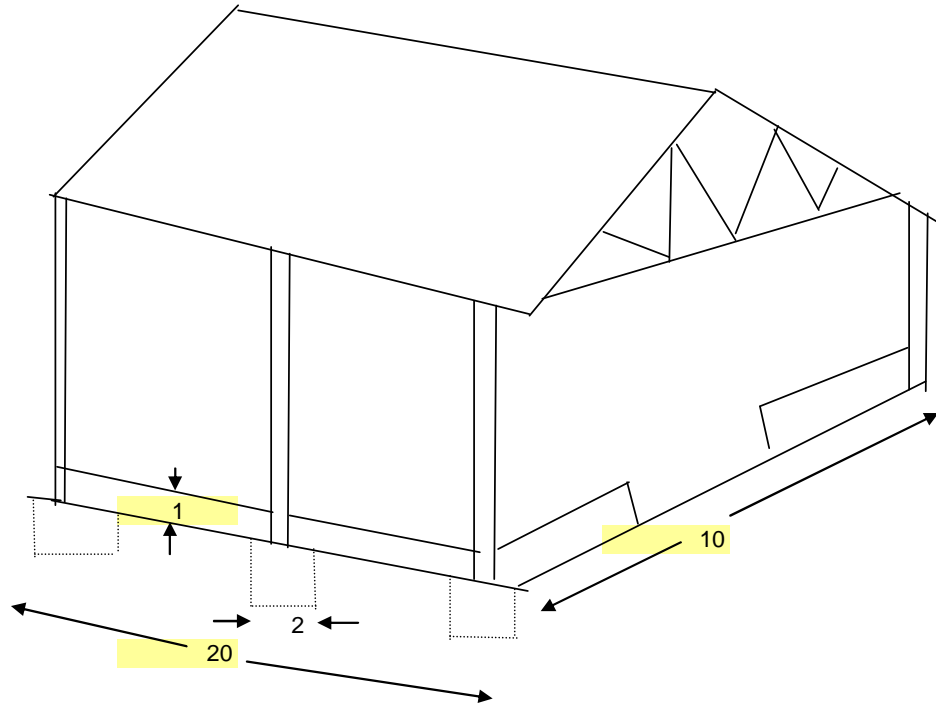
| S.No. | Name of tools | Specification | Quantity |
|-------|----------------------|---------------|----------|
| 1 | Hammer | 500gm | 60.00 |
| 2 | Hammer | 1 kg | 100.00 |
| 3 | Plies | 8" Taparia | 180.00 |
| 4 | Screw driver Taparia | 6"-8"-12" | 250.00 |

| | | | |
|----|---------------------------------|--------|---------|
| 5 | Pincer- 6" | 6" | 100.00 |
| 6 | Nose plier-6" | 6" | 100 |
| 7 | Alignment equipment cycle wheel | | 1000 |
| 8 | Anvil – Chowka | 5 kg | 500.00 |
| 9 | Screw wrench | 10" | 150.00 |
| 10 | Hexa Frame polaud type | | 120.00 |
| 11 | Spanner Set fix type 8 pcs | 8 pcs | 380.00 |
| 12 | Electric hand drill machine | | 2000.00 |
| 13 | Hand Skipper | 10" | 100.00 |
| 14 | Solution | | 50.00 |
| 15 | Water Pump Plier | | 100.00 |
| 16 | Punch | 6" | 50.00 |
| 17 | Hand Scissors | 8" | 120.00 |
| 18 | Oil cane | 250 gm | 80.00 |

Abstract of cost Vermi compost unit

| Sr. no | Name of work | Project cost | | | Measures |
|--------|--------------------|--------------|-------------|--------------|------------------|
| | | Unit cost | Project | Contribution | |
| 1 | Warmi Compost Unit | | 60% | 40% | |
| | | 30809.78 | 18485.8683 | 12323.91219 | 30809.7805 |
| | Say | 0.26 | 0.16 | 0.10 | 0.26 Lacs |

IWMP-6-Pali,P.S-Bali

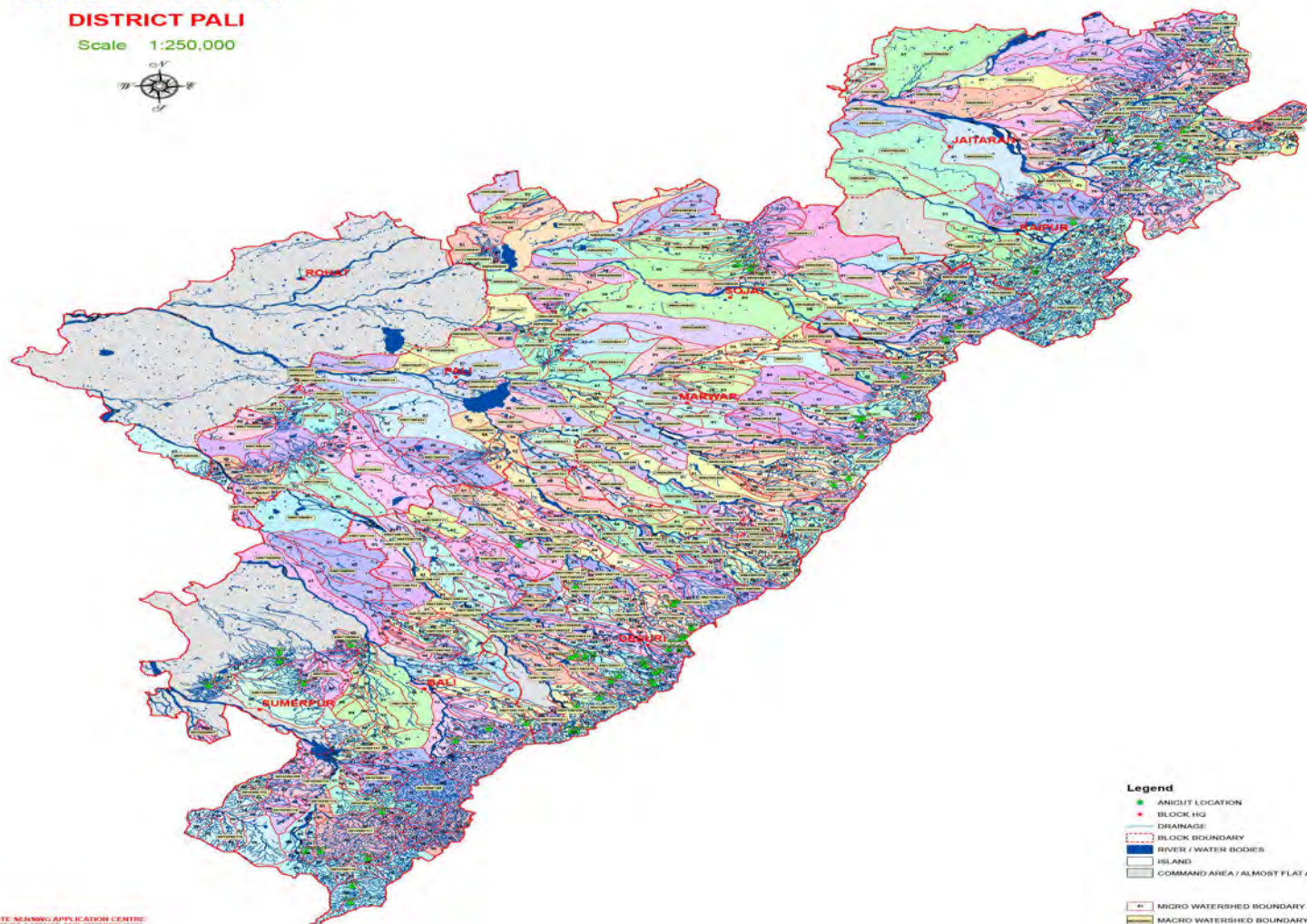


| Model Estimate | | | | | | | | | | |
|----------------|--|----------|----------|--------|--------|---------------------------------|--------|------|------|-----------------|
| IWMP-6-Pali | | | P.S-Bali | | | Vermi Compost manure Production | | | | |
| So.No | Name of work | Item no. | No | Length | width | Hight | Qty | Unit | Rate | Amount |
| 1 | नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना। Hard soil | 2B | 6 | 2 | 2 | 2.5 | 60 | | | |
| | | | | | | | 1.70 | Cum | 92 | 156.46 |
| 2 | माप की पत्थर मिट्टी (हाथ से तोड़ी गई)/ ईट की मिट्टी सीमेन्ट-रेत मसाला, 1 सीमेन्ट : 5 रेत : 10 मिट्टी अनुपात में मिलाकर डालना तथा कुटाई करना, तराई समेत। | 11,1 | 6 | 2 | 2 | 1 | 24 | | | |
| | | | | | | | 0.68 | Cum | 1436 | 976.87 |
| 3 | नींव तथा कुर्सी में पत्थर की वे रद्धा-ढोका सीमेन्ट-बजरी 1 : 3, 1 : 6 या 1 : 8 मसाले में, मय बगल की झिरी बन्द करना तथा तराई आदि। (1:6) | 24 | 6 | 2 | 2 | 1.5 | 36 | | | |
| | | | 2 | 16.25 | 1 | 1 | 32.5 | | | |
| | | | 2 | 10 | 1 | 1 | 20 | | | |
| | | | | | | | 88.5 | cuf | | |
| | | 25C + 26 | 6 | 1.25 | 1.25 | 7 | 65.625 | Cum | 1603 | 4021.13 |
| | | | | | | | 1.86 | Cum | 1603 | 2981.77 |
| 4 | Pillor mesonary | 28 | | | | | 1.86 | Cum | 1962 | 3649.55 |
| 5 | सीमेन्ट प्लास्टर दीवार पर 1:4 अनुपात में सीमेन्ट-बजरी मिलाकर कर जोड़ों को कुरेदने तथा तराई सहित 25 मि.मी./20 मि.मी./12 मि.मी. में। 25 mm | 66 | 6 | 5 | | 7 | 210 | | | |
| | | | 2 | 16.25 | | 3 | 97.5 | | | |
| | | | 2 | 10 | | 3 | 60 | | | |
| | | | | | | | 367.5 | Sqf | | |
| | | | | | | | 34.15 | Sqm | 147 | 5020.678439 |
| 6 | Chanal 3" * 1.5" Angle(1.5"*1.5") Angle (1"*1") | 51,35 | | | Length | Kg/feet | Kg | | | |
| | | | 3 | 20 | 60 | 1.25 | 75 | Kg | 46 | 3450 |
| | | | 6 | 5.22 | 31.32 | 0.9 | 28.19 | Kg | 46 | 1296.69 |
| | | | 3 | 10 | 30 | 0.9 | 27.00 | Kg | 46 | 1242 |
| | | | 3 | 8 | 24 | 0.35 | 8.40 | Kg | 46 | 386.4 |
| 7 | Asbestos Sheet | | 14 | 6 | 3 | | 252 | | | |
| | | | | | | | 23.42 | Sqm | 202 | 4730.855019 |
| 8 | color and finising | | | | | | | | | 500 |
| 9 | Vermi | | | | | | 3 | Kg | 500 | 1500 |
| | | | | | | | | | | 29912.41 |
| | | | | | | | | | | 897.37 |
| | | | | | | | | Say | | 30809.78 |

WATERSHED MAP

DISTRICT PALI

Scale 1:250,000

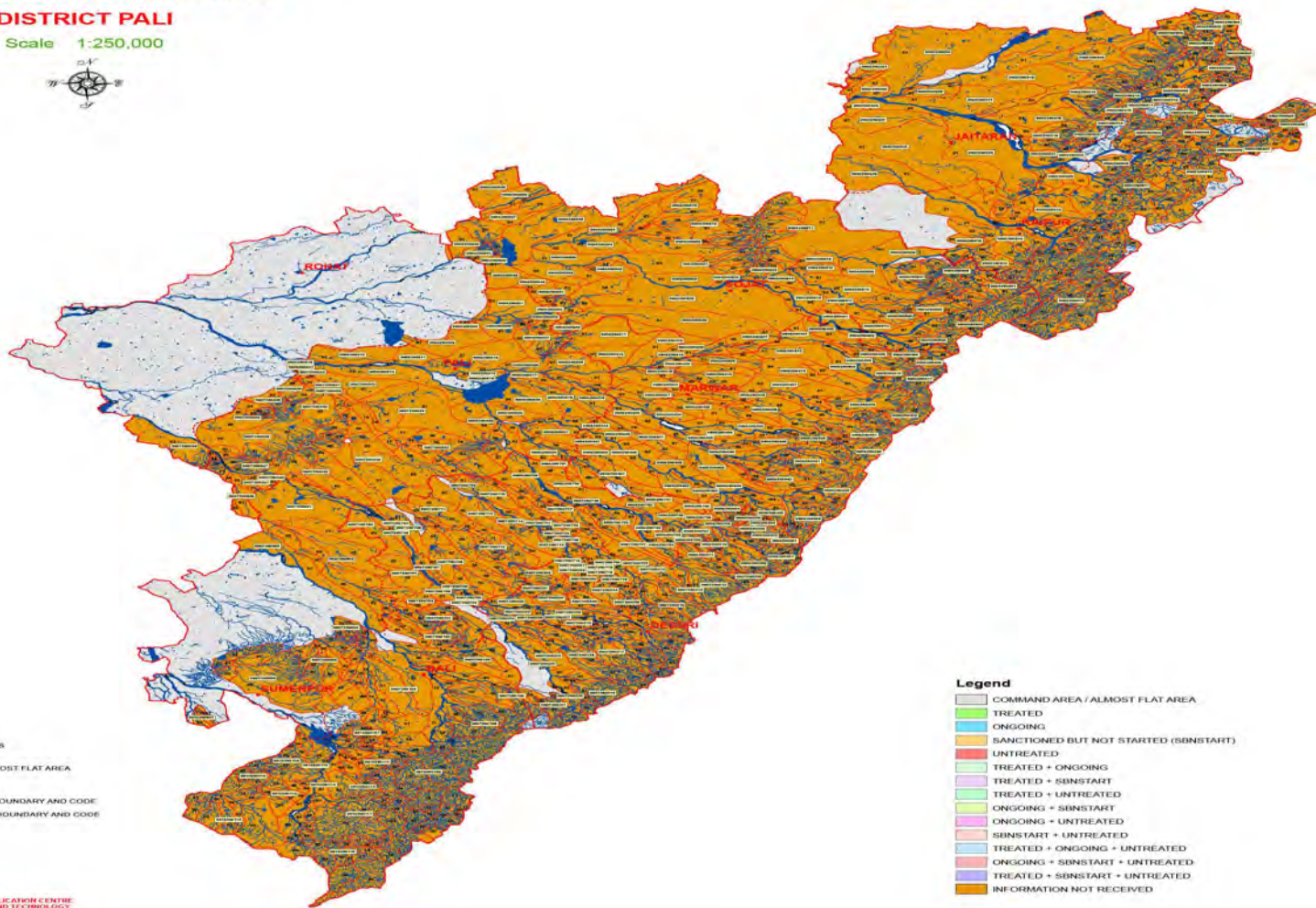


STATE REMOTE SENSING APPLICATIONS CENTRE
DEPARTMENT OF SCIENCE AND TECHNOLOGY
GOVERNMENT OF RAJASTHAN
JAIPUR

STATUS OF WATERSHED

DISTRICT PALI

Scale 1:250,000



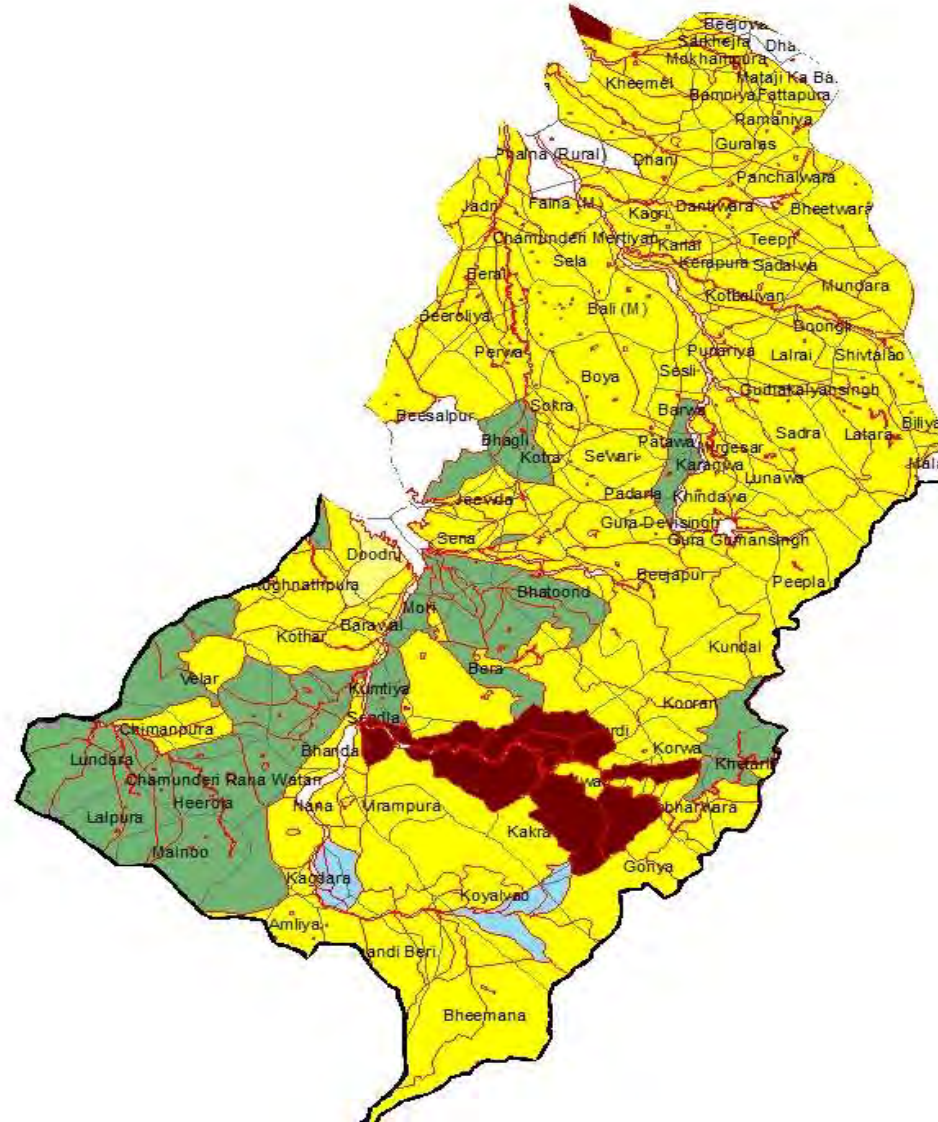
Legend

- BLOCK HQ
- DRAINAGE
- BLOCK BOUNDARY
- RIVER / WATER BODIES
- ISLAND
- COMMAND AREA / ALMOST FLAT AREA
- MICRO WATERSHED BOUNDARY AND CODE
- MACRO WATERSHED BOUNDARY AND CODE

STATE REMOTE SENSING APPLICATION CENTRE
DEPARTMENT OF SPACE AND TECHNOLOGY
GOVERNMENT OF RAJASTHAN
JODHPUR

Legend

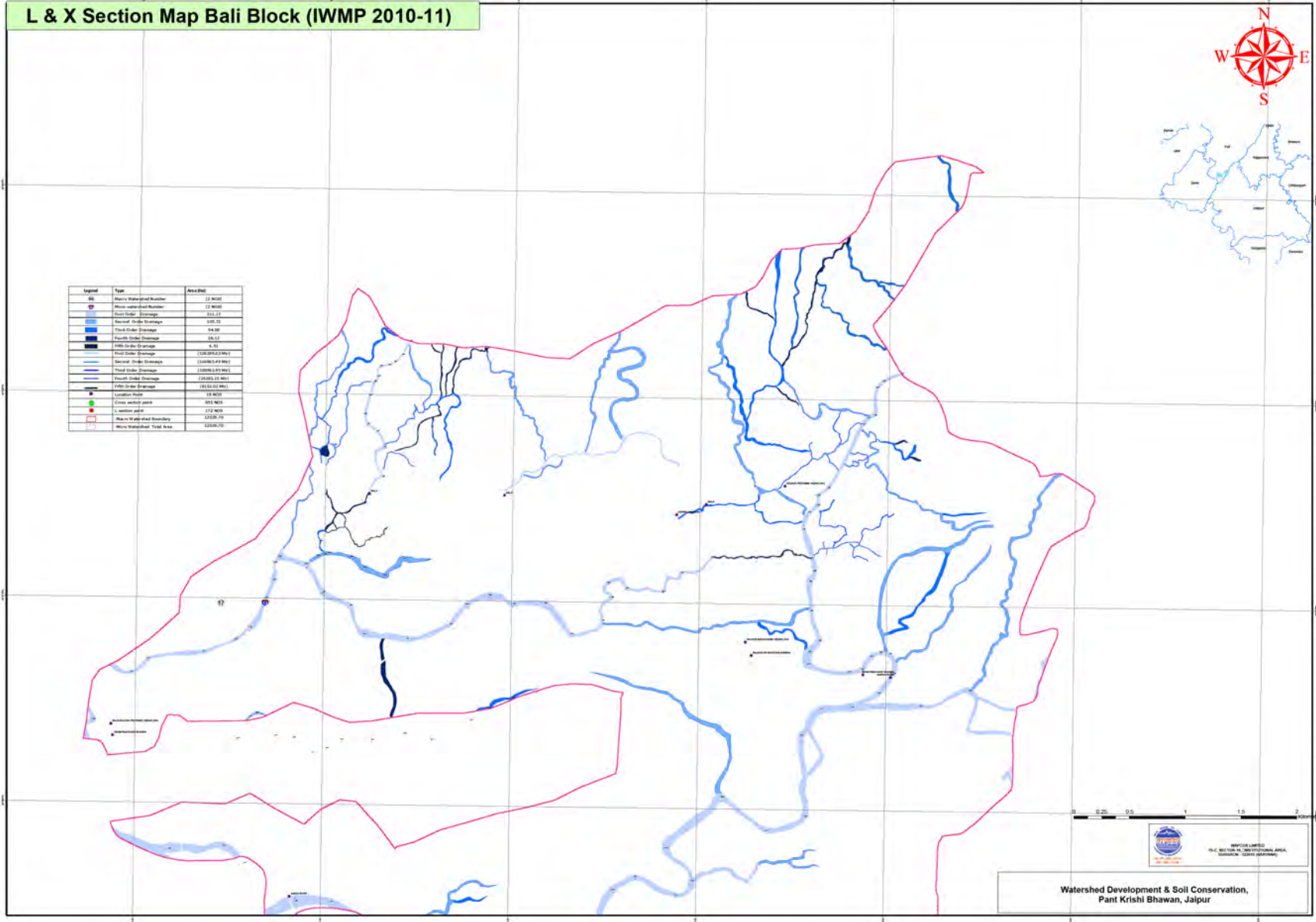
- COMMAND AREA / ALMOST FLAT AREA
- TREATED
- ONGOING
- SANCTIONED BUT NOT STARTED (SBNSTART)
- UNTREATED
- TREATED + ONGOING
- TREATED + SBNSTART
- TREATED + UNTREATED
- ONGOING + SBNSTART
- ONGOING + UNTREATED
- SBNSTART + UNTREATED
- TREATED + ONGOING + UNTREATED
- ONGOING + SBNSTART + UNTREATED
- TREATED + SBNSTART + UNTREATED
- INFORMATION NOT RECEIVED



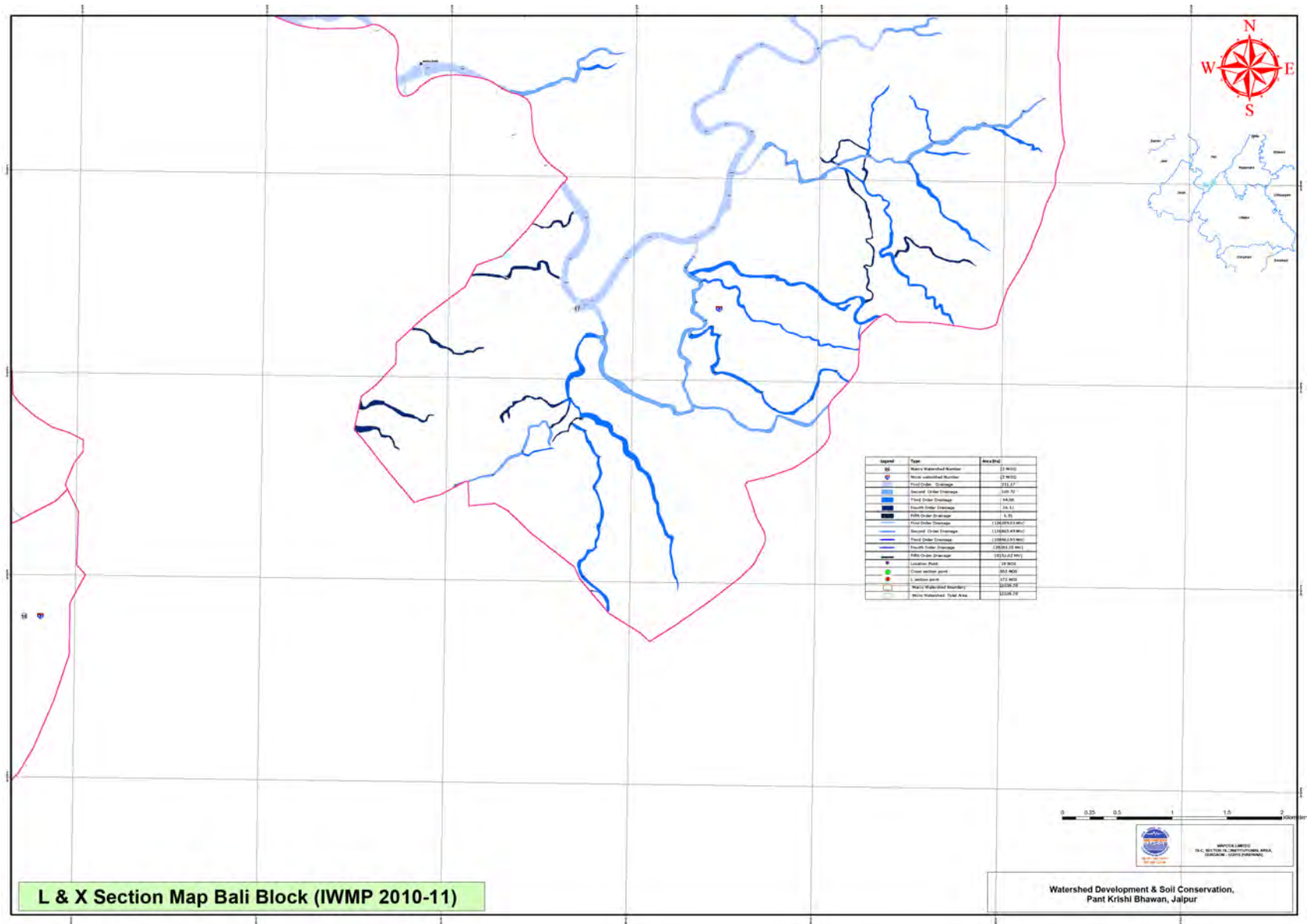


G.T SHEET OF PROJECT AREA IN P.S BALI

L & X Section Map Bali Block (IWMP 2010-11)

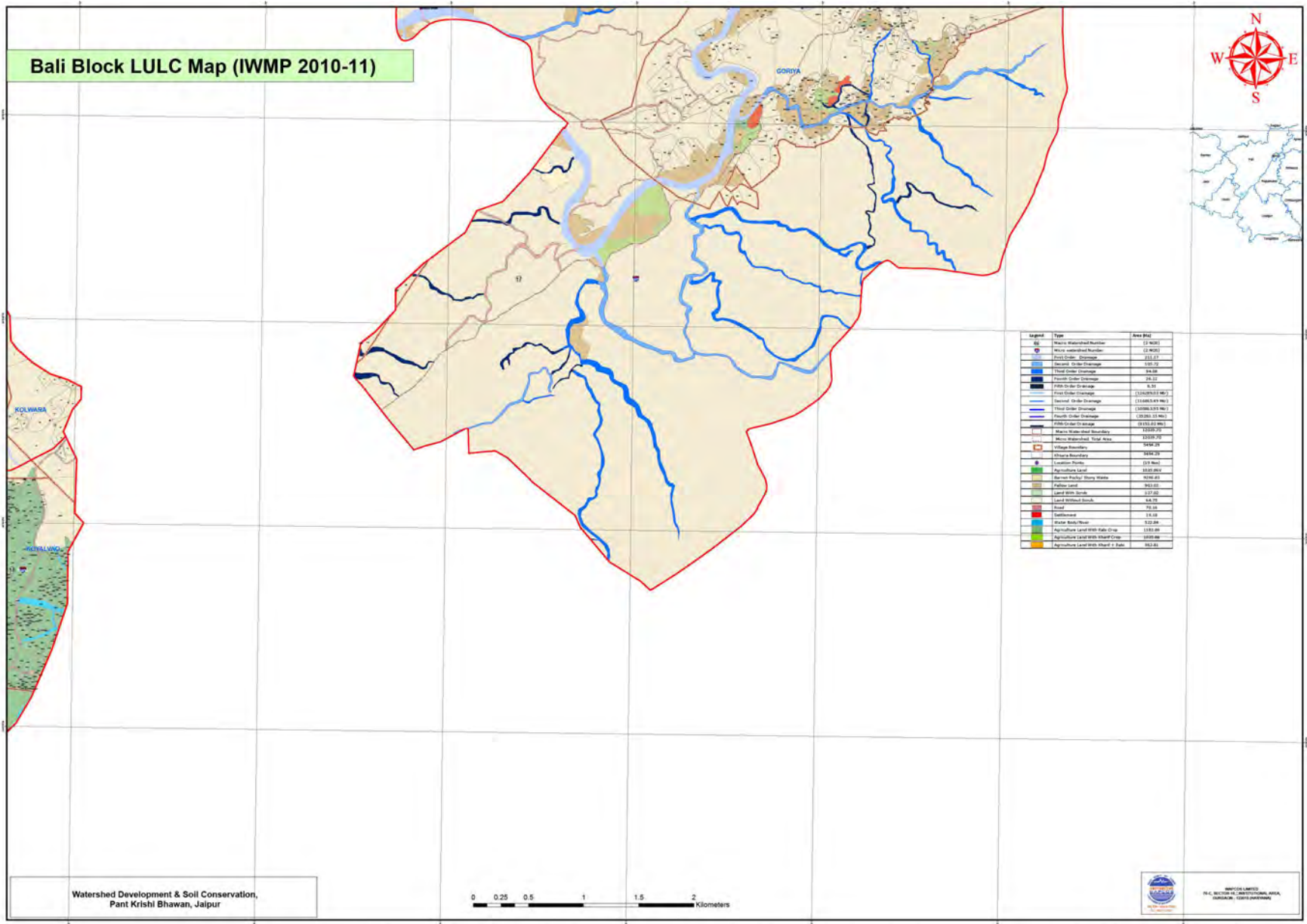


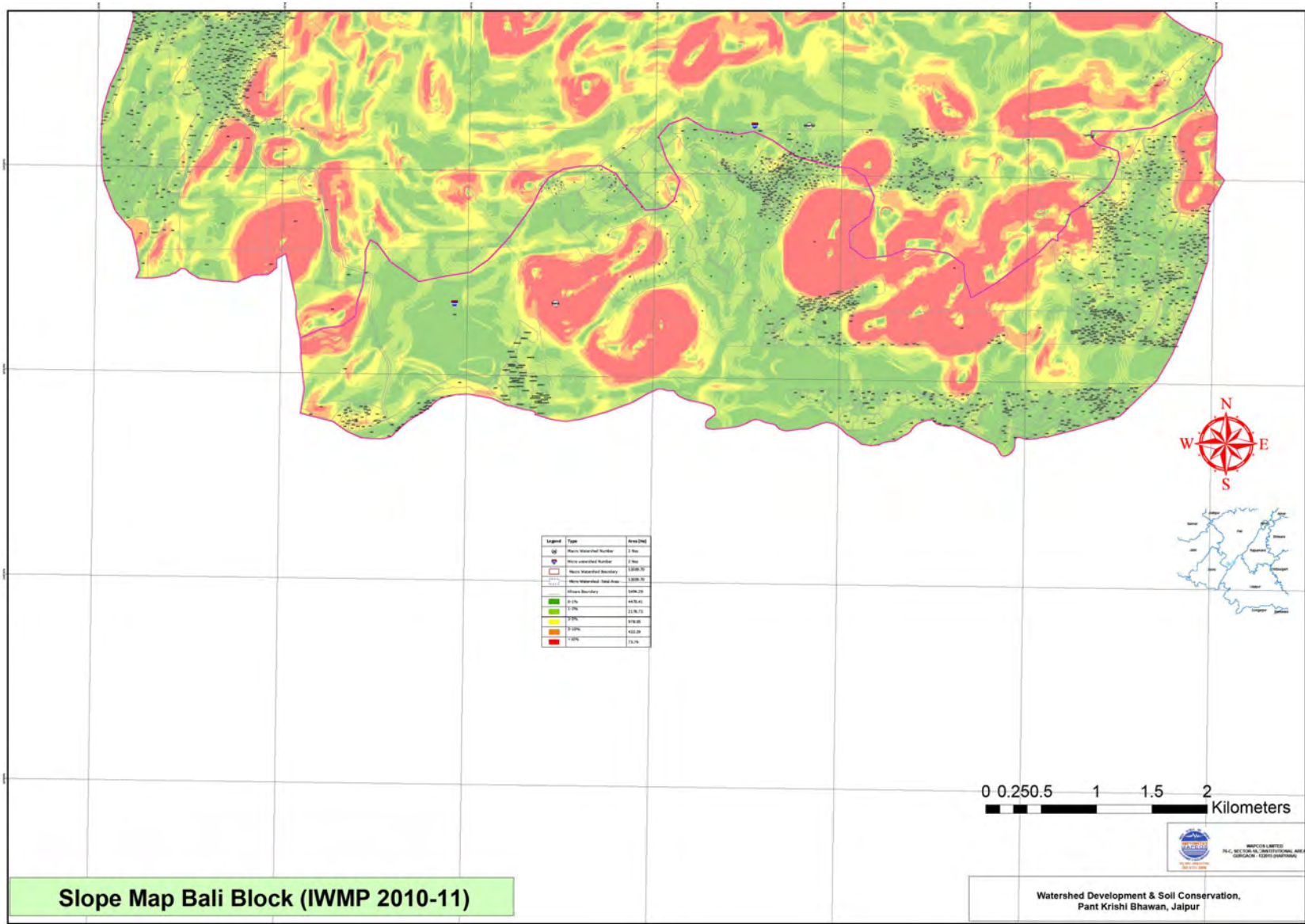
Watershed Development & Soil Conservation,
Pant Krishi Bhawan, Jaipur

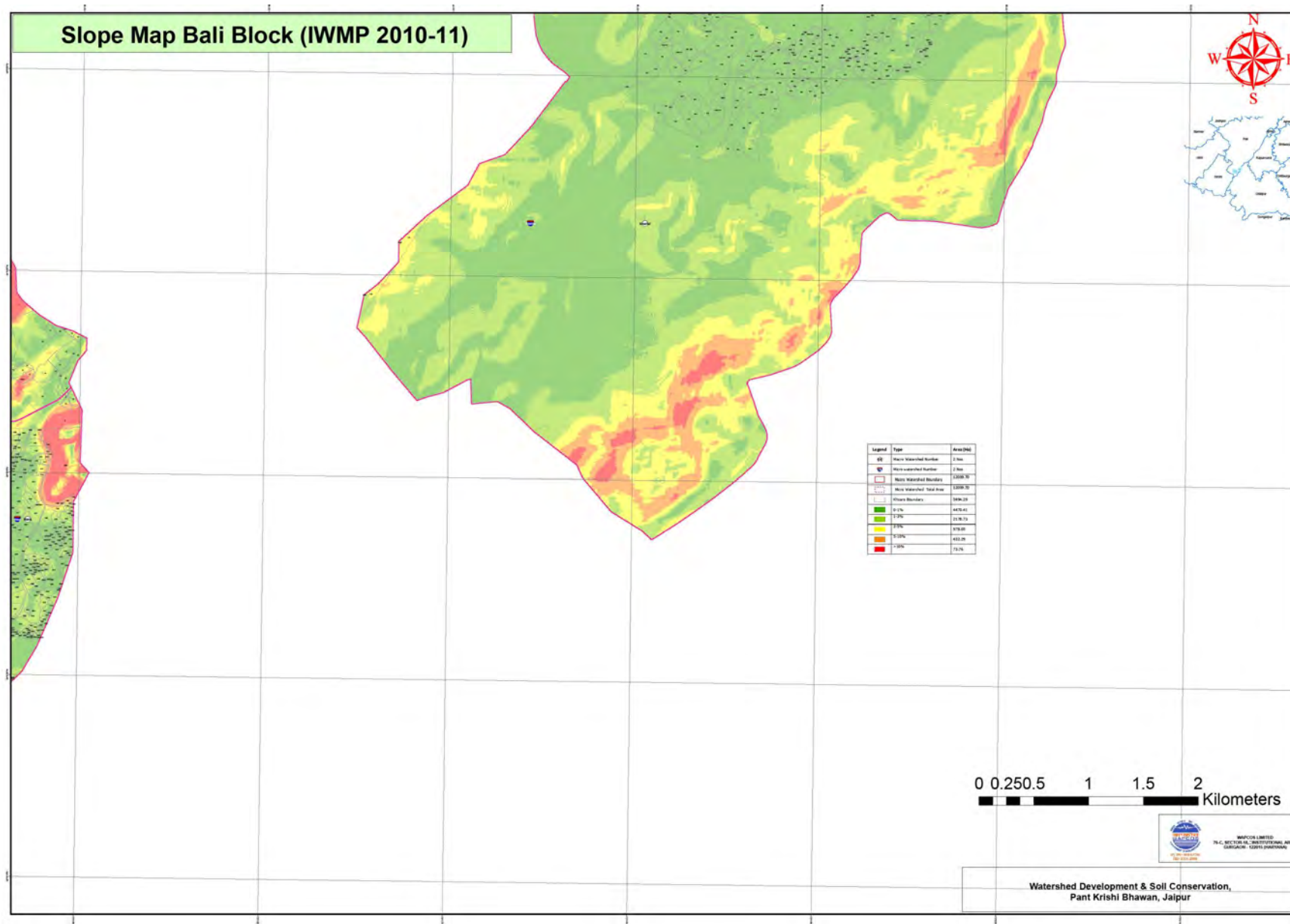


L & X Section Map Bali Block (IWMP 2010-11)

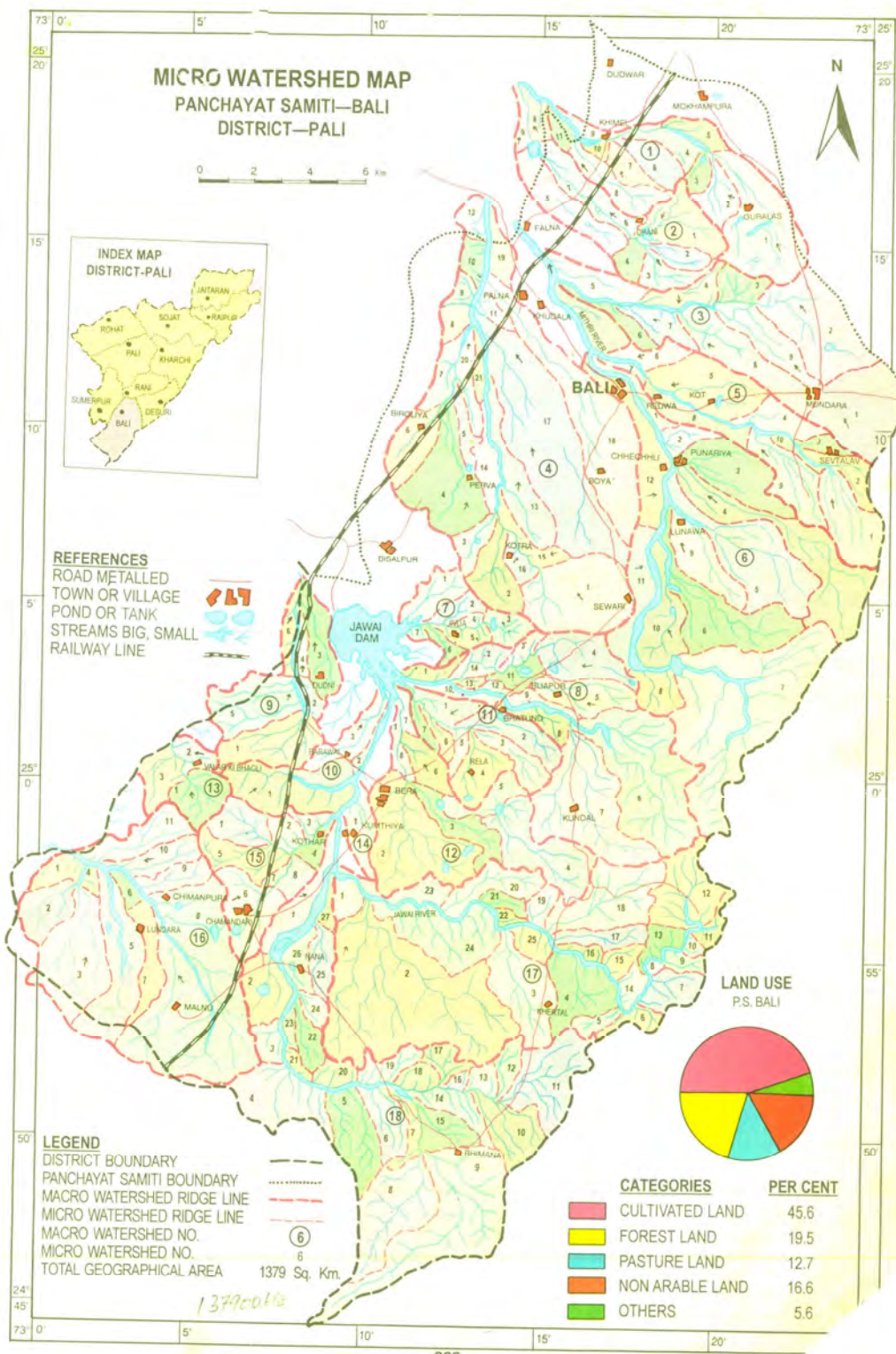
Watershed Development & Soil Conservation,
Pant Krishi Bhawan, Jaipur











SRSAC ATLAS MAP OF P.S BALI