# Integrated Watershed Management Programme

# Preliminary Project Report (PPR)

# KASARAGOD

**Department of Land Resources,**
**Ministry of Rural Development,**
**Government of India**

# Preliminary Project Report

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**I. Institutional Structures**

**I. A. State Level Nodal Agencies (SLNAs):**

**Table-PPR 1: Details of SLNA**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| S. No. | State | Type of SLNA[#] | Date of Notification | Date of MoU with DoLR | Total no. of members of SLNA |
| | Kerala | Mission | 14 June 2010 | | Twenty five |

[#]Whether it is a Department/ Mission/ Society/ Authority/ Others (pl. specify)

**Table-PPR 1: Details of SLNA (Contd..)**

| 7 | | 8 | | | | | |
|---|---|---|---|---|---|---|---|
| Chairperson | | CEO | | | | | |
| Name | Designation[#] | Name | Designation | Date of Appointment | Nature of appointment [$] | Tenure (No. of years) | Contact Ph. No./ Fax/ E-mail |
| Subrata Biswas IAS | Agriculture Production Commissioner | K.V. Mohankumar IAS | Commissioner for Rural Development | 14 June 2010 | | | |
| Dr. Rajan Khobragade IAS | Secretary, LSGD | | | | | | |

[#] APC/ ACS/ Dev. Commissioner/ Others (pl. specify) [$] Deputation/ Contract

**Table-PPR 2: Details of functionaries in the SLNAs***

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sl. No | Total no of Persons working in the SLNA of IWMP | Name & Designation | Qualification | Experience | Work Allocation | Monthly remuneration | Total budget of SLNA | | Funding Expected from DoLR (Rs) | |
| | | | | | | | R | NR | R | NR |
| 1 | 8 | K.Shoukathali, Administrative Officer | MBA | 25 Years | Administration & Co-ordination | Rs.65000/- | 885000 | 3000000 | 885000 | 3000000 |
| 2 | | M.Jayasree, Technical Expert (Agri) | MSc Agriculture | 25 Years | DPR,Agri & Soil, GIS | Rs.65000/- | 875000 | | 875000 | |
| 3 | | P.Balachandran Nair,Technical Expert (livelihhod) | MA | 12 Years | Livelihood activities & Capacity Building | Rs.47000/- | 636000 | | 636000 | |
| 4 | | Kabeer.H, Finance Officer | Mcom | 25 Years | Finance & Accounting | Rs.40000/- | 540000 | | 540000 | |
| 5 | | Dinil.R, Accounts Asst | MA | 15 Years | Funds, Accounting, Establishment | Rs.30000/- | 405000 | | 405000 | |
| 6 | | Sindhu.D.S, Accounts Asst | BSc | 15 Years | Scheme, IWDP,Audit | Rs.28000/- | 379000 | | 379000 | |
| 7 | | Karthiyani Devi.A.J, Programmer | Btech Computer Science | 05 Yeas | Programming, MIS | Rs.25000/- | 300000 | | 300000 | |
| 8 | | Jisha.C.C, Data Entry Operator | Bcom with PGDCA | 05 Years | Data Entry | Rs.10000/- | 120000 | | 120000 | |
| | | | | | | | **4140000** | **3000000** | **4140000** | **3000000** |

**PR 3 Details of State Level Data Cell (SLDC) functionaries**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | |
|---|---|---|---|---|---|---|---|---|---|---|
| No | Total no. of persons working in the SLDC for IWMP | Names & Designation | Qualification | Experience | Work allocation | Monthly remuneration (Rs.) | Total budget of SLDC (Rs.) | | Funding expected from DoLR (Rs.) | |
| | | | | | | | R | NR | R | NR |
| 1 | Nine | Technical expert, (Agriculture/ Agriculture Engineering) | PG/Ph.D in the related Field | 10 years | | 50000 | | | | |
| 2 | | Technical expert, (IT/Livelihood,micro enterprises /livelihood) | B Tech. Computer Science / MCA | 10 years | | 50000 | | | | |
| 3 | | Administrative Officer | PG in Administration / Management | 10 years | | 40000 | | | | |
| 4 | | Finance cum Accounts Officer | PG in FM / Accounts / CA | 10 years | | 35000 | | | | |
| 5 | | Accounts assistants - 2 numbers | Graduation in Accounts / Commerce / Economics | 5 years | | 25000 | | | | |
| 6 | | GIS expert | B Tech / M Sc / M Tech in related field | 5 years | | 40000 | | | | |
| 7 | | Data entry operator | Graduate+Certi ficate in DTP | 5 years | | 15000 | | | | |
| 8 | | Programmer | Diploma/Certifi cate in related fields | 5 years | | 25000 | | | | |

**PPR 4 Details of Functionaries in District level Watershed Cell**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| No | Name of the District | Name of the executing Agency | Status of Chairman | Date of signing of MoU with SLNA | Total no. of persons working for Watershed programme |
| 1 | Thiruvananthapuram | Respective District Panchayats | President, Respective District Panchayat | | Three each in all districts, 52 persons in the State |
| 2 | Kollam | | | | |
| 3 | Pathanamthitta | | | | |
| 4 | Alapuzha | | | | |
| 5 | Kottayam | | | | |
| 6 | Idukki | | | | |
| 7 | Ernakulam | | | | |
| 8 | Thrissur | | | | |
| 9 | Palakkad | | | | |
| 10 | Malappuram | | | | |
| 11 | Kozhikkode | | | | |
| 12 | Wayaand | | | | |
| 13 | Kannur | | | | |
| 14 | Kasaragpd | | | | |

**PPR 4 Details of Functionaries in District level Watershed Cell (contd...)**

| | 7 | 8 | 9 | 10 | 11 | 12 | | 13 | |
|---|---|---|---|---|---|---|---|---|---|
| No | Names & Designation | Qualification | Experience | Work allocation | Monthly remuneration (Rs.) | Total budget of Watershed Cell (Rs.) | | Funding expected from DoLR (Rs.) | |
| | | | | | | R | NR | R | NR |
| 1 | Technical expert | Graduation in the related field | 5 years | | 25000 | | | | |
| 2 | Accountant | Graduation in the related field | 3 years | | 10000 | | | | |
| 3 | Data entry operator | Diploma / certificate in the related field | 3 years | | 7500 | | | | |
| | | | | | 595000 | | | | |

**II. SELECTION OF WATERSHED PROJECTS**

***Table-PPR 5: Status of District-wise area covered under the watershed programme* (MIS Table-M(SP)2)***

| 1 | 2 | 3 | | 4 | | | | | | 5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S. No. | Names of District | Total micro-watersheds in the District | | Micro-watersheds covered so far | | | | | | Net watersheds to be covered | |
| | | | | Dept. of Land Resources | | Other Ministries/ Depts. | | Total watersheds covered | | | |
| | | | | Pre-IWMP projects (DPAP +DDP +IWDP) | | Any other watershed project | | | | | |
| | | No. | Area (ha.) | No. | Area (ha.) | No. | Area (ha.) | No. | Area (ha.) | No. | Area (ha.) |
| **1** | **Kasaragod** | **427** | **199168** | **3** | **8384** | **81** | **27867** | **84** | **36251** | **378** | **146349** |
| | State | 4529 | 3874535 | 29 | 19345 | 955 | 1018761 | 983 | 1038991 | 2067 | 1459817 |

**Table-PPR 6: Prioritized list of projects proposed for sanction during the financial year 2014-15***

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sl. No. | District | Name of the project | No. of micro watersheds proposed to be covered | Proposed project area (ha) | Type of project (Hilly/ Desert/ Others) | Proposed cost (Rs. in lakh) | Weightage under the criteria# | | | | | | | | | | | | | |
| | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | Total |
| **1** | **Kasaragod** | **Kasaragod-IWMP-VII-2014-15** | **13** | **5239** | **Plains** | **628.68** | **7.5** | **3** | **0** | **10** | **2** | **0** | **15** | **7.5** | **15** | **10** | **10** | **15** | **0** | **95** |

** From column no. 2, total no. of districts, from column no. 3, total no. of projects selected for sanction, from column no. 4, total no. of micro-watersheds to be covered, from column no. 5, total project area proposed, from column no. 7, total cost proposed, may be indicated for the entire State at the end of the table.*

# **Criteria and weightage for selection of watershed**

| Sl. No. | Criteria | Maximum score | Ranges & scores | | | |
|---|---|---|---|---|---|---|
| i | Poverty index (% of poor to population) | 10 | Above 80 % (10) | 80 to 50 % (7.5) | 50 to 20 % (5) | Below 20 % (2.5) |
| ii | % of SC/ ST population | 10 | More than 40 % (10) | 20 to 40 % (5) | Less than 20 % (3) | |
| iii | Actual wages | 5 | Actual wages are significantly lower than minimum wages (5) | Actual wages are equal to or higher than minimum wages (0) | | |
| iv | % of small and marginal farmers | 10 | More than 80 % (10) | 50 to 80 % (5) | Less than 50 % (3) | |
| v | Ground water status | 5 | Over exploited (5) | Critical (3) | Sub critical (2) | Safe (0) |
| vi | 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/ DDP Block | |
| vii | Area under rain-fed agriculture | 15 | More than 90 % (15) | 80 to 90 % (10) | 70 to 80% (5) | Above 70 % (Reject) |
| viii | Drinking water | 10 | No source (10) | Problematic village (7.5) | Partially covered (5) | Fully covered (0) |
| ix | Degraded land | 15 | High – above 20 % (15) | Medium – 10 to 20 % (10) | Low- less than 10 % of TGA (5) | |
| x | Productivity potential of the land | 15 | Lands with low production & where productivity can be significantly enhanced with reasonable efforts (15) | Lands with moderate production & where productivity can be enhanced with reasonable efforts (10) | Lands with high production & where productivity can be marginally enhanced with reasonable efforts (5) | |
| xi | Contiguity to another watershed that has already been developed/ treated | 10 | Contiguous to previously treated watershed & contiguity within the microwatersheds in the project (10) | Contiguity within 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) | |
| xii | Cluster approach in the plains (more than one contiguous micro-watersheds in the project) | 15 | Above 6 micro-watersheds in cluster (15) | 4 to 6 microwatersheds in cluster (10) | 2 to 4 microwatersheds in cluster (5) | |
| | Cluster approach in the hills (more than one contiguous micro-watersheds in the project) | | Above 5 micro-watersheds in cluster (15) | 3 to 5 microwatersheds in cluster (10) | 2 to 3 microwatersheds in cluster (5) | |

**III) PROJECT WISE PROFILE OF THE SELECTED WATERSHED PROJECT**

**Table –PPR 7: Project at a Glance**

| | | | | |
|---|---|---|---|---|
| 1 | Name of the State | Kerala | | |
| 2 | Name & type# (Hilly/ Desert/ Others) of the project | IWMP 7 | 0 | Hilly |
| 3 | Name of the District | Kasaragod | | |
| 4 | Names of the Blocks | Kasaragod | | |
| | | Manjeswaram | | |
| 5 | Names of Grama Panchayats | Mogral-Puthur | | |
| | | Madhur | | |
| | | Kumbala | | |
| | | Badiyadka | | |
| | | Chengala | | |
| | | Puthige | | |
| 6 | Names & Census Code of Villages covered | Edanad | 627092 | |
| | | Kaudlu | 627133 | |
| | | Madhur | 627132 | |
| | | Koipady | 627128 | |
| | | Bela | 627090 | |
| | | Chengala | 627134 | |
| | | Pady | 627104 | |
| 7 | Names & Codes of the micro-watersheds | Thudiyar | 41M1a | |
| | | Bedradka | 41M2a | |
| | | Mogral | 41M3a | |
| | | Neeroli | 41M4a | |

| | | | |
|---|---|---|---|
| | | Ananthapuram | 41M4d |
| | | Shiravagilu | 41M5a |
| | | Maippadi | 41M6a |
| | | Kuthirappadi | 41M7a |
| | | Patla | 41M8a |
| | | Aranthodu | 41M9a |
| | | Maruthumvayal | 41M16a |
| | | Paadi | 41M17a |
| | | Yedineerr | 41M18a |
| 8 | Four major reasons for selection of watershed | Heavy soil erosion & land degradation | |
| | | Water scarcity and insufficient irrigation system | |
| | | Strong presence of SC/ ST, BPL families and marginal farmers | |
| | | Poor adaptation to climate change | |
| 9 | Area of the Project (ha.) | 5382.24 | |
| 10 | Area proposed to be treated (ha.) | 5239.00 | |
| 11 | Project Cost (Rs. in Lakhs) | 628.68 | |
| 12 | Name and Address of proposed PIA | **Kasaragod Block Panchayat** | |
| 13 | Any other (please specify) | | |

**Table-PPR 8: Details of previously identified DPAP/ DDP areas proposed under IWMP (ha) during the financial year***

(There are no DPAP/DDP blocks identified in Kerala)

**Table-PPR 9: Land Use pattern of the project***

(Area in ha)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|
| No | Name of Watersheds | Name of Villages | Geographical Area of the Watershed | Forest Area | Land under agricultural use | Rain fed area | Permanent pastures | Wasteland | |
| | | | | | | | | Cultivable | Non-cultivable |
| 1 | 41M1a | Kadlu<br>Koipady | 594.79 | 0 | 396.11 | 396.11 | 0 | 14.6 | 0.97 |
| 2 | 41M2a | Koipady<br>Edanad | 368.93 | 0 | 313.32 | 313.32 | 0 | 28.74 | 0.75 |
| 3 | 41M3a | Edanad<br>Kadlu | 283.62 | 0 | 272.86 | 272.86 | 0 | 0 | 0 |
| 4 | 41M4a | Bela<br>Madhur<br>Kadlu | 469.87 | 0 | 368.31 | 368.31 | 0 | 0 | 26.26 |
| 5 | 41M4d | Madhur<br>Bela | 276.04 | 0 | 674.98 | 674.98 | 0 | 12.81 | 0 |
| 6 | 41M5a | Madhur | 272.21 | 0 | 238.85 | 238.85 | 0 | 17.01 | 0 |
| 7 | 41M6a | Chengala<br>Madhur | 428.75 | 0 | 540.9 | 540.9 | 0 | 123.22 | 0 |
| 8 | 41M7a | Madhur<br>Pady<br>Chengala<br>Bela | 564.49 | 0 | 348.05 | 348.05 | 0 | 190.99 | 0 |
| 9 | 41M8a | Chengala<br>Bela<br>Pady | 680.42 | 0 | 445.56 | 445.56 | 0 | 212.04 | 3.96 |
| 10 | 41M9a | Pady | 220.59 | 0 | 103.21 | 103.21 | 0 | 104.21 | 0 |
| 11 | 41M16a | Edanad<br>Kadlu<br>Madhur | 441.00 | 0 | 414.58 | 414.58 | 0 | 1.62 | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | 41M17a | Kadlu | 337.79 | 0 | 304.54 | 337.79 | 0 | 5.79 | 0 |
| 13 | 41M18a | Kadlu | 443.74 | 0 | 376.76 | 443.74 | 0 | 1.69 | 0 |

Source of data: Land Use Board

* From column no. 2, total no. of microwatersheds, from column no. 3, total no. of villages, from column no. 4 to 9, totals, may be indicated for the project at the end of the table.

**IV. AGRO-CLIMATIC CONDITION**

Detail about soil types, land uses etc, are given as additional tables

**Table – PPR 10: Details of Agro-climatic condition**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| No | Name of Watersheds | Name of Agro- climatic zone covers project area | Names of the villages | Topography | Average rainfall in mm |
| 1 | 41M1a | Northern midland | Kadlu | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | 3374 mm |
| | | | Koipady | | |
| 2 | 41M2a | Northern midland | Koipady | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Edanad | | |
| 3 | 41M3a | Northern midland | Edanad | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Kadlu | | |
| 4 | 41M4a | Northern midland | Bela | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Madhur | | |
| | | | Kadlu | | |
| 5 | 41M4d | Northern midland | Madhur | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Bela | | |

| | | | | | |
|---|---|---|---|---|---|
| 6 | 41M5a | Northern midland | Madhur | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| 7 | 41M6a | Northern midland | Chengala | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Madhur | | |
| 8 | 41M7a | Northern midland | Madhur | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Pady | | |
| | | | Chengala | | |
| | | | Bela | | |
| 9 | 41M8a | Northern midland | Chengala | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Bela | | |
| | | | Pady | | |
| 10 | 41M9a | Northern midland | Pady | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| 11 | 41M16a | Northern midland | Edanad | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| | | | Kudlu | | |
| | | | Madhur | | |
| 12 | 41M17a | Northern midland | Kadlu | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |
| 13 | 41M18a | Northern midland | Kadlu | Valleys less extensive, Hills with moderate gradients and top with egg shaped hump, steep slopes | |

**Table – PPR 10 a: Details of soil types and major crops***

| 1 | 2 | 3 | | | | 4 | | | |
|---|---|---|---|---|---|---|---|---|---|
| No | Name of Watersheds | Major Soil types | | | | Major crops | | | |
| | | K01 | K10 | K13 | Total | Paddy | Coconut | Mixed Crop | Total |
| 1 | 41M1a | 87.15 | 505.1 | | **592.65** | 10.28 | 61.66 | 337.62 | **409.56** |
| 2 | 41M2a | | 368.93 | | **368.93** | 19.12 | 92.66 | 206.93 | **318.71** |
| 3 | 41M3a | | 271.20 | 12.42 | **283.62** | 16.99 | 66.28 | 189.59 | **272.86** |
| 4 | 41M4a | | 378.46 | 91.41 | **469.87** | 18.54 | 101.32 | 277.50 | **397.36** |
| 5 | 41M4d | | 175.7 | 100.34 | **276.04** | 28.69 | 45.74 | 175.95 | **250.38** |
| 6 | 41M5a | | 90.07 | 182.14 | **272.21** | 22.54 | 0.37 | 215.94 | **238.85** |
| 7 | 41M6a | | 183.14 | 245.60 | **428.75** | 22.58 | 0.64 | 268.05 | **291.27** |
| 8 | 41M7a | | 374.51 | 189.97 | **564.49** | 35.12 | 3.26 | 309.67 | **348.05** |
| 9 | 41M8a | | 320.63 | 359.80 | **680.42** | 13.29 | 11.98 | 420.29 | **445.56** |
| 10 | 41M9a | | 140.23 | 79.45 | **219.68** | 11.43 | 1.15 | 90.63 | **103.21** |
| 11 | 41M16a | | 24.25 | 416.74 | **441.00** | 108.61 | 107.28 | 198.69 | **414.58** |
| 12 | 41M17a | | 170.65 | 167.14 | **337.79** | 75.93 | 84.92 | 139.96 | **300.81** |
| 13 | 41M18a | | 432.01 | 11.73 | **443.74** | 47.27 | 176.92 | 138.57 | **362.76** |

Source of data: Land Use Board

* From column no. 5, total no. of villages, from column no. 6, total area, from column no. 9, total no. of crops and total cropped area, may be indicated for the project at the end of the table.

**Table-PPR 11: Details of flood and drought in the project area***

| 1 | 2 | 3 | 4 | | 5 |
|---|---|---|---|---|---|
| Sl. No. | Particulars | Villages | Periodicity | | Not affected |
| | | | Annual | Any other (please specify) | |
| 1 | Flood | No. of villages | | 4 | |
| | | Name(s) of villages | | Edanad , Kudlu, Madhur, Koipady | |
| 2 | Drought | No. of villages | | 7 | |
| | | Name(s) of villages | | Edanad , Kudlu, Madhur, Koipady, Bela, Chengala, Pady | |

* From column nos. 4 & 5, total no. of villages, category wise, for the project may be given at the end of the table.

**Table-PPR 12 : Details of soil erosion in the project area**

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Cause | Types of erosion | Area affected (ha) | Run off (mm/ year) | Average soil loss (Tones/ ha/year) |
| Water erosion | | | | |
| a | Severe | 0 | | |
| b | Moderate | 5295.09 | | |
| c | Slight | 87.15 | | |
| Sub Total | | 5382.24 | | |
| Wind erosion | | | | |
| **Total** | | 5382.24 | | |

**V. DEMOGRAPHY AND LAND DISTRIBUTION**

Growth in population during the last three census' , per capita availability of land, sex ratio, population age group in the project area, literacy level, migration, workforce available in different sectors of the economy, demography of SC, ST, BPL and landless families in the project area in the last ten years, etc.

| No | Watershed name | Area (in Ha) | Total families | Population | | | BPL Families | Land holding/ Family (in Ha) |
|---|---|---|---|---|---|---|---|---|
| | | | | Total | SC | ST | | |
| 1 | 41M1a | 594.79 | 975 | 5763 | 330 | 3 | 650 | 0.68 |
| 2 | 41M2a | 368.93 | 441 | 2599 | 163 | 1 | 294 | 0.84 |
| 3 | 41M3a | 283.62 | 204 | 1224 | 84 | 0 | 136 | 1.39 |
| 4 | 41M4a | 469.87 | 699 | 3909 | 248 | 39 | 466 | 0.67 |
| 5 | 41M4d | 276.04 | 429 | 2399 | 147 | 25 | 286 | 0.64 |
| 6 | 41M5a | 272.21 | 631 | 3510 | 176 | 0 | 421 | 0.43 |
| 7 | 41M6a | 428.75 | 817 | 4633 | 224 | 0 | 545 | 0.52 |
| 8 | 41M7a | 564.49 | 788 | 4694 | 243 | 0 | 526 | 0.72 |
| 9 | 41M8a | 680.42 | 914 | 5581 | 255 | 0 | 609 | 0.74 |
| 10 | 41M9a | 220.59 | 299 | 1832 | 75 | 0 | 199 | 0.74 |
| 11 | 41M16a | 441.00 | 1136 | 6409 | 339 | 57 | 758 | 0.39 |
| 12 | 41M17a | 337.79 | 783 | 4524 | 259 | 10 | 522 | 0.43 |
| 13 | 41M18a | 443.74 | 1087 | 6317 | 367 | 6 | 725 | 0.41 |
| **Total** | | **5382.24** | **9204** | **53394** | **2911** | **142** | **6135** | |

Growth in population during the last three census

| No | Watershed name | 1991 | 2001 | 2011 |
|---|---|---|---|---|
| 1 | 41M1a | 5022 | 5496 | 5763 |
| 2 | 41M2a | 2265 | 2479 | 2599 |
| 3 | 41M3a | 1067 | 1167 | 1224 |
| 4 | 41M4a | 3407 | 3728 | 3909 |
| 5 | 41M4d | 2091 | 2288 | 2399 |
| 6 | 41M5a | 3059 | 3347 | 3510 |
| 7 | 41M6a | 4038 | 4418 | 4633 |
| 8 | 41M7a | 4091 | 4476 | 4694 |
| 9 | 41M8a | 4864 | 5322 | 5581 |
| 10 | 41M9a | 1597 | 1747 | 1832 |
| 11 | 41M16a | 5585 | 6112 | 6409 |
| 12 | 41M17a | 3943 | 4314 | 4524 |
| 13 | 41M18a | 5505 | 6024 | 6317 |
| | Total | **46531** | **50919** | **53394** |

**VI. LIVELIHOODS**

The existing scenario and the opportunities are described in the tables. One more word about capacity building activities. There is tremendous scope of these activities can be organized in the field level in a participatory manner. Of extreme importance is adaption to climate change. How an effective strategy can be developed is the very question of survival. Then comes the hands on exposure to modern agriculture practices, technologies and machines. Trainings should be imparted in such a manner that new social institutions can be created at grass root level to sustain these initiatives.

**Table-PPR 13 Summary of livelihoods**

| No | Name of Watersheds | Existing livelihood activities | Possible livelihood interventions under the project | Current status of migration (no. of people) | Main reasons for migration |
|---|---|---|---|---|---|
| 1 | 41M1a | Employment in construction sector, wage labour in semi skilled and unskilled activities, trading etc. are the major livelihood of the poor people now. Middle and upper class are employed in service sector, government and large private enterprises. Agriculture is not the soul income anymore. Agricultural labour is part of the employment of the poor. For the poor families another major chunk is the income from MNREGS. Lower income people also attempt animal husbandry with mixed results. More often the cash income from such activities is not sufficient due to a number of factors | Animal husbandry with strong forward and backward linkage and supporting infrastructure and initiatives at the homestead is the main possibility. high yield cows which can be milked in tandem, scientifically constructed cowshed and biogas tank, grass cultivation, training to the concerned, ensuring the availability of milking machines, soft finance, hand holding for the first few years, providing functional insurance etc, are essential for the success of the programme. Food processing at household level using locally available banana, jack fruit, mango etc. is another possibility. Rearing of backyard chicken, quail, rabbit etc. can b explored. | 58 | Lack of job opportunities in agriculture sector due to low productivity and poor income from land. This is inducing the farmer to fallow the land and search for better alternatives. As more and more people move to urban areas seeking employment, whatever rural economic activities remain gets weakened and faces a gradual demise. Only the people with ensured income or people who are unable to move remain in the villages. |
| 2 | 41M2a | | | 26 | |
| 3 | 41M3a | | | 12 | |
| 4 | 41M4a | | | 39 | |
| 5 | 41M4d | | | 24 | |
| 6 | 41M5a | | | 35 | |
| 7 | 41M6a | | | 46 | |
| 8 | 41M7a | | | 47 | |
| 9 | 41M8a | | | 56 | |
| 10 | 41M9a | | | 18 | |
| 11 | 41M16a | | | 64 | |
| 12 | 41M17a | | | 45 | |
| 13 | 41M18a | | | 63 | |

**VII. EXPECTED PROJECT OUTCOMES**

**VII. (i). Expected employment related outcomes:**

**Table-PPR 14: Employment generation**

| No | Watershed name | Wage employment | | | | | | | | | | Self employment | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. of mandays in '00 s | | | | | No. of beneficiaries | | | | | No. of beneficiaries | | | | | |
| | | SC | ST | Others | Women | Total | SC | ST | Others | Women | Total | SC | ST | Others | Women | Total | |
| 1 | 41M1a | 33 | 0 | 899 | 945 | 1878 | 33 | 0 | 899 | 945 | 1878 | 20 | 0 | 225 | 756 | 1001 | 2879 |
| 2 | 41M2a | 16 | 0 | 407 | 424 | 848 | 16 | 0 | 407 | 424 | 848 | 10 | 0 | 102 | 339 | 451 | 1299 |
| 3 | 41M3a | 8 | 0 | 194 | 197 | 400 | 8 | 0 | 194 | 197 | 400 | 5 | 0 | 49 | 158 | 211 | 611 |
| 4 | 41M4a | 25 | 4 | 624 | 627 | 1280 | 25 | 4 | 624 | 627 | 1280 | 15 | 2 | 156 | 501 | 675 | 1955 |
| 5 | 41M4d | 15 | 3 | 383 | 385 | 785 | 15 | 3 | 383 | 385 | 785 | 9 | 2 | 96 | 308 | 414 | 1199 |
| 6 | 41M5a | 18 | 0 | 558 | 565 | 1141 | 18 | 0 | 558 | 565 | 1141 | 11 | 0 | 139 | 452 | 602 | 1743 |
| 7 | 41M6a | 22 | 0 | 738 | 745 | 1505 | 22 | 0 | 738 | 745 | 1505 | 13 | 0 | 184 | 596 | 794 | 2299 |
| 8 | 41M7a | 24 | 0 | 752 | 750 | 1526 | 24 | 0 | 752 | 750 | 1526 | 15 | 0 | 188 | 600 | 803 | 2329 |
| 9 | 41M8a | 25 | 0 | 894 | 892 | 1811 | 25 | 0 | 894 | 892 | 1811 | 15 | 0 | 224 | 713 | 952 | 2763 |
| 10 | 41M9a | 8 | 0 | 293 | 293 | 594 | 8 | 0 | 293 | 293 | 594 | 5 | 0 | 73 | 234 | 312 | 906 |
| 11 | 41M16a | 34 | 6 | 1011 | 1040 | 2091 | 34 | 6 | 1011 | 1040 | 2091 | 20 | 3 | 253 | 832 | 1109 | 3200 |
| 12 | 41M17a | 26 | 1 | 703 | 744 | 1475 | 26 | 1 | 703 | 744 | 1475 | 16 | 1 | 176 | 595 | 787 | 2262 |
| 13 | 41M18a | 37 | 1 | 980 | 1042 | 2059 | 37 | 1 | 980 | 1042 | 2059 | 22 | 0 | 245 | 833 | 1101 | 3160 |
| Total | | **291** | **14** | **8436** | **8650** | **17391** | **291** | **14** | **8436** | **8650** | **17391** | **175** | **8** | **2109** | **6920** | **9212** | **26603** |

* From column no. 2, total no. of villages, from column no. 3 & 4, category-wise totals may be given at the end of the table for the project.

**Table-PPR 15: Details of migration from Project area**

| No | Names of the watersheds | No. of persons migrating | No. of days per year of migration | Major reasons for migrating | Expected reduction in no. of personsmigrating |
|---|---|---|---|---|---|
| 1 | 41M1a | 58 | 5475 | Lack of opportunities in the agriculture and allied sectors. Low productivity and poor income from land. Rural economic activities getting weakened. Weak infrastructure and support services to agriculture. Better livelihoods. Changing life syles | 43 |
| 2 | 41M2a | 26 | 2469 | | 19 |
| 3 | 41M3a | 12 | 1163 | | 9 |
| 4 | 41M4a | 39 | 3713 | | 29 |
| 5 | 41M4d | 24 | 2279 | | 18 |
| 6 | 41M5a | 35 | 3334 | | 26 |
| 7 | 41M6a | 46 | 4402 | | 35 |
| 8 | 41M7a | 47 | 4459 | | 35 |
| 9 | 41M8a | 56 | 5302 | | 42 |
| 10 | 41M9a | 18 | 1741 | | 14 |
| 11 | 41M16a | 64 | 6089 | | 48 |
| 12 | 41M17a | 45 | 4298 | | 34 |
| 13 | 41M18a | 63 | 6001 | | 47 |
| Total | | **534** | **25229** | | **400** |

* From column no. 2, total no. of villages; from column no. 3, total no. of persons migrating; from column no. 4, average no. of days for annual migration; from column no. 6, total expected reduction on no. of persons migrating, for the project may be given at the end of the Table.

**VII. (ii). Water related outcomes**:

**Table-PPR 16: Details of average ground water table depth in the project areas** (in meters)

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| No | Names of the watersheds | Sources | Pre-Project level | Expected post-project level | Remarks |
| 1 | 41M1a | Open wells | 12 - 14 | 11 - 12 | This increase will substantially improve the drinking water availability, reduce the drudgery for fetching water . But substantial steps to improve water and irrigation efficiency through the application of modern and traditional technologies is essential. There must be simultaneous initiatives to reduce the contamination of surface water and ground water. |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 2 | 41M2a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 3 | 41M3a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 4 | 41M4a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 5 | 41M4d | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 6 | 41M5a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 7 | 41M6a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 8 | 41M7a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |

| | | | | | |
|---|---|---|---|---|---|
| 9 | 41M8a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 10 | 41M9a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 11 | 41M16a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 12 | 41M17a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |
| 13 | 41M18a | Open wells | 12 - 14 | 11 - 12 | |
| | | Bore wells | 45 | 43 | |
| | | Others - Ponds | 10 | 9 | |

Source of data: Central Ground Water Board

**Table-PPR 17: Status of Drinking water***

| 1 | 2 | 3 | | 4 | | 5 |
|---|---|---|---|---|---|---|
| S. No. | Codes of the watersheds | Availability of drinking water (no. of months in a year) | | Quality of drinking water | | Comments |
| | | Pre-project | Expected Post-project | Pre-project | Expected Post-project | |
| 1 | 41M1a | 8 | 10 | Turbulence, hardness, high iron are the major issues observed. | Reduced concentration of total dissolved salts, less incidence of turbulence, better bacteriological quality etc. are the major expected post project benefits | The issues listed are culled from varies studies conducted in the area by other agencies. There is also a variation in quality issues during different seasons. |
| 2 | 41M2a | 8 | 10 | | | |
| 3 | 41M3a | 8 | 10 | | | |
| 4 | 41M4a | 8 | 10 | | | |
| 5 | 41M4d | 8 | 10 | | | |
| 6 | 41M5a | 8 | 10 | | | |
| 7 | 41M6a | 8 | 10 | | | |
| 8 | 41M7a | 8 | 10 | | | |
| 9 | 41M8a | 8 | 10 | | | |
| 10 | 41M9a | 8 | 10 | | | |
| 11 | 41M16a | 8 | 10 | | | |
| 12 | 41M17a | 8 | 10 | | | |
| 13 | 41M18a | 8 | 10 | | | |

***** from column no. 2, total no. of villages implementing the programme, from column no. 3, average no. of months may be given at the end of the table for the entire project.

**VII. (iii). Crop related outcomes**:

**Table-PPR 18- Major crops grown and their productivity in the project area**

| 1 | 2 | 3 | | 4 | |
|---|---|---|---|---|---|
| **S. No.** | **Name of the Crop** | **Current status** | | **Expected post project status** | |
| | | Area (ha) | Productivity (kg/ ha) | Area (ha) | Productivity (kg/ ha) |
| 1 | Paddy | 430.39 | 2367 | 450 | 2500 |
| 2 | Coconut | 754.18 | 7441 nos./ha | 800 | 7500 nos/ha |

***** From column no. 2, total no. of crops; from columns no. 3 & 4, total cropped area, average productivity, for the project may be given at the end of the Table.

## VIII. MANDATORY CERTIFICATION

**"It is certified that the State Government of Kerala will abide by the following mandatory conditions laid down by DoLR"**

| | |
|---|---|
| 1 | The area of the proposed projects are not covered under assured irrigation |
| 2 | The area of the proposed project is not covered or overlapping with any other watershed projects sanctioned by the central govt./ state govt./ autonomous bodies & others |
| 3 | The State must sign all the mandatory MoUs before implementing the project |
| 4 | The timeframes and milestones of the projects will be followed |
| 5 | The Budget requested for must follow the criteria laid down in the Common Guidelines, 2008 |
| 6 | The State must release matching State Share within 15 days from release of each installment of central funds |
| 7 | Purchase of vehicles and other equipments are not permitted and nor is construction of buildings allowed. Only purchase of computers and related software is permitted |
| 8 | Savings, if any, in each component of the project cost can be utilized only for activities in the Watershed works |
| 9 | The DWDU will have one Member exclusively responsible for monitoring |
| 10 | All works will be evaluated after each phase of completion. Fund release will depend on favourable reports received from evaluators |
| 11 | Evaluators must include only institutions and agencies and not individuals |
| 12 | The State and DRDA cell will furnish monitoring reports and periodical reports as desired by DoLR |
| 13 | Composition of the WDT must be clearly spelt out and the team Members must be fully in place at the time of signing of the MoU of contract between the PIA and DRDA Cell |
| 14 | That DRDA shall release the funds to the PIAs and the watershed committees within 15 days of receipt of the funds |
| 15 | The Watershed Committee must be a registered society under the Societies Registration Act, 1860 |
| 16 | At least one of the WDT Members must be a woman |
| 17 | The Gram Sabhas of the proposed project areas have passed resolutions for people's contribution towards WDF |
| 18 | Resource-use agreements on the principles of equity and sustainability must be worked out among the User Groups prior to the concerned work being undertaken |
| 19 | The DPR must give detailed justification for the proposed project duration |
| 20 | No works on private lands will be repaired/ maintained from the WDF |
| 21 | The PIA will start project work within three months of the receipt of first installment by DWDU/agency or else it can come under the purview of foreclosure |
| 22 | The State will not undertake unnecessary foreclosure of the projects. In the event of foreclosure, the State will refund the amount and furnish all necessary documents as desired by DoLR. The State shall also take administrative and legal action against any defalcation, misappropriation, mis-utilization, deliberate negligence and laxity which has caused foreclosure of the project. |

Date:

Signature of officer authorized by State Govt.*
NAME OF OFFICER (IN CAPITAL LETTERS)
DESIGNATION

*Letter of Authority from Secretary of the concerned Department, authorizing the concerned officer to sign the above undertaking, should be enclosed with PPR.

**IX. STATUS OF ON-GOING PROJECTS (DPAP/ DDP/ IWDP)**

**Table- PPR 19: Details of pending UCs: Statewise***

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | | 10 | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sl. No. | District | Project | Instalment no. | Financial year of release of fund | Amount released (Rs. in lakh) | Amount utilized (Rs.in lakhs) | Submission of UC | | Date of submission of UC | | Reasons for not submitting / delayed submission of UC | Pending UCs | |
| | | | | | | | Due date | Amount (Rs. in lakhs) | Date | Amount (Rs. in lakhs) | | Period | Amount (Rs. in lakhs) |
| 1 | Kasaragod | KGD 1 | 2 | | | | 31-03-2010 | | 29-07-2013 | 104.9 | Audit report awaited | | |
| 2 | | KGD 2 | 2 | | | | 31-03-2010 | | 29-07-2013 | 104.9 | | | |

*From column No. 2, total no. of Districts, from column No. 3, total no. of projects, from column no. 6, total amount released, from column No. 7, total amount utilized, from column No. 8, total amount due, from column no. 9, total amount for which UCs submitted, from column No. 11, total amount of the pending UCs, may be mentioned at the end of the table for the entire State.

**Table- PPR 20: Details of Unspent balance as on 31.03.2014: Districtwise***

| 1 | 2 | 3 | 4 | 5 | | 6 |
|---|---|---|---|---|---|---|
| S. No. | District | Name of the Project | Total cost (Rs. in lakh) | Total funds released (Rs. in lakh) | | Unspent balance (Rs. in lakhs) |
| | | | | DoLR | State | |
| 1 | Kasaragod | KGD 1 | 354 | 144.75 | 13.15 | 49.29 |
| 2 | | KGD 2 | 354 | 144.76 | 13.27 | 62.40 |

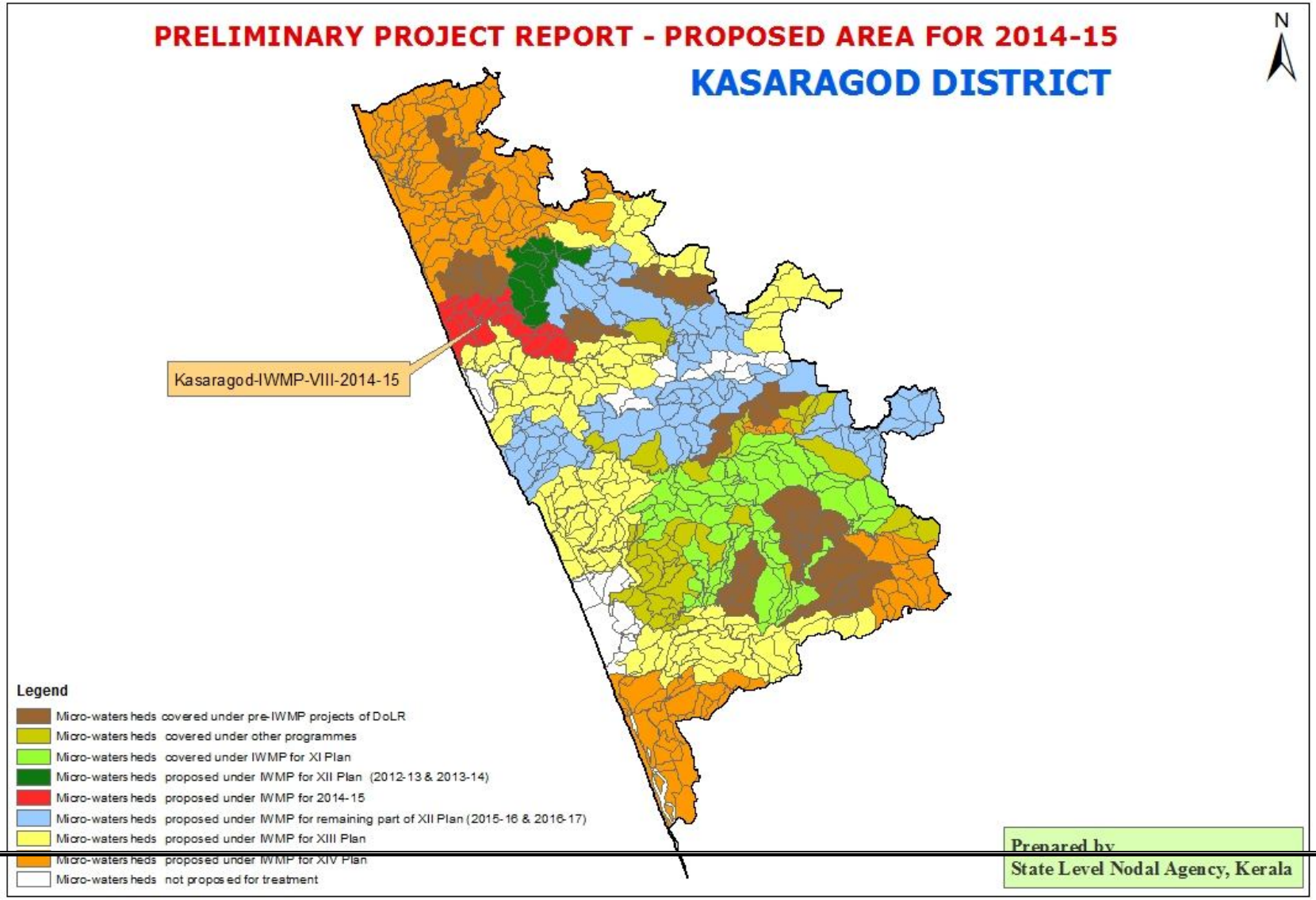
*From column No. 2, total no. of Districts, from column No. 3, total no. of projects, from column no.4 to 6, totals, may be mentioned at the end of the table for the entire State

**X. ABSTRACT OF PROJECTS PROPOSED FOR SANCTION DURING FINANCIAL YEAR 2014-15**

| | | Hilly/Desert | Others |
|---|---|---|---|
| 1 | Number of districts to be covered under the present proposal | | |
| 2 | No. of Watersheds projects proposed to be taken up under IWMP | | 1 |
| 3 | Total area to be covered under proposed projects (000' ha) | | |
| | (a) Hilly & Desert areas[#] | | |
| | (b) Others | 5239.00 | |
| | (c) Total | 5239.00 | |
| 4 | Total cost of the proposed Watershed projects (Rs. in lakhs) | | |
| | (a) Hilly & Desert areas[#] | | |
| | (b) Others | 628.68 | |
| | (c) Total | 628.68 | |
| 5 | First installment required from central funds for the proposed watershed projects | 125.736 | |

[#] *For details refer Appendix-I*

| | |
|---|---|
| Date of meeting of PPR sanctioning Committee | : |
| Decision taken by the Committee | : |
| Date of receipt of Annual Action Plan | : |
| Brief details of Annual Action Plan | : |
| Final approval of projects/area/costs/project period | : |
| Amount released as first installment and date of release | : |
| File No. | : |


PRELIMINARY PROJECT REPORT - PROPOSED AREA FOR 2014-15
KASARAGOD DISTRICT
N
Kasaragod-IWMP-VIII-2014-15
Legend
Micro-watersheds covered under pre-IWMP projects of DoLR
Micro-watersheds covered under other programmes
Micro-watersheds covered under IWMP for XI Plan
Micro-watersheds proposed under IWMP for XII Plan (2012-13 & 2013-14)
Micro-watersheds proposed under IWMP for 2014-15
Micro-watersheds proposed under IWMP for remaining part of XII Plan (2015-16 & 2016-17)
Micro-watersheds proposed under IWMP for XIII Plan
Micro-watersheds proposed under IWMP for XIV Plan
Micro-watersheds not proposed for treatment
Prepared by
State Level Nodal Agency, Kerala

## State Level Nodal Agency (SLNA)

Integrated Watershed Management Programme
Commissionerate of Rural Development
LMS Compound, Thiruvananthapuram

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Fax: 0471-2317214