Integrated Watershed Management Programme

Preliminary Project Report (PPR)

KANNUR

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

Preliminary Project Report

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

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | } | | 9 |
|----------|---|--|---|------------|--------------------|----------------------------------|-----------------------|----|--------------|----|
| Vo | Total no. of persons working in the SLDC for IWMP | Names & Designation | Qualification | Experience | Work allocation | Monthly remuneration (Rs.) | Total but SLDC (Rs | | expected fro | |
| | SEDO TOT TVVIVII | | | | | | R | NR | R | NR |
| 1 | | Technical expert, (Agriculture/ Agriculture Engineering) | PG/Ph.D in the related Field | 10 years | | 50000 | | | | |
| <u>)</u> | | Technical expert, (IT/Livelihood,micro enterprises /livelihood) | B Tech. Computer Science / MCA | 10 years | | 50000 | | | | |
| 3 | ٥ | Administrative Officer | PG in Administration / Management | 10 years | | 40000 | | | | |
| 4 | N :- - U | 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 | | | | |
| 3 | | Programmer | Diploma/Certifi cate in related fields | 5 years | | 25000 | | | | |

| 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 | | | | |
| 2 | Kollam | - | | | |
| 3 | Pathanamthitta | - | | | |
| 4 | Alapuzha | - | | | _ |
| 5 | Kottayam | - | | | |
| 6 | Idukki | - | | | _ |
| 7 | Ernakulam | Respective District | President, Respective | | Three each in all districts, 52 persons in |
| 8 | Thrissur | Panchayats | District Panchayat | | the State |
| 9 | Palakkad | - | | | _ |
| 10 | Malappuram | - | | | _ |
| 11 | Kozhikkode | - | | | |
| 12 | Wayaand | - | | | _ |
| 13 | Kannur | - | | | |
| 14 | Kasaragpd | - | | | 1 |

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

| | 7 | 8 | 9 | 10 | 11 | 1 | 12 | 13 | |
|----|------------------------|--|------------|-----------------|----------------------------|--|----|----------------------------------|---|
| No | Names & Designation | Qualification | Experience | Work allocation | Monthly remuneration (Rs.) | Total budget of Watershed Cell (Rs.) R NR | | Funding e froi DoLR (R | n |
| 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 |
|------|-------------------|-------------------|---------|-------------------------------------|---------------|-----------------------------|-------------|------------------|---------|------------------------------|---------|
| | | | | | Micro-\ | | | | | | |
| | | Total | micro- | Dept. of Land | | Other Ministries/ Depts. | | Total watersheds | | Net watersheds to be covered | |
| S. | | watersheds in the | | R | esources | | | | | | |
| No. | Names of District | Dis | strict | Pre-IWMP projects Any other covered | to be covered | | | | | | |
| INO. | | | | (DPAP +DDP +IWDP) | | watershed project | | | | | |
| | | No. | Area | Area (ha.) | No. | Area (ha.) | No. | Area | No. | Area | |
| | | NO. | (ha.) | No. | Arca (ria.) | NO. | Arca (ria.) | (ha.) | | INO. | (ha.) |
| 1 | Kannur | 640 | 296558 | 1 | 2920 | 69 | 69 68598 | | 71518 | 307 | 130127 |
| | 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 2012-13*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | | | | | 8 | | | | | | |
|------------|----------|-------------------------------|---|------|--|-----------------------------------|-----|----------------------------------|---|----|---|---|----|---|----|----|----|----|----|-------|
| | | | No. of micro | | Type of | | | of Weightage under the criteria# | | | | | | | | | | | | |
| SI. No. | District | Name of the project | watersheds proposed to be covered | • | project (Hilly/ Desert/ Others) | Proposed cost (Rs. in lakh) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | Total |
| 1 | Kannur | Kannur- IWMP-V- 2013-14 | 13 | 4667 | Hilly | 700.05 | 7.5 | 3 | 0 | 10 | 2 | 0 | 15 | 5 | 10 | 10 | 10 | 0 | 15 | 87.5 |

^{*} 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 microwatersheds 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

| SI. No. | Criteria | Maximum score | | Ranges & so | cores | |
|------------|---|---------------|---|--|---|---------------------|
| 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) | |
| Х | 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) | |
| хi | 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 microwatersheds 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 5 | 0 | Hilly |
| 3 | Name of the District | Kannur | | |
| 4 | Names of the Blocks | Irikkur | | |
| • | Indities of the blocks | Thalipparamba | | |
| | | Payyavoor | | |
| | | Padiyur | | |
| 5 | Names of Grama Panchayats | Sreekandapuram | | |
| | | Eruvessi | | |
| | | Naduvil | | |
| | | Payyavoor | 00013 | 3900 |
| | | Sreekandapuram | 00014 | 1500 |
| 6 | Names & Census Code of Villages covered | Kalliyad | 00014 | 1300 |
| Ü | Mariles & Cerisus Code of Villages covered | Eruvessi | 00013 | 8800 |
| | | Nediyenga | 00013 | 3700 |
| | | Naduvil | 00012 | 2900 |
| | | Paisakkari- 1 | 32V16 | Sae (Treated) |
| | | Paisakkari- 2 | 32V16 | Saf (Treated) |
| 7 | Names & Codes of the micro-watersheds | Koipra | 32V16 | bag |
| • | ivallies & codes of the filldo-watersheds | Payyavoor | 32V16 | Sah |
| | | Kanjileri | 32V16 | 5bd |
| | | Edari | 32V16 | bi |

| | | Parakkadavu | 32V16j | | | |
|----|---|---------------------------------------|-----------------------------------|--|--|--|
| | | Eruvassy | 32V16k | | | |
| | | Ambalathumchal | 32V16m | | | |
| | | Chemberi | 32V16u | | | |
| | | Nellikkutti | 32V16v | | | |
| | | Moorikkadavu | 32V16w | | | |
| | | Madakkal | 32V16x | | | |
| | | Low productivity of land | • | | | |
| 8 | Four major reasons for selection of watershed | Heavy soil erosion & land degradation | | | | |
| | Tour major reasons for selection of watershed | Strong presence of SC/ST, E | BPL families and marginal farmers | | | |
| | | Poor adaptation to climate | change | | | |
| 9 | Area of the Project (ha.) | | 5286.33 | | | |
| 10 | Area proposed to be treated (ha.) | | 4667.00 | | | |
| 11 | Project Cost (Rs. in Lakhs) | | 700.05 | | | |
| 12 | Name and Address of proposed PIA | Irikku | ır 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)

| Tab | le-PPR 9: Land Use p | pattern of the project* | | | | | | | |
|-----|----------------------|-------------------------|--------------------------|--------|---------------------|----------|-----------|------------|--------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | T | (Area in ha) |
| | Name of | | Geographical | Forest | Land under | Rain fed | Permanent | Was | steland |
| No | Watersheds | Name of Villages | Area of the Watershed | Area | agricultural use | area | pastures | Cultivable | Non- cultivable |
| 1 | 32V16ae | Payyavoor | 266.97 | 0.21 | 201.25 | 201.25 | 0 | 0 | 0 |
| 2 | 32V16af | Payyavoor | 293.58 | 0 | 248.36 | 248.36 | 0 | 0 | 0 |
| 3 | 32V16ag | Payyavoor | 223.34 | 0 | 164.86 | 164.86 | 0 | 53.54 | 0 |
| 4 | 32V16ah | Payyavoor | 221.15 | 0 | 245.28 | 245.28 | 0 | 13.24 | 0 |
| | 32V16bd | Sreekandapuram | 507.00 | | 175 01 | 175 01 | | 201.72 | 27.02 |
| 5 | 32 V 1000 | Kalliyad | 587.92 | 0 | 175.21 | 175.21 | 0 | 381.73 | 27.83 |
| , | 22\/14; | Sreekandapuram | 200 | | 227.56 | 227.54 | | 110 22 | |
| 6 | 32V16i - | Eruvessi | 389 | 0 | 227.50 | 227.56 | 0 | 118.33 | 0 |
| 7 | 32V16j | Sreekandapuram | 242.35 | 0 | 41.67 | 41.67 | 0 | 153.26 | 0 |
| | - | Eruvessi | 242.30 | | | | U | | |
| 8 | 32V16k | Eruvessi | 339.46 | 0 | 68.23 | 68.23 | 0 | 259.48 | 0 |
| | | Nediyenga | | | | | | <u> </u> | 1 |
| 9 | 32V16m | Naduvil | 267.05 | 0 | 18.78 | 18.78 | 0 | 235.25 | 0 |
| | | Eruvessi | | | | | | <u> </u> | |
| 10 | 32V16u | Eruvessi | 417.57 | 0 | 90.03 | 90.03 | 0 | 269.88 | |
| 11 | 201/1/ | Payyavoor | 1427.02 | | 410.77 | 410.77 | | 0/0.00 | F 20 |
| 11 | 32V16v | Eruvessi | 1437.92 | 0 | 410.77 | 410.77 | 0 | 968.88 | 5.38 |
| 12 | 32V16w | Payyavoor | 207.30 | | 1/0.0 | 1/0.0 | | 124.20 | |
| 12 | 32V 10W | Eruvessi | 296.28 | 0 | 0 160.9 | 160.9 | 0 | 124.28 | 0 |
| 13 | 32V16x | Payyavoor | 202.75 | 0 | 19.46 | 19.46 | 0 | 177.99 | 1.3 |

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

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

| 1 | 2 | 3 | 5 | 7 | 8 |
|------------|---|--|-----------------------|--|------------------------|
| SI. No. | Name of the Watershed | Name of the Agro-climatic zone covers project area | Names of the villages | Topography# | Average rainfall in mm |
| 1 | 32V16ae | Northern midland | Payyavoor | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |
| 2 | 32V16af | Northern midland | Payyavoor | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |
| 3 | 32V16ag | Northern midland | Payyavoor | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |
| 4 | 32V16ah | Northern midland | Payyavoor | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |
| 5 | 32V16bd | Northern midland | Sreekandapuram | Valleys less extensive, Hills with moderate | |
| 5 | 32 V 1000 | Northern midiand | Kalliyad | gradient, Top with egg shaped hump | |
| 6 | 32V16i | Northern midland | Sreekandapuram | Valleys less extensive, Hills with moderate | |
| 0 | 32 V 101 | Noi them midiand | Eruvessi | gradient, Top with egg shaped hump | |
| 7 | 32V16j | Northern midland | Sreekandapuram | Valleys less extensive, Hills with moderate | 0074 |
| , | 021101 | Noi them midiand | Eruvessi | gradient, Top with egg shaped hump | 3374 |
| 8 | 32V16k | Northern midland | Eruvessi | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |
| | | | Nediyenga | Valleya less sytematics. Hills with medianate | |
| 9 | 32V16m | Northern midland | Naduvil | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |
| | | | Eruvessi | | |
| 10 | 32V16u | Northern midland | Eruvessi | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |
| 11 | 32V16v | Northern midland | Payyavoor | Valleys less extensive, Hills with moderate | |
| 11 | 32 10 10 10 10 10 10 10 10 10 10 10 10 10 | Northern midiand | Eruvessi | gradient, Top with egg shaped hump | |
| 12 | 32V16w | Northern midland | Payyavoor | Valleys less extensive, Hills with moderate | |
| 12 | 021.011 | 1401 triciti findiana | Eruvessi | gradient, Top with egg shaped hump | |
| 13 | 32V16x | Northern midland | Payyavoor | Valleys less extensive, Hills with moderate gradient, Top with egg shaped hump | |

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

| 1 | 2 | | 3 | | | | | | 4 | | | | |
|----|------------|--------|--------|----------|----------|--------|---------|-------------|--------|---------------|---------|--------|--------|
| | Name of | | | Major So | il types | | | Major crops | | | | | |
| No | Watersheds | K10 | K21 | K22 | K23 | K24 | Total | Paddy | Pepper | Mixed Crop | Coconut | Rubber | Total |
| 1 | 32V16ae | 0 | 185.61 | 0 | 0 | 81.27 | 266.97 | 0 | 0 | 36.37 | 0 | 26.76 | 63.13 |
| 2 | 32V16af | 15.86 | 92.92 | 0 | 0 | 184.80 | 293.58 | 0 | 0 | 6.49 | 0 | 3.65 | 10.14 |
| 3 | 32V16ag | 214.36 | 0 | 0 | 0 | 8.98 | 223.34 | 24.25 | 0 | 130.66 | 0 | 9.95 | 164.86 |
| 4 | 32V16ah | 321.15 | 0 | 0 | 0 | 0 | 321.15 | 0 | 0.29 | 220.36 | 0 | 24.63 | 245.28 |
| 5 | 32V16bd | 171.38 | 0 | 416.54 | 0 | 0 | 587.92 | 9.99 | 0 | 117.81 | 27.48 | 19.93 | 175.21 |
| 6 | 32V16i | 389.99 | 0 | 0 | 0 | 0 | 389.99 | 1.91 | 9.82 | 103.33 | 3.75 | 108.75 | 227.56 |
| 7 | 32V16j | 242.35 | 0 | 0 | 0 | 0 | 242.35 | 12.23 | 0 | 25.3 | 0 | 4.14 | 41.67 |
| 8 | 32V16k | 339.46 | 0 | 0 | 0 | 0 | 339.46 | 0 | 0 | 37.55 | 0 | 30.68 | 68.23 |
| 9 | 32V16m | 262.41 | 0 | 0 | 4.65 | 0 | 267.05 | 0 | 0 | 16.2 | 0 | 2.58 | 18.78 |
| 10 | 32V16u | 417.57 | 0 | 0 | 0 | 0 | 417.57 | 0 | 0 | 46.26 | 0 | 43.77 | 90.03 |
| 11 | 32V16v | 980.85 | 0 | 0 | 0 | 457.07 | 1437.92 | 0 | 0 | 267.2 | 0 | 143.57 | 410.77 |
| 12 | 32V16w | 296.28 | 0 | 0 | 0 | | 296.28 | 1.65 | 0 | 108.81 | 0 | 43.42 | 153.88 |
| 13 | 32V16x | 71.40 | 0 | 0 | 0 | 131.35 | 202.75 | 0 | 0 | 17.39 | 0 | 2.07 | 19.46 |

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 |
|---------|-------------|---------------------|--------|--------------------------------|----------|
| | | | | Not | |
| SI. No. | Particulars | Villages | Annual | Any other (please specify) | affected |
| 1 | Flood | No. of villages | - | 1 | |
| | | Name(s) of villages | - | Sreekandapuram | |
| 2 | Drought | No. of villages | 1 | 6 | |
| | | | - | Payyavoor, Sreekandapuram, | |
| | | Name(s) of villages | | Kalliyad, Eruvessi, Nediyenga, | |
| | | | | Naduvil | |

^{*} 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 | Type of erosion | Type of erosion Area affected (ha) | | Average soil loss (Tonnes/ ha/ year) |
| | Water erosion | | | |
| a | Severe | | | |
| b | Moderate | 5281.6 | | |
| С | Slight | 4.65 | | |
| S | Sub-Total | 5286.25 | | |
| Wi | nd erosion | 0 | NA | |
| | Total | 5286.25 | | |

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 | | Population | | BPL Families | Land holding/ Family | | |
|-----|---------------------------------------|---------------|----------|-------------|------------|----|---------------|----------------------|--|--|
| INO | watersneu name | Area (III na) | families | Total SC ST | | ST | DPL Fairlines | (in Ha) | | |
| 1 | 32V16ae | 266.97 | 217 | 953 | 72 | 17 | 144 | 1.23 | | |
| 2 | 32V16af | 293.58 | 249 | 1095 | 83 | 19 | 166 | 1.18 | | |
| 3 | 32V16ag | 223.34 | 181 | 797 | 60 | 14 | 121 | 1.23 | | |
| 4 | 32V16ah | 221.15 | 246 | 1083 | 82 | 19 | 164 | 0.90 | | |
| 5 | 32V16bd | 587.92 | 526 | 2519 | 177 | 0 | 350 | 1.12 | | |
| 6 | 32V16i | 389 | 374 | 1792 | 126 | 0 | 249 | 1.04 | | |
| 7 | 32V16j | 242.35 | 230 | 1057 | 73 | 0 | 153 | 1.05 | | |
| 8 | 32V16k | 339.46 | 262 | 1175 | 80 | 0 | 175 | 1.30 | | |
| 9 | 32V16m | 267.05 | 193 | 888 | 61 | 0 | 129 | 1.38 | | |
| 10 | 32V16u | 417.57 | 358 | 1609 | 109 | 0 | 239 | 1.17 | | |
| 11 | 32V16v | 1437.92 | 1180 | 5287 | 363 | 9 | 786 | 1.22 | | |
| 12 | 32V16w | 296.28 | 251 | 1111 | 80 | 0 | 167 | 1.18 | | |
| 13 | 32V16x | 202.75 | 143 | 630 | 48 | 11 | 95 | 1.42 | | |
| | Total 5185.34 4410 19997 1414 91 2939 | | | | | | | | | |

Growth in population during the last three census

| No | Watershed name | 1981 | 1991 | 2001 |
|----|----------------|------|------|------|
| 1 | 32V16ae | 762 | 871 | 953 |
| 2 | 32V16af | 875 | 1001 | 1095 |
| 3 | 32V16ag | 637 | 728 | 797 |
| 4 | 32V16ah | 866 | 990 | 1083 |
| 5 | 32V16bd | 2014 | 2302 | 2519 |
| 6 | 32V16i | 1433 | 1638 | 1792 |
| 7 | 32V16j | 845 | 966 | 1057 |
| 8 | 32V16k | 939 | 1074 | 1175 |
| 9 | 32V16m | 710 | 812 | 888 |

| 10 | 32V16u | 1286 | 1470 | 1609 |
|-------|--------|-------|-------|-------|
| 11 | 32V16v | 4227 | 4832 | 5287 |
| 12 | 32V16w | 888 | 1015 | 1111 |
| 13 | 32V16x | 504 | 576 | 630 |
| Total | 0 | 15986 | 18275 | 19997 |

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 | 32V16ae | Employment in construction | | 10 | Lack of job opportunities in |
| 2 | 32V16af | sector, wage labour in semi | Animal husbandry with strong | 11 | agriculture sector due to low |
| 3 | 32V16ag | skilled and unskilled | forward and backward linkage | 8 | productivity and poor income |
| 4 | 32V16ah | activities, trading etc. are the | and supporting infrastructure | 11 | from land As more and |
| 5 | 32V16bd | major livelihood of the poor | and initiatives at the homestead | 25 | more people move to urban |
| 6 | 32V16i | people now. Middle and | is the main possibility Food | 18 | areas seeking employment, |
| 7 | 32V16j | upper class are employed in | processing at household level | 11 | whatever rural economic |
| 8 | 32V16k | service sector, government | using locally available banana, | 12 | activities remain gets |
| 9 | 32V16m | | jack fruit, mango etc. is another | 9 | weakened and faces a |
| 10 | 32V16u | | possibility. Rearing of backyard | 16 | gradual demise. Only the |
| 11 | 32V16v | | chicken, quail, rabbit etc. can b | 53 | people with ensured income |
| 12 | 32V16w | | explored. | 11 | or people who are unable to |
| 13 | 32V16x | | · | 6 | move remain in the villages. |

VII. EXPECTED PROJECT OUTCOMES

VII. (i). Expected employment related outcomes:

Table-PPR 14: Employment generation

| | | | | | W | age em | ploym | ent | | | | Self employment | | | | | |
|----|----------------|-----|-----|----------|--------------|--------|----------------------|-----|--------|-------|----------------------|-----------------|----|--------|-------|-------|-------|
| No | Watershed name | | No. | of manda | ays 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 | 32V16ae | 7 | 2 | 153 | 152 | 314 | 7 | 2 | 153 | 152 | 314 | 4 | 1 | 38 | 122 | 165 | 479 |
| 2 | 32V16af | 8 | 2 | 176 | 175 | 361 | 8 | 2 | 176 | 175 | 361 | 5 | 1 | 44 | 140 | 190 | 551 |
| 3 | 32V16ag | 6 | 1 | 128 | 127 | 263 | 6 | 1 | 128 | 127 | 263 | 4 | 1 | 32 | 102 | 138 | 401 |
| 4 | 32V16ah | 8 | 2 | 174 | 173 | 357 | 8 | 2 | 174 | 173 | 357 | 5 | 1 | 43 | 138 | 188 | 545 |
| 5 | 32V16bd | 18 | 0 | 399 | 407 | 824 | 18 | 0 | 399 | 407 | 824 | 11 | 0 | 100 | 326 | 436 | 1260 |
| 6 | 32V16i | 13 | 0 | 284 | 290 | 586 | 13 | 0 | 284 | 290 | 586 | 8 | 0 | 71 | 232 | 310 | 896 |
| 7 | 32V16j | 7 | 0 | 169 | 170 | 345 | 7 | 0 | 169 | 170 | 345 | 4 | 0 | 42 | 136 | 182 | 527 |
| 8 | 32V16k | 8 | 0 | 188 | 188 | 384 | 8 | 0 | 188 | 188 | 384 | 5 | 0 | 47 | 150 | 202 | 586 |
| 9 | 32V16m | 6 | 0 | 142 | 142 | 290 | 6 | 0 | 142 | 142 | 290 | 4 | 0 | 35 | 114 | 153 | 443 |
| 10 | 32V16u | 11 | 0 | 258 | 257 | 526 | 11 | 0 | 258 | 257 | 526 | 7 | 0 | 64 | 206 | 277 | 803 |
| 11 | 32V16v | 36 | 1 | 847 | 845 | 1729 | 36 | 1 | 847 | 845 | 1729 | 22 | 1 | 212 | 676 | 910 | 2639 |
| 12 | 32V16w | 8 | 0 | 178 | 177 | 364 | 8 | 0 | 178 | 177 | 364 | 5 | 0 | 45 | 142 | 191 | 555 |
| 13 | 32V16x | 5 | 1 | 101 | 100 | 207 | 5 | 1 | 101 | 100 | 207 | 3 | 1 | 25 | 80 | 109 | 316 |
| | Total | 141 | 9 | 3196 | 3203 | 6549 | 141 | 9 | 3196 | 3203 | 6549 | 85 | 5 | 799 | 2562 | 3452 | 10001 |

^{*} 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 | No. of persons migrating | No. of days per year | Major reasons for migrating | Expected reduction in no. |
|-----|--------------|--------------------------|----------------------|----------------------------------|---------------------------|
| INO | watersheds | No. of persons migrating | of migration | iviajor reasons for migrating | of persons migrating |
| 1 | 32V16ae | 10 | 905 | | 7 |
| 2 | 32V16af | 11 | 1040 | | 8 |
| 3 | 32V16ag | 8 | 757 | | 6 |
| 4 | 32V16ah | 11 | 1029 | Lack of opportunities in the | 8 |
| 5 | 32V16bd | 25 | 2393 | agriculture and allied sectors. | 19 |
| 6 | 32V16i | 18 | 1703 | Low productivity and poor income | 13 |
| 7 | 32V16j | 11 | 1004 | from land. Rural economic | 8 |
| 8 | 32V16k | 12 | 1117 | activities getting weakened. | 9 |
| 9 | 32V16m | 9 | 844 | Weak infrastructure and support | 7 |
| 10 | 32V16u | 16 | 1528 | services to agriculture. Better | 12 |
| 11 | 32V16v | 53 | 5023 | livelihoods. Changing life syles | 40 |
| 12 | 32V16w | 11 | 1056 | | 8 |
| 13 | 32V16x | 6 | 598 | | 5 |
| | Total | 200 | 10571 | | 150 |

^{*} 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 |
| | | Open wells | 7 | 5 | |
| 1 | 32V16ae | Bore wells | 60 | 49 | |
| | | Others - Ponds | 2 | 1 | |
| | | Open wells | 9 | 7 | |
| 2 | 32V16af | Bore wells | 75 | 73 | |
| | | Others - Ponds | 3 | 2 | This increase will |
| | | Open wells | 2 | 1 | substantially improve the |
| 3 | 32V16ag | Bore wells | 87 | 81 | drinking water availability, |
| | | Others - Ponds | 0 | 0 | reduce the drudgery for fetching water . But |
| | | Open wells | 6 | 5 | substantial steps to |
| 4 | 32V16ah | Bore wells | 55 | 53 | improve water and irrigation efficiency |
| | | Others - Ponds | 4 | 3 | |
| | | Open wells | 7 | 6 | through the application of |
| 5 | 32V16bd | Bore wells | 70 | 65 | modern and traditional |
| | | Others - Ponds | 5 | 4 | technologies is essential. |
| | | Open wells | 8 | 7 | There must be |
| 6 | 32V16i | Bore wells | 85 | 83 | simultaneous initiatives to |
| | | Others - Ponds | 6 | 5 | reduce the contamination |
| | | Open wells | 9 | 7 | of surface water and |
| 7 | 32V16j | Bore wells | 110 | 103 | ground water. |
| | _ | Others - Ponds | 7 | 6 | |
| | | Open wells | 7 | 6 | |
| 8 | 32V16k | Bore wells | 130 | 125 | |
| | | Others - Ponds | 5 | 4 | |

| | | Open wells | 7 | 6 |
|----|--------|----------------|-----|-----|
| 9 | 32V16m | Bore wells | 120 | 115 |
| | | Others - Ponds | 5 | 4 |
| | | Open wells | 8 | 7 |
| 10 | 32V16u | Bore wells | 90 | 83 |
| | | Others - Ponds | 6 | 5 |
| | | Open wells | 9 | 7 |
| 11 | 32V16v | Bore wells | 105 | 100 |
| | | Others - Ponds | 7 | 6 |
| | | Open wells | 7 | 6 |
| 12 | 32V16w | Bore wells | 90 | 86 |
| | | Others - Ponds | 5 | 4 |
| | | Open wells | 8 | 6 |
| 13 | 32V16x | Bore wells | 60 | 55 |
| | | Others - Ponds | 3 | 2 |

Source of data: Central Ground Water Board

Table-PPR 17: Status of Drinking water*

| 1 | 2 | | 3 | | 4 | 5 |
|-----|--------------|-------------|----------------------------------|-----------------------------------|---------------------------|---------------------------|
| S. | Codes of the | | drinking water ths in a year) | Quality of d | Comments | |
| No. | watersheds | Pre-project | Expected Post- project | Pre-project Expected Post-project | | |
| 1 | 32V16ae | 8 | 10 | | Reduced concentration | The issues listed are |
| 2 | 32V16af | 8 | 10 | Turbulence, hardness, | of total dissolved salts, | culled from varies |
| 3 | 32V16ag | 8 | 10 | high iron are the major | less incidence of | studies conducted in the |
| 4 | 32V16ah | 8 | 10 | issues observed. | turbulence, better | area by other |
| 5 | 32V16bd | 8 | 10 | | bacteriological quality | agencies. There is also a |

| 6 | 32V16i | 8 | 10 | etc. are the major | variation in quality |
|----|--------|---|----|-----------------------|-------------------------|
| 7 | 32V16j | 8 | 10 | expected post project | issues during different |
| 8 | 32V16k | 8 | 10 | benefits | seasons |
| 9 | 32V16m | 8 | 10 | | |
| 10 | 32V16u | 8 | 10 | | |
| 11 | 32V16v | 8 | 10 | | |
| 12 | 32V16w | 8 | 10 | | |
| 13 | 32V16x | 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 Expected post project status | | | |
|-----|------------------|-----------|------------------------------------|--------------------------------|--------------------------|--|--|
| S. | | Current | status | | | | |
| No. | Name of the Crop | Area (ha) | Productivity (kg/ ha) Area (ha) | | Productivity (kg/ ha) | | |
| 1 | Paddy | 50.03 | 2099 | 55 | 2200 | | |
| 2 | Coconut | 31.23 | 6878 nos./ ha | 35 | 7000 nos./ha | | |
| 3 | Rubber | 463.9 | 1365 | 480 | 1500 | | |

^{*} 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

has caused foreclosure of the project.

| _ | , | "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 |
| | | |

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 | 1 | 11 |
|-----|----------|---------|----------------|----------------------|------------------|------------------------|----------------|------------------------------|------|-----------------------------|----------------------------------|-----------------------------|--------|
| SI. | District | Project | Instal ment | Financial year of | Amount released | Amoun t utilized | Submissi | on of UC | | ate of sion of UC | Reasons for not submitting | Pendi | ng UCs |
| No. | District | rroject | no. | release of fund | (Rs. in lakh) | (Rs.in lakhs) | Due date | Amoun t (Rs. in lakhs) | Date | Amount (Rs. in lakhs) | n submission Period | Amount (Rs. in lakhs) | |
| 1 | Kannur | KNR 1 | | | | | 31-03- 2010 | | | | Audit report | | |
| 2 | | KNR 2 | | | | | 31-03- 2010 | | | | awaited | | |

^{*}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 31.07.2013: Districtwise*

| | | | ao on o monizono biotinoti | | | |
|-----------|----------|------------------------|----------------------------|--|-------|-----------------------------------|
| 1 | 2 | 3 | 4 | 5 Total funds released (Rs. in lakh) | | 6 |
| S. No. | District | Name of the Project | Total cost (Rs. in lakh) | | | Unspent balance (Rs. in lakhs) |
| INO. | | Project | | DoLR | State | (KS. III IdKIIS) |
| 1 | Kannur | KNR 1 | 724 | 532.16 | | |
| 2 | | KNR 2 | 444 | 402.16 | | |

^{*}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

| 1 | Number of districts to be covered under the present proposal | |
|-----------|---|---------------------|
| 2 | No. of Watersheds projects proposed to be taken up under IWMP | Hilly/Desert Others |
| 3 | Total area to be covered under proposed projects (000' ha) | |
| | (a) Hilly & Desert areas [#] | 4667.00 |
| | (b) Others | |
| | (c) Total | 4667.00 |
| 4 | Total cost of the proposed Watershed projects (Rs. in lakhs) | |
| | (a) Hilly & Desert areas# | 700.05 |
| | (b) Others | |
| | (c) Total | 700.05 |
| 5 | First installment required from central funds for the proposed watershed projects | 140.01 |
| For detai | 's 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. :