

## CONVERGENCE FOR SUSTAINABILITY

Clean drinking water is a basic necessity of life. Sustainable and adequate supply of clean drinking water in the rural areas has always been one of the highest priorities of the government. The National Water Policy (2002) adopted by the Government of India enunciates that " Water is a scarce and precious national resource to be planned, developed, conserved and managed as such, and on an integrated and environmentally sound basis, keeping in view the socio-economic aspects and needs of the states. It is one of the most crucial elements in developmental planning. As the country has entered the 21<sup>st</sup> century, efforts to develop, conserve, utilize and manage this important resource for sustainability have to be guided by national perspective." The National Water Policy has assigned the highest priority for drinking water supply needs followed by irrigation, hydro-power, navigation, industrial and other purposes. Groundwater supplies bulk of drinking water, 80% of the drinking water is based



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on ground water resources. However, drinking water uses only 3% of the water resources.

## SUSTAINABILITY

The maintenance of desired quantity and acceptable quality standard of water supply services through out the design life of the water supply systems may be defined as sustainability. The system as well as the water supply source must fulfill these criteria. The sustainability is with reference to:

- Source – quantity and quality
- System – infrastructures

Factors affecting sustainability of water sources:

- The depletion or lowering of water levels in groundwater and surface sources over a period of time due to over draws
- Change/degradation of water quality due to over draws or contamination by domestic/industrial wastes/waste water

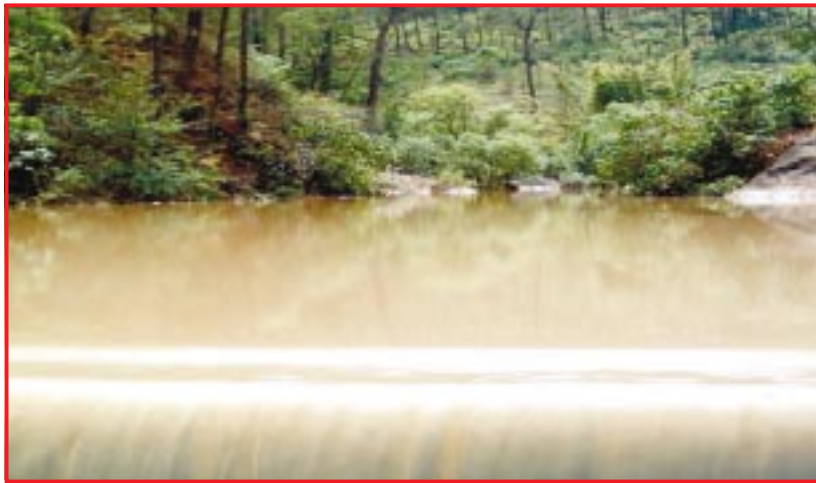
For ensuring sustainability of the systems, steps were initiated in 1999 to institutionalise community participation in the implementation of rural drinking water supply schemes by incorporating the following three basic principles:

- i. Adoption of a demand-driven responsive and adaptable approach based on empowerment of villagers to ensure their full participation in the project through a decision making role in the choice of

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scheme design, control of finances and management arrangements.

- ii. Increasing role of government for empowering user groups/gram panchayats for sustainable management of drinking water assets and integrated water management and conservation.
- iii. Partial capital cost sharing either in cash or kind or both and 100 per cent responsibility of Operation and Maintenance by end-users.



## **SUSTAINABILITY SCHEMES**

Water has been at the core of various development schemes initiated by different ministries of the government of India. There has been increasing recognition over the years of the need for water conservation and water management. Consequently there have been a number of schemes initiated by different departments, which have as their critical component, water conservation and water management issues.

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There is the need therefore for a convergence of related activities under these schemes especially at the district level to optimize their benefits. Some of the schemes of the various departments of the government of India, which have a strong sustainability component and may be converged at district level are described in this brochure.

## **NATIONAL AFFORESTATION PROGRAMME**

Under this programme, all afforestation schemes of the Ministry of Environment and Forests have been brought under a single umbrella scheme being implemented through decentralized Forest Development Agencies (FDA) set up at the district level. The FDAs have a strong linkage to the District Panchayat and Village Forest Protection Committee.

### **Objectives:**

The overall objective of the scheme is to develop the forest resources with people's participation, with focus on



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improvement in livelihoods of the forest-fringe communities, especially the poor. Financial support under the scheme is provided for soil and moisture conservation.

### **Funding Pattern**

The scheme is operated by the National Afforestation and Eco-Development Board, Ministry of Environment and Forests as a 100% Central Sector/ Centrally Sponsored Scheme. In the participatory mode, the scheme is being implemented by involving two-tier set up namely the Forest Development Agencies (FDA) and Joint Forest Management Committees (JFMC).

### **Implementation**

The NAP is being implemented through a 2-tier structure of Forest Development Agency (FDA) at the forest division level and Joint Forest Management Committee (JFMC) at the village level. Thus, FDA is the confederation of JFMCs in that forest division. FDAs are registered under the Societies Registration Act. JFMCs are registered either with the Forest Department or under Statutory provisions. The district-level officers of relevant line departments of the State Govt. and Panchayat Raj Institution are members of FDA.

### **Contact**

GOI: Ministry of Environment and Forests; website [www.envfor.nic.in](http://www.envfor.nic.in)

Local : Conservator of Forests, Territorial

## **NATIONAL PROJECT FOR REPAIR, RESTORATION AND RENOVATION OF WATER BODIES**

This scheme was announced by the Union Finance Minister in his Budget Speech 2004-05 with the aim to repair, renovate and restore all the water bodies directly linked to agriculture. Managed by the Ministry of Water Resources, the project envisages active community participation

### **Objectives**

Under the scheme, projects are to be taken up in one or two districts each in the states. The states are to take up restoration of water bodies having original irrigation culturable command area of 40 ha upto 2000 ha to revive, augment



Restoration of Bhandar Tank Head Works in Kabirdham district of Chhattisgarh

and utilize their storage and irrigation potential. Priority is to be accorded by states to areas, which are arid, drought-prone, tribal-dominated, backward while selecting districts.

### **Funding Pattern**

This is a state-sector scheme and the proposed funding pattern is Centre: State 75: 25. The projects are to be completed within a period of two years. Detailed project Reports are to be prepared by the states as per the guidelines and submitted for approval of Ministry of Water Resources and consideration for funding. 10% of the project cost will be kept for related capacity building & people's participation and survey for collect of baseline data.

### **Implementation**

There will be a district level implementation committee, chaired by the District Collector for deciding all implementation management issues and supervision. The Panchayati Raj Institutions and Water Users Associations (WUA) and representative of all stakeholders will be actively involved in the Committee. WUAs will include representative of all stakeholders including those from landless and vulnerable groups and women.

### **Contact details**

GOI: Ministry of Water Resources; Website [www.wrmin.nic.in](http://www.wrmin.nic.in)

Local : District Collector

## **RIVER VALLEY PROJECT AND FLOOD PRONE RIVER PROGRAMME**

The centrally sponsored programme of soil conservation for enhancing the productivity of degraded lands in the catchments of River Valley Project and Flood Prone River, in the present form, is being implemented since November 2000 by the Ministry of Agriculture and Cooperation.

### **Objectives**

The main objectives of the programme are:

- Prevention of land degradation by adoption of a multi-disciplinary integrated approach of soil conservation and water shed management in catchment areas
- Improvement of land capability and moisture regime in the watersheds
- Promotion of land use to match land capability
- Prevention of soil loss from the catchments, to reduce siltation of multipurpose reservoirs and enhance the in situ moisture conservation and surface rainwater storages in the catchments to reduce flood peaks and volume of run off.

### **Funding pattern**

The financing pattern of the programme after amalgamation is in the ratio of 90:10 between centre and state governments. The funds are provided to state governments as 80% grant and 20% loan.



## Implementation

In this programme all types of lands viz. agriculture, waste and forest are treated in an integrated manner with suitable package of treatment. The catchments included under RVP and FVR programmes are surveyed by the All India Soil & Land Use Survey Organisation by conducting Priority Delineation Survey and categorized into five categories i.e. Very High, High, Medium, Low and Very Low using Silt Yield Index methodology. As per the norms stipulated in the Guidelines only priority watersheds (very high and high watersheds) are taken for treatment.



## Contact details

GOI: Ministry of Agriculture and Cooperation; website [www.agricoop.nic.in](http://www.agricoop.nic.in)

Local: Director Soil and Water Conservation

## NATIONAL RURAL EMPLOYMENT GUARANTEE SCHEME

The National Rural Employment Guarantee Act was notified on 7<sup>th</sup> September 2005.

## Objectives

The NREGS' objective is to strengthen livelihood opportunities and create durable assets in rural areas through legal guarantee of 100 days of employment in a financial year to a rural household that demands employment within 15 days of demand. Among the works undertaken under NREGS, water conservation and water harvesting has a high priority



The kind of works permissible under the Programme and according to priority are:-

- Water conservation and water harvesting;
- Drought proofing, afforestation and tree plantation.

- Irrigation canals including micro and minor irrigation works;
- Provision of irrigation facility to land owned by households belonging to the Scheduled Castes and Scheduled Tribes or to land beneficiaries of land reforms or that of the beneficiaries under the Indira Awas Yojana of the Government of India.
- Renovation of traditional water bodies including desilting of tanks,
- Land development,
- Flood control and protection works including drainage in water logged areas,
- Rural connectivity to provide all-weather access. The construction of roads may include culverts where necessary, and within the village area culverts may be taken up along with drains.
- Any other work which may be notified by the Central Government in consultation with the State Government

### Implementation

The implementing agencies of these schemes are the gram Panchayats (half of EGS works), other Panchayati Raj institutions, line departments (PWD, Forest dept) and NGOs. Contractors have been banned from these schemes. The planning process is initiated by the Gram Sabha, which also recommends works. The Gram Panchayat consolidates recommendations of Gram Sabha into Village Development

Plans and forwards to intermediate Panchayat level. The GP plans are consolidated into block plans with the addition of works that cut across GPs. The District Panchayat approves the plans. There is a shelf of projects at the village level. A holistic village plan is prepared from which NREGA needs are derived (inter sectoral and inter departmental needs and resources are factored in this). There is also a five-year district perspective plan.

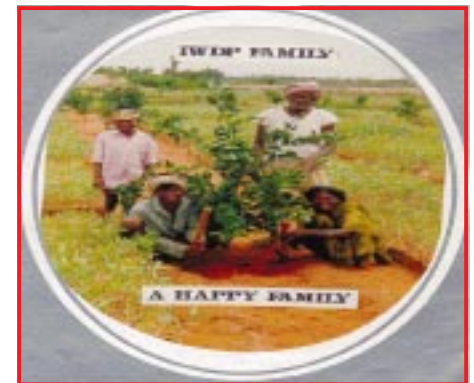
### Contact

GOI: Ministry of Rural Development; Website [www.nrega.nic.in](http://www.nrega.nic.in)

Local : Programme Officer, DRDA

## INTEGRATED WASTELAND DEVELOPMENT PROGRAMME

This scheme is implemented by the Department of Land Resources, Ministry of Rural Development since 1989-90. Apart from the development of non-forest wastelands the scheme also provides for the development of an entire micro watershed in a holistic manner. The IWDP scheme is being implemented on the basis of new Guidelines for Watershed Development from 1.4.1995.



## Objectives

The basic objective of this scheme is an integrated wastelands development based on village/micro watershed plans. These plans are prepared after taking into consideration the land capability, site condition and local needs of the people.



CHECK DAM

## Activities

The major activities taken up under the scheme are:

- In situ soil and moisture conservation measures like terracing, bunding, trenching, vegetative barriers and drainage line treatment.
- Encouraging natural regeneration.
- Encouraging people's participation through community organization and capacity building.
- Development of small water Harvesting Structures.

## Implementation

To make the programme successful, proper Institutional arrangement has been provided in the Guidelines from state level to village level. The State Watershed Programme Implementation and Review Committee is an apex organisation at a state level under the chairmanship of Chief Secretary/ Addl.Chief Secretary/APC. Representatives of prominent NGOs,



RECHARGING WELL UNDER IWDP PROJECT

SIRDs, Heads of Department of related Departments are also member of the Committee. The Committee undertakes monitoring, review and evaluation of Watershed Development projects. DRDA/ZP is a key institution in the programme execution. The project is sanctioned in favour of the DRDA and funds are released to it directly from Government of India. The Watershed Development Team is a multi-disciplinary team responsible for technical and financial supervision of the project activities. The team consists of field level officials drawn from various disciplines like forestry, soil conservation,



horticulture, social sciences etc. Watershed Development Association (WA) consists of all members of the village whose land is situated in the watershed area called user group (UG) and all those members who derive sustenance from the watershed area called self help group (SHG). Watershed Committee (WC) is the key institution at Watershed level consisting of about 2-3 representatives, each of UG, SHG, Panchayat and women etc. Committee also appoints a Watershed Secretary preferably a local man graduate from the same area.

### Funding

The IWDP Scheme is 100% Grant-in-Aid from Government of India. The projects are sanctioned on getting basic information from DRDAs about the watershed to be treated and capability of the PIA and over all situation in the area. A well laid criteria for selection of watersheds has been provided in para 27 of the Guidelines. The watersheds selected for the projects should be as far as possible contiguous and there should be preponderance of wastelands. Acute shortage of drinking water, low wage rates and non overlapping of watersheds with any other project are other requirements. Under IWDP scheme the projects are sanctioned in non DPAP/DDP areas. Normally, not more than two projects are sanctioned in a district. Funds from DRDA flow to Watershed Committees who open an account in the nearest bank to be operated jointly by WDT member and local man i.e. Secretary of WC. The Watershed Committee is the primary unit which is directly involved in implementation of the programme right from preparation of action plan and check measurements of works and payment of wages. The WC also maintains an account

called Watershed Development Fund Account, where contribution realised from the members of Watershed Associations are deposited for utilisation in post project maintenance of assets. Contribution in shape of labour, cash and kind are valued and kept in interest bearing account. The projects under IWDP Scheme aim at sustainability in the long run. This is achieved through the establishment of Watershed Development Fund which takes care of past project maintenance and sustenance. This fund is meant to sustain the maintenance of the assets created during the course of project implementation so that the people in the watershed area continue to reap the benefits even after the completion of the project.

### Contact

GOI : Department of Land Resources, Ministry of Rural Development; Website: [www.dolr.nic.in](http://www.dolr.nic.in)

Local: various PIAs, DRDA



Sustainable use of Water Resources



## HARIYALI

The guidelines for Hariyali were issued in 2003 with the aim to involve the Panchayat Raj Institutions (PRIs) more meaningfully in planning, implementation and management of economic development activities in rural areas. New projects under the area development programmes have to be implemented in accordance with the Guidelines for Hariyali with effect from 1.4.2003. The programmes under these guidelines have to be implemented exclusively on watershed basis. All activities relating to watershed development and management like planning, execution and maintenance of assets created are to be taken up by the local people through their own organizations specifically created for the purpose.

### Objectives

The objectives of projects under Hariyali are:

- Harvesting every drop of rainwater
- Ensuring overall development of rural areas through the Gram Panchayats and creating regular sources of income for the Panchayats from rainwater harvesting and management.
- Employment generation, poverty alleviation, community empowerment and development of human and other economic resources of the rural areas.

### Implementation

Under the Hariyali Guidelines, the execution of watershed projects is to be carried out by Gram Panchayats. The block

level or Zilla Panchayat will act as a Project Implementing Agency (PIA).

### Funding Pattern

The prevailing cost for a prescribed watershed project of 500 ha. is Rs. 30.00 lakh i.e. Rs. 6,000 per hectare. Central and State Government in the ratio of 75:25 share the cost. Funds will be released in five annual installments.

### Contact

GOI: Department of Land Resources, Ministry of Rural Development; Website [www.dolr.nic.in](http://www.dolr.nic.in)

Local: Chief Executive Officer, Zila Parishad/Project Director, District Rural Development Agency.



## TWELFTH FINANCE COMMISSION

The Twelfth Finance Commission was appointed by the President of India on 1<sup>st</sup> November, 2002 and it submitted its report on November 30, 2004, covering the period 2005-10. The TFC stated in its report that The Panchayats are to be encouraged to take over water supply assets. The PRIs are to

recover at least 50 per cent of the recurring costs in the form of user charges. The guidelines further mention that priority should be given to expenditure on the O&M costs of water supply and sanitation. This will facilitate Panchayats to take over the schemes and operate them. The Twelfth Finance Commission made a grant of Rs. 20,000 crore which is to be used for improving the service delivery by the Panchayats in respect of water supply and sanitation.

### Implementation

The TFC provides for the constitution of a high level committee to ensure proper utilization of Local Bodies Grants headed by the Chief Secretary, and includes the Finance Secretary and Secretaries of the concerned departments.

This committee is responsible for the following

- Approval of the projects at the beginning of every year to be undertaken in each sector, quantify the targets, both in physical and financial terms and lay down a time table for achievement of specific milestones
- Monitoring both physical and financial targets and ensuring adherence to the specific conditionality in respect of each grant, wherever applicable

The state Finance Secretary is required to provide a certificate every year of the percentage of grants spent on schemes of water supply and sanitation by the PRIs, details of recurring O&M cost recoverable by the PRIs.

### Contact

GOI: Funds released by Ministry of Finance; Website: <http://www.finmin.nic.in>

Local: Gram Panchayat

## ACCELERATED RURAL WATER SUPPLY PROGRAMME

The Accelerated Rural Water Supply Programme (ARWSP) was introduced in 1972-73 by the Government of India to assist the States and Union Territories (UTs) to accelerate the pace of coverage of drinking water supply. The entire programme was given a Mission approach with the launch of the Technology Mission on Drinking Water and Related Water Management in 1986. Later in 1999 Department of Drinking Water Supply was formed to give more emphasis on Rural Water Supply programme.

### Objectives

- To ensure coverage of all rural habitations with access to safe drinking water
- To ensure sustainability of drinking water systems and sources
- To tackle the problem of water quality in affected habitations



- To institutionalize the reforms initiative in the rural drinking water supply sector

### Funding Pattern

Under ARWSP funds are provided to states for making provisions of safe drinking water in rural habitations. 15% of these funds can be spent on operation and maintenance of the existing drinking water systems and sources. State governments should match funds released by this department on 1:1 basis.

Upto 20% of the funds can be utilized by the state governments to take ensure source sustainability by conserving water, recharging aquifers etc. out of this 15% should be utilized for projects for quality and 5% for projects for sustainability of sources. Funding is done in the ratio of 75:25 between central and state governments.

Criteria for allocation of funds to the States under the ARWSP are as under:

| Weightage for   | Percentage (%) |
|---|----------------|
| (a) Rural Population  | 40             |
| (b) States under DDP, DPAP, HADP & special category hill States in terms of rural areas | 35             |
| (c) NC/PC villages (at 2:1 ratio)   | 10             |
| (d) Quality affected villages (40:40:15:5)  | 5              |
| (e) Overall water resource availability (un-irrigated over irrigated area)              | 10             |
| <b>Total</b>  | <b>100</b>     |

However, the proportion of Union Territories, North Eastern States, and Sikkim is retained at the level of their allocation for 1986-87.

### Implementation

The implementing agencies for the programme may be decided by the State Government. The implementation may be through the PHED or Rural Development Department/ Panchayati Raj Department/Board, Corporation or Authority. The implementation should be entrusted to one single department in the State and not to a number of departments, with a view to better implementation, monitoring of the progress, etc. If the programme has to be implemented in more than one department in the State due to unavoidable and certain special considerations, one of the departments should be designated as the Nodal Department for coordinating the rural water supply programmes and sending consolidated progress to the Central Government. The Panchayati Raj



Institutions should also be involved in the implementation of schemes, particularly in selecting the location of standpost, spot sources, operation and maintenance, fixing of cess/water tariff, etc.

### Contact

GOI: Department of Drinking Water Supply Ministry of Rural Development; Website: [www.ddws.nic.in](http://www.ddws.nic.in)

Local : Programme Officer, DRDA

## BACKWARD REGIONS GRANT FUND

The Backward Regions Grant Fund is designed to redress regional imbalances in development. The fund aims to provide financial resources for supplementing and converging existing developmental inflows into 250 identified districts, so as to bridge critical gaps in local infrastructure and other development requirements that are not being adequately met through existing inflows.

### Objectives

It aims to:

- Strengthen, to this end Panchayat and Municipality level governance with more appropriate capacity building, to facilitate participatory planning, decision making, implementation and monitoring.
- Provide professional support to local bodies for planning, implementation and monitoring their plans

- Improve the performance and delivery of critical functions assigned to Panchayats, and counter possible efficiency and equity losses on account of inadequate local capacity.

### Implementation

The Panchayats at the village, intermediate and district level, referred to in Part IX of the Constitution, will undertake planning and implementation of the programme, in keeping with the letter and spirit of Article 243 G.



### Funding

The Programme has two components namely, a district component covering 250 districts and Special plans for Bihar and the KBK districts of Orissa. A total provision of Rs. 5000 crore had been made for the two components in the Budget



of 2006-07. Out of this allocation Rs. 1250 crore had been provided in the Demand for Grants of the Ministry of Finance for the Special Plans dealt with by the Planning Commission. The remaining amount of Rs. 3750 crore had been placed at the disposal of the Ministry of Panchayati Raj for the District Component, covering 250 districts. The allocation of Rs. 3750 crore consisted of two funding windows (a) capacity building fund of Rs. 250 crore and (b) development grants of Rs. 3500 crore for the financial year 2006-07.

### Contact

GOI: Ministry of Panchayati Raj; Website [www.panchayat.nic.in](http://www.panchayat.nic.in)

Local: Gram Panchayat

## TOTAL SANITATION CAMPAIGN

Total Sanitation Campaign (TSC) was introduced in 1999, as a consequence of the restructuring of the Central Rural Sanitation Programme. TSC is a comprehensive programme to ensure sanitation facilities in rural areas with broader goal to eradicate the practice



of open defecation. This restructuring also marked a paradigm shift in the programme's focus from supply to demand driven and a people centred focus. The concept of sanitation was, therefore, expanded to include personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal and waste water disposal.

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Low cost latrine

### Objectives

The main objectives of the TSC are as under:

- Bring about an improvement in the general quality of life in the rural areas.
- Accelerate sanitation coverage in rural areas.
- Generate felt demand for sanitation facilities through awareness creation and health education.
- Cover schools/ Anganwadis in rural areas with sanitation facilities and promote hygiene education and sanitary habits among students
- Encourage cost effective and appropriate technologies in sanitation.
- Eliminate open defecation to minimize risk of contamination of drinking water sources and food.

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- Convert dry latrines to pour flush latrines, and eliminate manual scavenging practice, wherever in existence in rural areas.

### Implementation

Implementation of TSC is done on a project mode. The TSC is being implemented with a district as unit. The States/UTs are expected to draw up a TSC Project for the selected districts to claim GOI assistance with commitment of their support. The number of TSC projects in a state is allocated based on the demand raised by the States as well as their performance in implementation of the existing projects. A project proposal emanates from a district, is scrutinized by the State Government and transmitted to the Government of India (Department of Drinking Water Supply, Ministry of Rural Development). TSC is implemented in phases with start-up activities. Funds are made available for preliminary IEC work.

### Funding Pattern

The Table below gives the percentage share of the allocation (i.e. the total approved TSC project cost) for different components of a TSC Project, the GOI/State share and the beneficiary contribution towards each components. In the case of Union Territories, the State share under the TSC will be borne by the Govt. of India.

| S.No. | Component   | Amount earmarked as percent of the TSC project outlay           | Contribution percent |       |                     |
|-------|---|---|----------------------|-------|---------------------|
|       |   |   | GOI                  | State | Household/Community |
| a.    | Start-up Activities (Preliminary Surveys, Publicity etc.)   | Less than 5% (subject to a ceiling of Rs. 20 lakh per district) | 100                  | 0     | 0                   |
| b.    | IEC, Including Motivational Awareness and Educative Campaigns, Advocacy etc.                      | More than 15%   | 80                   | 20    | 0                   |
| c.    | Alternate Delivery Mechanism (PCs/RSMs)   | More than 5% (Subject to a maximum of Rs. 35 Lakh per district) | 80                   | 20    | 0                   |
| d.    | (i) Individual Latrines for BPL/disabled house holds<br>(ii) Community Sanitary Complexes         | Less than 60% (subject to para 9(d) of the Guidelines)          | 60                   | 20    | 20                  |
| e.    | Individual house hold latrines for APL  | Nil   | 0                    | 0     | 100                 |
| f.    | School Sanitation Including Anganwadis (Hardware and Support Services)                            | More than 10%   | 60                   | 30    | 10                  |
| g.    | Administrative charges, including training, staff, support services, Monitoring & Evaluation etc. | Less than 5% (subject to a ceiling of Rs. 40 lakh per district) | 80                   | 20    | 0                   |

### Contact

GOI: Department of Drinking Water Supply, Ministry of Rural Development; Website [www.ddws.nic.in](http://www.ddws.nic.in)

Local: District Collector



# CONVERGENCE FOR SUSTAINABILITY



SUSTAINABLE DRINKING WATER SUPPLY  
SANITATION FOR ALL 2012



**Government of India**  
**Ministry of Rural Development**  
**Department of Drinking Water Supply**  
**Rajiv Gandhi National Drinking Water Mission**

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