## DETAILED NOTE ON RECLAMATION MEASURES IN WATERLOGGED AREAS OF IRRIGATED COMMANDS

## **Extent of Water-logging:**

The National Commission on Agriculture assessed in 1976 that an area of about 6.0 million hectare was waterlogged in the country. Out of this, an area of 3.4 mha was estimated to be suffering from surface water stagnation and 2.6 mha through rise in water table. The Ministry of Agriculture estimated in 1984-85 that an area of 8.53 mha was suffering from the problem of waterlogging including both irrigated and un-irrigated areas. The Working Group constituted by the Ministry of Water Resources estimated in 1991 that an area of 2.46 mha was suffering from the problem of water-logging under irrigation commands. State-wise breakup of the areas affected by water-logging as assessed from time to time is presented in the table given below:

State	Area Affected by water- logging (both irrigated and un- irrigated)(National Commission on Agriculture – 1976)	Waterlogged Areas (both irrigated and un- irrigated areas)(Ministry of Agriculture – 1984-85)	Area Estimated by the Working Group of MoWR – 1991 (under irrigated commands)
Andhra Pradesh	3.39	3.39	2.66
Assam	NR	4,50	NR
Bihar	1.17	7.07	6.20
Gujarat	4.84	4.84	1.72
Haryana	6.20	6.20	2.49
Jammu & Kashmir	0.10	0.10	0.01
Karnataka	0.10	0.10	0.24
Kerala	0.61	0.61	0.12
Madhya Pradesh	0.57	0.57	0.73
Maharashtra	1.11	1.11	0.15
Orissa	0.60	0.60	1.96
Punjab	10.90	10.90	2.00
Rajasthan	3.48	3.48	1.80
Tamil Nadu	0.18	0.18	0.16
Uttar Pradesh	8.10	19.80	4.30
West Bengal	18.50	21.80	NR
Delhi	0.01	0.01	NR
Total (Lakh ha)	59.86	85.26	24.56
Total(Million ha)	6.0	8.53	2.46

NR: Not Reported.

## **Component of Reclamation of Water-logging under the CADWM Programme**

The Ministry of Water Resources, Government of India introduced the component of reclamation of waterlogged areas in irrigated commands of the CAD projects since 1.4.1996 for providing Central assistance to the State Governments. The main objective of this component is to

reclaim waterlogged areas caused either on account of surface flooding/inundation or due to rise in water table to put back the degraded land for optimum productivity. Under this component, Central assistance is provided to States in the form of grant.

In May, 1997, a Coordination Committee was constituted by the Ministry of Water Resources to co-ordinate and suggests steps for effective management and reclamation of waterlogged areas. The Committee was headed by the Additional Secretary, Ministry of Water Resources and includes representatives of Ministry of Agriculture, Indian Council of Agriculture Research, Planning Commission, Central Water Commission and Central Ground Water Board. So far, three meetings of the Committee have been held in which detailed discussion were held and various decisions were taken on the problem of water logging. The Committee has finalized the guidelines for the State Governments for submissions of proposals for inclusion of schemes under the component of reclamation of water logged areas in the commands of CAD projects. The Committee had also formed a Core Group of officers which considers such proposals, received from the State Governments and recommends their suitability or otherwise for inclusion under the programme.

Under this component, 823 schemes of nine State Governments have been approved so far with an area estimated to be reclaimed as 122532.00 ha out of which an area of 78278.00 ha is reported to be reclaimed till March, 2016. Abstract of approved projects on reclamation of water logged areas in States as under:

S.N.	Name of State	No. of projects	Area proposed to be covered (ha.)	Estimated cost of Reclamation (Rs. in lakh)	Area (ha) reclaimed till 3/2016
1.	Bihar	81	15668	409.05	12744
2.	Gujarat	7	1290	136.70	0
3.	Jammu & Kashmir	4	9684	283.87	4914
4.	Karnataka	383	62169	14238.50	34074
5.	Kerala	265	20820	2315.32	16249
6.	Madhya Pradesh	6	1437	172.44	0
7.	Maharashtra	46	4801	1175.13	3876
8.	Orissa	19	1342	162.66	1100
9.	Uttar Pradesh	12	5321	645.23	5321
	Total	823	122532	19538.90	78278

## Reclamation of Waterlogged Areas under the restructured CAD &WM Programme

Till 2003-04, bio drainage was not included under the component of reclamation of waterlogged areas under CAD Programme. The cost norm for subsurface drainage system was the same as for the surface drainage system. Under the restructured CADWM Programme implemented from the financial year 2004-05, the cost norm for reclamation of water logged area has been increased from Rs. 12000/- per ha to Rs. 15000/- per ha ( for execution of surface drainage, bio drainage etc.) and to Rs.40,000/- per ha (for sub surface drainage). Thus, an amount of Rs. 7500/- and Rs. 20,000/- per ha (or 50% of actual expenditure whichever is less) is eligible to States under this component as central grant for surface/bio drainage and sub surface drainage respectively as per XI Plan guidelines. The component of reclamation of water logged areas has been retained in the XII Plan, PMKSY-Har Khet Ko Pani also. The cost norm has been enhanced up to Rs.20000/- per ha. and Rs.50000/- per ha. for execution of surface/ bio-drainage and sub-surface drainage respectively during XII Plan. Thus, amount of Rs.10000/- per ha. and Rs.25000/- per ha. respectively (or 50% of actual expenditure whichever is less) is eligible as central assistance for surface/bio drainage and sub surface drainage respectively as per XII Plan guidelines.