

**MOST IMMEDIATE**

F-11011/11/2015-Water-II  
Government of India  
Ministry of Drinking Water and Sanitation

4<sup>th</sup> Floor, Paryavaran Bhawan  
CGO Complex, Lodhi Road  
New Delhi-110003

Dated: 05 January, 2016

**OFFICE MEMORANDUM**

***Subject: To study and firm up the definition of 'Kandi' areas (commonly identified as foothill region in North and North Western States) of India.***

The undersigned is directed to refer to the OM dated 17.12.2015, whereby an expert committee has been constituted headed by Addl. Adviser (PHE) in the Ministry (scanned copy of OM enclosed), to *firm up the definition of 'Kandi' areas and identify the extent of such areas in the country.* A brief note on some of the features of Kandi areas is annexed to this communication for your ready reference on the subject matter.

2. It is opined that such areas may be identified in states of Andhra Pradesh, Tamil Nadu, Maharashtra, Odisha, Jharkhand, Punjab etc. & elsewhere in the country. Accordingly, State Governments are requested to furnish the details of area alike 'Kandi' and number/ name of village in part of blocks with name of districts from your state. While forwarding the aforesaid details the following details may also be furnished namely, (i) population in such area, (ii) geographical and hydrological feature of the area, (iii) average per capita cost of spot water supply/ piped water supply schemes in these areas.

3. While forwarding the details of such habitations/ villages in blocks to be identified under Kandi areas, states may please ensure that such areas are not identified under any other development schemes such as Desert Development Programme (DDP), Desert Prone Area Development (DPAD) and Hilly Area Development Programme (HADP), etc. of state government or central government so as to avoid overlapping of priorities.

4. In case some of the state govts. have already notified areas which may be classified under Kandi areas, a copy of notification of the state may be forwarded to undersigned for reference & consideration. Since, tenure of the committee is short, you are therefore requested that an expeditious action may kindly be taken to communicate your concern on the matter latest by 15.01.2016.

*Shriyadarshi*  
05-01-2016  
(Sumit Priyadarshi)  
Asst. Adviser (PHE)  
Min. of Drinking Water & Sanitation  
Tel.: 011-24362191  
Email- [s.priyadarshi@gov.in](mailto:s.priyadarshi@gov.in)

To

The Principal Secretary/ The Secretary of ALL states.

Copy to the following, for kind information please.

1. PS to Jt. Secretary (W&A), Min. of Drinking Water & Sanitation, New Delhi.
2. PS to Hon'ble Minister for Drinking Water & Sanitation, New Delhi.

Copy to Sr. Technical Director (NIC), with a request to upload on Ministry Website, please.

BRIEF BACK-GROUND NOTE ON

Sub-montane or foothills region commonly termed as 'Kandi' areas in North and North Western states of India

It includes outer Himalayas, particularly region of Siwaliks and adjoining areas and foothills of other mountain ranges, in the altitude ranging between 300 and 1500 metres above mean sea level. The total normal rainfall of the Kandi region may vary from about 800 to 1500 mm. The normal winter (November to March) rainfall is about 170 mm. The minimum temperature in Dec-Jan may be close to freezing and the maximum during May-June to about 45 degrees. In this zone, forests dominated by timber trees of Sal, Khair, Palash and alike are common. Other important tree species include dry- deciduous tree growing to a height of 15m & is used for timber, resin, fodder, medicine. At higher elevation, around 1000 to 1500 metre altitude, cheer (pine) forests may also found at certain places. Ground vegetation is scanty.

Most of the population depends on agriculture either as farmers or as agricultural labourers. Most of the farmers have small (1-2 ha) or marginal land holdings. In the Kandi region, undulating area just below the hills with 2-6% slope is used for raising crops mainly rain-fed.

About 80% of total rainfall is received in 3 months from mid-June to mid-September. The aberrations include late start of monsoon season and its early withdrawal, long dry spells within monsoon season and heavy showers received in a short period of 2-3 days. Open pan evaporation during the growth period varies from about 2mm/day in December-January to about 5mm in last week of March and first week of April.

Apart from agriculture and labour, other major sources of income are animal husbandry and sale of timber. Most of the villages lack facilities of all-weather roads, good schools and hospitals. Literacy, especially amongst the women is very low. Most of the adult males have been traditionally working as laborers in the town. Out migration more or less permanent in nature for job search/ livelihood.

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4<sup>th</sup> Floor, Paryavaran Bhawan  
CGO Complex, Lodhi Road  
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Dated: 17.12.2015

Office Memorandum

**Subject: Constitution of an Expert Committee to study and firm up the definition of 'Kandi' areas (commonly identified as foothill region in North and North Western States) of India**

A meeting was held under the chairmanship of Jt. Secretary (W&A), MDWS, on 15-12-2015, to discuss and deliberate regarding the definition of 'Kandi' areas coming under Punjab state and ascertain its extent for which Ministry of Drinking Water and Sanitation may coordinate with Dept. of Land Resources, Min. of Rural Development and Min. of Agriculture & Farmers Welfare.

It was decided that an expert committee be constituted headed by Addl. Adviser (PHE), MDWS, to firm up the definition of 'Kandi' areas and identify the extent of such areas in the country.

During the meeting, Additional Commissioner (Min. of Agriculture) opined that such areas may be identified in states of Andhra Pradesh, Tamil Nadu, Maharashtra, Odisha, Jharkhand etc. and he suggested that expertise of National Bureau of Soil Survey and Land Use Planning, Nagpur (NBSS&LUP) and Soil and Land Use Survey of India, N. Delhi (SLUSI) may also be sought to decide on the matter rationally. Accordingly, he suggested that representatives from the aforesaid organisations would be useful.

In line with the above discussions and deliberations, it was decided that to constitute the following committee:

- |   |                    |
|---|--------------------|
| 1. Addl. Adviser (PHE), MDWS                                | - Chairman         |
| 2. Sr. Consultant, MDWS                                     | - Member           |
| 3. Representative of Min. of Agriculture & Farmers' Welfare | - Member           |
| 4. Representative from Dept. of Land Resources              | - Member           |
| 5. Representative from NBSS&LUP, Nagpur                     | - Member           |
| 6. Representative from SLUSI, New Delhi                     | - Member           |
| 7. Asst. Adviser (PHE), MDWS                                | - Member Secretary |

**Terms of Reference of the committee:**

- i. The committee may collect relevant information and interact with the states with reported 'Kandi' areas and explore the similar geographical locations elsewhere in country.
- ii. After studying the information gathered from different resources, states planning depts., survey and census etc., the committee will lay down the norms and formulate a definition for

'Kandi areas' which would be applicable for finding such areas in the entire country on a rational basis.

The Committee may co-opt or invite any other person for the works as per TOR. The exercise must be completed by 31.01.2016.



(Rajesh Kumar)  
Director (Water)

Copy to:

1. The Jt. Secretary, Department of Land Resource, Min. of Rural Development, N. Delhi
2. The Jt. Secretary, NRM Division, Min. of Agriculture & Farmers Welfare, N. Delhi
3. The Jt. Secretary (W&A), Min. of Drinking Water & Sanitation, N. Delhi
4. The Director, National Bureau of Soil Survey and Land Use Planning, Nagpur
5. The CSSO, Soil and Land Use Survey of India, N. Delhi
- May kindly nominate a Representative to participate in the Committee
  
6. PS to Hon'ble Minister for Drinking Water & Sanitation, New Delhi – for information please