



No. J-11016/11/2012-MGNREGA, IV
Government of India
Ministry of Rural Development
Department of Rural Development
(Mahatma Gandhi NREGA Division)

Krishi Bhawan, New Delhi
Dated: 16th February, 2016

To: The Spl CSs/Prl Secretaries/ Secretaries of Rural Development (In charge-MGNREGS).

Subject: Suggestive/ indicative estimates of Farm Pond, NADEP & Vermi Compost Tanks etc.

Sir/ Madam,

In the list of "focus / thrust areas" for 2016-17, one of the focus areas are construction of 5 lakh farm ponds and 10 lakh VERMI/ NADEP compost tanks in Financial Year 2016-17. To facilitate the States/ UTs, suggestive/ indicative estimates with drawings of farm pond, NADEP & Vermi compost tanks are attached herewith. As regards farm ponds, expected outcome i.e. irrigation potential in hectare is to be built up in the estimate & measured while making the payment.

2. It is also requested to fix the district wise targets of farm ponds ,Vermi/ NADEP compost tanks, IHHLs and AWCs as per the requirement of the area and communicate the same to the Ministry by 1st March , 2016 so that the national target can be achieved on time. This will also be part of State's presentation before the Empowered Committee for finalisation of LB for each State/ UT administration.

Yours faithfully,

(Aparajita Sarangi)
Joint Secretary (MGNREGA)

Enclosure: As above

16/2/16

ONE MILLION FARM PONDS TO BRING FARM LAND UNDER IRRIGATION UNDER MGNREGA:

A. FARM POND: Farm pond is a structure constructed on a farmer's land to harvest rainwater, which would otherwise have flowed out of the farm. On flatter land in the village, streams are not very deep, nor do they have high embankments. Thus it becomes difficult to build water harvesting structures like earthen dams. In such flat lands, Farm Ponds are the most effective water harvesting Solution. The main objective of such structures is to provide protective irrigation to the kharif crop. In addition, in West Bengal, Assam, Chhattisgarh, Bihar, Jharkhand and Orissa, Farm ponds are being used to irrigate the rabi crops and also for fish Farming.

B. TYPICAL SIZE OF FARM POND: top area= 20m x 20m, bottom area =14m x 14m, & depth= 3m, with 1: 1 side slope, so that the grass planting/ sodding can be carried out on the inner side slope of the pond for the durability of the pond. **Detailed drawing is attached.**

The size of Farm Pond will depend on the land use, land slope, type of soil, annual rainfall and catchment area. However, in cultivated area, where annual rainfall is at least 500 mm, the catchment area for this size of pond should be 1-2 hectare & where annual rainfall is at least 1000 mm; the catchment area for this size of pond should be at least 0.5-1 hectare.

C. ESTIMATE OF THE FARM POND; The Farm Pond with above mentioned specification will cost Rs. 1, 60, 000/- with labour component Rs. 133283/- (83.3%) and material component Rs. 26700.94 (16.7%). **Detailed estimate is attached.**

D. OUTCOME: Total quantity of water stored will be nearly 880 cubic meters,

i) 5000 cum. water can irrigate 1 ha land with 0.5 m depth of irrigation water, therefore 880 cum. water will be able to irrigate $880 / 5000 = 0.176$ ha land with single refill of pond, whereas, in normal rain fall, there will be at least 2-3 refill of pond, which will be able to irrigate $0.176 \times 2 = 0.352$ ha land throughout the year i.e. in kharif as well as in rabi season.

ii) Like this 1 million farm pond costing Rs 1.6 lakh X 1000000 = Rs. 16000 crore, will irrigate 3. 52 lakh ha agriculture land, will recharge ground water, will check soil erosion & can be used for fish culture.

