

महाराष्ट्र शासन
ग्राम विकास विभाग
शासन निर्णय क्रमांक: बिजीएस-२०१४/प्र.क्र.१२९/पंरा-६
बांधकाम भवन
२५, मझबान पथ, फोर्ट, मुंबई- ४०० ००१
तारीख: ७ फेब्रुवारी, २०१५

वाचा

- १) केंद्र शासनाचे नविन आणि नविनकरण उर्जा विभाग मंत्रालयाचे पत्र क्र. ५-५/२०१४ BE (NBMMMP) दिनांक ३० जुन, २०१४ व दि.२ जुलै २०१४
- २) केंद्र शासनाचे नविन आणि नविनकरण उर्जा विभाग मंत्रालयाचे कार्यालयीन आदेश (Office Memorandum) दिनांक २६ नोव्हेंबर, २०१४.

प्रस्तावना

राष्ट्रीय बायोगॅस व खत व्यवस्थापन कार्यक्रम ही योजना १०० % केंद्र पुरस्कृत असून सदर योजना केंद्र शासनाच्या २० कलमी कार्यक्रमांतर्गत समाविष्ट आहे. केंद्र शासनाकडून प्रतिवर्षी निर्गमित केल्या जाणाऱ्या प्रशासकीय मंजूरी आदेशातील मार्गदर्शक सूचनांनुसार बायोगॅस व खत व्यवस्थापन कार्यक्रम राज्यात राबविण्यात येतो. सन २०१४-२०१५ या वर्षातील बायोगॅस विकास कार्यक्रम राबविण्या संदर्भात केंद्र शासनाने दिनांक ३०.०६.२०१४ रोजी नविन सुधारित प्रशासकीय मंजूरीचे आदेश निर्गमित केले असून या आदेशान्वये बायोगॅस संयंत्रासाठी अनुदानाचे दर सुधारीत केलेले आहेत. सुधारित वाढीव दर ८ मे, २०१४ पासून लागू करण्याचे केंद्र शासनाचे आदेश असल्याने त्यानुसार सर्व जिल्हा परिषदांना सुचना देण्याचे प्रस्तावित आहे.

शासन निर्णय

राष्ट्रीय बायोगॅस व खत व्यवस्थापन कार्यक्रम २०१४-२०१५ अंतर्गत राज्यात उभारण्यात येणाऱ्या बायोगॅस संयंत्र व तत्संबधी कार्यक्रमास केंद्र शासनाच्या अपारंपारिक उर्जा स्रोत मंत्रालय यांचेकडून त्यांचे पत्र क्रमांक ५-५/२०१४-BE, दिनांक ३० जुन , २०१४ अन्वये प्रशासकीय मंजूरी देण्यात आली आहे. सदर आदेश केंद्र शासनाच्या [www. mnre. gov.in](http://www.mnre.gov.in) या वेबसाईटवरून उपलब्ध करून घ्यावेत.

२. केंद्र शासनाच्या वरील प्रशासकीय मंजूरी आदेशान्वये नमूद केल्याप्रमाणे बायोगॅस संयंत्रासाठी अनुदानाचे दर (सुधारीत वाढीव दर), प्रशासकीय खर्च, टर्न की फी, शोचालयास जोडलेल्या बायोगॅस संयंत्रासाठी अतिरिक्त अनुदान, जुन्या संयंत्रांची दुरुस्ती इतर प्रशिक्षण वर्ग, प्रचार व प्रसार इ. साठी या बाबतचे धोरण सन २०१४-१५ या आर्थिक वर्षाच्या ८ मे, २०१४ पासून अंमलात आणण्याबाबतच्या सूचना दिलेल्या आहेत.

३. केंद्र शासनाने निर्गमित केलेल्या प्रशासकीय मंजूरी आदेशातील राष्ट्रीय बायोगॅस व खत व्यवस्थापन कार्यक्रमाबाबतची महत्वाची उद्दिष्टे खालील प्रमाणे आहेत.

१. स्वयंपाकसाठी बायोगॅस पुरविणे.
२. LPG व इतर पारंपारिक उर्जा साधनांचा वापर कमी करणे.
३. एकात्मिक उर्जा धोरणात नमूद केल्यानुसार स्वयंपाकसाठी आवश्यक उर्जा मिळविणे.
४. रासायनिक खतांचा वापर कमी करून सेंद्रिय खतांचा वापर करण्यास लाभार्थ्यांना प्रवृत्त करणे.
५. ग्रामीण भागातील स्त्रीयांचे जीवनमान सुधारणे व त्यांना होणारा त्रास कमी करणे.
६. बायोगॅस संयंत्रास शौचालय जोडून ग्रामीण भागातील स्वच्छता राखण्यास मदत करणे.

४. वरील उद्दिष्टे विचारात घेऊन, १२ व्या पंचवार्षिक योजनेच्या उर्वरित कालावधीकरिता म्हणजे सन २०१४-१५ या आर्थिक वर्षाच्या ८ मे, २०१४ पासून सदर योजना सुधारित दरानुसार राबविण्याचे केंद्र शासनाने ठरविले असून, त्यासाठी केंद्र शासनाने त्यांचे दिनांक ३०.०६.२०१४ चे पत्रान्वये मंजूरी दिली आहे. या योजनेच्या अंमलबजावणीबाबतच्या मार्गदर्शक सूचनाही त्यामध्ये देण्यात आल्या आहेत. सदर योजना १०० % केंद्र पुरस्कृत असून या योजनेचा समावेश २० कलमी कार्यक्रमांतर्गत केलेला आहे.

५. केंद्र शासनाने निर्गमित केलेल्या संदर्भिय क्र. १ च्या प्रशासकीय मंजूरी आदेशातील मार्गदर्शक सूचनांनुसार राष्ट्रीय बायोगॅस व खतव्यवस्थापन कार्यक्रम ही योजना राज्यामध्ये राबविण्यात शासन मंजूरी देण्यात येत आहे.

६. केंद्र शासनाच्या मंजूरी आदेशात नमूद केल्याप्रमाणे बायोगॅस संयंत्र लाभधारकास द्यावयाचे अनुदान, टर्न की फी, शौचालयास जोडलेल्या बायोगॅस संयंत्रासाठी अतिरिक्त अनुदान, प्रशासकीय खर्च (सेवाशुल्क) अनुदान, जुन्या संयंत्रांची दुरुस्ती, प्रशिक्षण वर्ग, प्रचार व प्रसिध्द इ. साठी वाढवून दिलेले सुधारित दर खालील प्रमाणे आहेत :- (केंद्र शासनाच्या पत्रातील परिच्छेद क्रमांक २.२ पहावा.)

कौटुंबिक बायोगॅस संयंत्र बसविणे (Family type biogas plants under NBMMP)			
राज्यात ग्रामीण भागातील सर्व लाभार्थ्यांसाठी लागू असलेले दर खालील प्रमाणे			
अ.क्र.	केंद्रिय अर्थ सहाय्याची बाब	तपशील	दर (रुपये)
अ)	सर्वसाधारण लाभार्थी	१ घ.मी. प्रति संयंत्रास	रु. ५,५००/-
		२ ते ६ घ.मी. प्रति संयंत्रास	रु. ९,०००/-
ब)	अनुसूचित जाती/जमाती	१ घ.मी. प्रति संयंत्रास	रु.७,०००/-
		२ ते ६ घ.मी. प्रति संयंत्रास	रु.११,०००/-
क)	टर्न की फी	१ ते ६ घ.मी. प्रति संयंत्रास, ५ वर्षांच्या हमी कालावधी सह	रु. १५००/-
ड)	शौचालयास जोडलेल्या बायोगॅस संयंत्रास अतिरिक्त केंद्रिय सहाय्य	१ ते ६ घ.मी. प्रति संयंत्रास	रु. १२००/-
इ)	प्रशासकीय खर्चासाठी (सेवाशुल्क)	१०० ते ३००० एवढ्या बायोगॅस संयंत्रांची उभारणी केल्यास	रु.१,००,०००/- (१०० पेक्षा जास्त संयंत्र उभारणीस रु.४००/- प्रती संयंत्र)
		३००१ ते ७००० एवढ्या बायोगॅस संयंत्रांची उभारणी केल्यास	रु.१०,५०,०००/- (३००० पेक्षा जास्त संयंत्र उभारणीस रु.३५०/- प्रती संयंत्र)
		७००१ पेक्षा अधिक बायोगॅस संयंत्रांची उभारणी केल्यास	रु.२४,५०,०००/- (७००१ पेक्षा जास्त संयंत्र उभारणीस रु ३००/- प्रती संयंत्र , कमाल रु. ६०.०० लक्षा)
ई)	बायोगॅस प्रशिक्षण		
१.	लाभार्थी प्रशिक्षण	रु.३,०००/-	
२.	स्टाफ कोर्स	रु.१०,०००/-	
३.	रिफ्रेशर कोर्स/बांधकाम व देखभाल कोर्स	रु. ४५,०००/-	
४.	स्वयंसेवी संस्थांनी टर्न की वर्कर यांना बायोगॅस संयंत्र व व्यवस्थापन कार्यक्रमाचे प्रशिक्षण दिल्यास	रु.७५,०००/-	
उ)	प्रचार व प्रसिध्दी		
	१००० संयंत्रापर्यन्त	रु. २,००,०००/-	
	१००१ ते १०,००० संयंत्रापर्यन्त	रु. ४,००,०००/-	
	१०,००० पेक्षा अधिक संयंत्राकरिता	रु. ६,००,०००/-	
ऊ)	अकार्यरत संयंत्रांच्या दुरुस्तीसाठी राज्यास प्राप्त होणा-या नियतव्ययापैकी ५ % नियतव्यय वापरण्यात यावा.	५०% केंद्रिय सहाय व ५०% लाभार्थ्यांचा सहभाग रुपाने वापरण्यात यावा.	

७. केंद्र शासनाच्या वरील सुधारीत वाढीव दरानुसार सर्व जिल्हा परिषदांनी बायोगॅस कार्यक्रमाची अंमलबजावणी करावी. टर्न की फी, शौचालयास जोडलेल्या बायोगॅस संयंत्रास अतिरिक्त केंद्रिय सहाय्य, प्रशिक्षण कार्यक्रम, प्रशासकीय खर्च, ट्रेनिंग सेंटर्स, प्रचार व प्रसिध्दी व अकार्यरत संयंत्रांच्या दुरुस्तीबाबतच्या सविस्तर सूचना केंद्र शासनाच्या दि. ३०.०६.२०१४ च्या पत्रातील परिच्छेद ७ ते १३ मध्ये देण्यात आल्या आहेत. यासूचनांचे अंमलबजावणी यंत्रणांनी पालन करावे.

८. जिल्हा सल्लागार समितीच्या बैठकीत या योजनेच्या जिल्हा स्तरावरील अंमलबजावणीचा आढावा घेवून त्याबाबतचा अहवाल त्रैमासिक अहवालासोबत केंद्र शासनास पाठविण्याकरिता राज्य शासनाकडे पाठविण्यात यावा. लाभार्थ्याने बांधलेले बायोगॅस संयंत्र पूर्णपणे कार्यान्वित झाल्याखेरीज व पूर्णत्वाचा दाखला प्राप्त झाल्याशिवाय त्यांना अनुदानाची रक्कम देण्यात येऊ नये. संयंत्र बांधून पूर्ण झाल्याबाबतचा पूर्णत्वाचा दाखला गट विकास अधिकारी किंवा कृषि विकास अधिकारी यांच्या स्वाक्षरीचा असावा.

९. बायोगॅस संयंत्राची उभारणी पूर्ण झाल्यानंतर सदर संयंत्र कार्यान्वित झाल्याचा दाखला प्राप्त झाल्यानंतर केंद्रिय अर्थसहाय्याची रक्कम संबंधित लाभार्थ्यास धनादेशाद्वारे अदा करण्यात यावी.

१०. बायोगॅस संयंत्र उभारणीकामी टर्न की वर्कर तथा स्वयंसेवी संस्थांना सहभागी करण्यात यावे. टर्न की वर्कर तत्वावर कामे सोपविल्यास त्यांनी सदर संयंत्र विनातक्रार ५ वर्षे कार्यान्वित राहण्याबाबतचे हमीपत्र लिहून देण्याच्या अटीवरच त्यांना देय टर्न की, फी रक्कम रु. १५००/- ही ५ हप्त्यांत (१ ला हप्ता रु. ७००/- व दुसरा, तिसरा, चौथा आणि पाचवा हे समान हप्त्यात म्हणजे रु. २००/- याप्रमाणे द्याय राहिल.) Account payee cheque किंवा Demand Draft द्वारे अदा करण्यात यावी व तसे करारपत्र टर्न की वर्कर किंवा स्वयंसेवी संस्थांकडून करून घेण्यात यावे. (केंद्र शासनाचे पत्रातील परिच्छेद क्र.२.२ तक्ता, परिच्छेद क्र.७ व Annexure IV पहावे.)

११. महाराष्ट्र राज्यास बायोगॅस संयंत्र उभारणीसाठी दिलेल्या उद्दिष्टांपैकी ३००० पर्यंतच्या उद्दिष्ट पूर्ततेसाठी रु. १,००,०००/- , ७००० पर्यंतच्या उद्दिष्ट पूर्तीसाठी रु. १०,५०,०००/- आणि ७००० पेक्षा अधिक बायोगॅस संयंत्रांचे उद्दिष्ट पूर्ण केल्यास रु. २४,५०,०००/- एवढे अनुदान प्रशासकीय खर्चासाठी (सेवाशुल्कापोटी) केंद्र शासनाकडून प्राप्त होणार आहे. सदरचे अनुदान हे जिल्हा परिषदांनी पूर्ण केलेल्या एकूण उद्दिष्टांच्या अनुषंगाने देय ठरेल.

१२. राज्यात उभारण्यात आलेली बायोगॅस संयंत्रे ही योग्य प्रकारे वापरली जावीत यासाठी संबंधित लाभार्थ्यांना प्रशिक्षण, बांधकाम व देखभाल प्रशिक्षण, कर्मचारी प्रशिक्षण इ. देणे आवश्यक आहे. ज्या गावात /तालुक्यात बायोगॅस संयंत्र उभारणी होणार आहे अशा गावात/तालुक्यात/जिल्ह्यात लाभार्थी प्रशिक्षण वर्ग , बांधकाम व देखभाल प्रशिक्षण वर्ग, कर्मचारी प्रशिक्षण वर्ग इ. घेण्यासाठी जिल्हा परिषदांनी पूर्वनियोजन करून या प्रशिक्षण वर्गाचे स्वतः जिल्हा परिषदांनी किंवा मान्यता प्राप्त बायोगॅस विस्तार केंद्रामार्फत आयोजन करावे. लाभार्थी प्रशिक्षण वर्ग, बांधकाम व देखभाल प्रशिक्षण वर्ग, कर्मचारी प्रशिक्षण वर्ग किती आयोजित करावेत व या प्रशिक्षण वर्गासाठी अभ्यासक्रम कोणता असावा याबाबतची सविस्तर माहिती **केंद्र शासनाचे पत्रातील Annexure-V ते VII** येथे पहावी व त्यानुसार कार्यक्रमाचे आयोजन करावे व अशाप्रकारे ज्या गावात/तालुक्यात आयोजित केलेल्या प्रशिक्षण वर्गाचा सविस्तर अहवाल शासनास सादर करावा.

१३. राज्यात बायोगॅस संयंत्राची उभारणी करताना मान्यता प्राप्त संयंत्राचीच उभारणी करावी. त्या व्यतिरिक्त इतर संयंत्राची उभारणी करण्यात येऊ नये. **(या शासन निर्णयातील संदर्भिय पत्र क्र. १ मधील परिच्छेद क्र.६ व संदर्भिय पत्र क्र.२ पहावे)**

१४. सर्व जिल्हा परिषदांनी केंद्र शासनाच्या प्रशासकीय मंजूरी आदेशातील परिच्छेद क्रमांक-१२ मध्ये नमूद केल्याप्रमाणे बायोगॅस संयंत्र उभारणीचा प्रचार व प्रसिध्दी करण्यात यावी.

१५. त्याचप्रमाणे केंद्र शासनाच्या प्रशासकीय मंजूरी आदेशात परिच्छेद क्रमांक-१३ मध्ये नमूद केल्याप्रमाणे जुन्या संयंत्राच्या दुरुस्तीसाठी बंद संयंत्राची तालुकावार पाहणी करुन ५ वर्षांपेक्षा अधिक कालावधीच्या परंतु स्ट्रक्चरल दुरुस्ती अभावी नादुरुस्त असलेल्या संयंत्रांची दुरुस्ती प्राप्त केंद्रीय अनुदानातून व लाभार्थ्यांच्या सहभागातून करण्यात यावी. मात्र जी संयंत्रे गॅस पाईप, कॉक, बर्नर इ.कारणामुळे बंद असतील तर अशा संयंत्राच्या दुरुस्तीवरील खर्च केंद्र शासनाच्या सूचनेनुसार संबंधित लाभार्थ्यांनी करावयाचा आहे.

१६. उभारलेल्या संयंत्राची तालुकास्तरावर १००% तपासणी गट विकास अधिकारी व जिल्हा स्तरावर १०% तपासणी कृषि विकास अधिकारी/शक्य असल्यास मोहीम अधिकारी यांनी करावी. त्याप्रमाणे विभागीय स्तरावर उपायुक्त (विकास), सहाय्यक आयुक्त (विकास) यांनीही एका महिन्यात २ गावांतील बायोगॅस संयंत्राची तपासणी करावी व याचा समावेश त्रैमासिक अहवालात करावा.

१७. बायोगॅस संयंत्र उभारणीसाठी राष्ट्रीयकृत बँका, शेडुल बँका, नाबार्ड यांच्यामार्फत वैयक्तिक लाभार्थ्यास / लाभार्थ्यांच्या गटास कर्ज सुविधा उपलब्ध होणार आहे. जिल्हा स्तरावरील यंत्रणांनी बँकांशी संपर्क साधून त्यांच्या वार्षिक कार्यक्रमात कर्जाचे उद्दिष्ट ठरवून घेण्यासाठी प्रयत्न करणे आवश्यक आहे. **(केंद्र शासनाच्या पत्रातील परिच्छेद क्रमांक ४.६ पहावे.)**

१८. बायोगॅस संयंत्राची उभारणी प्रशिक्षित गवंडयाकडून करुन घेण्यात यावी. तसेच यासाठी वापरण्यात येणारे साहित्य विशिष्ट दर्जाचे असावे. लाभार्थ्यांच्या सविस्तर माहितीचा (यामध्ये लाभार्थ्यांचे संपूर्ण नांव, पत्ता, शेतकऱ्यांचा प्रवर्ग, जनावरांची /कुटुंबातील व्यक्तींची संख्या, संयंत्राचे मॉडेल व आकार, केंद्रिय सहाय्याची रक्कम, ती दिल्याचा दिनांक इत्यादी माहितीचा) डाटाबेस संगणकावर तयार करुन ही माहिती तालुका व जिल्हा स्तरावर कायमचा रेकॉर्ड म्हणून ठेवण्यात यावी. ही माहिती केंद्र शासनाच्या अधिकाऱ्यांना व लेखा तपासणीसाठी उपलब्ध करुन द्यावी. तसेच ही माहिती राज्यस्तरावर ठेवण्यासाठी राज्य शासनाकडे पाठविण्यात यावी. **लाभार्थ्यांची यादी वेबसाईटवर अपलोड करणे बंधनकारक करण्यात आले आहे.** त्यानुसार ती वेळोवेळी करण्यात यावी. बायोगॅस संयंत्र उभारणी नंतर पूर्णत्वाचा दाखला (Completion Certificate) संबंधित गटविकास अधिकाऱ्यांनी अथवा सक्षम अधिकाऱ्यांनी द्यावे. अंमलबजावणी यंत्रणेने योजनेच्या अंमलबजावणीसाठी वर्षभरात नेमलेल्या मनुष्यबळाची सविस्तर माहिती त्यांनी क्लेम्स केलेल्या प्रशासकीय खर्चाच्या पृष्ठयर्थ ठेवावी. त्याचप्रमाणे टर्न फी अदा केल्याचीही माहिती ठेवावी. ही सर्व माहिती संगणककृत असावी व ती वेळोवेळी अद्ययावत करावी. बायोगॅस संयंत्रांचा अनुक्रमांक, जिल्हा, तालुका, अंमलबजावणी यंत्रणा इत्यादी माहिती असलेली धातूची पट्टी प्रत्येक बायोगॅस संयंत्रावर बसविण्यात यावी. पूर्ण झालेल्या बायोगॅस संयंत्रासह घेतलेले लाभार्थ्यांचे छायाचित्र केंद्रिय अर्थसहाय्याचे संवितरण नोंदीसह ठेवण्यात यावे. **(केंद्र शासनाच्या पत्रातील परिच्छेद क्रमांक १४ व Annexure XI पहावे.)**

१९. बायोगॅस संयंत्र उभारणीचा विहित नमुन्यातील मासिक अहवाल केंद्र शासनास दरमहा १० तारखेपूर्वी पाठवावयाचा असल्याने मासिक प्रगती अहवाल जिल्हा परिषदांकडून राज्य शासनास दरमहा ५ तारखेपर्यंत पाठविण्यात यावा. सदर अहवालासोबत प्रत्यक्ष केलेल्या खर्चाचा अहवाल देखील जोडण्यात यावा. तसेच, प्रत्येक तिमाही नंतरच्या १५ तारखेपर्यंत विहित नमुन्यातील त्रैमासिक अहवाल केंद्र शासनास पाठविणे आवश्यक असल्याने त्रैमासिक अहवाल जिल्हा परिषदांकडून राज्य शासनास तिमाही नंतरच्या १० तारखेपर्यंत पाठविण्यात यावा. अपूर्ण संयंत्राची माहिती मासिक अथवा त्रैमासिक अहवालात देण्यात येऊ नये. (केंद्र शासनाचे पत्रातील परिच्छेद क्र.१५ पहावे व Annexure IX व X पहावे.)

२०. प्रत्येक तिमाहीत उभारलेल्या प्रत्येक संयंत्राची तपासणी करून तसे प्रमाणपत्र सक्षम प्राधिकाऱ्याने लेखा तपासणीसाठी देण्यात यावे. यापूर्वी बायोगॅस संयंत्र उभारणी करण्यात आलेल्या दोन गावांची निवड करून तेथील बायोगॅस संयंत्राच्या स्थितीबाबतचा अहवाल त्रैमासिक अहवाला सोबत पाठविण्यात यावा.

२१. केंद्र शासनाच्या ग्रामीण विकास मंत्रालय, पाणी पुरवठा विभागाच्या सचिवांनी संपूर्ण स्वच्छता अभियानाच्या कार्यक्रमाशी Convergence करून बायोगॅस योजना राबविण्याच्या सूचना दिलेल्या आहेत. जिल्हा स्तरावर संपूर्ण स्वच्छता अभियान कक्षाशी समन्वय साधून मोठ्या प्रमाणात बायोगॅस संयंत्रास शौचालयास जोडण्याचा कार्यक्रम हाती घ्यावा. राज्यात संत गाडगेबाबा ग्राम स्वच्छता अभियानांतर्गत अनेक गावांनी मोठ्या प्रमाणात शौचालयास बायोगॅस जोडून गावे समृद्ध बनविण्याचा प्रयत्न केलेला आहे. ग्राम विकास विभाग सुवर्ण महोत्सवी ग्राम विकास विभाग सुवर्ण महोत्सवी वर्षानिमित्त गावाचा शाश्वत विकास होण्याच्या दृष्टीने नैसर्गिक साधनसंपत्तीचा वापर करून पर्यावरण संतुलित गावे बनविण्यावर भर दिलेला आहे. त्यामुळे मोठ्या प्रमाणात बायोगॅस बांधकामाचा कार्यक्रम हाती घेण्यात यावा.

२२. संपूर्ण स्वच्छता अभियान व इतर कार्यक्रमाच्या जनजागृती कार्यक्रमात बायोगॅसचे फायदे, महत्व व बांधकाम याचा समावेश करावा. ज्या गावांनी १००% किंवा मोठ्या प्रमाणात बायोगॅस बांधकाम केले आहे त्या गावाची यशोगाथा तयार करावी म्हणजे ते इतर गावांना प्रेरणादायी ठरेल.

२३. राज्यात उभारणी केलेल्या बायोगॅस संयंत्रासाठी जिल्हा परिषदांनी केलेल्या प्रत्यक्ष खर्चाचे क्लेम्स हे दरवर्षी दि.३० जून पर्यंत केंद्र शासनास सादर करावयाचे असल्यामुळे उभारणी केलेल्या बायोगॅस संयंत्राचे खर्चाचे क्लेम्स हे आर्थिक वर्ष संपल्यानंतर लवकरात लवकर दि.१५ मे पूर्वी शासनास पाठविणे आवश्यक आहे. (केंद्र शासनाच्या पत्रातील परिच्छेद क्र. २१ व Annexure III पहावे.)

२४. सदरील कार्यक्रम राबविण्यासाठी विभागीय स्तरावर सनियंत्रण व समन्वयाची जबाबदारी उप आयुक्त विकास यांची राहिल.

२५. हे आदेश नियोजन व वित्त विभागाच्या सहमतीने वित्त विभागाचा अनौपचारिक संदर्भ क्र.२४/२०१५/व्यय-१५, दि.१२/०१/२०१५ अन्वये मिळालेल्या मान्यतेने निर्गमित करण्यात येत आहेत.

सदर शासन निर्णय महाराष्ट्र शासनाच्या www.maharashtra.gov.in या संकेतस्थळावर उपलब्ध करण्यात आला असून त्याचा संकेतांक क्रमांक २०१५०२०७१४००४९३२२० असा आहे. हा आदेश डिजीटल स्वाक्षरीने साक्षांकित करून काढण्यात येत आहे.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने.

विवेक गुजर

उप सचिव, महाराष्ट्र शासन

प्रत,

१. महालेखापाल महाराष्ट्र-१ मुंबई (लेखा परिक्षा)(लेखा व अनुज्ञेयता)
२. महालेखापाल महाराष्ट्र-२ नागपूर (लेखा परिक्षा) (लेखा व अनुज्ञेयता)
३. उप आयुक्त (विकास), विभागीय आयुक्तांचे कार्यालय (सर्व)
४. मुख्य कार्यकारी अधिकारी, जिल्हा परिषद (सर्व)
५. मुख्य लेखा व वित्त अधिकारी , जिल्हा परिषद (सर्व)
६. मुख्य लेखा परिक्षक, स्थानिक निधी लेखा, कोकण भवन, नवी मुंबई
७. कृषि विकास अधिकारी, जिल्हा परिषद (सर्व)
८. उप मुख्य लेखा परिक्षक, स्थानिक निधी लेखा (सर्व)
९. जिल्हा लेखा परिक्षक स्थानिक निधी लेखा (सर्व)
१०. संचालक, लेखा कोषागारे, महाराष्ट्र, मुंबई.
११. जिल्हा कोषगार अधिकारी (सर्व)
१२. नियोजन विभाग, कार्यासन १४४३/१४४४ , मंत्रालय, मुंबई
१३. वित्त विभाग, मंत्रालय (व्यय-१५ /अर्थ-१७), मंत्रालय, मुंबई.
१४. कार्यासन क्रमांक वित्त-१, वित्त-२, वित्त-६, वित्त-७, वित्त-८, ग्राम विकास व जलसंधारण विभाग.
१५. निवड नस्ती, कार्यासन पंरा-०६, योजना-६, ग्राम विकास व जलसंधारण विभाग.

NO. 5-5/ 2014-BE (NBMMP)
GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
(BIOGAS TECHNOLOGY DEVELOPMENT GROUP)

**BLOCK NO. 14, CGO COMPLEX,
LODI ROAD, NEW DELHI-110003**

DATED: 30.06. 2014

To,

1. Chief Secretaries of All the States/UTs
2. State Nodal Departments - All States/ UTs.
3. State Nodal Agencies - States and Union Territories concerned.
4. Khadi and Village Industries Commission, Mumbai.
5. All Biogas Development and Training Centres.
6. Indian Renewable Energy Development Agency (IREDA), New Delhi.
7. National Bank for Agriculture and Rural Development (NABARD).
8. Financial Institutions/Head Offices of all Public Sector Banks (PSBs).

Subject:- Implementation of National Biogas and Manure Management Programme (NBMMP) during 12th Five Year Plan – Administrative Approval – reg.

Sir / Madam,

I am directed to convey the sanction of the Government of India, for implementation of Central Sector Scheme, the National Biogas and Manure Management Programme (NBMMP) during the 12th Five Year Plan in all the States and Union Territories. The programme forms part of 20-Point Programme. These new guidelines of the programme **shall be applicable w.e.f. 08.05.2014, whereas provisions of the Scheme approved during 2013-14 and conveyed vide this Ministry's Sanction No. 5-1/2013-BE dated 22nd May, 2013 will apply upto 07.05.2014.** The details of the NBMM Programme are as follows:-

1. OBJECTIVES

The objectives of the scheme are as follows:

- i. To provide clean gaseous fuel mainly for cooking purposes and organic manure to rural and semi urban households through family type biogas plants,
- ii. To mitigate drudgery of rural women, reduce pressure on forests and accentuate social benefits;
- iii. To improve sanitation in villages by linking sanitary toilets with biogas plants;
- iv. To provide bio digested slurry (liquid / semi-solid and dried) as an upgraded source of enrichment for manure to reduce and / or supplement use of chemical fertilizers; by linking biogas digested slurry with enrichment units such as wormy-composting plants and other organic enrichment facilities of slurry.
- v. To meet 'lifeline energy' needs for cooking as envisaged in "Integrated Energy Policy" report of the Planning Commission.
- vi. To help in combating and reduction in causes of climate change by preventing emissions of carbon dioxide and methane into the atmosphere.

2. PROGRAMME FOR 12TH PLAN PERIOD

2.1 Physical targets

The programme will be implemented with a physical target of 6.50 lakh biogas plants. Annual physical targets for installation of biogas plants would be fixed in accordance with the demand and performance of various States Nodal Departments and Implementing Agencies and other eligible organizations like KVIC, BDTCs etc. State / UT-wise and agency-wise physical targets for installation of biogas plants for the year 2014-15 are given in **Annexure-I**. Physical targets for organization of various types of training courses/ programmes are given at **Annexure- II**.

2.2 Rates of Central Financial Assistance (CFA)

Rates of Central Financial Assistance (CFA) for different approved component of National Biogas and Manure Management Programme (NBMMP) is as given below in the **Table-I:-**

Table-I

Central Financial Assistance under the National Biogas and Manure Management Programme, w.e.f. 08.05.2014 for the remaining period of 12th Five Year Plan:

Sl. No.	Particulars of Central Financial Assistance (CFA) & States / Regions and Categories	Family Type Biogas Plants under NBMMP (1 to 6 cubic metre capacity per day)	
A.	Central Subsidy Rates Applicable (In Rs.)	1 Cubic Metre	2- 6 Cubic Metre
1.	NER States, Sikkim (except plain areas of Assam) and including SC and ST Categories of NE Region States.	15,000	17,000
2.	Plain areas of Assam.	10,000	11,000
3.	Jammu & Kashmir, Himachal Pradesh, Uttrakhand, Niligiri of Tamil Nadu, Sadar Kurseong & Kalimpong Sub-Divisions of Darjeeling, Sunderbans (W.B.) and Andaman & Nicobar Islands.	7,000	11,000
4.	Scheduled castes / Scheduled Tribes of other than NE Region States including Sikkim & other Hilly States / regions as given in Sl.no.3 above.	7,000	11,000
5.	All Others	5,500	9,000
B.	Turn-Key Job Fee including warranty for five years and quality control (in Rs. per plant).	Rs.1500/- per plant for fixed dome Deenbandhu type and floating gasholder KVIC type brick masonry models. Turn Key Job Fee also provided for biogas plants with prefabricated material involving part construction work either for digester or dome. No fee is provided for	

		completely prefabricated / manufactured plants such as Bag type plants with rubberized material or plants made of HDPE / PVC / fabric materials, as and when approved.
C.	Additional CFA for toilet linked Biogas Plants (in Rs. per plant).	1,200/-
D.	Administrative Charges – for physical target range of biogas plants (in Rs.)	
1.	100-3,000	1,00,000[^]
2.	3,001-7,000	10,50,000^{^^}
3.	Above 7,001	24,50,000 *
E.	Training support per course (in Rs.)	
1.	Users Course	3,000
2.	Staff Course	10,000
3.	Construction-cum Maintenance / Refresher Course	45,000
4.	Turn-key Workers & Management Course for TKWs / RETs / SHGs/ Officials of SND / SNA / Banks / FIs & Companies / Entrepreneurs.	75,000
F.	Biogas Development & Training Centres.	As per the pattern of CFA and staff strength / positions conveyed vide Ministry's sanction letter No. 19-3/2011-BE (Pt.) dated 16 th November, 2011 and dated 2 nd March, 2012 and annual outlay allocated year-wise.
G.	Support for Communication & Publicity as per the target range of Biogas Plants (In Rs.).	
1.	Up to 1,000	2,00,000
2.	1,001- 10,000	4,00,000
3.	More than 10,000	6,00,000
H.	Support for Repair of Non- functional Plants with the restriction of utilization of upto 5% of the annual outlay of the programme, earmarked for the year for the concerned SND/SNA/UT.	50% of the applicable central subsidy rate subject to sharing of 50% of the cost of repair by the respective beneficiary. Repair cost estimates for a non-functional biogas plant should not exceed the total subsidy amount applicable as per the size of the biogas plant. The proposal prepared by SNDs/SNAs and KVIC by bunching of such non-functional plants, requires prior approval of the Ministry (MNRE).

Household size Family Type Biogas Plants under NBMMP
^ Extra Rs. 400 per plant in excess of 100 biogas plants.
^^ Extra Rs.350 per plant in excess of 3000 biogas plants.
* Extra Rs. 300 per plant in excess of 7,000 biogas plants subject to maximum of Rs. 60.00 lakh (Rupees Sixty Lakhs).

3. RELEASE OF FUNDS

The Central Financial Assistance (CFA) will be released for eligible components of the programme as given in **Table-1** to the concerned State Nodal Departments (SNDs) / State Nodal Agencies (SNAs) and Khadi & Village Industries Commission (KVIC), Mumbai and BDTCs, and other approved implementing agencies @ Rs.18,000/- per plant for NER States and Rs.11,000/- per plant for all other States, as worked out at an estimated unit cost for advance release of funds per plant for the allocated target on lump-sum basis . The CFA released as advance can be used for expenditure on payment of subsidy, turn-key job fee, administrative charges, publicity, training, etc. The CFA will be released in two installments on the following pattern:-

- i. First installment of advance, amounting to 50% of the total CFA estimated as per the rates given above, corresponding to the allocated annual targets and after adjusting the unspent balance of previous years, if any, will be released to all State Nodal Departments/ Agencies and Khadi & Village Industries Commission(KVIC), BDTCs and other approved Organizations, after issue of the sanction order for physical targets and upon receipt of Utilization Certificate (UC) for the relevant period in respect of the funds released during previous year.
- ii. The balance 50% of the CFA will be released as second instalment after the receipt of Utilization Certificate of the previous releases and receipt of Audited Statement of Account up to previous to previous year and based on the satisfactory physical progress (40% of the annual targets) achieved during the year of programme implementation.
- iii. State Nodal Departments / Agencies and Khadi & Village Industries Commission (KVIC), BDTCs, and other approved organizations, etc. shall forward their final year-wise claims for settlement of accounts to the Ministry in the prescribed format as given at **Annexure-III** along with consolidated Utilization Certificate (**in GFR-19A**) and A.G. audit certificate in case of State Nodal Departments and Audited Statement of Expenditure duly audited by Chartered Accountant in respect of State Nodal Agencies, after the close of the financial year, by **30th September**.
- iv. Subsidy paid / claimed will be recoverable if any irregularity is detected at any point of time.

4. IMPLEMENTATION

4.1 The programme will be implemented by State Nodal Departments / State Nodal Agencies and Khadi & Village Industries Commission (KVIC), Biogas Development and Training Centres (BDTC), other State Government Agencies / Organizations / Departments, etc. However, within the State, the programme implementing State Nodal Departments / State Nodal Agencies and KVIC, BDTC, etc. could also take help by identifying other skilled organizations that would function within their overall control. **However, in one State there may not be more than two agencies excluding KVIC.** The implementing agencies within a State would work with proper coordination and share all the information with each other. The

SNDs / SNAs and KVIC may further take help of Panchayati Raj Institutions / Gram Panchayats, Urban Local Bodies and Block / Taluka Development Officers / District Agriculture Offices, Kissan Vikas Kendras etc. in identification and selection of the potential beneficiaries. They may also involve them in post installation supervision of the plants. Financial participation of Scheduled Banks through their Regional Rural Development Banks / Grameen and Prathama Banks, IREDA, NABARD, and other financial institutions would be ensured by the SNDs / SNAs and KVIC as well as BDTCs.

4.2 Coordination Committees at the State and District Levels

With a view to ensure proper monitoring, coordination and review of programme implementation, all State Nodal Departments / Agencies concerned and KVIC etc. should include the subject in the meeting at State / District level. The details of the meetings of the Committee held during each quarter may be included in the **quarterly progress report** attaching the list of important decisions and sent to MNRE headquarters.

4.3 Demarcation of area of operation for KVIC and other Agencies

SNDs / SNAs should demarcate the district/block of operation for KVIC, etc. based on a mutual consultation in the beginning of the financial year earmarking specific area for implementation for each organization. It would also be necessary that one Agency / Organization is allowed to operate in an identified area. The plants set up by these agencies may also be monitored on a random basis by the SND / SNA concerned.

With a view to avoid duplication in reporting of physical achievement and payment of Central Financial Assistance (CFA) / Subsidy, it is mandatory on the part of KVIC and other programme implementing organizations to keep the concerned State Nodal Departments / State Nodal Agencies posted and informed in writing with the relevant information about the biogas plants set up by them from time to time. The implementing agencies of the State should share the lists of biogas plant beneficiaries with each other before finally making sure the entry in their respective master inventory registers and sending the final reports of a year to the MNRE.

All implementing Departments / Agencies & KVIC and others should share the lists of beneficiaries to concerned Nodal Departments / Agencies at appropriate level, i.e. to State / District Authorities concerned for checking with the lists of Nodal Departments / Agencies and get it cleared within a maximum period of 45 days before disbursing subsidy to the genuine beneficiaries. **States Nodal Departments / Agencies and KVIC are requested to issue suitable instructions to District Nodal Officers in the above mentioned issue on yearly basis while assigning the district-wise targets.**

4.4 Review of Biogas Development and Training Centres (BDTCs) by SNDs / SNAs

8 BDTCs have been continued for assisting SNDs / SNAs / KVIC. With a view to ensure proper coordination and periodic review of the performance of BDTCs by the State, SNDs / SNAs may set up “BDTC Programme Advisory & Review Committee” under the chairmanship of the concerned Secretary of the State Nodal Department / Chief Executive Officer of the State Nodal Agency. Co-coordinator / PI, BDTC, is to be also represented in this committee. The committee should meet in the beginning of the year for formulation of the annual action plans, review of performance, etc.

4.5 Payment of CFA after commissioning of plants

Central Financial Assistance (CFA) / subsidy is to be disbursed to the beneficiaries preferably through ECS or account payee Demand Draft / Cheque, after completion of construction and commissioning of biogas plants, commissioning of plant includes laying of biogas pipeline, installation of biogas burner, and generation of biogas from the plants and beginning of biogas use by the beneficiary. Wherever a biogas plant beneficiary has taken loan for setting up of biogas plant from Scheduled Banks or cooperative Banks or NABARD authorized FIs for Agriculture, the subsidy amount can be deposited / transferred directly into his Biogas Loan Account. This would help him in resourcing funds and lessen his interest burden.

4.6 Bank loan for Installation of Biogas plants

The Scheduled Banks, NABARD, Gramin and Regional Rural Banks of Scheduled Banks need to be involved in implementation of NBMMP by pursuing them to extend lending for biogas plants. SNDs / SNAs / KVIC may determine unit costs for different sizes of Biogas plants and areas for the purpose of facilitating lending by banks. A few important measures to be taken are given below:

- i. Efforts may be made for getting Block / District-wise targets reflected in the service area plans prepared by different banks. Bank-wise targets may also be worked out in the States / Districts / Block level meetings for monitoring purposes;
- ii. Efforts should be made to prepare applications for banks in the beginning of the financial year. The banks, in turn, may chalk out a programme for expeditious clearance of the loan applications so that construction activities can start in full swing before the commencement of the monsoon. Close liaison should be maintained with the banking institutions for timely release of bank loans. State Nodal Departments / State Nodal Agencies may provide bank-wise / branch-wise details of loan applications pending for more than 3 months for taking up the matter with Banking Division, Ministry of Finance or RBI.

5. SPECIAL AND INNOVATIVE FEATURES

‘Special and Innovative Features’ of implementation of the programme are given below:

- i. In order to upscale the programme, State Nodal Departments / State Nodal Agencies and KVIC and BDTCs may involve recognized and registered Biogas Turn-Key Workers (BTKW) / Rural or Renewable Energy Technicians (RETs), Self Help Groups (SHGs) and other experienced and recognized organizations having knowledge in the biogas technology development and implementation.
- ii. Installation of biogas plants with stress on the entrepreneurship model, and involvement of fast expanding Self Help Groups (SHGs) with the concept of microfinance for better inclusive and sustainable growth.
- iii. Introduction of competitive bidding for setting up of biogas plants on pilot scheme basis
- iv. Uploading of Village / Block / District-wise, beneficiary-wise, and year-wise complete list of installation of biogas plants along with the amount of subsidy paid, on the websites of the respective programme implementing organizations, has been

made mandatory. The prescribed format for this purpose is given at **Annexure -XI**. These lists will also be sent to respective village Panchayats.

6. MODELS OF BIOGAS PLANTS AND APPLIANCES

6.1 Approved Models of Family Type Biogas Plants

Appropriate models of family type biogas plants from the approved biogas plants should be selected on the basis of factors such as preference / choice of the beneficiaries and considering technical requirements, such as location, distance between kitchen and cattle shed availability of water and feed-stock like cattle dung, other biomass wastes and sanitary toilets. Approved models for such plants are available for 1 to 6 cubic metre capacities for fixed dome and floating dome type plants. In addition to Ferro-cement and Brick-masonry biogas plants, Prefabricated models of Deenbandhu biogas plants made of High Density Polyethelene (HDPE) and KVIC and Deenbandhu plants made of Fiber-glass Reinforced Plastic (FRP) and Reinforced Cement Concrete (RCC) material may be also included in the approved plants as and when approved. **The MNRE approved models will be eligible for CFA under NBMMP.**

The list of MNRE approved models of Biogas Plants (Family Size) capacity 1 M³ to 6 M³ per day is as given below:

S.No.	Biogas Plant Models*	Specifications/ Ministry's letter No. and date of approval.
1.	Fixed Dome Biogas Plants: (i) Deenbandhu fixed dome model with Brick masonry construction. (ii) Deenbandhu ferro-cement model with in-situ technique. (iii) Prefabricated RCC fixed dome model.	Ministry's letter No.13-10/96-BG dated 10-1-2002 Code of Practices (Second Revision), IS 9478:1989 of the BIS, New Delhi. Ministry's letter No.13-11/99-BG dated 5-3-1999
2.	Floating Dome Design Biogas Plants: (i) KVIC floating steel metal dome with brick masonry digester. (ii) KVIC floating type plant with Ferro-Cement digester and FRP gas holder. (iii) Pragati Model Biogas Plants.	Code of Practices (Second Revision), IS 9478:1989 of the BIS, New Delhi. Code of practice IS-12986:1990 of BIS, New Delhi. Code of Practices (Second Revision), IS 9478:1989 of the BIS, New Delhi.
3.	Prefabricated model Biogas Plants: (i) Prefabricated Reinforced Cement Concrete (RCC) digester with KVIC floating drum.	Ministry's letter No.13-1/2007-BE, dated 29.02.2008.
4.	Bag Type Biogas Plants (Flexi model)	Ministry's letter No.7-39/89-BG dated 14.7.95

***New innovative and cost effective models of plants may be added depending upon the technology development and their field worthiness.**

6.2 Appliances

ISI marked (BIS code IS - 8749: 1988) burners having a minimum thermal efficiency of 55% and only double burner biogas stoves / chullhas should be provided under the programme. Where the biogas stoves are to be purchased by the beneficiaries themselves, the names of ISI Marked stoves and their Manufacturers, prominent locations of availability, market places of biogas stoves and their spare parts, should be given in the publicity material.

7. TURN-KEY JOB FEE (TKJF)

7.1 Turn-Key Job Fee for in-situ construction of Biogas Plant

The Turn-key job fee is linked with five years' warranty for trouble-free functioning of biogas plants set up on **Turn-Key Work basis**. It is also payable to corporate bodies; registered societies identified by the State Governments Departments / Agencies and their approved and registered trained entrepreneurs. This is subject to the condition that the Turn-Key Worker would visit the plants at least twice in a year during the warranty period. Guidelines and procedure for engaging and payment of Turn-key Job Fee for setting up family type biogas plants to be followed by all the States Nodal Departments and State Nodal Agencies and KVIC & other approved agencies, are given at **Annexure- IV**, for ready reference. Turn-Key Job Fee should be paid to the Turn-Key Job workers / Rural Energy Technicians / Self Help Groups / Entrepreneurs etc. preferably through ECS or account payee Demand Draft / Cheque only, it should be paid in four installments. The first installment of Rs. 700/- to be released after proper construction and successful commissioning of the plant and on getting beneficiary's consent and issue of completion certificate. Thereafter, four annual installments at the rate of Rs. 200/- each may be released during next four years, after completing the monitoring and physical inspection for providing satisfactory warranty services upto the end of 5th year. The written consent of beneficiaries indicating the satisfactory working of the plant at every stage will form the part of documentation for release of the Turn-Key Worker Charges. The consent form may be devised and incorporated in the Beneficiary's Service Card along with User's Complaint Card.

7.2 Turn-Key Job Fee for Prefabricated Biogas Plants

Turn-key job fee of Rs. 1500/- only is also payable for biogas plants involving part construction work either for digester or dome. Only MNRE approved models of prefabricated family type biogas plants are eligible for this assistance. No fee for completely prefabricated / manufactured biogas plants will be provided, such as bag type digester made of rubberized material, nylon fabric material based complete Flexi plants and models involving HDPE, FRP and RCC material based prefabricated / manufactured complete portable family type Biogas plants, as these units do not require any supervision for construction and installation at beneficiaries' homes and manufacturers themselves are supposed to provide a guarantee for five years.

8. ADDITIONAL CFA FOR CATTLE DUNG BASED BIOGAS PLANTS LINKED WITH SANITARY TOILETS

The additional CFA of Rs.1,200/- per plant as subsidy can be used only for meeting the extra cost involved in raising the toilet level, if required, and its connection with a biogas plant. However, SNDs / SNAs / KVIC and BDTCs etc. should ensure that such plants are set

up only after ensuring the requirement and preparedness of the beneficiary to use biogas from the plant attached with the toilet and the biogas plants should be completed in all aspects, including its commissioning for biogas generation and use by the beneficiaries. The targets for the sanitary toilet linked plants are included in the overall targets as mentioned at **Annexure- I** applicable for the year 2014-15. SNDs and SNAs, KVIC, etc. are requested to make effective coordination with the Departments / Agencies concerned with the rural sanitation programme at the State and District level in identification of beneficiaries for linking of biogas plants with sanitary toilets, wherever feasible. The village-wise list of selected potential beneficiaries of biogas plants may be provided in advance to the State Departments/ Agencies working for the rural sanitation programme.

9. TRAINING COURSES

For State Nodal Departments and State Agency-wise and also for KVIC, the allocation of annual target for 2014-15 for Construction-cum-Maintenance / Refresher Training Courses, Users' Courses, Turn-Key Workers Course and Staff Training Course are given in **Annexure- II**. The Fact Sheets for different types of training courses are given in **Annexure- V to VIII**. The BDTCs may suggest upgradation in the training curriculum as and when required.

10. ADMINISTRATIVE CHARGES

The rate of Administrative Charges (AC) for SNDs / SNAs and KVIC, BDTCs etc. as main Implementing Agencies is linked with their physical target range and actual achievements. No Administrative Charges will be given for achievement of less than 100 biogas plants.

The manpower engaged by SNDs / SNAs, KVIC and BDTCs and by any other Implementing Agencies will not be deemed as employees of Ministry of New and Renewable Energy, Government of India. The Administrative Charges given to SNDs / SNAs and KVIC and BDTC etc. may be utilized for the activities related to development of the Biogas Programme.

11. BIOGAS DEVELOPMENT AND TRAINING CENTRES (BDTCS)

Biogas Development and Training Centres (BDTCs) are supported to help States for providing various Biogas training courses and monitoring & evaluation and preparation of technical booklets / guidelines / technical support for quality implementation of biogas programme and Biogas technology development. Each BDTC should engage manpower only in project mode on contract basis for all the approved posts / positions instead of appointment on regular basis or deputation basis and the manpower engaged so shall not be treated as employees of Ministry of New and Renewable Energy, Government of India.

BDTCs should submit their claims indicating training-wise details (viz: venue, periodicity, number of participants, expenditure incurred etc.) as also the number and names of manpower engaged, emoluments etc. The BDTC-wise annual targets of various trainings and activities shall be earmarked yearly by the MNRE. Their performance will be reflected in their Annual Reports. Eight **Biogas Development and Training Centres (BDTCs)** have been continued for the remaining period of the 12th Five Year Plan (2014-15 to 2016-17). Their locations and States / UTs for work jurisdiction are given in **Annexure-XII**.

12. INFORMATION AND PUBLICITY

The State Nodal Departments / Agencies & KVIC and BDTCs as well as other implementing Agencies should prepare standard publicity materials such as Do's and Don'ts, leaflets, booklets, posters, etc. for wider dissemination in the State by availing the financial assistance under NBMMP. Broad items of publicity campaigns to be taken up by the States are: (a) advertisements in local dailies; (b) preparation and display of posters in Panchayat Offices and schools, Kisan Sewa Kendras; (c) Booklets and Folders on Biogas for biogas users and for distribution during gatherings at exhibitions, Kisan Melas / fairs, etc.; (d) Local folk dances / dramas / songs; (e) exhibitions and demonstrations including exhibits at Regional / District Rural Development Training Institutes; (f) documentary Films / Video Films; (g) Wall paintings / hoardings / wall calendars; (h) participation in exhibition / fair, etc., including setting up of Biogas plants for demonstration; (i) Radio jingles / TV spots in local language; (j) Complaint Cards to Biogas Plant Users; (k) evaluation of publicity campaign, (l) **publicity of one prominent Biogas Customers Centre in each Block, (m) information / publicity about ISI marked biogas stove's availability should be given in the publicity material etc. Each beneficiary of a Biogas Plant will be provided a Biogas User's Card for providing and adhering to the 5 year's free warranty services to beneficiaries of Biogas plant which will also contain 10 complaint cards for the use of beneficiary to be lodged by him as and when the plant goes non-functional during the warranty period. The complaints lodged by the beneficiaries are to be attended within the specified time period say within a week.**

13. SUPPORT FOR REPAIR OF OLD NON-FUNCTIONAL PLANTS

Financial support is provided for repair and revival of old non-functional biogas plants which are at least five years old and which are in dis-use at present for want of structural repairs, excluding replacement of gas pipelines, gas cock, burner, etc. The 50 percent expenditure of the repair of the old plant would be borne by the concerned beneficiary. The State Nodal Departments and Programme Implementing Agencies are required to carry out a detailed block/district-wise field assessment on the number of non-functional plants to be repaired and details of repair costs, along with expected contribution from the beneficiaries, support from the State Government, if any, and financial support needed from MNRE. SNDs / SNAs may undertake repair of non-functional biogas plants intensively in chronic districts and complete the repair work of the plant, subject to above conditions, utilizing the advance funds released by MNRE and submit the claims along with other items for adjustment / reimbursement. **The expenditure towards repair of biogas plants which become non-functional after five years of warranty period is restricted to 5 percent of the annual outlay in accordance with the target for the year allocated to the concerned SNDs / SNAs and KVIC. The proposal of repair needs to be submitted to the Ministry for prior approval. The repaired plants will need verification for their working condition by BDTCs / independent organizations and a copy of the report should be submitted to the Ministry along with the claims for the year.**

14. SAFEGUARDS AND MAINTENANCE OF RECORDS FOR AUDIT PURPOSES

14.1 Database of Village-wise Beneficiaries

The State Nodal Departments / State Nodal Agencies and KVIC, as well as other approved programme implementing Agencies / Organizations under them **are required to**

maintain computerized database in a proper format (Annexure-XI). The detailed particulars of the beneficiaries at the Block or District and State Headquarters and Headquarters / State Offices of KVIC should be maintained in the form of a permanent registers which should be readily available for inspection of the Officers of MNRE / Independent Evaluators and also for post audit verification purpose. **Each plant should be serially numbered in the register.** The details should include particulars of the beneficiaries viz., name, father / husband's name, address, category of farmer, number of cattle-heads owned, size and model of the plant, amount of CFA / subsidy disbursed with date(s) of disbursement, details of voucher, whether installed on Turn-Key basis, name & address of the Turn-Key Worker / RET or agency, date of completion, date of commissioning, name & address of the trained biogas masons who constructed the plant, etc. **The contact / mobile nos. of both the beneficiary and the concerned TKW / RET or Entrepreneur should be also recorded.**

14.2 Beneficiary-wise List on Websites

It is mandatory to put year-wise and District-wise beneficiaries' list of biogas plants set up, on the websites of the respective organizations. Settlement and release of further funds to SNDs / SNAs & KVIC and other implementing agencies will be released on fulfillment of this condition. This should be done in the prescribed format as given at **Annexure-XI**, after final and firm reporting of the annual Physical progress to the Ministry (MNRE), preferably by 30th June, following the close of the year.

14.3 Maintenance of Records of Completed Biogas Plants

Completion certificates in respect of commissioned biogas plants will be signed by either Block Development Officer or equivalent officer of State Nodal Department / State Nodal Agency and Development Officer of the KVIC, State Agro-Industries Corporation, Non-Conventional Energy Development Agencies, etc. as authorized to do so and will be maintained for audit purposes. States / Agencies must also keep the details of manpower employed for implementing the programme during the year, in support of their administrative charges claimed. Similarly the details of Turn-key Job Fee paid should also be maintained separately for post verification in support of TKJF claimed. All the State Nodal Departments / State Nodal Agencies and KVIC etc. implementing the programme would also maintain the records with respect to functionality status of biogas plants installed by them and monitor their registered Biogas Turn-Key Workers. Such data should be updated annually.

State Governments / Nodal Agencies & KVIC, BDTCs etc. should ensure that these records are computerized and updated on regular basis.

14.4 Identification Mark on the Biogas Plants

Each plant should be serialized with pre-determined identification mark and code for District / Block along with name of plant setting SNDs / SNAs and KVIC and other Programme Implementing Agencies and the number embossed / carved out on the plants or the serial number on a metal strip / piece is welded on the gas outlet pipe in the dome portion or gas holder depending on the model to avoid duplication of reporting and claim. These may also be carved out on the body of digester while plastering on prefabricated models it is to be mentioned on various components of the plants. The unique identification mark and code of

each biogas plant should be recorded in the permanent registers as mentioned under para 14.1 above.

14.5 Photograph of the Beneficiary in CFA Claims and affidavit

A photograph of the beneficiary with the completed biogas plant would also be kept along with the CFA disbursement records. **An affidavit should be taken from every new beneficiary declaring that no biogas plant was set up earlier in his / his wife's name or any other member of his family (including minor children), by any agency and nor he / she availed any subsidy / Government financial help in the name of the biogas plant. The beneficiary would also state that he will be operating the plant by feeding daily required feed material into the biogas plant.**

15. SUBMISSION OF REPORTS

15.1 Monthly Progress Reports

A monthly progress report indicating the number of biogas plants set up during the month should be sent by post / fax no. 011-24368904 or e-mail: gl.meena@nic.in, by the **10th of the following month** in the prescribed proforma (**Annexure- IX**).

15.2 Quarterly Progress Reports

The quarterly progress report should be sent to the MNRE by **15th of the month**, following the end of each quarter in the prescribed format. (**Annexure-X**)

15.3 Material for Annual Report and Website of the Ministry of New and Renewable Energy

All State Nodal Departments / Nodal Agencies and KVIC and other implementing agencies should send a brief write-up on implementation of the programme by the end of the month of December of the implementing year for inclusion in the Annual Report of the Ministry. The write-up should highlight the implementation strategy, development of business model and on working and management of work being done through registered BTKWs / RETs / SHGs, involvement of panchayats and non-governmental organizations, linkages with other rural development programmes, methodologies adopted for publicity and awareness raising, details of physical verification and highlights of feed-back survey, etc. Few photographs of the biogas plants set up during the year may also be sent along with the write-up.

Success stories on installation of biogas plants in most of the households of a village / area and other innovative features may be sent for hosting on MNRE website. **Special efforts are required to be made and success gained, in facilitating for providing Bank loans to the interested beneficiaries of biogas plants.**

16. MONITORING OF PROGRAMME

16.1 Physical Verification and Sample Village-wise Monitoring Reports

In order to ensure that incomplete / un-commissioned plants are not included for monthly reporting and for claiming CFA, it is mandatory that all the plants set up during each quarter are physically verified and a certificate to that effect recorded by the officers concerned for post-audit purposes.

Further in order to have regular cross checking, State Nodal Departments / Nodal Agencies and KVIC and BDTCs are requested to select at least two villages each month for determining the status of biogas plants earlier set up in these villages and send **reports thereto in quarterly progress reports.**

All SNDs / SNAs & KVIC and other Implementing Organizations are requested to include information on sample village monitoring report in the Quarterly Progress Report and the action taken on revival of non-functional plant to be sent to MNRE (**Annexure- X**).

Heads of the SNDs / SNAs & KVIC are to make arrangements for inclusion of inspection of family type biogas plants set up in various districts / blocks in the inspection reports of the District Collectors / District Magistrates / Sub-Divisional Magistrates / Block Development Officers / Taluka Development Officers concerned.

16.2 Field Inspections by Biogas Development and Training Centres (BDTCs)

Biogas Development and Training Centres (BDTCs) supported under National Biogas and Manure Management Programme (NBMMP) are to conduct inspection of 1000 biogas plants in a year in certain Blocks of districts, selected on random basis in their States of jurisdiction (**Annexure-XII**). SNDs / SNAs & KVIC etc. are requested to extend help and co-operation to BDTCs in carrying out the inspections on a regular basis.

Inspections should be carried out preferably by a team consisting of three members, one each from BDTC, State Government and KVIC or other implementing agency as the case may be. The Biogas Development and Training Centres (BDTCs) may select districts in consultation with implementing agency at the commencement of programme.

SNDs / SNAs & KVIC etc. should take immediate remedial action on the inspection reports of the Biogas Development and Training Centres (BDTCs) and confirm the action taken to the BDTCs concerned under intimation to MNRE on a quarterly basis. All the BDTCs should include few photographs of biogas plants inspected in their inspection reports, which should also be included in their annual reports.

16.3 Evaluation Study by Independent Organizations

SNDs / SNAs & KVIC at their level should also involve reputed independent organizations in the monitoring and evaluation of the programme. A copy of the report of such monitoring and evaluation studies conducted should also be sent to MNRE. Such evaluation studies can be supported from the provision of the administrative charges.

16.4 In addition to monitoring by SNDs / SNAs & KVIC, and other implementing Agencies, Ministry of New and Renewable Energy may also entrust Independent Evaluation studies of NBMMP. Ministry of New and Renewable Energy including its Regional Offices may also take up monitoring and evaluation studies of the programme periodically on sampling basis.

17. SETTLEMENT OF CLAIMS AND ACCOUNTS

Timely year-wise settlement of accounts is a must for smooth flow of further funds for the programme. The SNDs / SNAs & KVIC and other implementing Agencies should submit Claims (in the format given at Annexure- III), Utilization Certificate (in GFR-19 A) and A. G. Audit Certificate of expenditure in case of State Nodal Departments / KVIC and detailed Statement of Expenditure duly audited by the Chartered Accountants in case of the State Nodal Agencies / BDTCs or other organization as early as possible after the close of the financial year, latest by 30th September of the year, following the implementation year.

18. This sanction issues in exercise of the powers conferred on this Ministry and in consultation with the Integrated Finance Division of this Ministry vide their Dy. No. IFD/334/2014-15, dated 26.05.2014.

These guidelines shall be deemed applicable with effective from 08.05.2014. In case of any ambiguity, in interpretation of any of the provisions of these guidelines, the decision of the Ministry shall be final.

19. Receipt of this Administrative Approval / Guidelines may please be acknowledged.

Yours faithfully,

**G.L. Meena
Director (Biogas)**

Copy for information and necessary action to:-

1. The Accountant General (Audit) - All States / UTs.
2. The Director of Accounts - (All States / UTs).
3. The Principal Director of Audit (Scientific Deptt.), DGACR Building, I.P. Estate, New Delhi.
4. Secretary, Finance / Planning Department (All States / UTs).
5. Reserve Bank of India (RBI), Central Office, Mumbai.
6. National Bank for Agriculture and Rural Development (NABARD), Head Office, Mumbai.
7. Secretary, Ministry of Statistics and Programme Implementation, New Delhi.
8. PSO to Secretary, MNRE, New Delhi.
9. Sr PS to JS and Financial Adviser, MNRE, New Delhi.
10. Sr PS to JS(AS) / JS(TK), MNRE, New Delhi.
11. PS to Adviser (Dr. N.P. Singh), MNRE, New Delhi.
12. PS to Advisor (BE), Sh. A.K. Dhussa, MNRE.
13. Director (Biogas R&D and BDTCs), Dr. B.S. Negi, MNRE
14. Director (IFD), MNRE.
15. PAO, MNRE.
16. PA to Director (BG)
17. Individual files of States / UTs / Agencies for the year 2014-15.
18. Guard File

G.L. Meena
Director (Biogas)

ANNEXURE –I**Allocation of physical targets for installation of family type biogas plants under National Biogas and Manure Management Programme (NBMMP) during the year 2014-15**

Sl. No.	State / UT / Agency	Physical Targets (General Category)	Physical Targets (SC Category)	Total targets for the year 2014-15
1	Andhra Pradesh, (NEDCAP),Hyderabad	15000	3000	18000
2	Arunachal Pradesh ,(APEDA), Itanagar	100	-	100
3.	Assam (FDA –cum CCF , Social Forestry Assam)	5500	500	6000
4.	Bihar	-	-	0
5	Chhattisgarh ,(CREDA), Raipur	3900	100	4000
6	Goa (Directorate of Agriculture)	100	-	100
7	Gujarat (GAIC Ltd.) Ahmadabad	3500	500	4000
8	Haryana, (Directorate of Agriculture) Panchkula, HR **	1600	100	1700
9	Himachal Pradesh (Dir. of Agri. Shimla) **	300	50	350
10	Jammu & Kashmir, JKEDA, Srinagar	100	0	100
11	Jharkhand (JHREDA Ranchi)	100	-	100
12	Karnataka, RD&PR Deptt. Bangalore **	10000	500	10500
13	Kerala, Directorate of Agril., Thiruvanthapuram **	2000	100	2100
14	ANERT, Thiruvanthapuram, Kerala	2400	100	2500
15	Madhya Pradesh, MPSAIDC, Ltd. Bhopal	9900	500	10400
16	Maharashtra (RD&WC Dept.) Mumbai **	12800	900	13700
17	Manipur (MANIREDA)	-	-	0
18	Meghalaya, Shillong (MNREDA)	500	-	500
19	Mizoram (Directorate of A H & V) **	500	-	500
20	Nagaland, Directorate of NRE, Kohima **	500	-	500
21	Odisha (OREDA), Bhubaneswar	6600	500	7100
22	Puducherry REAP	-	-	0
23	Punjab (PEDA , Chandigarh)	9000	250	9250
24.	Rajasthan (BDTC, CTAE Udaipur)	1000	100	1100
25	Sikkim (SREDA), Gangtok	200	-	200
26	Tamil Nadu (Directorate of RD & PR) Chennai **	700	100	800
27	Tripura (TREDA) **	300	100	400
28	Uttar Pradesh, RDD Lucknow, UP **	1500	300	1800
29	UPNEDA, UP	400	100	500
30	Uttrakhand - UREDA, Dehradun	350	50	400
31	Uttarkhand- RDD, Pauri **	450	50	500
32	West Bengal (WBREDA) Kolkata **	NR	-	-
33.	KVIC Mumbai *	12000	800	12800
	Total	1,01,300	8,700	1,10,000

* Including 1500 plants for NER States

** Audited Statement of accounts upto previous to previous year (2012-13) to be submitted to the Ministry for final settlement of accounts at an early date.

ANNEXURE-II**Allocation of physical targets for training courses for 2014-15 under National Biogas and Manure Management Programme (NBMMP) for SNDs / SNAs / KVIC–**

S.No	State/UT/Agencies	CMC/Refresher training courses (10 days)	Users Courses (one day)	Turn-key workers courses (15 days)	Staff courses (4 days)
1.	Andhra Pradesh	6	200	2	1
2.	Arunachal Pradesh	-	-	-	-
3.	Assam	2	15	-	-
4.	Chhattisgarh	5	80	-	-
5.	Gujarat	2	50	-	-
6.	Goa	1	10	-	-
7.	Haryana	2	40	-	-
8.	Himachal Pradesh	1	20	-	-
9.	Jammu & Kashmir	1	05	-	1
10.	Karnataka	6	150	-	-
11.	Kerala (Directorate of Ag.)	2	50	-	-
12.	Kerala (ANERT)	2	50	-	-
13.	Madhya Pradesh, MPSAIDC	8	75	-	1
14.	Maharashtra	8	150	-	1
15.	Meghalaya	2	20	1	-
16.	Mizoram	2	20	-	-
17.	Nagaland	2	20	-	-
18.	Odisha (OREDA)	4	80	-	-
19.	Punjab, PEDDA	5	80	1	1
20.	Sikkim, SREDA	2	20	-	-
21.	Tamil Nadu (RD&PR)	2	50	1	-
22.	Tripura (TREDA)	2	20	-	-
23.	Uttar Pradesh (UPNEDA)	2	10	-	-
24.	Uttarakhand (R.D.D)	2	20	-	-
25.	UREDA, Uttarakhand	2	20	1	-
26.	West Bengal	-	-	-	-
27.	KVIC, Mumbai	10	300	-	-

In addition to above, all BDTCs would be also allocated separate annual targets for imparting trainings for the above mentioned courses including for the year 2014-15.

ANNEXURE-III**PROFORMA FOR SUBMISSION OF CLAIMS WITH RESPECT TO MNRE FUNDS ONLY, FOR SETTLEMENT OF ACCOUNTS UNDER NATIONAL BIGOAS AND MANURE MANAGEMENT PROGRAMME**

1. Year of the implementation :
2. Name and address of the State Nodal Department / Agency / KVIC:
3. Annual Physical target:
4. Physical Achievement:
5. Details of the Central Finance Assistance (CFA) claims:

Sl. No.	Particulars	Size of the Plant (in cub. Metre)	No. of Plants actually installed	Rate of CFA per plant (Rs.)	Total amount of CFA disbursed (Rs.)	Remarks, if any
A.	Central Subsidy					
1.	N.E.R. States, including Sikkim (except Plain areas of Assam) and SC & ST Categories of NE Region States					
2.	Plain areas of Assam					
3.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Nilgiris of Tamil Nadu, Sadar Kursoong and Kalimpong Sub-Divisions of Darjeeling, Sunderbans (WB) and Andaman & Nicobar Islands (Including SC & ST Categories)					
4.	Scheduled Castes and Scheduled Tribes of other than NE Region States and Hilly States / Regions					
5.	All others					
6.	Additional CFA for sanitary toilet linked Biogas Plants disbursed (in Rs.)					
7.	Total subsidy in Rs.					
8.	Total Subsidy disbursed (in Rs.)					

6. Details of claims of Turn-key Job Fee paid to TKWs / RETs etc.:

Sl. No.	Particulars	No. of biogas plants set up on Turn-key basis	Rate per biogas plant (Rs.)	Amount disbursed (In Rupees)
(a)	Approved models of Deenbandhu Fixed dome / KVIC Floating dome type design Biogas plants involving brick masonry construction work for digester or gas holder or for both			
(b)	Approved Prefabricated biogas plants involving part brick masonry / RCC construction work either for digester or for dome. No TKJF for completely prefabricated / manufactured biogas plants such as Bag type plants with rubberized material or plants made of PVC / HDPE / fabric material flexi as and when approved			
	Total Turn –Key Job Charges (Rs.)			

7. Training Courses :

Sl. No.	Type of Training Course	Target	Achievement	Venue of Training course	Periodicity (Dates from -- to----	Nos. of Trainees trained	Nos. of plants constructed during training	Actual Expenditure incurred (Rs.)
(a)	Construction-cum-Maintenance / Refresher Course (CMC)							
(b)	Turn –Key Workers and Management Training course for TKW / RET / SHG etc.							
(c)	Users Training Course (UTC)							
(d)	Staff Training Course (STC)							
	TOTAL							

8. Details of Administrative Charges (As per physical target and actual achievements):

- (i) Physical achievements
(With reference to CFA claims) : ----- Nos. of Biogas Plants

Annexure-III (Contd.)

- (ii) Total amount of Claims : Rs. -----
(As per the range given in the Administrative Approval).

9. Details of Publicity Expenditure:

- (i) Physical Achievements
(With reference to CFA Claims) : ----- Nos. of Biogas Plants
- (ii) Amount of Claims : Rs.-----

(Give details of expenditure on specific items(s)_listed for publicity at **Para-12** of this Administrative Approval)

10. Details of repair of old Non-functional Biogas Plants:

- (i) Proposal Amount for repair submitted to MNRE for Prior approval : Rs. -----
- (ii) Amount approved for undertaking repair work : Rs. -----
- (iii) Expenditure incurred in actual : Rs. -----

Sl.No	Category of the beneficiary	Actual Nos. of plants repaired	Rate (Rs.)	Beneficiary's share for repair (in Rs.)	Total Expenditure (in Rs.)
1.	NER States, Sikkim (except plain areas of Assam)				
2.	Plain areas of Assam				
3.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Niligiri of Tamil Nadu, Sadar Kursoong & Kalimpong Sub-Divisions of Darjeeling, Sunderbans (W.B.) and Andaman & Nicobar Islands				
4.	Scheduled Caste/ Scheduled Tribe				
5.	All Others				
	Total				

Certified that:

- The plants for which CFA / subsidies to beneficiaries, Administrative Charges, Turn – Key Job Fee, Publicity and Communication etc. have been claimed , have actually been commissioned during the period from -----to -----and requisite completion certificate in respect of these completed plants are available at the State Nodal Department/ State Agency Headquarter.
- These plants have been physically verified, sample test checks have been conducted and claims sent herewith relate only to the commissioned biogas plants as reported for actual physical progress for the year _____, the details of which have been uploaded on the Departments / Agency's website.

Annexure-III (Contd.)

3. The CFA in respect of ----- plants has been disbursed to the beneficiaries concerned according to the rates prescribed for the respective category of beneficiary and size of the plant, after the plant was commissioned and physically verified by an Officer authorized for this purpose. The CFA in respect of the remaining ----- plants will be disbursed to the beneficiaries concerned according to the rates prescribed for the respective category of beneficiary and size of the plant after receiving the required funds. This is also to state that no State share has been included in these claims.
4. A photograph of the beneficiary taken with the completed and commissioned biogas plant has been kept along with the CFA disbursement records.
5. Beneficiary-wise details regarding the category of beneficiary, model , size and location of plant installed (with date of completion, amount of CFA paid to beneficiary and date of payment) have been maintained and also hosted on the Website of the State Nodal Department/ State Nodal Agency and the KVIC and the above mentioned details of the beneficiaries have been shared with the other implementing agencies including KVIC who are working in the State and ensured that no case of any kind of duplicacy in reporting involved.
6. Out of----- biogas plants installed during the year-----, ----- --biogas plants have actually been completed on Turn-Key Job Fee basis and Turn – Key Job Fee for these plants have not been claimed earlier from the Central or State Government/ KVIC/ Other Agencies.
7. The concerned beneficiaries are satisfied with the construction, fabrication and functioning of the biogas plants and certificate to this effect have been obtained from them for record.
8. A written undertaking has been given to the beneficiary concerned for free cost service, inspection, guidance and to repair defects, if occurred during the period of five years from the date of commissioning of the plants. Beneficiary's service card also containing complaint cards has been also handed over to him for post installation services.
9. It is certified that the old non-functional plants for which claims of repair charges have been preferred are functioning properly and 50% of the cost of repair has been taken from the beneficiaries.
10. It certified that detailed accounts/vouchers have been maintained for each training course at an appropriate level for post facto audit purposes.
11. It is certified that action for rectification of the plants found to be non-functional in the inspections carried out by the BDTCs/Independent Agencies has been carried out and that such plants have been made functional.
12. It is also certified that all the terms and conditions stipulated in the relevant and applicable Administrative Approval of the financial year.....have been followed.

Signature

Name & Designation of the Head of
the State Department / State Agency
with Official Seal

Place:

Date:

Guidelines and procedure for payment of Turn-Key Job Fee for setting up of Family Type Biogas Plants under National Biogas and Manure Management Programme (NBMMP).

Extract from letter No. 17-4/1982-Biogas dated 18th December, 1982 to all State Governments and implementing agencies, etc.

(A) Eligibility

- (i) Corporate bodies/ Registered Societies identified by the State Governments and intimated in advance to Government of India.
- (ii) Approved trained private entrepreneurs registered with the State Nodal Department/ Agencies/ KVIC and other programme implementing agencies.

The private entrepreneurs selected should fulfill inter-alia the following requirements before approval for undertaking Turn –key Jobs:

- (a) Received training in the construction and maintenance of biogas plants imparted by the Biogas Development and Training Centres (BDTCs) and experience of plant construction supervision and commissioning as well as O & M.
- (b) Possess requisite facilities like workshop for fabrication of steel gas holders and storage space for prefabricated biogas plants, gas holders, cement, bricks, biogas appliances, etc.
- (c) Possess requisite financial resources and credibility

A list of such trained and registered persons should be maintained by the programme implementing SNDs/ SNAs and KVIC and others involved in the programme, at the State/ Agency Headquarters and KVIC Headquarters as well as in the field Offices at the Districts and Block levels. There should not be any common Turn Key Worker/ RET registered for the programme implementation by the implementing SNDs/ SNAs and KVIC and others involved in the programme.

To start with, State Governments and implementing agencies may consider registration of such persons who have already been trained in the construction and maintenance of biogas plants in the training programme organized under **National Biogas and Manure Management Programme (NBMMP) after proper evaluation of their technical capabilities and resources to undertake Turn Key Jobs work for Biogas plants.**

(B) Mode of release of Funds by MNRE, Govt. of India

Payment of Turn-Key Fee at the rate mentioned in Paragraph 7.1 and 7.2 for biogas plants, set up and service provided and support on turn-key basis by the corporate bodies/ registered Societies/ approved trained Private entrepreneurs will be made by the Government of India, after satisfactory completion /commissioning of the biogas plants and on receipt of claims in the proforma at **Annexure-III**. The funds will be released by the Government of India on receipt of the final claims all duly audited and certified by the Head of the programme implementing State Nodal Department / State Nodal Agency and KVIC Mumbai, etc.

(C) Suggested Procedure for payment to approved and registered Private Entrepreneurs

- (a) The State Governments Nodal Departments / State Implementing Agencies should disburse the payment of the Turn-Key Job Fee to their approved trained and registered Biogas Turn-Key Workers / Rural Energy Technicians / Self Help Groups / Entrepreneurs etc. in yearly installments. Turn Key Job Fee should be paid to these workers preferably through ECS or account payee Demand Draft/ Cheque only. **It should be paid in five installments.** The first installment to be of Rs. 700/- to be released after proper construction and successful commissioning of biogas plant. Thereafter, second, third, fourth and fifth installment @ Rs. 200/- each per year may be paid after completing the inspection and providing satisfactory warranty services, based on the Biogas Plant yearly functional reports signed by the beneficiary concerned and local Official and Gram Panchayat Member.
- (b) It will be the sole responsibility of the State Government, Department / implementing agency and KVIC etc. to ensure all the Terms and Conditions of the Turn-key Job Fee provisions.
- (c) State Governments may also keep some caution money/ surety bond/ Bank Guaranty from their registered Turn Key Job Workers / RETs / SHGs to cover the five years warranty period of their providing post installation operation and maintenance services for the biogas plant installed by each of the Turn Key Worker/ RET. In order to have better checks and balances for this scheme, they may also enter into an Agreement with each of the Turn Key Job Worker / Rural Energy Technician / Self Help Group / Entrepreneur etc. engaged by them for setting up of biogas plants and which should be unambiguous to avoid unnecessary litigations subsequently.

(D) Guarantee

The agencies / private entrepreneurs involved for undertaking Turn-key Jobs and receiving Turn –key Job Fee shall give a Guarantee of the satisfactory working and also free of cost services for inspection and guidance to repair the defects, if any, occurred during a period of one year from the date of commissioning of the biogas plant. In case of defaulters , the State Governments / implementing Agencies and KVIC may decide to blacklist the concerned agencies, entrepreneurs / Turn Key Worker / RET and may forfeit the caution money / en-cash the Bank Guaranty / Surety Bond etc. for setting the biogas plants repaired / re-commissioned.

(E) Area of Operation

In case of Corporate bodies / Registered Societies / Self Help Groups / Entrepreneurs, the area of operation should be clearly demarcated by the State Government and the implementing Agencies so that there is no duplication in efforts and reporting. Similarly, for approved trained entrepreneurs allotment of specific areas should be considered by the State Nodal Departments/ State Agencies and KVIC. Wide publicity may be given for these provisions and list of approved trained Turn Key Workers / Rural Energy Technician / Entrepreneurs / SHGs registered by the State Governments and State implementing Agencies and KVIC Mumbai, under the Turn Key Job Provisions of the NBMMP Scheme, **should also be put on their respective web sites and Notice Boards of field Offices at Districts and Block levels and Gram Panchayat Offices for wider information of the biogas beneficiaries.**

Model Syllabus for USERS' Training Courses on Biogas

1. Objective:

- (i) To raise awareness about the benefits of biogas plants among users specially women beneficiaries, and
- (ii) To impart awareness on operation and maintenance and day to day upkeep of biogas plants.

2. Venue/ Nos. of Participants:

Villages having about 1-5 biogas plants in operation will be selected as venue and 40-60 household of the selected village will be contacted and invited for attending User's Course. Efforts should be made for involving in all such courses.

3. Medium of Instruction: Local Language

4. Duration of Users' Training: One Day

5. Topics to be covered:

a) Women Education Programme for awareness raising

- Benefits of Biogas Plant.
- Operation and Maintenance of Biogas Plant.
- Financial and other assistance.
- Preparation of loan applications.
- Field visits and practical demonstrations on how to connect plant to biogas burner after generation of biogas in the plant.

b) Users' Course on Operation of biogas plants

- How to collect dung free from sand, stone, gravel etc.?
- How to prepare dung slurry and how and when the slurry should be fed into a biogas plant?
- How to light burner and biogas lamp?
- The method of cooking of chapattis on biogas (direct blowing of chapattis should be demonstrated).
- Type and size of utensils to be used.
- Method for increasing gas production during the winter months.
- How to use best use of biogas plant digested slurry and How to make it more in quantity and value?
- How to store the biogas plant digested slurry if wet slurry is being not used directly for manuring of crops?
- How to keep a biogas plant and plat site clean and tidy?
- How to use a biogas plant if it is connected with sanitary toilet also?
- When a biogas burner has been left open and the gas has leaked out in the kitchen, what precautions should be taken?

c) Maintenance of Biogas Plants

- How to clean/ wash burner and lamp periodically?
- How to clean biogas holder?
- How to remove water condensation from the Gas Pipe Line?
- Checking of gate valve, Joints in pipeline, pressure tube, gas cook, etc.

6. Financial Provisions for Users's Training Course

Estimated Cost for Users' Training Course

Sl. No.	Item of expenditure	Estimated Proposed Cost (in Rs.)
1.	Tea/ snack	700
2.	POL	700
3.	Honorarium @Rs. 300 per Lecture	600
4.	Contingency (Shamiana, audio and visual aids, chairs, banners, Miscellaneous items.	1000
5.	Total	3,000

NATIONAL BIOGAS AND MANURE MANAGEMENT PROGRAMME (NBMMP)**Staff Training Course (for Government / Bank Officers / Field Officers / Field Functionaries)****1. Purpose**

To expose Supervisors / Govt. Functionaries / Bank Officials & Staff to various aspects of biogas technology and to familiarize them with the importance of Biogas as a fuel and present status of biogas programme, inter-alia details about how Biogas Plants are constructed and operated.

2. Participants

The course is intended for field supervisory functionaries involved in the implementation of biogas extension programme. Persons of following categories may be selected / nominated for such training courses-

- (i) Block and District level Supervisory Functionaries involved in the promotion and execution of National Biogas and Manure Management Programme. These functionaries include Block Development Officers, Agriculture Development Officers, Agriculture Extension Officers, Assistant Engineers, Junior Engineers, Assistant Agricultural Engineers, Agricultural Inspectors / Assistant Directors and Development Officers of Khadi and Village Industries Commission and Khadi and Village Industries Board, Field Supervisors and Staff of Agro Industries Corporation Ltd., Dairy Development Board / Corporations, Entrepreneurs of Agro-services Centres, Field Supervisory Staff of recognized Voluntary Organizations / Self Help Groups / Registered Societies. Women-functionaries of all above mentioned organizations should be also nominated.
- (ii) Instructors / Teachers from ITIs, selected Farmers Training Centres / Extension Centres / Gram Sevaks Training Centres etc. Such Training Centres should be selected as the venue for organization of subsequent Training Courses for local masons in the construction of biogas plants.

- 3. Medium of Instruction** : Hindi/ English / Regional Language
- 4. Duration** : Four Days
- 5. Numbers of Participants** : 10
- 6. Syllabus / Curriculum**

DAY	SUBJECT
1st	Introduction to the Biogas Technology Introduction to National Biogas and Manure Management Programme
2nd	<ol style="list-style-type: none"> i. Design of different approved models of biogas plants, capacity determination, selection of building materials and accessories. Type of different approved models of Biogas plants based on material and accessories, appliances etc. ii. Motivation / selection of biogas models and selection of biogas potential beneficiaries, Socio-Economic Aspects, Environmental

	Aspects of having biogas plants installed in houses iii. Rates of Financial Assistance / disbursement of subsidy / utilization of funds, maintenance of Accounts iv. Institutional support for implementation of the NBMMP Programme
3rd	i. Construction methodologies for biogas models popular in the region. ii. Details of biogas stoves / burners / appliances and spares for O & M of biogas plant iii. Identification of faults and their rectifications. iv. Connecting a cattle dung based biogas plant with sanitary toilet and its operation v. Installation and Commissioning of prefabricated approved Biogas Plants
4th	Field / Site Visit to: i. Operational Biogas Plants, ii. Biogas plants under construction, iii. Biogas plants under commissioning for biogas generation, iv. Connection of biogas plant to biogas burner for use of Gas by the new user, v. Handling and application of biogas plant effluent vi. Operation and Maintenance of biogas plant vii. Valedictory and concluding

7. Financial Provisions for Training Course for Government Functionaries / Field Officers

8.

Sl. No.	Item of Expenditure	Estimated Cost (in Rs.)
1.	Transportation Charges	3,000
2.	Technical books, literature, blue prints etc.	2,000
3.	Tea/lunch @Rs.80/- per head per day	3,000
4.	Contingency and honorarium to guest speakers @ Rs. 300/-	2,000
TOTAL		10,000

NATIONAL BIOGAS AND MANURE MANAGEMENT PROGRAMME
Fact Sheet on
CONSTRUCTION-CUM-MAINTENANCE COURSE (CMC) / REFRESHER
COURSE

1. Purpose

To create a cadre of masons and technicians skilled in the construction and maintenance of approved models of biogas plants i.e. Deenbandhu fixed dome model, KVIC floating metal gas holder with brick masonry digester models, digester made of ferro-cement, gas holder model of FRP and Pragati models. Also training for new and innovative models of plants as and when approved by MNMRE.

2. Selection of Trainees

Construction-cum-maintenance training course are intended for professional masons having experience of working independently on civil construction and fabricators/technicians having the facilities of workshop, welding lit, etc. The trainees should have knowledge to understand construction and fabrication, methodology design, specification etc.

- 3. Numbers of Participants : Ten trainees can be recruited for each course.**
- 4. Medium of Instruction : Hindi or Regional language**
- 5. Duration of Training : 10 DAYS**
- 6. Syllabus**

The training is practical in nature. However, a few classroom lectures should be arranged completely tied up with the construction of plants in the field. The suggested curriculum and schedule is given below:-

6.1 Theory

- i. Importance & benefits of biogas programme.
- ii. Pre-requisite for a biogas plant availability of dung and water felt need and end usage
- iii. Description of different approved models
- iv. Selection of beneficiaries and selection of site
- v. Material requirements for biogas plants of different capacities/models
- vi. Quality of construction materials
- vii. Construction methodology
- viii. Plumbing aids and fitting of pipeline, water removal device, gas appliances
- ix. Testing for gas and water leakages
- x. Commissioning and operational procedure

6.2 Practical

A minimum of two biogas plant needs to be constructed and installed during the training course by the trainees. Emphasis should be mainly on proper practical

Annexure-VII (continued)

training and not on construction of a large number of biogas plants to achieve targets.

Work may be organized as follows:

Approximate value of days	Field work
1	<ul style="list-style-type: none">• selection of site• marking of layout• Digging of pit
1	<ul style="list-style-type: none">• Laying of foundation
4	<ul style="list-style-type: none">• Digester construction• Construction of outlet chamber in DeeInbandhu Model• Fixation of guide frame in case of floating drum KVIC or Pragati model
2	<ul style="list-style-type: none">• Plastering
5	<ul style="list-style-type: none">• Curing of civil work• Laying of gas distribution pipeline, fixing accessories etc.
2	<ul style="list-style-type: none">• Slurry making filling of digester
1	<ul style="list-style-type: none">• Testing for gas leakages

7. Financial Provisions

Estimated cost per course is as under:-

Sl. No.	Item of Expenditure	Estimated cost (in Rs.)
1.	Stipend up to a maximum of Rs. 400/- trainees/day or 10 trainees for a maximum period of 10 days (pro-rata basis) to meet boarding and lodging expenditure	40,000
2.	To and fro transport charges to 10 trainees as per actual but no exceeding of Rs. 300/- per trainee on pro-rata basis.	3000
3.	Contingency for transportation/POL, Stationery, books, honorarium to guest speakers etc.	2000
Total		45,000

8. PLANNING

8.1 The State/Agency should fix location, tentative date for organizing course in the beginning of the year as per the target allocated to them.

8.2 The faculty for training should include a master mason trained in one of the Regional Biogas Development & Training Centre and who have constructed plants no less than ten.

8.3 The Nodal Officer at Block level should ensure the quality of training for the purpose of monitoring the district nodal officer should ensure participation in the course. The State level officials should also visit at least 10% of the course organized.

Annexure-VII (continued)

- 8.4 Preference should be given for organizing course in ach areas where less number of persons have been trained so far and also construction of biogas plants has yet to pick up.
- 8.5 At the closing of the course a test has to be conducted for ensuring the skill of trainees Certificates may be issued to qualified trainees and a notification should be issued containing there in their names & address.
- 8.6 A user training course should be also organized, the day following the closing of course.**

NATIONAL BIOGAS AND MANURE MANAGEMENT PROGRAMME
Fact Sheet on
Turn-key Workers Training (TKW)

Objective:

To create a cadre of Biogas Turn-Key Workers / Biogas entrepreneurs in rural areas for setting up of biogas plants on Turn-Key basis and providing post-installation servicing of plants as a self-employed vocations.

Participants:

The programme is meant for unemployed rural youths having inclination to take up biogas as a self vocation. He/She may be functionary in voluntary organization. A minimum educational qualification may be kept as 12th Standard pass or 10th pass with ITI certificate. If they have already some relevant experience certificate in biogas work, they should also be given chance. The trainee should take in living in his/her village

Numbers of participants	Ten
Medium of instruction	Hindi/ English/ Regional language [depending upon the facility available at the Biogas Development and Training Centre (BDTC)]
Duration of training	15 Days
Venue	Biogas Development & Training Centre

Syllabus:

The programme should cover the following:-

A. Technical Aspects:

- i. Importance and benefits of biogas programme
- ii. Economic viability of biogas plants
- iii. An over-view of Indian Biogas Programme, present level of achievement and estimated potential
- iv. Technological advances in biogas technology

B. Management aspects:

- i. **Marketing Management:** Technique of motivation, project formulation, filling up and process of applications for arrangements of subsidy.
- ii. **Personal Management:** Training of masons, placement of masons in different village to be covered, identification of plumber and his training liaison with beneficiary, masons and plumbers, supervision of the persons engaged in plants construction
- iii. **Material Management:** Types of the material required for biogas plant construction, testing of quality of material, procurement of the materials.

Annexure-VIII (continued)

- iv. **Financial Management:** Estimation of Unit cost of bigoas plants arrangement of bank loans and subsidy special motivation support from social organizations, principle of accounting.
- v. **Office Management:** Record keeping of individual beneficiaries and other records on financial and physical programmes, methods of maintaining the accounts, payment made to the beneficiary and masons etc.
- vi. **Break-down Management:** Feed-back, monitoring and evaluation of plants repair and maintenance of sick plant.

C. Project Reports:

A project for turn-key operation for their respective areas may be prepared by the trainees during the duration of the training.

D. Field Visit:

Visits should be organized to banks, to villages having large number of plants and to an agency working on turn-key basis.

E. Financial Provision Turn-key Workers Training Course

Estimated cost per course is as under:-

Sl. No.	Item of Expenditure	Estimated cost (in Rs.)
1.	Stipend up to a maximum of Rs.300/- trainees/day or 10 trainees	45,000/-
2.	To and fro fare charges/ cost up to a maximum of Rs.700/- per trainee, subject to actual.	7,000/-
3.	Contingency, POL for field visit, honorarium to guest speakers @ Rs.300/- per lecture, project reports, books, stationery, blue prints, technical literature, manuals, etc.	23,000/-
Total		75,000/-

F. Suggested Planning:

- a. The programme highlights should be widely circulated.
- b. Nomination may be asked from State Nodal Departments/Agencies, Voluntary Organizations in advance.
- c. The faculty for training should include technical and management experts.

NATIONAL BIOGAS AND MANURE MANAGEMENT PROGRAMME

Monthly Progress Report of Family Type Biogas Plants for the year 2014-15

- (i) Name of State / UT programme implementing Department / Agency :-----
(ii) Progress Report for the Month of :-----
(iii) Model and Type of biogas plants being installed / set up :-----

Items of Physical Progress	Annual Targets General & SC Category separately	Nos. of Biogas Plants Commissioned				Cumulative total upto the current month of report	Nos. of plants under Construction stage			Total Nos. of plants under construction stage during the month of report	Unit cost of the plant as per Size (in Rs.)	Total Nos. of training targets allocated including those of BDTCs	Achievement of Training Courses out of the total Annual Targets including those of BDTC
		Upto Previous month	During the month of report	For SCs	For STs		General Category	SC Category	ST Category				
1	2	3	4	5	6	7 (3+4)	8	9	10	11(8+9+10)	12	13	14
(A). Family Type plants	X (Y)												
(i) Total Nos. of plant & size (Cu. M.)													

(B) . Nos. of cattle dung based plants connected with sanitary toilets, out of the total of (A) above .													
(C) . Cumulative total Nos. of Villages covered under the scheme so far.													
Total (A+B)													

X – General Category targets including ST Category

Y – SC Category annual target

ANNEXURE-X

National Biogas and Manure Management Programme
Quarterly Report for the _____ Quarter of the Year _____

1. Name of State/UT/Agency : _____
2. Report for the quarter ending : _____

3	Physical Progress	Annual target	No. of plants completed					No. of Biogas plants	
			Up to previous quarter	During current quarter	Cumulative (up to current quarter)	SC	ST	Commissioned for Gas Generation	Plants to be commissioned
3.1	Family type plants								
	Name of District: i)								
3.2	Sanitary toilet linked cattle dung plants out of 3.1 above								
	Total								
3.3	Number of plants taken up for repair under repair scheme	Number of plants proposed for repair	Up to previous quarter		During previous quarter	Cumulative (up to current quarter)		No. of plants under repair	
	Name of districts: i)								
4	Inspection Report of reported in progress report	No. of plants installed up to the date of inspection	No. of plants actually inspected	No. of completed & functional plant	No. of plants not found functional	No. of dismantled plants	No. of non-traceable plants	Remarks (action taken for repair) making plant functional	
4.1	Name of village/Block/District								
	i)								
	ii)								
5	Training course	Annual target (No. of courses)	Upto previous quarter (nos.)		During current quarter (nos.)		Cumulative upto current quarter (nos.)		

5.1	Users' Training course								
5.2	Construction-cum-Maintenance/Refresher /Trainers/Turn-key-workers' training Course								
6	Publicity	Print Media [Brochure/Hand bills, Calendars advertisement (sample copies should be attached)]				Electronic Media (Advertisement on AIR/Doordarshan) (Please indicate the duration and frequency)		Others (Exhibitions/Meals etc.)	
7	Action Taken Report								
7.1	ROs/BDTCs concerned	Reference number of ROs/BDTCs Report				Action taken: i. ii.			
7.2	Concurrent Monitoring	Reference Number of Monitoring organizations' Report				Action taken: i. ii.			
8.	State/District Level Co-ordination Committee	No. of meetings held with date				Important decisions: i. ii.			

ANNEXURE - XI

National Biogas and Manure Management Programme

Village, District and Year – wise and beneficiary – wise detail of Beneficiaries of the family type biogas plants to be displayed on the websites of the respective SND / SNA and KVIC and other organizations and for concerned Village Panchayat

1. Name of State / UT : _____
2. Name of the SND / SNA / KVIC of the State : _____
3. Block / Taluka : _____
4. District : _____
5. **Report on website for the year** : _____
6. **Total nos. of Biogas Plants reported as complete in all respect** : _____
7. **Date of putting the list on web-site** : _____
8. Particulars of the beneficiaries viz:

Sl. No.	Name/ Father's name/ Husband's name of beneficiary	Full address (village, block, district and state) and contact number of beneficiary	Category of the beneficiary, General/ SC/ ST/ Others	Nos. of family members	Nos. of Cattle owned	Size and Model of biogas plant and identification mark/ code number on the biogas plant	Date of Commissioning of biogas plant	Amount of subsidy paid (in Rs.)		Date and amount of subsidy disbursed and delivery mechanism of payment linked with Aadhaar number	Whether plants installed on Turn Key basis. If yes, name and address of Turn key Agency/ Worker/ RET	Name of the field supervising official of the SND/ SNA/ KVIC who verified the completion of biogas plant	Whether ISI marked, biogas stove, provided. Yes/No	Photograph of the beneficiary with the biogas plant
								MNRE subsidy	STATE subsidy					
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.

ANNEXURE - XII**BIOGAS DEVELOPEMNT & TRAINING CENTER (BDTCs)**

S.No	Locations	Name of Institution	States Covered
1.	Guwahati	Dr. Pinakeswar Mahanta, Assistant Professor & Head, Department of Mechanical Engineering, Indian Institute of Technology, Guwahati, North Guwahati, Guwahati- 781039 Ph: 0361-258-2651/2662 (O), Fax: 0361- 2690762 Mob:- 09435734561 E-mail: pinak@iitg.ernet.in 2.Dr. V. Guha Roy, Project Manager, Mob.no.9678738054 E.mail_ Uguharayiitg.ernet.in	All North-Eastern Region States including Sikkim and West Bengal
2.	Bangalore	Dr. V. Kumar Gouda, Biogas Development and Training Center, Department of Agricultural Engineering, University of Agricultural Sciences, GKVK, Bangalore- 560065 Ph: 080- 23330153/335, 080- 23640206 ® M-9901069131 E-mail: ykgouda@rediffmail.com 2.Mr. B.K.Anand Rao HOD.	Goa and Karnataka
3.	Indore	Prof. S.P. Singh Director, Biogas Development and Training Centre, Centre of Energy Studies and Research (CESR), Devi Ahilya Vishwavidyalaya, Khandwa Road, Indore- 452017. Ph: 0731- 2460309, Fax: 0731- 2467378/2462366 ® 0731- 2446803 Mob: 09424009418 Email: spsanjali@yahoo.co.in 2.Rajender Singh Pawar (STA) rspawar18@gmail.com	Chhattisgarh, Madhya Pradesh and Maharashtra
4.	Ludhiana	Dr. Sarabjit Singh Sooch, (PI) Research Engg & Incharge BDTC Dept. of Civil Engg. Punjab Agricultural University, Ludhiana141004, Punjab Ph: 9872084513 (M), 09501034513 (M), 0161- 2401655(F) sssooch@rediffmail.com Dr. N.K. Khullar Director,	Punjab, Himachal Pradesh, Uttrakhand and Jammu & Kashmir

		Biogas Development and Training Centre, Dept. of civil Engg. Punjab Agricultural University, Ludhiana. Punjab. Ph: 0161- 2401960 Extn- 259, Mob: 9417932952	
5.	Udaipur	Dr. Deepak Sharma Head, Deptt. of Renewable Energy Engineering Coordinator, Biogas Development and Training Centre, College of Technology & Agricultural Engineering, Maharana Pratap University of Agriculture & Technology, Udaipur-313001 (Rajasthan) Ph: 0294-2471068 (O), 0294-2414021(R) Mob.: 9414160221 Email: deepshar@rediffmail.com Web.: www.ctae.ac.in	Gujarat, Rajasthan and Daman & Diu
6.	Coimbatore, Tamil Nadu	Prof. (Dr.) S. Kamaraj 094439-34139 Coordinator, Biogas Development and Training Centre, Agricultural Engineering and Research Institute, Tamilnadu Agricultural University, Coimbatore- 641003. Ph: 0422- 6611526, 527, 545 Fax: 0422- 6611454 Email., bioenergy@tnau.ac.in , kamarajs@hotmail.com Mob.: 9442961793	Tamil Nadu, Pondicherry, Kerala, Andaman & Nicobar and Lakshadweep
7.	Delhi	Prof. V.K. Vijay Programme Coordinator, Biogas Development and Training Centre, Center for Rural Development & Technology (CRDT), IIT Hauz Khas, New Delhi- 110016 M- 9871366611 Ph: 011- 26596351, 26596311, Fax: 011- 26591121, 26596351 Email: vkvijay@rdat.iitd.ernet.in bdtciitd@gmail.com	Haryana, Uttar Pradesh and NCR Delhi
8.	Odisha	Dr. Snehasish Mishra, Associate Professor (PI-BDTC), School of Biotechnology, Kalinga Institute of Industrial Technology (KiiT), Bhubaneswar 751024. Odisha, Email: smishra@kiitbiotech.ac.in , snehasish.mishra@gmail.com Mob.: 9437110305, 9438669414 Fax No. 0674-2725732	Andhra Pradesh, Odisha, Bihar and Jharkhand

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No.18-1/2014-BE (NBMMP)
Government of India
Ministry of New and Renewable Energy
(Biogas Technology Development Division)

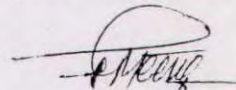
Block No. 14, CGO Complex
Lodhi Road, New Delhi-110003

Dated: 26th November, 2014

OFFICE MEMORANDUM

The undersigned is directed to refer to O M No. 5-5/2014-BE (NBMMP) of 30-6-2014 regarding a Central Sector Scheme, the National Biogas and Manure Management Programme (NBMMP) during the 12th Plan period. The OM also contains a list of models of family size biogas plants in the capacity of 1 to 6 cubic metre per day for installation under this scheme in the country. ISI standards for these conventional biogas plants have already been developed. MNRE also approved various models of KVIC floating dome and Deenbandhu Fixed Dome biogas plants for field trials during the 11th Five Year Plan period. Based on the feedback reports from State Nodal Departments/ Agencies and Biogas Development and Training Centres (BDTCs) and also demand of such plants made of HDPE/FRP/RCC material and based on KVIC design floating type biogas plants of 1 to 6 cubic metre capacity, are approved under the National Biogas and Manure Management Programme (NBMMP) from the date of this O.M.

2. The undersigned is directed to say that the manufactures/developers of family size biogas plants made of alternative building materials, who follow the standard specifications for manufacture/pre-fabrication of biogas plants as given in **Annexure-I to Annexure-III** of this OM and the biogas plants manufactured as per these standards **will be eligible for support under the National Biogas and Manure Management Programme (NBMMP).**



G.L.Meena
Director (BG)
Dated: 26.11.2014

To,

Heads of All the State Nodal Departments/State Nodal Agencies,
CEO, Khadi and Village Industries Commission (KVIC), Mumbai and
PIs of Biogas Development and Training Centres (BDTCs) and various manufactures
whose biogas plants were approved for field trials during the 11th Plan period.

ANNEXURE-I

Volumes and dimensions of digester and gasholder for KVIC floating dome/ Gasholder design type biogas plant for 30 days, 40 days and 55 days Hydraulic Retention Time (HRT) as already specified for various States/regions of the country.

Sl.No.	Capacity of Biogas Plant (M ³ /day)	HRT (days)	Volume of Plant digester (M ³)	Volume of Gas holder (M ³)
1.	1	30	1.500	0.600
2.	2	30	3.000	1.200
3.	3	30	4.500	1.800
4.	4	30	6.000	2.400
5.	6	30	9.000	3.600
6.	8	30	12.000	4.800
7.	10	30	16.000	6.000
1.	1	40	2.000	0.600
2.	2	40	4.000	1.200
3.	3	40	6.000	1.800
4.	4	40	8.000	2.400
5.	6	40	12.000	3.600
6.	8	40	16.000	4.800
7.	10	40	20.000	6.000
1.	1	55	2.650	0.600
2.	2	55	5.000	1.200
3.	3	55	8.000	1.800
4.	4	55	10.000	2.400
5.	6	55	15.000	3.600
6.	8	55	20.000	4.800
7.	10	55	25.000	6.000

Note: 1. Cattle dung has been considered the main feed material for design consideration of the above type of biogas plants.

Note: 2. The biogas plants of size 1 cubic metre to 6 cubic metre per day only would be eligible for CFA under the NBMMP.

[Signature]
26/11/14

Annexure-II**Technical Specifications of HDPE/PVC/ FRP/RCC material based pre-fabricated Family size KVIC Floating Design type/ Fixed Dome design Biogas Plants.****1. General Specification:**

Family size HDPE make Pre-fabricated biogas plant with Central guide pipe, spring mechanism, inlet pipe, inlet connections, outlet pipe, outlet connections, Gas pipe and Biogas Double Burner.

2. Material Construction:

- 2.1 Material of construction used should be broadly in line with specifications of materials as per IS:12701:1996 relating to rotational moulded polyethylene tanks and for Fibre glass Reinforced Plastic (FRP) material the specifications should be as per IS:12986:1990 of BIS, New Delhi.
 - 2.2 The material of construction of Biogas digester and Gasholder shall be such that it does not impart any colour, odour nor any toxic effect and it shall not contaminate biogas slurry.
 - 2.3 Polyethylene resin to be used for the manufacturing of Biogas digester and Biogas holder should be of rotational moulding grade.
 - 2.4 The Biogas Digester and Biogas Holder shall be manufactured from carbon black compounded polyethylene.
 - (a) The percentage of carbon black content in the material shall be within 2.0 to 3.0.
 - (b) The dispersion of carbon black shall be satisfactory.
 - 2.5 The materials like polyethylene, FRP, PVC etc. should be UV treated and thickness of biogas plant digester, gasholder and water jacket would be as given below under point 5,6 and 7.
 - 2.6 **The materials to be used for prefabrication/ construction of such Biogas plants to be guaranteed by the manufacturers to have minimum useful life of 10 years .**
- 3. Gas generations Capacity:**
- 1.0 to 6.0 cubic metre** per day for consideration under the National Biogas and Manure Management Programme of the Ministry of New and Renewable Energy (MNRE). The Family Size Biogas plants up to 10 cubic metre per day biogas generation may be considered for the purpose of setting Standards as given in **Annexure-I**. However, biogas plants of 1 to 6 cubic metre size would be eligible for MNRE, CFA under the NBMM programme.
- 4. Overall Dimensions:** For KVIC floating Gasholder type biogas plants as given in **Annexure-I**. For Deenbandhu Solid -State Biogas Plant 75 Days HRT, as mentioned in this Annexure later.

Annexure-II(Contd.)

26/11/11

5. Biogas Digester:

The HDPE/ PVC/ FRP material based Floating Dome KVIC design pre-fabricated portable model Biogas plants should have broad features/ specifications as under:

The digester shall be made of minimum 4.50 mm to 5.50 mm average wall and bottom thickness for digester, Gasholder, inlet & outlet pipe for 2 to 6 cubic metre capacity Biogas plants and higher for higher capacity plants in the range of average thickness from 6.6 mm to 8.2 mm for 6 to 10 cubic metre capacity biogas plants, with provisions for inlet and outlet connections as above. There will be all provisions of partition wall for Biogas plants above 3 Cubic Metre capacity. It shall also have provision to fix Central guide and Gas holder structure. Wherever, water jacket is provided, the thickness of water jacket should be at least 4.40 mm.

6. **Biogas Holder:** It shall be made of 4.40 mm average minimum thickness with provision for outlet connections and higher thickness for higher capacity biogas plants as mentioned above under point 4. It shall also have provisions to accommodate extra weight in case of variation in end use point distance. It must have arrangements to connect $\frac{1}{2}$ " (12.7 mm) Gas outlet connection. The minimum weight of the HDPE/FRP/PVC Etc. Gasholder shall be maintained in relation to the Biogas Plant capacity and pressure of the gas required for transporting it from plant site to the kitchen/end use point.

7. Central guide pipe:


Such Biogas plants shall have central guide pipe made of Stainless steel with minimum thickness of 2.00 mm, Central guide pipe shall be made in such a way that holds spider and also such that allow spring to move vertically up/down smoothly.

8/ Spring Spider Mechanism:

It shall be provided with black corrosion resistant paint and with proper spring index which exerts sufficient pressure to displace biogas at 100 to 150 mm of water column. Spider made of SMC material with the provision to connect with central guide pipe. It shall fit on to the Biogas holder in such a way that make Biogas holder's up/down movement freely and smoothly.

9 Inlet Pipe:

Inlet pipe shall be of minimum 4" UPVC/PVC.


26/11/14

Annexure-II**10 Inlet Connections:**

Inlet connections shall be of 4" UPVC/PVC with adequate gaskets and check nut.

11 Outlet Connection:

Outlet connection shall be moulded and shall be an integral part of Biogas Digester; it shall be compatible with 4" flexible UPVC/PVC pipe and joint may be finished in such a way that no leakage of biogas plant slurry take place during the life span of the plant.

12 Gas Outlet Valve:

Gas outlet valve shall be of minimum $\frac{1}{2}$ " (12.7 mm) with inside threaded connections and leaving no chance of gas leakage at the base of joint with Gasholder.

13 Gas outlet connection:

It shall be $\frac{1}{2}$ " (12.7 mm) PVC/ UPVC connection with adequate gasket and check.

14 Gas Outlet Pipe:

Gas outlet pipe shall be of HDPE 16-20 mm.

15 Finishing:

The internal and external surface of the Biogas Digester and Biogas Holder shall be smooth, clean and free from other hidden internal defects, such as air bubbles, pits and metallic or other foreign material inclusions. The mould parting line and excess material near the Top Rim of Digester and Gas holder shall be cut and finished to the required level. Defects in fabrication if any, like air bubbles and pits at mould parting line and at top rim of the Biogas Digester shall be checked by hot-air filler rod welding method leaving no chance of leakage.

16 Marking:

All the Biogas plants produced shall be distinctly marked with the following information:

- Manufacturer's name, initials or recognized trade mark;
- Product Code and Capacity in Cubic Metre along with daily quantity in Kg. of cattle dung to be fed. As well as serial number along with serial number of the unit/manufacturing line.
- Lot or Batch number and year of manufacture.
- All the plant produced would be given a distinction lot Number serial number as a mark of identification by the Manufacturer and moulded on the external surface clearly visible after installation.

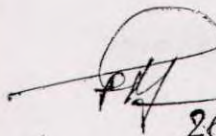
Annexure-II (Contd.)

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Annexure-II

- e) The above detail from a to d shall be moulded on the external surface of the Biogas Digester during manufacture.

- 17 Installation:** Installation and commissioning of Biogas plants shall be done by the company/manufacturer's authorized and trained personnel. The beneficiaries of biogas plants shall be provided "Operation and maintenance" manual in the printed form/ version along with warranty and guarantee clauses.
- 18** The standard specifications for the construction of Solid -State Deenbandhu Fixed dome biogas plants shall be as per the details as approved for field trials. **The constructional material like bricks, cement, concrete, sand etc. would be as per the BIS Standard-Code of Practices (Second Revision), IS 9478:1989 of the BIS, New Delhi. Similarly the kind and quality of material required for Pre-fabricated RCC Digester Biogas Plant with KVIC Floating type Gasholder shall be as per the details given in Annexure-III, but quality of material should be conforming to the ISI Standards as mentioned above.**
- 19** The manufacturers are bound to carry out any further required change(s) in these approved model of biogas plants, as and when felt necessary and asked by the Ministry (MNRE), including those required for formulating a new ISI Standard for Standardization of such models of Biogas plants.
- 20.** The Ministry (MNRE) reserves to take any further action in all the matters related to the standards specifications as mentioned in these **Annexure-I to Annexure-III.**


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Annexure-III**Broad Specifications of Pre-fabricated RCC Digester with KVIC Floating Gasholder Type Biogas Plant (for 30 Days and 40 Days HRT)**

Size of Biogas Plant (Cubic Metre)	HRT (Days)	Volume of digester (cubic metre)	Volume of Gasholder (Cubic Metre)	Thickness (cm)	Weight (Kg.)	Centre Guide beam (cm)
1	30	1.500	0.600	3.0	300	125x20x10
2	30	3.000	1.200	3.5	350	140x15x15
3	30	4.500	1.800	4.0	450	170x15x15
4	30	6.000	2.400	4.0	500	185x15x15
6	30	9.000	3.600	5.0	800	140x20x20
1	40	2.000	0.600	3.0	300	125x20x10
2	40	4.000	1.200	4.5	450	170x15x15
3	40	6.000	1.800	5.0	500	185x15x15
4	40	8.000	2.400	5.5	800	140x20x20
6	40	12.000	3.600	6.0	850	185x20x20

List and Quantity of material required for the production of RCC Digester for KVIC Floating Gasholder design Biogas Plant 2 Cubic Metre to 6 Cubic Metre Capacity. (For 30 Days HRT Period)

Sl.No.	Material	1 Cu. M.	2Cu.M.	3Cu.M.	4 Cu.M.	6 Cu.M.
1	Cement (Bag)	1	2	3	4	5
2	River Sand/Quarry Sand (Cft.)	5	7	10	15	20
3	Baby Metal-6mm (Cft.)	5	7	10	15	25
4	Welded Mesh 50x50mm (Cft.)	65	80	100	120	150
5	Steel Rod 8 mm (Kg.)	1	2	4	6	10
6	GI Pipe 1.5"(Metre)	1	1.25	1.5	1.5	1.5

Note: The quantity of material as above will increase in proportionate to the HRT Period of 40 Days, 50 Days and 55 Days as applicable for various regions of the country.

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