

# Overview of Biogas series

**Talk to a Teacher**

**<http://spoken-tutorial.org>**

**National Mission on Education through ICT**

**<http://sakshat.ac.in>**

**Spoken Tutorial and Rural ICT Project**

**IIT Bombay**

**18 February 2016**



# Learning Objectives



# Learning Objectives

**In this tutorial we will learn:**



# Learning Objectives

**In this tutorial we will learn:**

- **Biogas spoken tutorial series**



# Learning Objectives

In this tutorial we will learn:

- **Biogas spoken tutorial series**
- **And the content available in various tutorials in this series.**





# Overview of Biogas series

- **This series can be segregated into 3 different sections**



# Overview of Biogas series



# Overview of Biogas series

**The first section explains:**



# Overview of Biogas series

**The first section explains:**

- **Various benefits of using Biogas for cooking**



# Overview of Biogas series

The first section explains:

- Various benefits of using Biogas for cooking
- **Generation of Biogas using bio-waste**



# Overview of Biogas series

The first section explains:

- Various benefits of using Biogas for cooking
- Generation of Biogas using bio-waste
- **And the finance options available for construction**



# Overview of Biogas series



# Overview of Biogas series

**The second section explains:**



# Overview of Biogas series

The second section explains:

- **Construction of the various parts of a Biogas plant**



# Overview of Biogas series

The second section explains:

- Construction of the various parts of a Biogas plant
- **And is particularly useful for masons**





# Overview of Biogas series

**The third section explains:**



# Overview of Biogas series

**The third section explains:**

- **How biogas is actually generated**



# Overview of Biogas series

The third section explains:

- How biogas is actually generated
- **Amount of bio-waste to be fed into the Biogas plant**



# Overview of Biogas series



# Overview of Biogas series

**And also:**



# Overview of Biogas series

**And also:**

- **Common troubleshooting information**



# Overview of Biogas series

**And also:**

- **Common troubleshooting information**
- **And periodic maintenance and repair**





# Overview of Biogas series

## Various models of Biogas plant:



# Overview of Biogas series

## Various models of Biogas plant:

- **KVIC model**



# Overview of Biogas series

## Various models of Biogas plant:

- KVIC model
- **Janata model**



# Overview of Biogas series

## Various models of Biogas plant:

- KVIC model
- Janata model
- **Pragati model**



# Overview of Biogas series

## Various models of Biogas plant:

- KVIC model
- Janata model
- Pragati model
- **Deenbandhu model**



# Overview of Biogas series

## Various models of Biogas plant:

- KVIC model
- Janata model
- Pragati model
- Deenbandhu model
- **Ganesh model**





# Overview of Biogas series

## Various models of Biogas plant:



# Overview of Biogas series

## Various models of Biogas plant:

- **Floating drum plant made of prefabricated reinforced concrete compound units**



# Overview of Biogas series

## Various models of Biogas plant:

- Floating drum plant made of prefabricated reinforced concrete compound units
- **And floating drum plant made of fiberglass reinforced polyester**





# Overview of Biogas series

**In this series:**



# Overview of Biogas series

**In this series:**

- **We have followed the Deenbandhu model**



# Overview of Biogas series

In this series:

- We have followed the Deenbandhu model
- **Construct a 2 cubic metres Biogas plant**





# Benefits of Biogas

**First tutorial explains:**





# Benefits of Biogas

**First tutorial explains:**

- **What is Biogas**
- **And the various benefits of using Biogas**



# Generation of Biogas



# Generation of Biogas

**Next tutorial is about how Biogas is generated:**



# Generation of Biogas

**Next tutorial is about how Biogas is generated:**

- **Using household biowaste**



# Generation of Biogas

**Next tutorial is about how Biogas is generated:**

- Using household biowaste
- **Animal dung**



# Generation of Biogas

Next tutorial is about how Biogas is generated:

- Using household biowaste
- Animal dung
- **And toilet waste**



# Finance options



# Finance options

- **The next tutorial is an introduction to the various finance options available**



# Finance options



# Finance options

**It will help us to know how:**



# Finance options

**It will help us to know how:**

- **We can avail loan from private or government banks**



# Finance options

**It will help us to know how:**

- **We can avail loan from private or government banks**
- **And avail subsidy from the government, later**



# Materials required for the construction



# Materials required for the construction

**The next tutorial will help us to know:**



# Materials required for the construction

The next tutorial will help us to know:

- **Choice of land for the Biogas plant**



# Materials required for the construction

The next tutorial will help us to know:

- Choice of land for the Biogas plant
- **Land dimensions**



# Materials required for the construction

The next tutorial will help us to know:

- Choice of land for the Biogas plant
- Land dimensions
- **And the materials required for the construction**



# Laying the foundation of the Biogas plant



# Laying the foundation of the Biogas plant

**The next tutorial will explain how to:**



# Laying the foundation of the Biogas plant

The next tutorial will explain how to:

- **Dig the pit**



# Laying the foundation of the Biogas plant

The next tutorial will explain how to:

- Dig the pit
- **And lay the foundation for the Biogas plant**



# Construction of the dome of the Digester tank



# Construction of the dome of the Digester tank

**The next tutorial will explain how to:**



# Construction of the dome of the Digester tank

The next tutorial will explain how to:

- **Construct the frame of the dome of the Biogas plant, with steel rods and chicken mesh**





# Building the walls of the slurry tank

**The next tutorial will explain:**



# Building the walls of the slurry tank

**The next tutorial will explain:**

- **How to build the walls of the slurry tank**



# Construction of the mixing tank



# Construction of the mixing tank

**The next tutorial is about:**



# Construction of the mixing tank

The next tutorial is about:

- **How to construct the mixing tank**



# Assembly of the Biogas plant



# Assembly of the Biogas plant

**The next tutorial will explain:**



# Assembly of the Biogas plant

The next tutorial will explain:

- **How to assemble the Biogas plant**



# Maintenance and repair



# Maintenance and repair

**Next tutorial in this series- Maintenance and repair:**



# Maintenance and repair

**Next tutorial in this series- Maintenance and repair:**

- **Will help us to know maintenance and repair of the Biogas plant**



# Overview of Biogas series



# Overview of Biogas series

- **How to construct the Biogas plant on their own**



# Overview of Biogas series

- **How to construct the Biogas plant on their own**
- **And also carry out routine maintenance on the Biogas plant**



# Overview of Biogas series



# Overview of Biogas series

**They can:**



# Overview of Biogas series

**They can:**

- **Refer to these tutorials as many times**



# Overview of Biogas series

**They can:**

- Refer to these tutorials as many times
- **And become experts in the construction of Biogas plants**





# Overview of Biogas series

**and..**



# Overview of Biogas series

and..

- **This series is also useful to those masons who want to start a Biogas Plant consulting agency**



# Summary



# Summary

**We have learnt:**



# Summary

**We have learnt:**

- **About the overview of the Biogas plant series**



# Summary

**We have learnt:**

- **About the overview of the Biogas plant series**
- **Please refer [spoken-tutorial.org](http://spoken-tutorial.org) for the detailed tutorials on each topic mentioned earlier**



# Acknowledgements

- This video was created by Spoken Tutorial project with inputs from Rural-ICT project, IIT Bombay.
- More information on these projects can be found at these links

[http://spoken-tutorial.org /NMEICT-Intro](http://spoken-tutorial.org/NMEICT-Intro)

<http://ruralict.cse.iitb.ac.in>



# Acknowledgement





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## Pictures and technology support:

### Courtesy:

- **Bhagirath Rural Development Foundation**  
**Village- Zarap, Taluka- Kudal,**  
**Dist.- Sindhudurg**

