

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



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



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



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



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



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



Benefits of Biogas

First tutorial explains:



Benefits of Biogas

First tutorial explains:

- **What is Biogas**



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



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



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 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



Acknowledgement

Pictures and technology support:



Acknowledgement

Pictures and technology support:

Courtesy:

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

