

**Case Study**

**of**

**Kakadpana Test Project in**

**Nasik District of Maharashtra**

The trial run of Gasifier in Kakadpana test project in Nasik District of Maharashtra was started on 13<sup>th</sup> April, 2011. One Gasifier of 10 kW capacity has been installed and commissioned fully in the project on 16<sup>th</sup> April, 2011. Kakadpana hamlet consists of 85 households and has Warli ST Population, which is known for warli painting. The hamlet is situated at a distance of about 110 Kms from District Headquarter and 40 Kms. from Block Headquarter Trimbakeshwar. The village is surrounded by thin Forest. This project has been implemented by Gomukh, Environmental Trust for Sustainable Development, Pune and Maharashtra Energy Development Agency (MEDA) has been the monitoring & coordinating agency for this project. The biomass gasifier meets the daily requirement of domestic lighting in 85 households, street lighting and other entertainment activities. Each household has been provided with two light points and one power point for domestic lighting and entertainment. With the introduction of electricity, the lifestyle of the villagers has been changed. The smile on the faces of the villagers can be seen clearly and indicates that their distant dream of light is fulfilled so easily and become true, which they never expected in this life. They now started working late in the evening, especially women folk and also go to bed very late at night, which resulted increase in their income. The students are also started studying during night. The electricity is being provided in the village for 6-7 hrs. everyday i.e. from 7.00 PM to 2.00 AM at night. The GOMUKH, NGO is now planning to dig a bore well in the village to solve their drinking water, as well as partial irrigational problem, which is at present acute in the village. On the demand of villagers, GOMUKH is also planning to construct a Community Hall in the village and place a Colour Television, so that the maximum no. of villagers may be benefited and watch the useful programmes of their interest, including National News. The fear of wild animals has reduced, as 10 street lights have been installed in the village, which provide adequate illumination during night. This has brought a sea change in their outlook towards development of their village. The villagers have decided to use the power generated for many other applications, such as, flour mill, chafe/fodder cutter machines and water pumps. 2 Nos. of biogas plants are also being installed in the village for meeting out their cooking requirements. The VEC has undertaken plantation of Karanj & fuel wood in 5

hectare land, which would provide biomass for running the gasifier.



**T & D Poll with Street Light**



**Biomass Gasifer**



**Biomass Gasifier Shed**



**Household Light**

**Case Study  
of  
Boritakheda Test Project in Amravati District of Maharashtra**

Boritakheda test project in Amravati District of Maharashtra was commissioned

in January, 2011. Two Gasifiers of 10 kW capacity each have been installed and commissioned in the project. Boritakheda has Korku ST Population with 123 households. The village is situated at a distance of about 228 Kms from District Headquarter and 61 Kms. from Block Headquarter Chikhaldara. The village is remote and there is 20 kms. Kaccha stony road and one can reach this village by Jeep only during off monsoon season. The village is surrounded by Forest. This project has been implemented by DREAM Bahuddheshiya Sanstha, Amravati and Maharashtra Energy Development Agency (MEDA) has been the monitoring & coordinating agency for this project. The biomass gasifiers meet the daily requirement of domestic lighting in 123 households, street lighting and other entertainment activities. Each household has been provided with two light points and one power point for domestic lighting and entertainment. With the introduction of electricity, the lifestyle of the villagers has changed drastically. The Korku Tribe living in this village is very gentle and simple in nature and give warm welcome to the visitor. The smile on their faces indicates that their distant dream of light is fulfilled and become true, which they never expected in this life. They now started working late in the evening, especially women folk and also go to bed very late at night, which resulted increase in their income. The students are also started studying during night. After the introduction of electricity, seven TVs have been purchased in the village and they are now watching the programmes up to 11 or 12'o clock at night. They watched the World Cup Cricket first time in their life because of the electricity availability in their village. The electricity is being provided in the village for 6-7 hrs. everyday i.e. from 7.00 PM to 2.00 AM at night. The DREAM, NGO is planning to put a motor on the existing well in the village, so that the water can be lifted for meeting out their drinking water needs and also partial irrigational needs, which is at present acute in the village. The DREAM, NGO is also planning to construct a Community Hall in the village and place a Colour Television, so that the maximum no. of villagers will be benefited and watch the useful programmes of their interest, including National News. The fear of wild animals has reduced, as 15 street lights have been installed in the village, which provide adequate illumination during night. This has brought a sea change in their outlook towards development of their village. The villagers have decided to use the power generated for many other applications, such as, flour mill, chafe/fodder cutter machines and water pumps. 2 Nos. of biogas plants are also being installed in the village for meeting out their cooking requirements. The VEC has undertaken plantation of fuel wood in 7 hectare land, which would provide biomass for running the gasifiers.



**T & D Poll with Street Light  
Chakki**

**Atta  
Biomass Gasifiers**



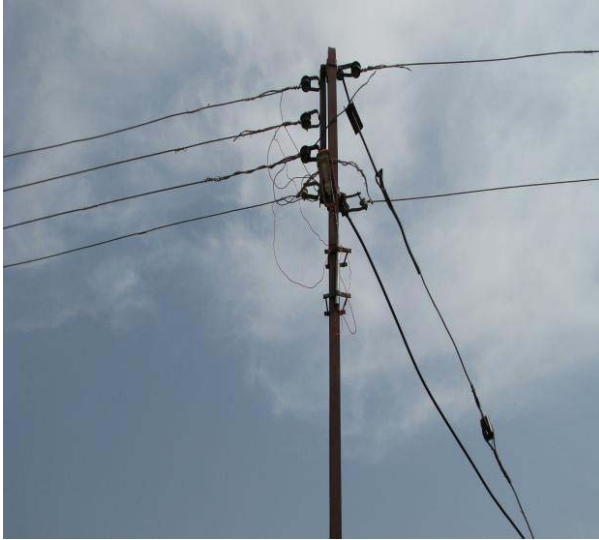
**Cutter  
HH**

**Television in working in a  
Nursery for plantation**

**Case Study  
of  
Chopan Test Project in Amravati District of  
Maharashtra**

Chopan test project in Amravati District of Maharashtra was commissioned in January, 2011. One Gasifier of 10 kW capacity has been installed and commissioned in the project. Chopan has Korku ST Population with 81 households. The village is situated at a distance of about 230 Kms from District Headquarter and 52 Kms. from Block Headquarter Chopan. The village is remote and there is 6 kms. Kaccha stony road and one can reach this village by Jeep only during off monsoon season. The village is surrounded by Forest. This project has been implemented by Apeksha Homoeo Society, Amravati and Maharashtra Energy Development Agency (MEDA) has been the monitoring & coordinating agency for this project. The biomass gasifier meets the daily requirement of domestic lighting in 81 households, street lighting and other entertainment activities. Each household has been provided with two light points and one power point for domestic lighting and entertainment. With the introduction of electricity, the lifestyle of the villagers has changed drastically. The Korku Tribe living in this village is very gentle and simple in nature and give warm welcome to the visitor. The smile on their faces indicates that their distant dream of light is fulfilled and become true now with the introduction of the electricity, which they never expected in this life. They now started working late in the evening, especially women folk and also go to bed very late at night, which resulted increase in their income. The students are also started studying during night. After the introduction of electricity, one TV has been purchased in the village and they are now watching the programmes up to late night. The electricity is being provided in the village for 6-7 hrs. everyday i.e. from 7.00 PM to 2.00 AM at night. The Apeksha Homeo Society, NGO is planning to construct a Community Hall in the village and place a Colour Television, so that the maximum no. of villagers will be benefited and watch the useful programmes of their interest, including National News. The fear of wild animals has reduced, as 10 street lights have been installed in the village, which provide adequate illumination during night. This has brought a sea change in their outlook towards development of their village. The villagers have decided to use the power generated for many other applications, such as, flour mill, chafe/fodder cutter machines and water pumps. 2 Nos. of biogas plants are

also being installed in the village for meeting out their cooking requirements. The VEC has undertaken plantation of fuel wood & oil seed bearing trees in 5 hectare land, which would provide biomass for running the gasifier and oil for oil expeller.



**T & D Poll with Street Light**



**Biomass Gasifer**



**Atta Chakki**



**Nursery for plantation**

### **Case Study of Kandhal Test Project in Cuttack District of Orissa**

Kandhal test project in Cuttack District of Orissa was completed in all respects and dedicated to the villagers in June, 2009. Two Gasifiers, each of 10 kW capacity have been installed and commissioned in the project. Kandhal is a remote, dominated by ST population and most of the families belongs to BPL with 143 households and situated at a distance of about 125 Kms from District Headquarter. The village is surrounded by Forest. This project has been implemented by Orissa Project & Marketing Development Centre (OPMDC),

Cuttack and Orissa Renewable Energy Development Agency (OREDA) has been the monitoring & coordinating agency for this project. The biomass gasifiers meet the daily requirement of domestic lighting in 150 families, community hall and primary school lighting, street lighting and other entertainment activities. Each household has been provided with two light points and one power point for domestic lighting and entertainment. One oil expeller of 100 kg/hr capacity has been installed in the project, which is being used for extraction of oil from Karanj and other edible oil-seeds. With the introduction of electricity in the village, the quality of life of the villagers has improved drastically and villagers are happy as they have installed Televisions in their houses for entertainment and their children are able to study at night in a proper light. The fear of wild animals has reduced, as 15 street lights have been installed in the village, which provide adequate illumination during night. This has brought a sea change in their outlook towards development of their village. The villagers have decided to use the power generated for many other applications, such as, flour mill, chafe/fodder cutter machines and water pumps. 20 Nos. of biogas plants have also been installed in the village for meeting out their cooking & lighting requirements. The lighting from biogas plants is facilitating women to work at night in making Dona Patta from Sal / Teak leaves. The role of women in biogas plants involves feeding of cow dung and also slurry treatment for use in agricultural fields. The VEC has undertaken plantation of Karanj & fuel wood in 10.5 hectare land, which would provide biomass for running the gasifiers and oil seeds for running the oil expeller. The smiles on the faces of the villagers after introduction of electricity speak volumes about success of the project, which may be termed as DREAM to REALITY.

### Biomass Machine House







**Dungbase Biogas Plant**