DEVELOPMENT AND PROMOTION OF GREEN JOBS, AN OPPORTUNITY FOR PUBLIC EMPLOYMENT SERVICES

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Guinea's experience in the diffusion of Bio digester technology

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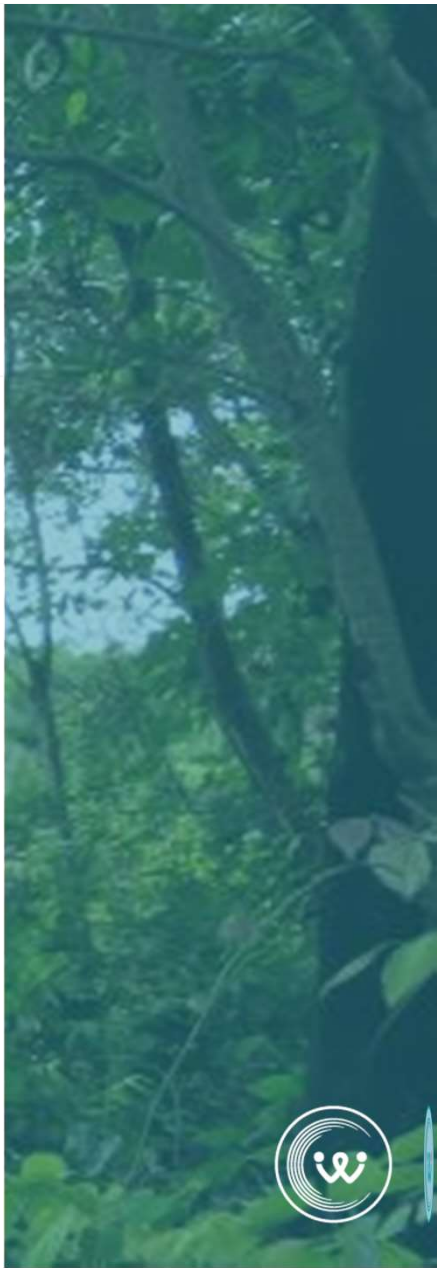

GUINEA'S EXPERIENCE IN DISSEMINATING BIODIGESTER TECHNOLOGY

Communication from the National Agency for the Promotion of Biodigester Technology (ANPTB)

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INTRODUCTION (1/2)

Our intervention is part of the development and promotion of green jobs in connection with the dissemination of biodigester technology in Guinea.

According to the International Labour Office (ILO), **the 21st century faces two major challenges:**

- **prevent climate change and the degradation of natural resources ;**
- **ensure social development and decent work for all**.

Green jobs are the key to meeting these two challenges simultaneously. The potential for creating green jobs exists in all countries. In fact, this potential is often higher in developing countries.

INTRODUCTION (2/2)

In Guinea, the ANPTB is the body responsible for promoting biodigester technology, under the supervision of the Ministry of the Environment and Sustainable Development (MEDD).

Its mission is to drive, lead and support programmes, projects and initiatives that encourage the development and promotion of biodigester technology as part of a public-private partnership with all the players involved.

ANPTB is the scaling-up of the pilot project "Creation of a market for the development and use of biogas resources in Guinea" initiated by the Guinean government.

PRESENTATION OF BIODIGESTER TECHNOLOGY

A biodigester is a reactor that produces biogas from organic waste such as human, agricultural or animal excrement through a natural fermentation process that degrades organic matter in the absence of oxygen (anaerobic digestion).

The biogas produced is made up of methane, carbon dioxide, water, nitrogen, oxygen and hydrogen sulphide.

Different parts of a biodigester

A biodigester has 6 main parts:

(i) The inlet basin (mixing zone) where the cattle/pig dung is loaded and mixed;

(ii) the digester (the digestion zone),

(iii) the gas holder or dome (the gas storage area),

(iv) the outlet basin (area where the dung is moved after digestion),

(v) the gas pipeline (gas pipe system) and

(vi) compost pits.

BIODIGESTER TECHNOLOGY

PRESENTATION OF BIODIGESTER TECHNOLOGY

The remaining dung from the digester (digestate) is used in vegetable gardens and fields. as fertiliser.

ACHIEVEMENTS OF THE PILOT PROJECT

THE PILOT PROJECT COVERS THE ENTIRE COUNTRY:
23 PREFECTURES OUT OF 33; **135** RURAL COMMUNES; I.E. A TOTAL OF **85%** OF THE NATIONAL TERRITORY WITH THE FOLLOWING RESULTS:

1,415 domestic biodigesters; 2 industrial biodigesters; 2,611,000 m3 of biogas produced; 7,065 people with access to clean cooking gas

- 48,426 MWHTh generated
- 36,500 tonnes of CO2 equivalent sequestered
- 52.270 tonnes of slurry produced
- 10,454 ha of fertilised land
- 2 stocked fish ponds

237 direct jobs created, including .

222 masons working for 12 companies in the biogas sector and 7 biodigester inspection and certification supervisors

CHALLENGES

- Strengthening the skills of players in the biodigester technology sector;
- Enhancing the attractiveness of the biodigester technology sector ;
- Creating an environment conducive to the development of the biodigester market .

ADVANTAGES IN TERMS OF CLEAN ENERGY PRODUCTION, WASTE MANAGEMENT AND COMMUNITY BENEFITS

The advantages of a 6 m3 biodigester are as follows:

- Reduction of GHG emissions (6 t eqCO2 /year) by replacing wood fuel with biogas;
- Preservation of 0.3 ha of forest per year by using biogas instead of firewood
- Production of the equivalent of 19 12 kg bottles of butane gas per year;
- Production of 60 tonnes of compost per year from the effluent;
- Improving women's and girls' health by reducing exposure to smoke

The advantages of a 6 m3 biodigester are as follows (2/2)

- Empowering women and girls by reducing labour shortages and saving time on wood chores;
- Contributing to waste management by recovering domestic and municipal waste;
- Improving the financial capacity of households by setting up an appropriate financing mechanism for households;
- Use of effluent as compost for agriculture and as feed for fish and poultry
- The creation of non-agricultural jobs, with the emergence of teams of craftsmen, masons, market gardeners and livestock farmers

The actions undertaken by the ANPTB to promote and disseminate this technology are part of the

- Ensuring the sustainability of the results achieved by monitoring the functionality of the biodigesters installed,
- Building household capacity in terms of biodigester maintenance and effluent use;
- Raising awareness among rural communities of the benefits of biodigesters and encouraging them to adopt the technology;
- Continued construction of biodigesters (domestic and semi-industrial) to meet demand from households and cooperatives;
- Monitoring the partnership with the Alliance pour le Biodigesteur en Afrique de l'Ouest et du Centre (AB/AOC);
- Mobilising internal/external resources ;
- Improving the governance of the ANPTB.

CONCLUSION

- In short, biogas plays an important role in the management of natural resources, helping to reduce waste, produce renewable energy and preserve non-renewable resources.
- Its intelligent use can contribute to a more sustainable balance in the use of the planet's resources.
- The use of biodigesters contributes to the promotion of green economies and green jobs within public and private services.

THANK YOU FOR YOUR KIND ATTENTION

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