



# CAVA II

Cassava: Adding Value for Africa Phase II



SLIDEN  
AFRICA

# CASSAVA AND THE ENVIRONMENT

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PRESENTATION AT THE CASSAVATECH HELD AT ORIENTAL HOTEL, LAGOS BETWEEN 22<sup>ND</sup> – 23<sup>RD</sup>  
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# Cassava

- ✓ a favoured root crop in the tropics
- ✓ source of carbohydrate in most developing countries
- ✓ thrives where other plants fail
- ✓ important staple crop
  - family reserve crop in some countries

▶ Commercially promising crop

Roots are processed for human food and animal feed plus raw materials for industries

Leaves are sources of vegetables in some parts of the world for human consumption and animal feed

Peels from the roots are also processed for livestock consumption

Stems are propagated for multiplication and plant production

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# Focus of this session

- ▶ To what extent do cassava production and processing contribute to issues on environmental concern/ environmental pollution?
- ▶ How aware are the actors along the value chain on these issues?
- ▶ What is the level of impact/damage caused by these environmental issues?
- ▶ Can these issues be managed and or controlled?
- ▶ What are the ways of managing and or controlling these issues?



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# Focus of this session

- ▶ Erosion and land degradation
- ▶ Wild and agro biodiversity loss
- ▶ Water depletion
- ▶ Soil nutrient depletion
- ▶ GHG emissions ( $N_2O$ ) from chemical storage



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# Focus of this session

- ▶ Impacts on ground water supply and ground water quality
- ▶ Impacts on surface water quality
- ▶ Impact on the soil
- ▶ Storage of waste residue impacts
- ▶ Health effects
- ▶ Gaseous pollution contribution to GHG emissions or foul odour and dust



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# Focus of this session

## Adding Value to Waste:

- ▶ Production of high quality feed from cassava peels, creating approximately 100,000 jobs and eliminating more than 20% of dangerous cassava peels from the environment (Stapleton, 2015)
- ▶ For large scale industries, water consumption should be minimized by the use of hydrocyclones or other water recycling systems thereby increasing extraction efficiency and reducing the amount of waste water produced
- ▶ For small-scale processing units, use of seepage pits, guaranteeing a limited degree of effluent reduction and for medium- to large-scale starch factories; effluents can be treated and treated water can be used for irrigating crops or safely released to rivers or streams

## EU funded GRATITUDE Project example:

- ✓ utilization of cassava peels in Feed and feed ingredients
- ✓ growing mushrooms from cassava wastes;
- ✓ Extracting starch and other nutrients from cassava peels;
- ✓ Turning wastes from cassava beer production into snack food ingredients

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Thank you



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