

Seeds for Fuel

TRAILER

Every year about 20,000 hectares of trees are cut down to be used as firewood in Malawi. Because of this, the country's forest cover is rapidly reducing. Now the government is asking farmers to grow crops that will provide alternative sources of fuel.

RUNTIME: 06:43

COUNTRY: MALAWI

FILMING LOCATION: CHIKWAWA, NSANJE

LANGUAGE: ENGLISH, CHICHEWA

SOURCE: A24 MEDIA

SCRIPT

COMMENTARY

Yohan Zuze is picking *Jatropha* seeds at his home in Chikwawa, Southern Malawi. He's getting ready for an upcoming agricultural show and wants to make some oil. He later uses this oil press made from a car jack, to crush the seeds for oil. Two of the machines were recently installed by the Malawi government and foreign donors to help residents easily express bio fuels.

ITV, YOHAN ZUZE, Farmer (Chichewa)

*"We have gained a lot from *Jatropha* seeds because we can make soap from the oil we no don't buy soap in this village any more. In the past we used to spend a lot of money buying soap and paraffin, but now we no longer spend that money because we can produce it ourselves."*

COMMENTARY

The oil can also be used to light lamps that come in handy at night. It produces some carbon dioxide when burnt, but not as much as fossil fuels like paraffin.

On the day of the show, residents came out to share and learn about the multiple uses of Jatropha, Neem and Moringa trees -- collectively referred to as Janeemo trees. Today, Yohan is showing visitors how to turn Jatropha oil into soap.

ITV, YOHAN ZUZE, Farmer (Chichewa/Subtitled)

“9 bottle tops of oil, 8 bottle tops of water and 1 bottle top of caustic soda. Now I’m trying to make soap by stirring.”

ITV, WILLIAM ALLAN, Chikwawa Resident (English)

“What I have seen here is Terrific, Marvellous. This is one way of reducing poverty in a rural setting like this.”

COMMENTARY

The event is part of an effort by the Scottish and Malawian governments to encourage communities here to grow Janeemo trees around their homes and farms. The project was started in 2008 and wants to promote use of sustainable energy resources. Grain Malunga is the Minister for Energy, Natural Resources and Environment.

ITV, GRAIN MALUNGA, Minister for Energy, Natural Resources and Environment (English)

“The past 10 years the economy has grown at a fast rate, and what that means is that there is growth in energy demand as well but we did not match the economic gains the economic development against our energy needs so we are now concentrating much in terms of energy generation, using hydropower, using solar and wind hybrid systems but at the same time we want to go into biomass energy.”

COMMENTARY

Nearby, a group of women demonstrate how to make relish from Moringa leaves. The tree's leaves can also be used to make vegetable oil.

ITV, DOLOFY MDUNA, Farmer (Chichewa)

“By eating Moringa we are getting stronger and stronger even our children were weak and now they are healthy.”

COMMENTARY

Its not just humans who can benefit from Moringa, Macduff Mwafumu, a chicken farmer feeds his brood on Moringa leaves which he says improves the nutritional value of the eggs they lay.

ITV, MACDUFF MWAFUMU, Farmer (English)

“You can see the colour, the one that is fed in ‘sangoa’ (moringa) leaves is deep in colour and the vitamin A content is high compared with the one which is not fed in moringa’s leaves.”

COMMENTARY

Away from the event, Yohani Chipembele showed us how his Neem trees have helped increase his income. He's a traditional healer and uses the plant to make medicine for patients. Yohani also sells firewood from his trees instead of cutting down those in the forest.

ITV, YOHANI CHIPEMBELE, Herbalist (Chichewa)

“This is a Neem tree, we prune the leaves and pound them into a powder form which we use as medicine for malaria and stomach-aches.”

COMMENTARY

Charcoal production still poses a major threat to Malawi's indigenous forests, and the department of forestry is struggling to make illegal loggers understand the importance of the country's forests. Every week, illegal traders are arrested as they try to smuggle charcoal in various towns.

ITV, ERIC ZANGAZANGA, Forest Officer, Chikwawa (English)

“Charcoal is supposed to move with a license; unfortunately none of these people who transport the charcoal have licenses so the only option that we have to confiscate and we do take these people to court.”

COMMENTARY

Meanwhile critics say that bio fuel crops pose a threat to food security because they are grown on land meant for food crops. On its part, Malawi is working to boost its food production alongside bio fuels.

After a devastating dry season in 2005, the government introduced seed and fertilizer distribution programs which increased harvests and saw the country export maize to neighbours like Zimbabwe.

COMMENTARY

Another project to transform organic waste into biogas has also been introduced in Chikwawa. Zimbabwean farmer, Jona Chisumo is working with an organisation known as Entech to install bio-digesters in schools here. He uses similar ones to run two engines on his farm.

ITV, JONA CHISUMO, Entech Official (English)

“How it works is that the initial dung kicks off the bio digesting process and we create methane. We then take that methane which is a green house gas but in this way we then

use it and the bi-product is water and energy. We take it through a pipe to a stove that we have put in the class or a light so that we can extend the study period for the school kids.”

COMMENTARY

Malawi's carbon emissions are some of the lowest in the world -- Practices like these improve people's lives but if they are not replicated in other parts of the world, the environment will continue to struggle with the effects of decades of neglect.

SHOT LIST

CHIKWAWA, MALAWI (RECENT)

1. VARIOUS OF FARMER, YOHAN ZUZE PICKING JATROPHA SEEDS
2. VARIOUS OF ZUZE EXPRESSING JATROPHA OIL
3. OIL DRIPPING IN BOTTLE

4. SOUNDBITE (Chichewa) FARMER, YOHAN ZUZE SAYING:
“We have gained a lot from Jatropha seeds because we can make soap from the oil we no don't buy soap in this village any more. In the past we used to spend a lot of money buying soap and paraffin, but now we no longer spend that money because we can produce it ourselves”

5. ZUZE LIGHTING LAMP USING JATROPHA OIL
6. ZUZE TALKING TO VISITORS ABOUT SOAP MAKING AT AN AGRICULTURAL SHOW
7. VARIOUS OF SOAP CAKES
8. ZUZE POURING JATROPHA OIL INTO TIN

9. SOUNDBITE (Chichewa) FARMER, YOHAN ZUZE SAYING:

“9 bottle tops of oil, 8 bottle tops of water and 1 bottle top of caustic soda. Now I’m trying to make soap by stirring.”

10. SOUNDBITE (English) CHIKWAWA RESIDENT, WILLIAM ALLAN SAYING:

“What I have seen here is Terrific, Marvelous. This is one way of reducing poverty in a rural setting like this.”

11. VARIOUS OF WOMEN POUNDING DRIED NEEM LEAVES

12. WOMAN SIEVING LEAVES

13. MINISTER FOR ENERGY NATURAL RESOURCES AND ENVIRONMENT,
GRAIN MALUNGA TALKING TO EXHIBITORS

14. (SOUNDBITE) (English) MINISTER FOR ENERGY NATURAL RESOURCES
AND ENVIRONMENT, GRAIN MALUNGA SAYING:

“The past 10 years the economy has grown at a fast rate, and what that means is that there is growth in energy demand as well but we did not match the economic gains the economic development against our energy needs so we are now concentrating much in terms of energy generation, using hydropower, using solar and wind hybrid systems but at the same time we want to go into biomass energy.”

15. VARIOUS OF WOMAN CHOPPING MORINGA LEAVES

16. VARIOUS OF WOMAN COOKING MORINGA RELISH

17. SOUNDBITE (Chichewa) FARMER, DOLOFY MDUNA SAYING:

“By eating Moringa we are getting stronger and stronger even our children were weak and now they are healthy.”

18. VARIOUS OF CHICKEN FARMER, MACDUFF MWAFUMU TALKING TO
VISITORS AT SHOW

18. EGGS WITH HIGH VITAMIN A CONTENT

19. (SOUNDBITE) (English) CHICKEN FARMER, MACDUFF MWAFUMU, SAYING:
“You can see the colour, the one that is fed in sangoa leaves is deep in colour and the vitamin A content is high compared with the one which is not fed in moringa’s leaves.”

20. VARIOUS OF TRADITIONAL HEALER, YOHANI CHIPEMBELE
HARVESTING NEEM LEAVES

21. MEN ARRANGING FIREWOOD FROM NEEM TREE

22. (SOUNDBITE) (Chichewa) TRADITIONAL HEALER, YOHANI CHIPEMBELE
SAYING:

“This is a Neem tree; we prune the leaves and pound them into a powder form which we use as medicine for malaria and stomach-aches.”

23. WOMAN LIGHTING FIRE TO MAKE CHARCOAL

24. VARIOUS OF CHARCAOL SELLERS

25. (SOUNDBITE) (English) CHIKWAWA ASSISTANT REGIONAL FORESTRY
OFFICER, ERIC ZANGAZANGA

“Charcoal is supposed to move with a license; unfortunately none of these people who transport the charcoal have licenses so the only option that we have to confiscate and we do take these people to court.”

NSANJE, MALAWI (FILE)

26. VARIOUS OF MAIZE CROP IN FARM

27. FARMERS WEEDING CABBAGE FARM

28. FARMERS LAYING IRRIGATION CHANELLs

29. VARIOUS OF ENTECH OFFICIAL, JONA CHISUMO PUTTING LEAVES INTO
BIODIGESTER

30. BIODIGESTER

31. (SOUNDBITE) (English) ENTECH OFFICIAL, JONA CHISUMO SAYING:
“How it works is that the initial dung kicks off the bio digesting process and we create methane. We then take that methane which is a green house gas but in this way we then use it and the bi-product is water and energy. We take it through a pipe to a stove that we have put in the class or a light so that we can extend the study period for the school kids.”

32. VARIOUS OF WOMAN HARVESTING NEEM LEAVES

END

Source: Africa Journal