

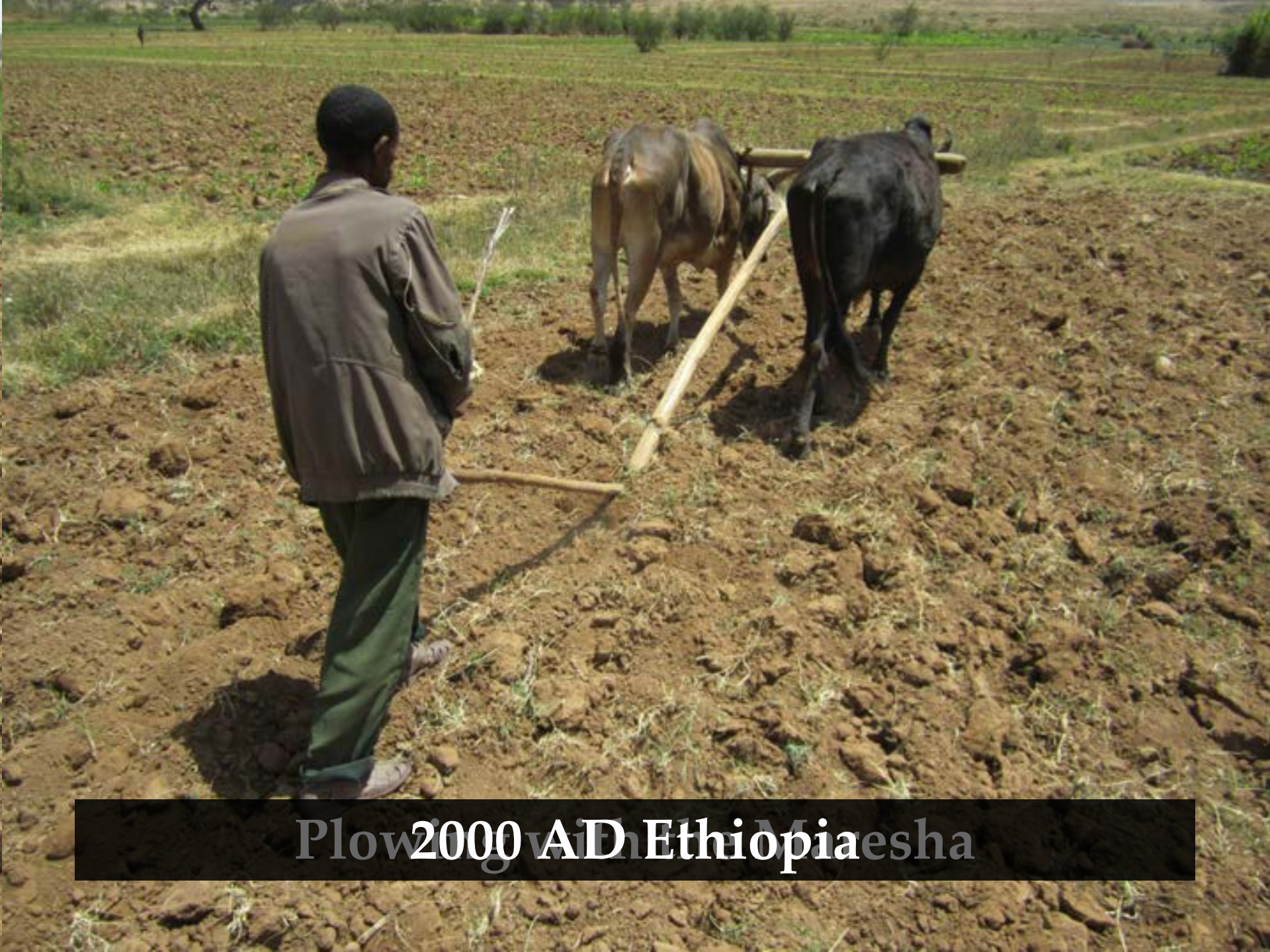


http://thewaythatrubandthelife.net/index/2_background/2-5_societal/0-000-043-000-bc-to_2-011-ad_2-5-2_wider-view/0-000-043-000-bc-to_2-011-ad_2-5-2-06/ardTanum.jpg

1000 BC Sweden



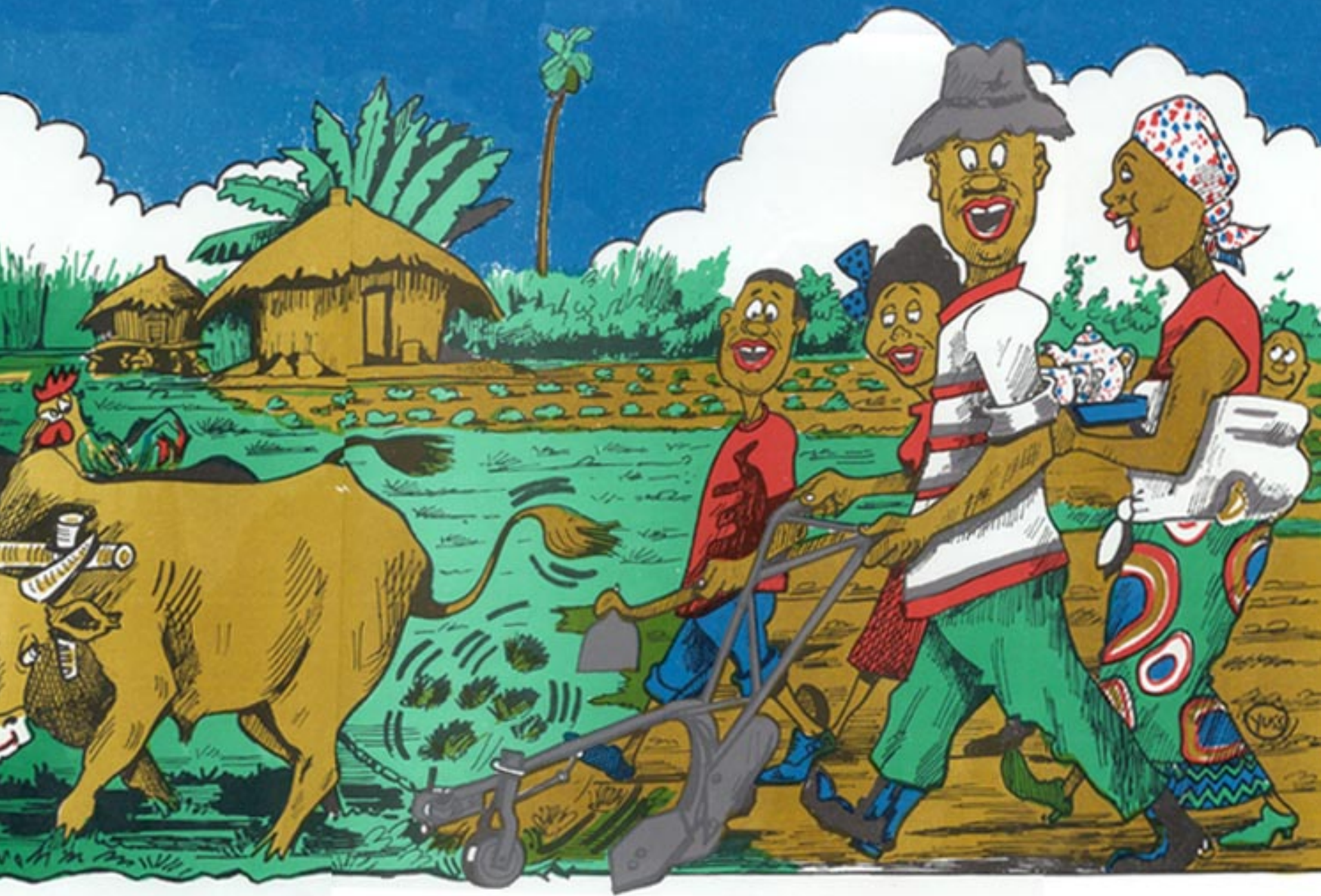
1200 BC Egypt



2000 AD Ethiopia
Plowing with Miesha



Plowing with the Maresha



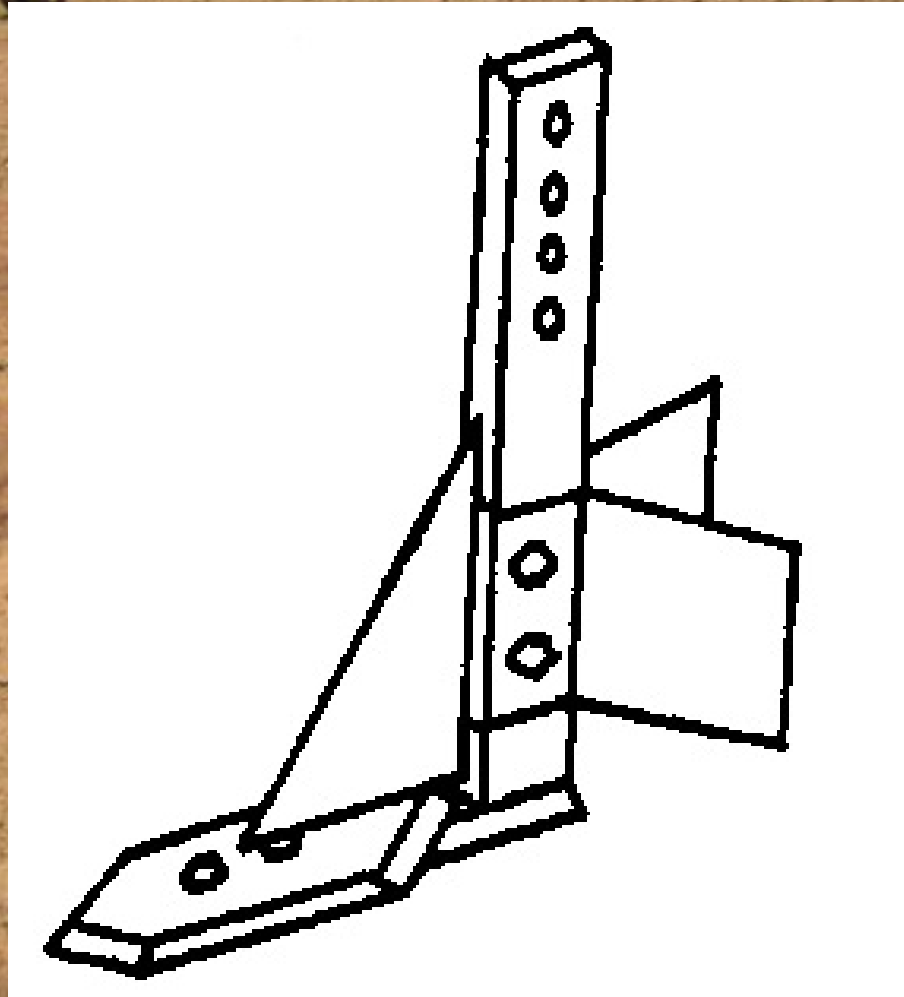
K Adapted!!



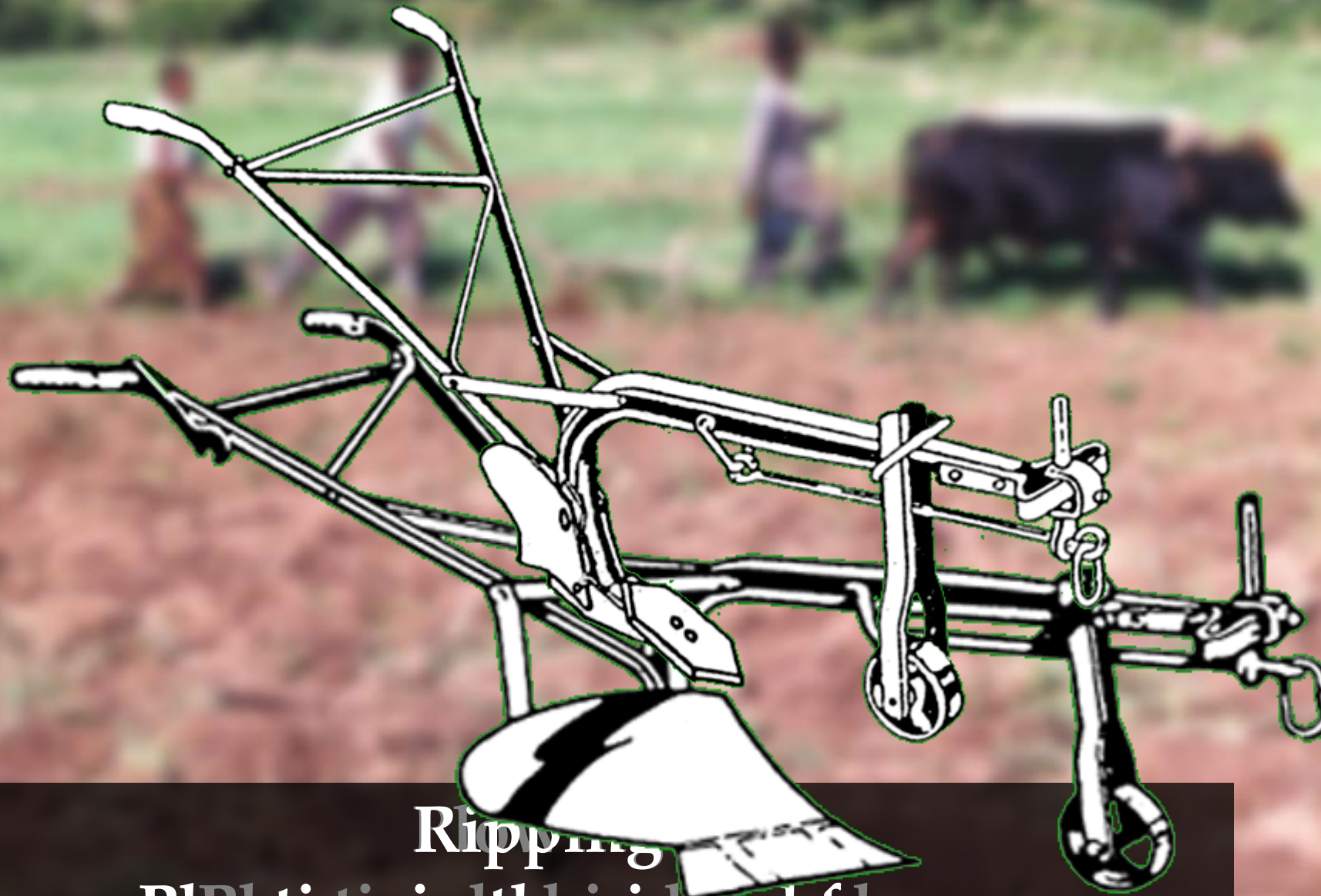
Adapting the Mānoy Bumper from Zambia



Niger



'Konni' ripper



Ripping
Planting in the ripped furrow



Ripping &
Planting in the ripped furrow



The Magoye ripper


A group of people, including men, women, and children, are gathered in a rural, dry landscape. In the foreground, a woman in a bright green shirt and patterned skirt is pulling a green net or cloth. Behind her, a man in a yellow shirt is guiding two brown oxen. A large group of people is standing in the background, watching the activity. The ground is dry and dusty, and there are some trees and bushes in the distance.

✓ 2-3 times faster than plowing

✓ early planting

✓ regular planting depth

✓ evenly spaced crop rows

- 
- ✓ water is trapped in the planting furrows
 - ✓ especially on lightly sloping land



Conservation Farming promotion

Digging and planting in a heavy hand
Effective but inefficient



**The Magoye ripper offers a faster option
for farmers with access to oxen**

Use the Magoye ripper in **DRY SOIL** for:



✓ reduced tillage

✓ water conservation

✓ timely planting

✓ making **Conservation Farming** do-able



**ox-rip
maize-cowpea intercrop
after velvet bean rotation**

**ox-plow
maize monocrop
year after year**

Conservation farming versus plowing



Conservation farming versus plowing





A deep winged factory design for a Magby gripper



Time to Magdalenapsettning



Need to reduce draft force requirement

**An attempt by the
Conservation Farming Unit, Zambia**



an animal
tool
breaking

No draft force requirement

The Magoye ripper 2.0



an animal
tool
breaking

✓ simpler, cheaper

✓ narrow chisel tine

✓ easy tine replacement



✓ better adapted for breaking hard soil

✓ better adapted for water harvesting



- ✓ better adapted for breaking hard soil
- ✓ better adapted for water harvesting



In Ethiopia, the farmers observed:

The Maresha only plows superficially

Need for a deep tillage option

So more moisture will be stored in the soil



Ouahigouya- Burkina Faso



Farmers proposed to mechanize the Zai



but some improvements were needed



The Magoye ripper 2.0
The Kapandula ripper
adapted in Zambia for Burkina Faso











A background photograph showing several people, including a child in a purple striped shirt and an adult in a blue jacket, working together to operate a large, rusty pair of shears. The shears are being used to cut a piece of green material. A speech bubble is overlaid on the image.

Kapandula!

Thank you!



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presentation

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