

# Agriculture mechanisation in Africa: the return of tractors and the new *aidbiz* landscapes

Lídia Cabral
Institute of Development Studies, University of Sussex, UK

#### MF 35 | 36.5 HP

#### The people's tractor

If you are thinking about buying your first tractor, the MF 35 is the perfect partner for your farm or contracting business.

The MF 35 puts tractor power within everyone's reach. It brings mechanisation to a new generation of farmers, farm workers and emerging agricultural businesses. It could transform the livelihood of your family or your community.

Best of all, the MF 35 comes from Massey Ferguson – a name highly trusted and well-respected amongst the farming community,





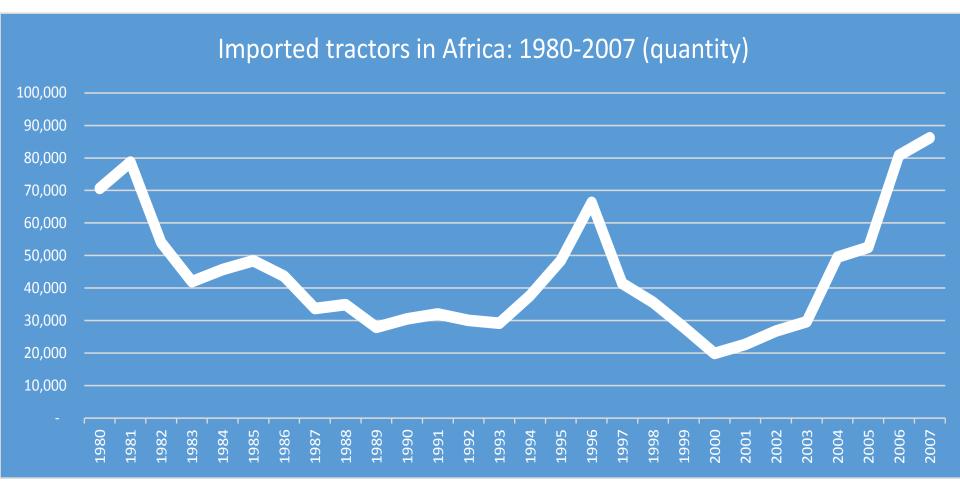






## What do we see?

new wave of agricultural mechanisation?



Source: FAOSTAT

## renewed policy interest

FAO Representative to the AU, 2016:

"The dream to have a hunger-free Africa by 2025 would remain a mirage without mechanisation."

#### World Bank official, 2016:

"There is a rapid advancement in the design of agricultural machines that our fields could be tilled, sown, tended and harvested entirely by fleets of cooperating autonomous machines by land and air. This could allow machines working day and night." Government of Mozambique, 2017:

"The Government has approved the Strategic Plan for Agricultural Development (PEDSA 2011-2020) where the challenge concerns the structural transformation of this Sector. turning dominant small producers into medium and large commercial producers (agribusiness), and developing agro-industry. In this context the Government is implementing the National Programme for Agricultural Mechanisation (PNMA), which aims to offer practical solutions for promoting employment, increasing productivity and competitiveness of the agricultural sector."

## it's all about tractors!



GHANA ECONOMY, GHANA NATURAL RESOURCE, INVESTORS CHOICE/CORRUPTION

WAATCO sets up \$200million tractor assembly unit to produce 500 tractors a year in Ghana

Posted on August 28, 2015



Indian-owned West Africa Agro-Tech Company (Waatco), based in Ghana, has invested \$200 million in a tractor assembly plant at nearby Nsawam, to produce 500 tractors a year, the company's managing director Akoliya Patel said.

The company is already selling India-made Sonalika tractors and farming machines, and is now planning to build agriculture service, as well as training, centres, in farming communities across the country. Patel said the company will also train the youth both in Ghana and the West African region on how to generate opportunities in various fields of technology and services for farmers.

## tractors from the 'South' and from the 'North'

MF 35 | 36.5 HP



**Tropical tech**: more rugged and **resistant** machinery **suitable** for African conditions

e.g. Brazil's More Food International



#### The people's tractor

If you are thinking about buying your first tractor, the MF 35 is the perfect partner for your farm or contracting business.

The MF 35 puts tractor power within everyone's reach. It brings mechanisation to a new generation of farmers, farm workers and emerging agricultural businesses. It could transform the livelihood of your family or your community.

Best of all, the MF 35 comes from Massey Ferguson – a name highly trusted and well-respected amongst the farming community,

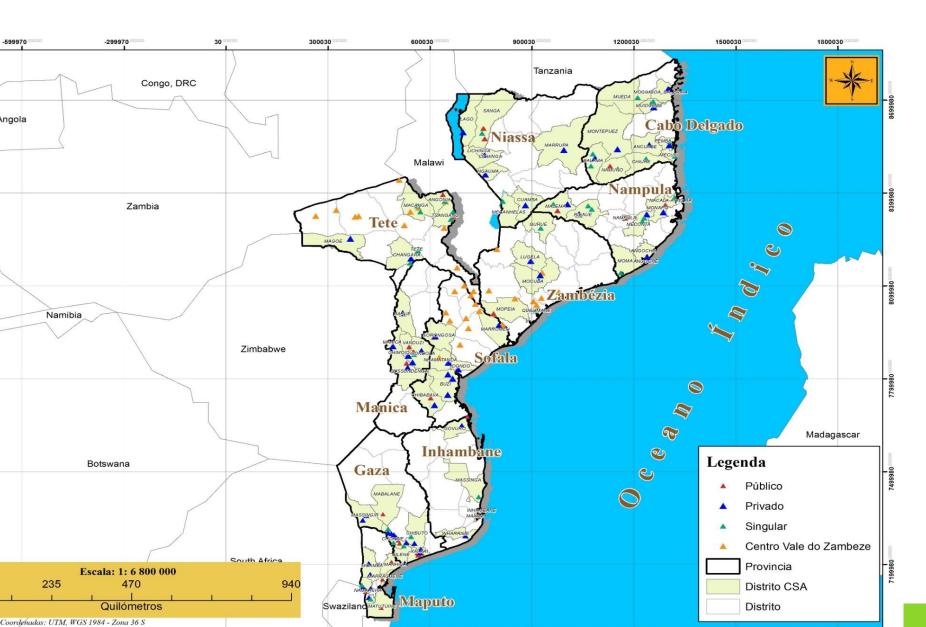




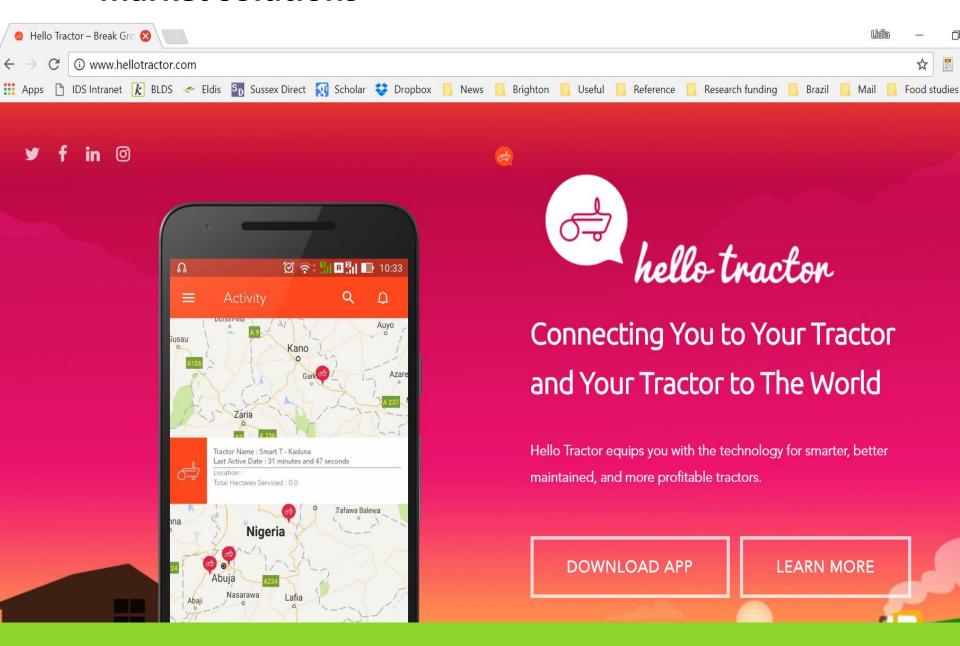
Sustainable tech: quality and range of technology from established European and US manufacturers and solutions for all farm types and sizes

e.g. CEMA's narrative

## state-led programmes and PPPs



### market solutions



## Mixed views on tractors





replace labour, lead to specialisation and diversity loss, tillage accelerates soil degradation and fertiliser dependency



reduce drudgery, expand cultivation to hard soils, free up time, improve timeliness of farming operations, multiple uses (e.g. transportation)



# **Tractors in post-colonial history**

- The economic failure of state-driven tractorisation schemes in Africa in the 80s/90s – structural conditions (land/labour) were not right, lack of maintenance and repair services, of complementary inputs and high costs of imports and fuel (Binswanger 1986; Pingali 1987; Mrema, Baker & Kahan 2008)
- Graveyards of tractors became commonplace in the African landscape!
- Yet, tractors have played non-trivial social and political functions — as instruments of political patronage, accumulation, constituency-building and of social revolution (Anthony, 1988)



#### Tractors were an instrument of the *ujamaa* social revolution in Tanzania:



If we want to develop, we have no choice but to bring both our way of living and our way of farming up to date. The hand-hoe will not bring us the things we need today. Very often it has not even sufficed to bring us enough to eat. We have got to begin using the plough and tractor instead. But our people do not have enough money, and nor has the Government, to provide each family with a tractor. So what we must do is try and make it possible for groups of farmers to get together and share the cost and the use of a tractor between them. But we cannot even do this if our people are going to continue to live scattered over a wide area, far apart from each other. The first and absolutely essential thing to do, therefore, if we want to be able to start using tractors for cultivation, is to begin living in proper villages.

President Nyerere cited by Anthony (1988: 48-49)

## Two areas of dispute

#### Channels: markets, not the state

- Markets responding to rising demand for tractors (Diao, Cossar, Houssou and Kolavalli 2014) and tractor rental services expanding, with larger farmers renting to capitalconstrained small farmers (Cossar et al. 2016)
- Do markets have solutions for all?
- Are solutions in the market being driven by demand or induced by industry, from North and South?

#### Types: the Asian small-engine alternative, not tractors

- Small-scale machinery more appropriate in much of Africa because of affordability, suitability for small farms, employment intensive and lower demands on skills and maintenance (Segal 1982)
- Small-scale engines delivered in terms of productivity and social justice in South Asia, with initial state intervention – e.g. in Bangladesh, by removing barriers to imports of cheap engines from China (Biggs and Justice 2015)
- Is the potential of small scale mechanisation being ignored by govts and cooperating partners?



# Our study on mechanisation

#### Questions

- How are African governments promoting agricultural mechanisation?
- What drives mechanisation policy and policy narratives, domestically and globally?
- What implications of policy for agrarian structures?

#### Scope

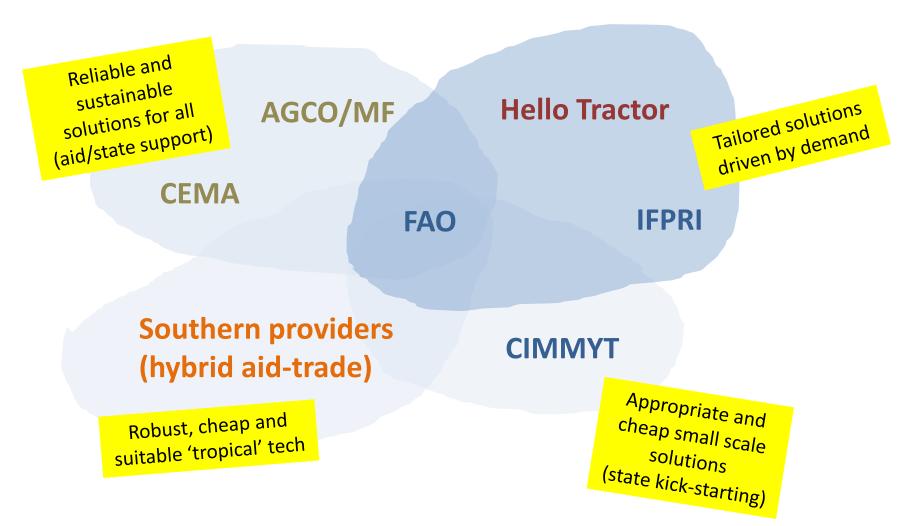
- global actors, agendas and narratives on mechanisation
- domestic policy processes and agrarian contexts

#### **Emerging themes**

- global aid-business alliances (North and South)
- Instrumentality of mechanisation for the state in agriculture (patronage, accumulation, developmental)
- state-business relations and wider interests (seed, fertilizers, land)

# **Global perspective**

# Mapping of actors, narratives and coalitions



# **Country perspectives**

## Agrarian politics, aid context, state-business relations

- Ghana
- Zimbabwe
- Mozambique

