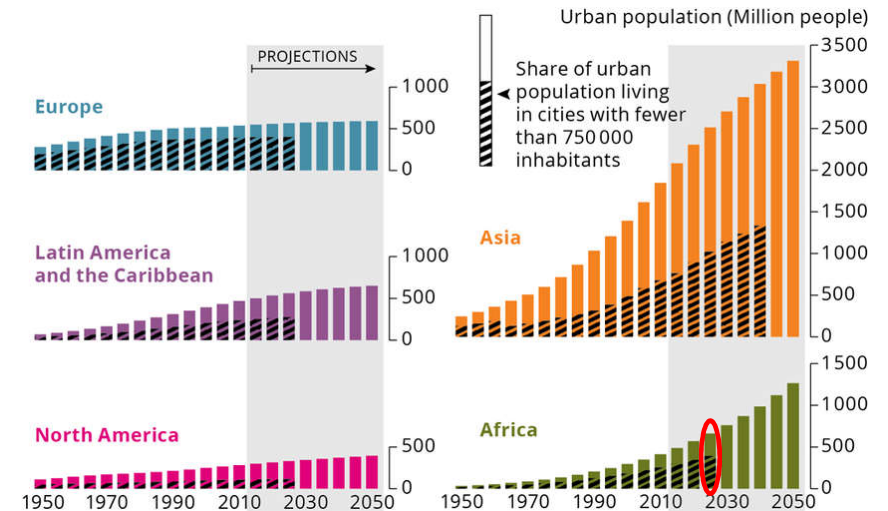
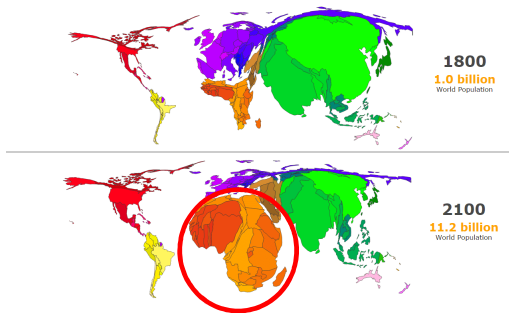


Petkus going Africa ...



African Trends in Grain Handling and Processing



Population

- **Boost** from today's 1/6 of the world population and growing and growing and being younger and younger – **43 % under age of 15**

Food production

- Has to grow (far) beyond actual capacities

Climatic change

- Shift of crop production areas and regional water shortages

Installation and Processing

- Facilities have to be erected in new areas, major investments in port terminals and new transportation routes

Trickle-down-Effect

- Consumer orientated societies where luxury goods move from upper to less wealthy social classes

Human

- **Urbanization** = Lack of labor willing to work under today's agriculture conditions

Food

- Accelerated demand for quality and food processing

Traceability

- And safety from field to fork – global food market segmentation - driven by export...

Agricultural (seed) business is strongly moving



PETKUS

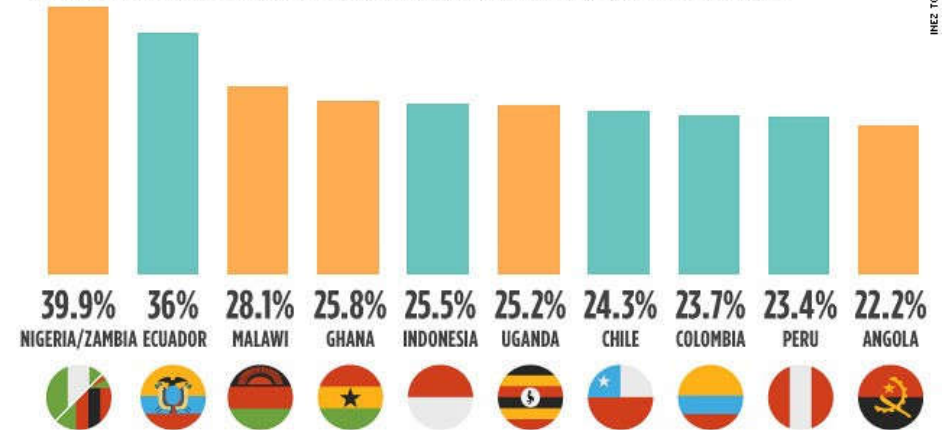
INEZ TORRE/OWN



Regional, continental and global growth performance, 2014-2020.
/ Courtesy



Total early stage Entrepreneurial Activity (TEA): Top 10 countries with the highest percentage of adults who are either starting a business or have run it for less than 3.5 years



*All data based on adults aged 18-64

Success over time

- In the last decades African wide developments have shown success.... Helping to grow food production beyond actual capacities.

Investments in arable land

- Big and ongoing investments in land development:
 - Land reclaim
 - Irrigation projects
 - Etc.
- Storage and processing projects are following, as well as infrastructural projects

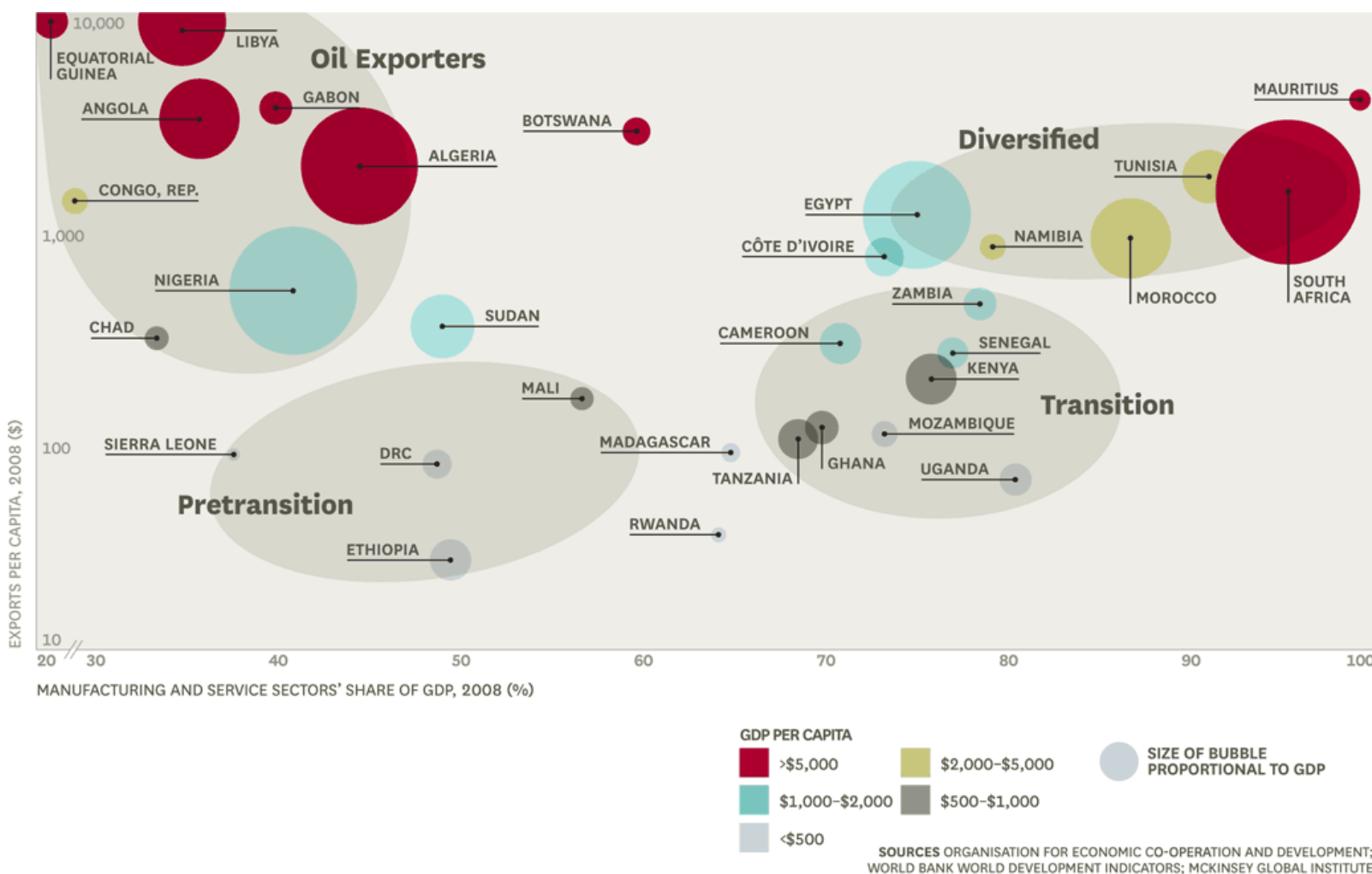
Entrepreneurship

- New professionally managed private companies are coming up more and more...

Input management

- Higher demand on good germinating and technical pure **seed** is one grantor to assure yield... helping to ensure food safety from field to fork

Africa is not a homogenous continent - 54 states...



Besides others...

- East/West – disparity in language
- North/South – disparity in religion
- Economy – disparity in prosperity:
 - + in Nigeria, South Africa, Egypt...
 - - in Chad, DR Congo, Somalia...
 - Local conflicts in Somalia, Mali, South Sudan,...

Keep in mind...

- In the shift from **agrarian** to **urban** economies, multiple sectors contribute to growth.

The African history of PETKUS as medium-sized OEM...



Opportunistic decades

- First projects started in the 80s of the last century
 - During the socialism time of the GDR, seed plants got installed in Mozambique and Angola
- In the 90s PETKUS delivered first mobile cleaners to Ethiopia and other countries
- About 10 years ago several cereal seed plants got installed in Morocco (3 -10 t/h)

Move

Strategy change

- First mobile cleaner **concept** delivered to the “Green Innovation Centre” in Burkina Faso → reference show case
- From opportunistic to strategical approach...
 - From single, mobile cleaners to complete seed installations
 - Creation of own market team
 - Membership in different business organizations
 - Close relation to GIZ (locally and in Germany)



PETKUS

The African story of PETKUS as medium-sized OEM...



Strategical Axis...

- GIZ: ppt project signed in Burkina Faso, new projects under focus in Ethiopia, Nigeria (PETKUS academy)
- BMZ: Green week participation and relations to governmental levels
- AFC: PETKUS academy under focus in Morocco, Zambia
- AFSTA: Membership



PETKUS

... and relationships

- AGRA: On stage in Kigali, presentation of mobile cleaner in Abijan
- Afrika-Verein: Membership (on stage in Adlon Hotel: German – Nigerian Business Summit)
- NIRSAL: Signed MOU's during visit of Angela Merkel in Nigeria, as well as visits of the Nigerian Vice President at PETKUS

PETKUS (seed) business- snapshot Nigeria

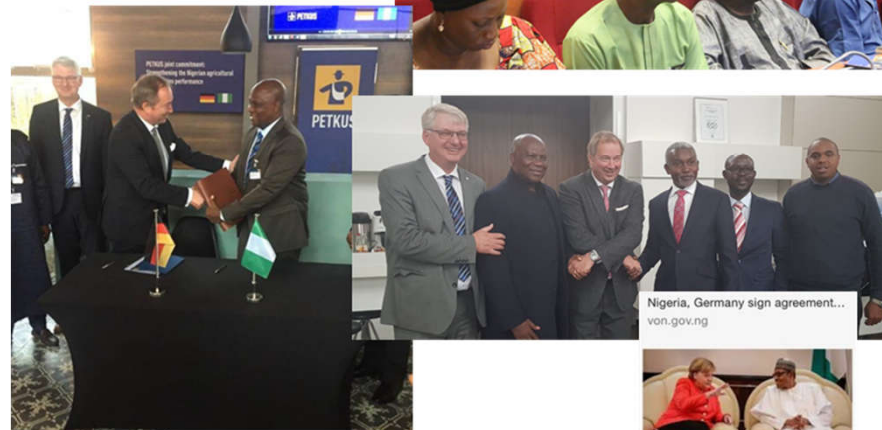


1.

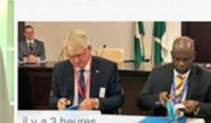
- Huge political support for the private agri-business-sectors
- Local and export driven

2.

- One of the largest potential markets in the world, developing and practicing farming on 80 Mio. ha arable land



Nigeria, Germany sign pacts on a...
dailycorrespondents.com.ng



German Chancellor Angela Merke...

3.

- MOU's and LOI's with NIRSAL about financial risk management and financing of private investors

4.

- Dealer concept and sales support services (commissioning, after sales, maintenance) under implementation

PETKUS as medium-sized OEM has to set priorities...



Market entry barriers

- Chose countries with a high predictability and economic perspectives in terms of
 - Legal, juridical
 - Financial
 - Demand, Offering...

Product offerings

- Product demand and product offering match...
 - Avoid market specific product developments
 - Care about robustness
 - Easy to use...

Handicap to trade

- Chose countries with “no nontariff barriers” as f. ex. additional:
 - Product certifications
 - Registrations
 - Licensing

Even more when they are linked to financing...!?

Product-, market entry-stewardship

- Chose countries with a higher perspective that local services could be provided by competent (local) partners...
- Chose countries where Official Development Assistance help is “active”...



PETKUS

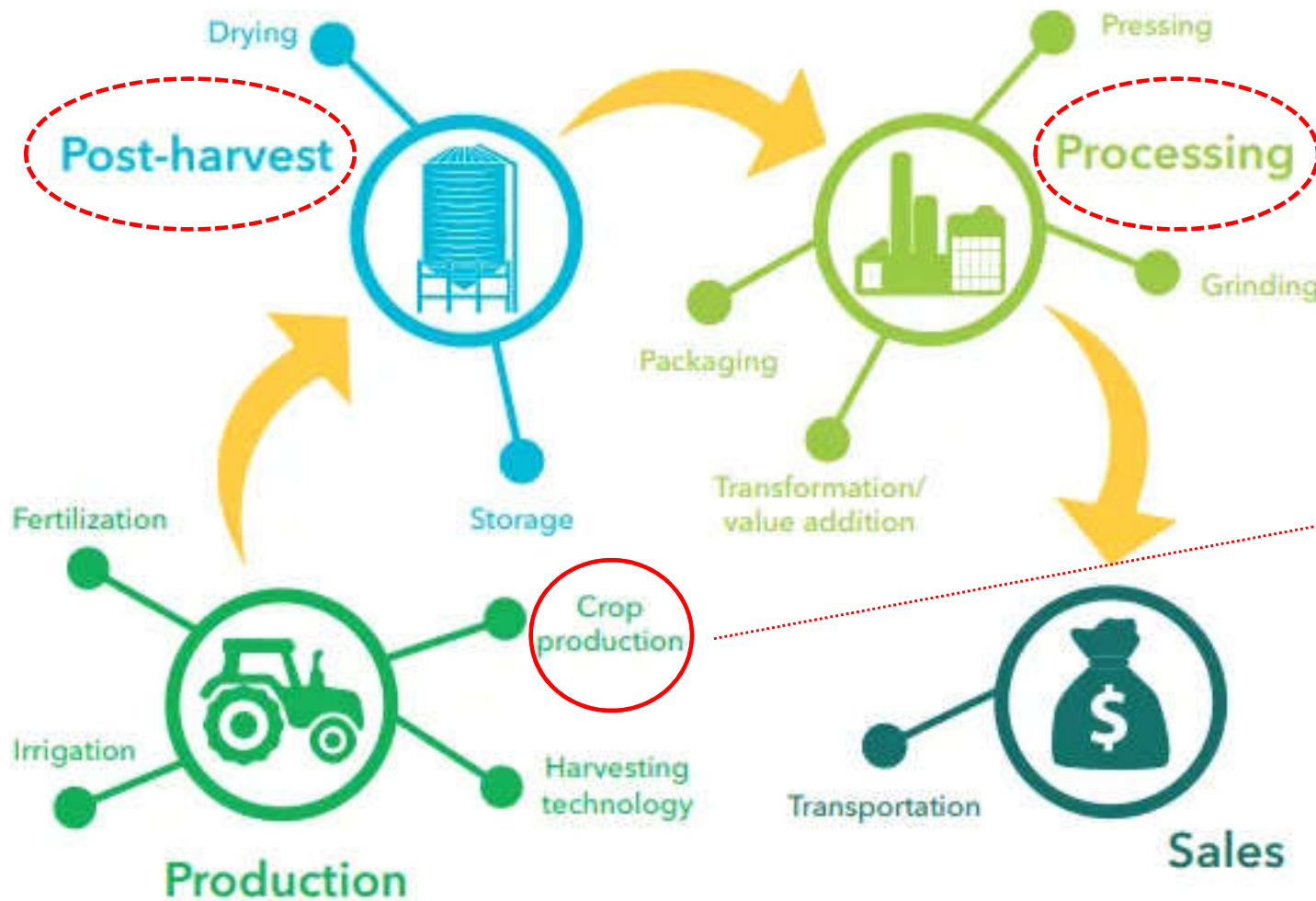
Expectations for market entries into the African markets...



Mechanization across agricultural value chain...



PETKUS



Agricultural production

- Just like in manufacturing and other sectors, Africa needs to treat agriculture as a business.
- But today the African agricultural value chain is deeply fragmented. Africa has an estimated 33 million smallholder farms...
- ... having limited access to fair markets, **inputs**, modern machinery as well as agricultural related information about prices, financial services, weather forecasts, pest, market demand, etc. which lowers their yields and eats into their profit margin.

Reasons how things could look up for African economies...



Diversifying the economy

- When “Africa” starts treating agricultural as a business, then the ultimate starting point on the **input** side is seed...
- ... and when every **seed** translates into a plant – this helps to increase yields and to grow the food production beyond actual capacities.

Reasons how things could look-up for African economies...



Moving forward in seed...

- Start small – come out big
 - Learning from each other
 - Creating comfortable working environments
 - Affordable machines payable solutions...

Mobile Seed Cleaning Project - realization in Ethiopia, Burkina Faso

Reasons how things could look-up for African economies...



Moving forward in seed +...

- And from there the (technical) agrarian sector could grow bigger when...
 - Barriers are kept on a justifiable level
 - People learn working with the machinery, start to understand the technical concepts, learn to operate such facilities...

Stationary Seed Cleaning Project - realization in Ruanda

Reasons how things are looking up for African economies...



Moving forward in seed + society

- And even bigger, when the knowledge level is increasing and therewith a higher complexity in the installation sector finds skilled operators
 - Think ahead! The African societies/customers have to invest in education and training...

Moveable Seed Cleaning Project - realization in Australia... but suitable for Africa

Reasons why things are looking up for African economies...



Moving forward in the agricultural value chain...

- And even bigger... being able to reach an industrial level, which is needed to enhance food production to grow (far) beyond actual capacities...

Seed Cleaning Facility - realization in Zambia

Summary

Keys for market success...

- Right choice of African countries based on your priorities – it is not wrong to start small and come out big
- Have the right product(s) on hand (tailored for the market, but no tailored product development – as solidity and approved technology is first)
- Build up trustful relations to your partners (could be clients, governmental organizations, foundations, etc.)
 - Local partner search by support of relationships to governmental organizations like BMEL / GIZ / AHK / German Desk / ...
 - Use the potential of ppp
 - Make use of relations to African embassies
 - Use relations to NGO's like AGRA / Bill & Melinda Gates Foundation / One Acre Fund / ...
 - Get in contact with your potential clients on diverse conferences
- Build up local services (after sales, maintenance, commissioning, etc.)
- Invest in own personnel based in your HQ, but also in personnel based in African countries (proof willingness of your staff to travel and to interact with the African people, which at the beginning might appear more complex and difficult as compared f. ex. to your European activities)
- Set appropriate objectives and “reachable” time frames – **time to success!**

Thanks a lot for your attention and a lot success here at Agritechnica and for all your projects!