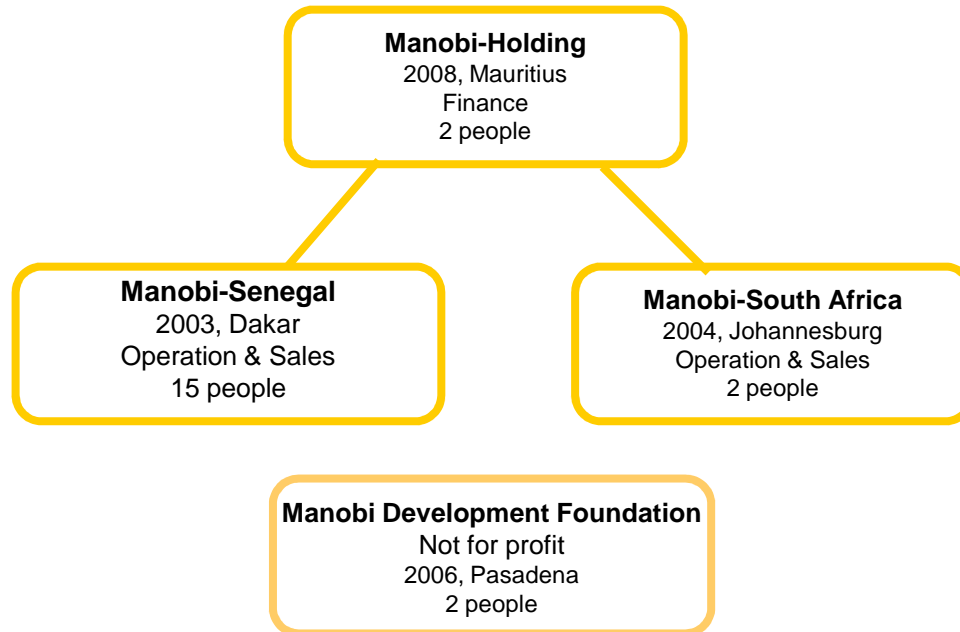




ICT based services for social and economic rural development

Daniel Annerose, CEO
Berlin, November 2010

Manobi



Mobile Value Added Business Services Operator

•Sectors

- Agribusiness
- E-governance
- Location base services
- Machine metering
- E-Marketing

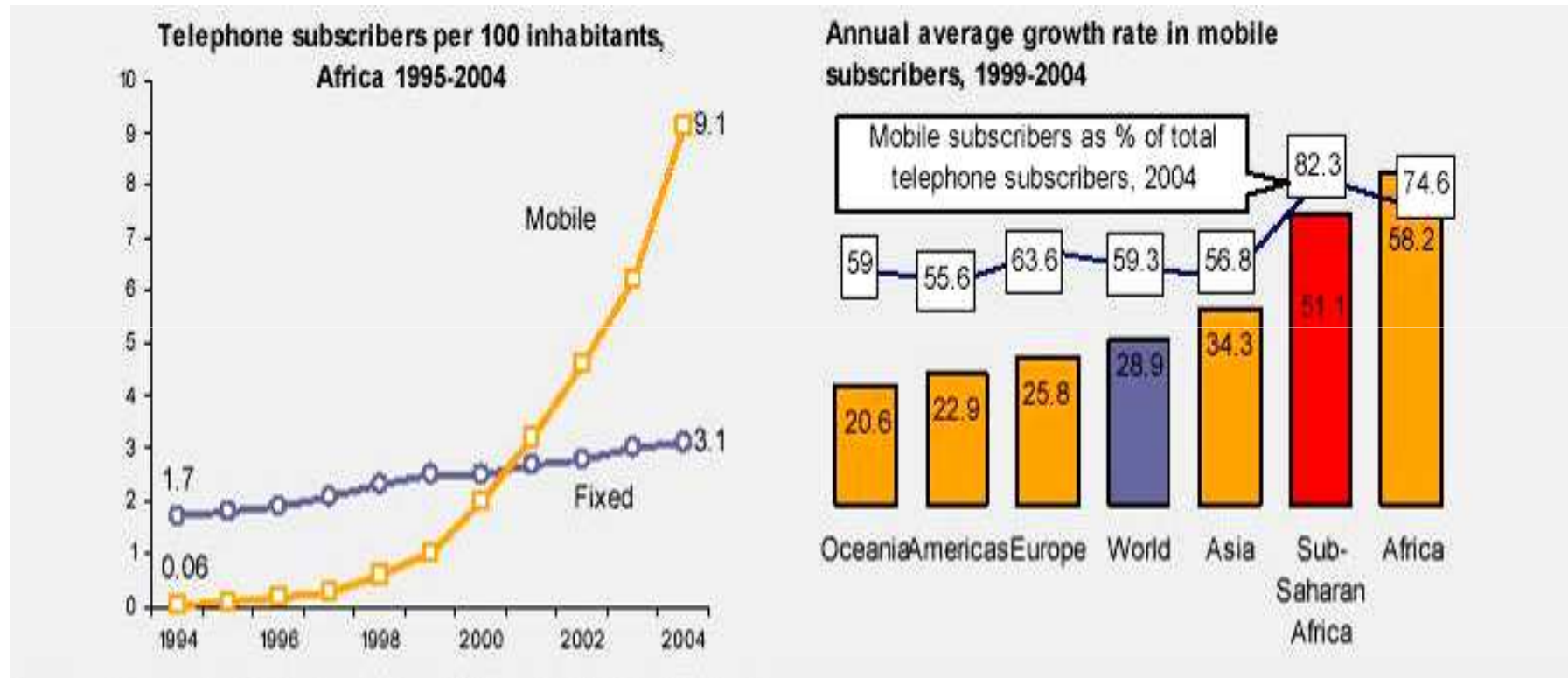
•Expertise

- Mobile multi-channel data (Wap, iMode, VoiceXML, SMS, Internet)
- Creation, development, integration, operation & provision of VAS on GSM network
- 100% Open Source

•References

- World-Best e-Inclusion Project (WSIS, 2003)
- Top African ICT Company (AAA, 2004)

Africa, the fastest growing mobile market



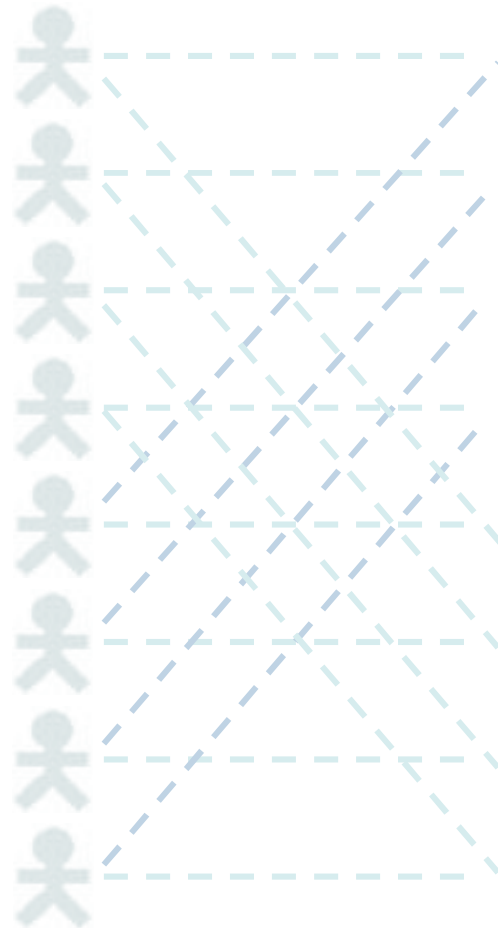
2011

- + 50% of Africa's 950 million people will use cell phones (BroadGroup)
- 70% of them will live in rural areas (World Bank)

Agriculture in SSA, a fragmented market

1. Lack of knowledge of arable surface area
2. Need to master cultivation techniques
3. Little or no sharing of best practices
4. No access to credit
5. No access to certified seeds, fertilizers, inputs and services
6. Market misinformation
7. Vulnerable to exploitation

Growers



Suppliers

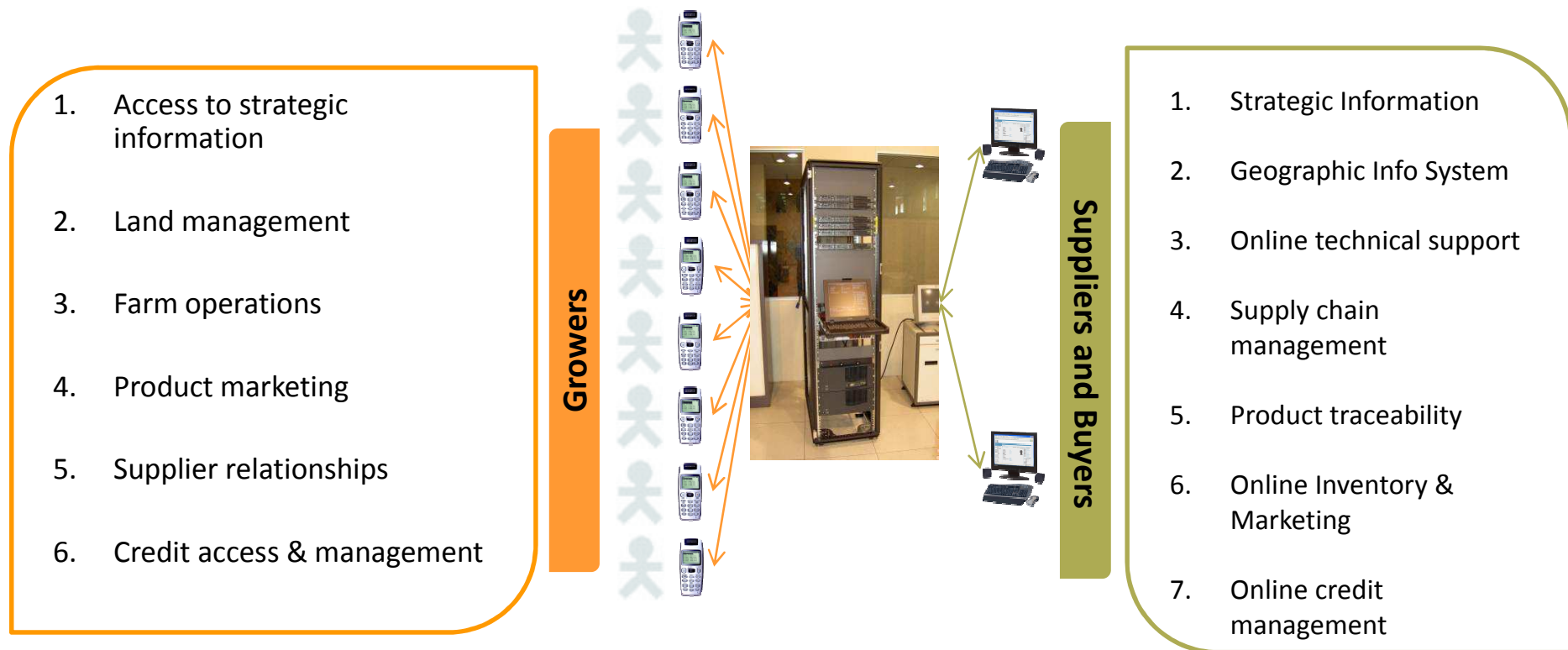
1. Poor knowledge of farmers' needs for inputs and services
2. Costly and complicated distribution to small farmers
3. Means of payments unsuitable to farmers
4. Systematic losses from small farm customers

Buyers

1. No effective means of communication with farmers
2. Poor knowledge of grower activities
3. High costs/low performance management
4. Low profitability
5. Vulnerable to speculation

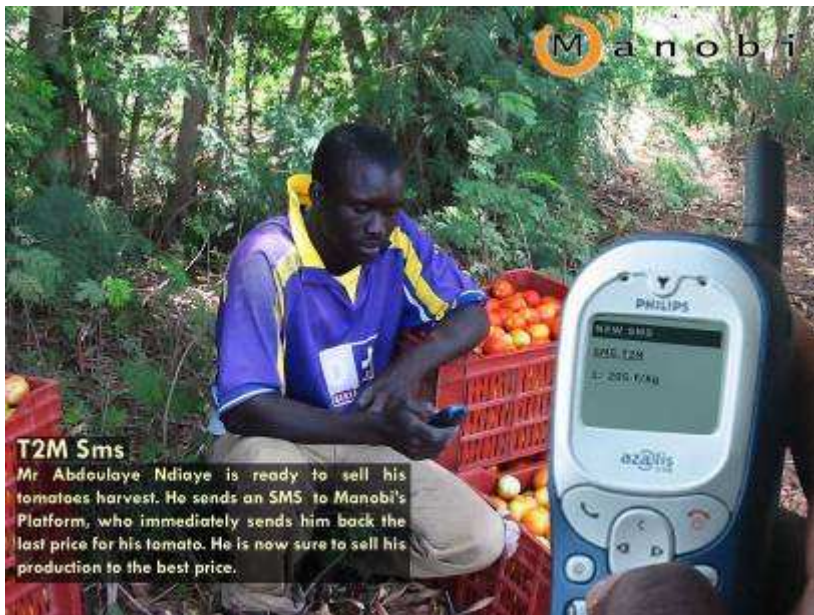
mAgri = efficient value chain

mAGRI = strong Farm-2-Market Linkages in an efficient Value Chain



mAGRI = better quality for the end markets

Market knowledge increases everyone's income



- Modou Seck waits for the middleman at the gate of his farm.
- He doesn't know what his product's value is on the end market
- He can only negotiate with the information the middleman gives him!

But with T2M...

- He checks the market price on his cell phone.
- He shows the screen to the middleman
- **They negotiate a fair price as business peers**
- He increases his annual revenue by \$750 per acre, **doubling his income.**
- The middleman wins, too, because he now uses T2M to choose the best end market to get for himself the highest price.

Better Linkages Improve Revenue



- Karaya gum producers have a contract to supply local exporters.
- Exporters argued that since they don't know what inventory is available, they can't carry enough cash to pay farmers at the point of sale.
- So the producers were obliged to sell to local middlemen instead, but at a lower price.

But with ²GIS + T2M...



- Gum growers have a dedicated system with **PDA/GPRS/GSM** to record their inventory
- Inventory stocks are displayed on the exporter's screen on a mobile GIS map.
- Exporters optimize their collection logistics and save money.
- Gum growers sell at higher prices directly to exporters paid cash on delivery — and increase their business income by 40% to 50%.

Produce traceability yields global markets



- Mango growers and exporters in Mali and Senegal faced trade barriers preventing access to Northern markets.
- They were totally dependent on the importer who only acted as an “agent”, leaving the Malians to carry all the transport and ripening risks that they had no control over.
- Their market system was not robust enough to promote their products profitably on foreign markets

But... with “Fresh Food Trace”...

- Malian & Senegalese mango growers have a mobile to internet system to post complete product information for their partners and customers
- Every single action touching the mango—from the field to the fork—is logged onto a mobile device.
- Complete product traceability is guaranteed to importers, retailers, customers.
- The end market, not the farmer, readily pays 9 cents per pound of fruit to have individual farm sourcing... and the guarantee of food safety standards.



Fruiema

Exportations Cahier Tracabilité Statistiques Regettes GestOP Administration

Contrats Productions Station Conditionnement

Fiche du lot

Information Cahier Tracabilité Feed-back

Fiche du lot

Exportateur	Fruière du Loto	Date d'arrivée local transitaire	14/12/2007
Code Palette	50001	N° Contrôle Phytosanitaire	23312
Code Tracabilité	50001	N° EUR1	20940
Culture	Mangue Amelle		
Catégorie	6		
Nb Cartons	600		

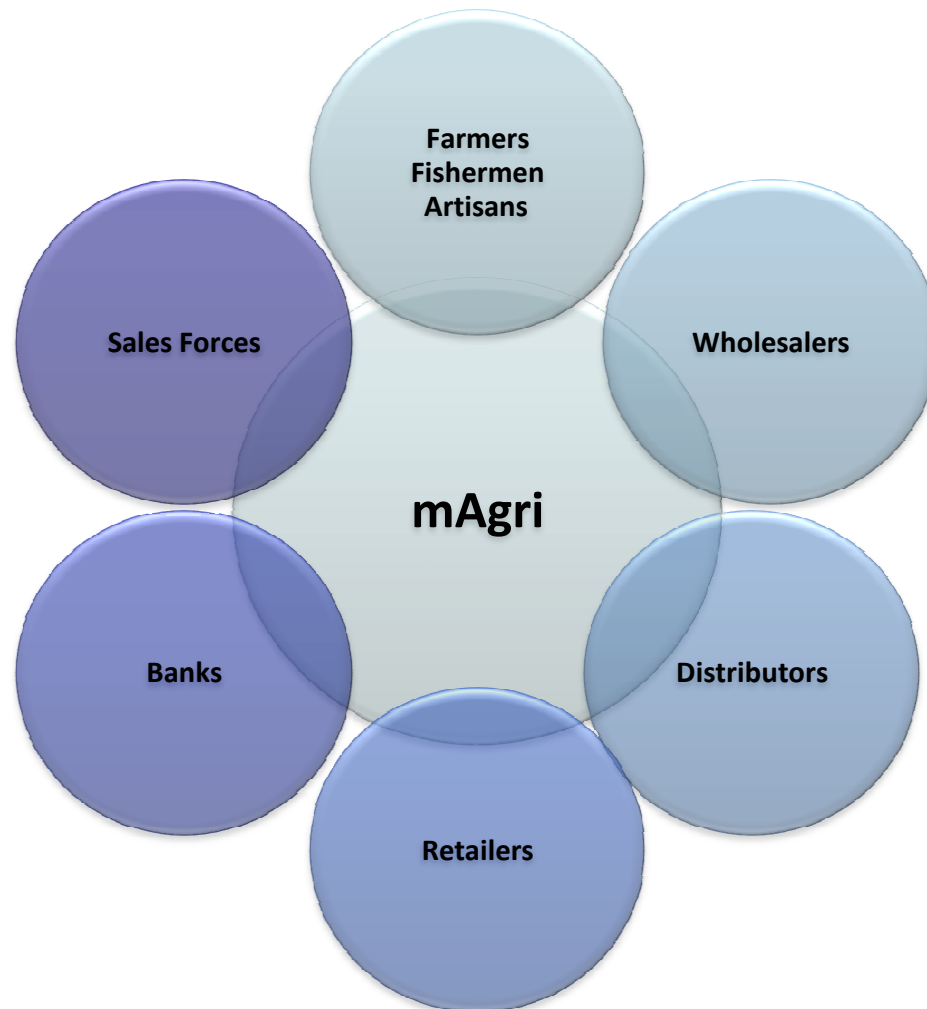
Station de conditionnement

Date reception	14/12/2007 12:39
Date début conditionnement	14/12/2007 12:45
Agent de conditionnement	M Boucar Berthé
Date pasteurisation	14/12/2007
Agent de pasteurisation	M Boucar Berthé
Mode stockage	Sous abri
Date de sortie station	14/12/2007

Fiche Transitaire


Date de départ des palettes	14/12/2007
Mode de transport	Aérien
LYA	TTTTT
Reference moyen transport	AP 768

mAgri reduces market friction



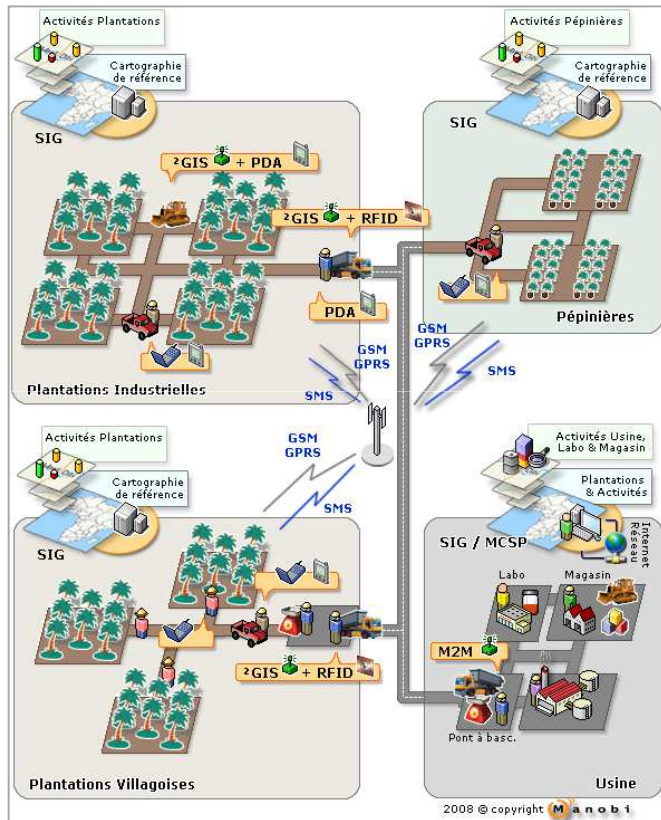
- **Asymmetrical relationships are enabled:**
 - Small Businesses to Small Businesses (SB 2 SB)
 - Strategic Information (e.g. real-time national and international market prices)
 - Transaction follow-up and periodic assessment
 - Posting of up to date offers of purchase and sale of agricultural products
 - Pure Big Businesses (BB)
 - Management of client portfolio
 - Optimization and steering of business processes
 - Online Trade
 - Small Businesses to Big Businesses (SB 2 BB)
 - Production control
 - Tracking "end to end" products and services
 - Online Trade
 - Organization of distribution networks and marketing

Our business model

Growers	Services	Who pays?	Sustainability?
<p>> \$4 per day + Sustainable Transformation</p> <p>3) Transform</p>	<p>3rd party services</p> <ul style="list-style-type: none"> • Market integration • Certification, contracts, bulk procurement • financial services 	<p>3rd parties</p> <ul style="list-style-type: none"> • Exporters • Importers • Processors • Suppliers • Banks 	
<p>> \$4 per day</p> <p>2) Graduate</p>	<p>Added Value services</p> <ul style="list-style-type: none"> • On farm management • Local market linkages 	<p>Grower + Local market</p>	
<p>< \$1-\$2 per day</p> <p>1) Assist</p>	<p>Free Entry Level Services</p> <ul style="list-style-type: none"> • Market information • Farmer group management 	<p>Grants (PPP)</p>	



Cashew chain in RCI



- PPP MANOBI-GTZ (€ 400,000)
- Year 1 : 1,000, to 5,000 growers

Improving growers market linkages



Field mapping & measurement



Control & Certification



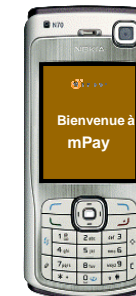
On going farm assistance



Transaction Services

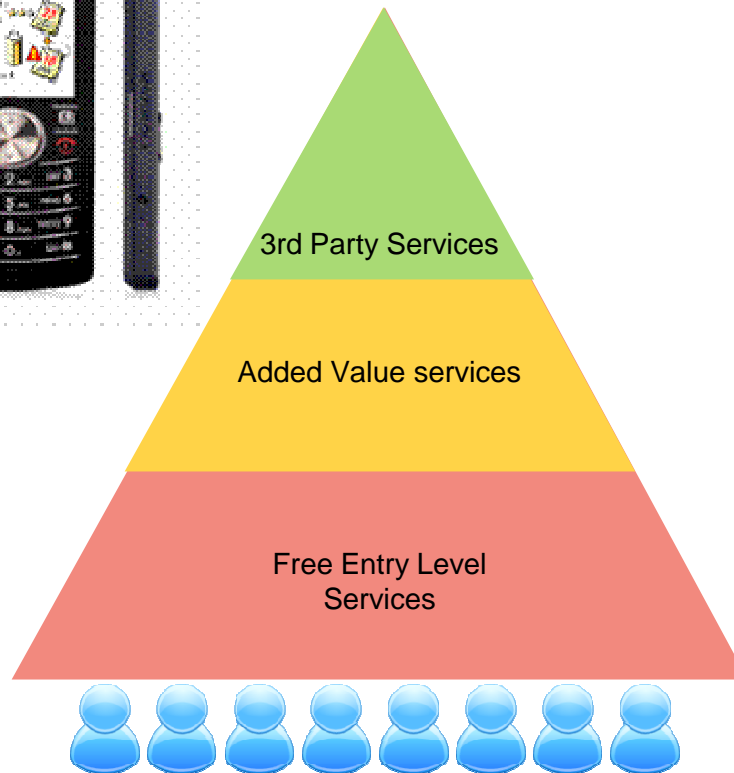


Logistic assistance



Financial & Payment Services

mAgri to organize cashew growers **gtz**



The mAgri™ pack

- ✓ A mobile phone
- ✓ Network connectivity
 - ✓ SIM Card + Recharge
- ✓ Business services
- ✓ Financial services
- ✓ Community based promoters
 - ✓ Market agents
 - ✓ Agri business promoters

Phase 1: 2010-2011

1 000 producteurs ↗ 5 000 producteurs
Partenaire financier à sélectionner

To improve grower 2 processor linkages



Stocks en temps réel



Optimisation de la logistique



Suivi et sécurisation des transactions

mAgri™ for the processor

- ✓ A mobile to web workspace
- ✓ To monitor grower product inventory
- ✓ To improve product logistic to the processing unit
- ✓ To make easier product transactions
- ✓ To secure payment

Results and next steps

mAgri

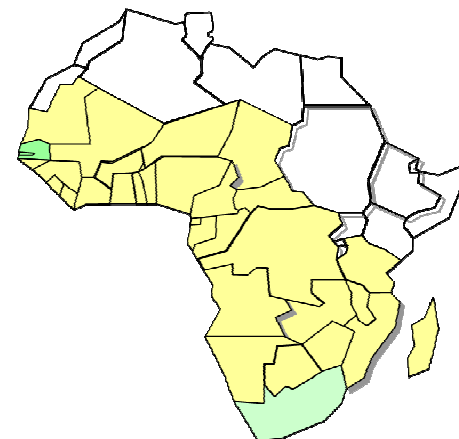
- Ivory Coast
 - 5,000 growers to 250,000 (cashew nuts, export)
- Senegal:
 - 130 cooperatives with 16,000 growers (all produce, domestic)
 - 30,000 growers in northern region (subsistence & domestic markets)
- Mali
 - 2,000 growers, 5 exporters (mangoes, export)
- Niger
 - 190,000 growers (subsistence & domestic markets)

Other sectors

- Water & Sanitation:
 - Senegal : 70 local governments
 - Mali : 55 local governments
- Local Governments
 - Senegal : 10 local governments
- Artisan fisheries
 - Senegal : 30,000 fishers
- Child protection services
 - Unicef : c. 10,000 street children (Senegal)
- Health
 - Senegal & Egypt /Bilharzia: 20 millions



Improving market linkages and income of small and vulnerable farmers



Thank you

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