

**Regional Workshop on an Integrated Policy Approach to Commercializing
Smallholder Maize Production in Eastern Africa**

June 6th to 7th 2012

at the Norfolk Hotel, Nairobi, Kenya

Workshop Proceedings [DRAFT 3]

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SUMMARY

Agriculture continues to be a significant sector in the economies of Eastern Africa countries. It contributes between 20 – 30% of national Gross Domestic Product (GDP) for most of the countries in the region, and offers opportunities for development through backward and forward industrial linkages. However, subsistence agriculture dominates the structure of production in these nations, with maize (a key staple food) being the major commodity grown. Changing global pressure on resources such as land necessitates transformation from subsistence to commercial agriculture in order to sustain economic growth.

Against this backdrop, the Food and Agriculture Organization (FAO) and the University of Nairobi, Kenya convened a stakeholders' workshop to discuss findings of their joint study on smallholder maize commercialization, and to share policy experiences with the various stakeholder groups. The two-day workshop was held at the NorFolk Hotel in Nairobi, Kenya and gathered participants from Research Institutions, Universities, Government Ministries, Agricultural Finance Institutions, Farmer Organizations, Youth Organizations, Public Policy ThinkTanks, Donors/Development Partner Institutions and Private Sector Organizations – drawn from various countries in the Eastern Africa Region, including Kenya, Uganda, Rwanda, Zambia and Ethiopia.

The key issues noted in the workshop include:

- Development policies at national and sub-national levels focus more on agricultural production, while ignoring or giving limited attention to high-level value chain aspects especially markets and agribusiness
- It is important to find an appropriate definition of 'smallholder farmer' so that policy interventions can be well targeted. Such definitions could be based on nature of enterprise, land size or scale of operations
- There is some sort of resistance at policy level to include agricultural education in training curriculum. For example, in Kenya's recent Education Review Taskforce, there were suggestions to remove agriculture from the cluster of examinable subjects in high school curriculum
- The process of attaining agricultural commercialization is still hampered by numerous challenges including limited and costly farm support services

- Agriculture is still considered to be part of drudgery, a low-level occupation and as the option for failures who cannot progress in other careers – agriculture has a poor image and is often avoided by most students during career selection
- There is need to take advantage of emerging opportunities such as on-going reforms in national agricultural policies (e.g., consolidation of Agricultural Laws and institutions in Kenya – the proposed Agriculture, Livestock and Food Authority) and regional market integration efforts in order to fast track the process of transforming smallholder agriculture
- Rapid growth of Information and Communication Technologies (ICTs) in Sub-Saharan Africa and their application in agricultural extension and marketing provide renewed avenues for enhancing the efficiency of smallholder agriculture – by possibly lowering transaction costs associated with information search for inputs and output markets
- Rather than pursuing isolated points of commodity value chains, it was noted that integrated value-chain analysis and complementary policy interventions spanning multiple levels of the value chain would be more cost-effective in addressing agricultural challenges
- Establishing and reviving farmer collective action models remain one of the effective ways to address smallholder farmers’ weak bargaining power in both input and output markets
- Making agriculture more attractive e.g., by use of drama and songs to convey extension messages, and by promoting fast moving service-oriented agribusiness enterprises would be a better way of retaining the rural youth in agriculture. Also consider regional and cultural differences in youth attitudes and aspirations. Further, encourage participation by professionals in agricultural activities in order to give agriculture a positive image that would attract the youth
- It is important to strengthen research-extension-farmer linkages to enhance design of locally-relevant farm technologies
- Context-specific training of farmers is necessary in order to promote sustainable transformation from subsistence to commercial agriculture.
- Promote non-cash options of solving youth problems e.g., cash for education interventions.

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DAY ONE: Wednesday 6th June 2012

WELCOMING REMARKS AND WORKSHOP OPENING

Chair: Dr. Rose Nyikal, University of Nairobi

In her opening remarks, Dr. Nyikal welcomed participants to the workshop and emphasized the importance of maize to Kenyan households and the entire Eastern Africa region. Further, she noted that over 75% of maize producers in the region are smallscale farmers and mainly produce for subsistence; hence concern over maize reflects food security. She then introduced representatives in attendance from other stakeholder institutions including the University of Nairobi (office of the Deputy Vice Chancellor in charge of Research, Production and Extension – DVC-RPE, Principal College of Agriculture and Veterinary Services - CAVS, Dean Faculty of Agriculture), Food and Agriculture Organization – FAO, Ministry of Agriculture-MOA).

Dr. Julius Okello, University of Nairobi

In his welcoming speech, Dr. Okello acknowledged delegates in attendance from various institutions and highlighted the importance of the workshop focusing on policy making for food security in Eastern Africa. He officially welcomed participants and urged them to freely deliberate on all issues relevant to the workshop. He noted that the issue of food security remains topical in the EA region and that it is crucial to promote commercialization of smallholder farmers considering that they are the majority producers. He also pointed out that the workshop had a diversity of expertise drawn from policy implementers, policy takers (e.g., farmers), development assistance agencies and private sector.

Dr. Andrea Woolverton, FAO-Rome

Dr. Andrea explained the workshop objectives principally to ‘Develop focused policy options to enable transition to commercial maize production – based on participants’ experiences and insights’.

Prof. Shibairo, Dean Faculty of Agriculture-University of Nairobi

He highlighted the context of maize and food security in Kenya with emphasis on the observation that maize production is a ‘culture’, and that maize is a staple food that is grown by almost all farmers in all seasons. He noted that research focusing on youth and women is important to maize production policy.

Prof. Mwang’ombe, Principal, CAVS

She welcomed participants and informed them of the University’s pleasure in hosting the research. She emphasized the need to strengthen the entire maize value chain right from soil types, seed selection, agronomic issues (crop protection from insects and diseases), marketing, harvesting and post harvest handling/losses that result in over 30% losses. Food safety issues also need scientific and policy attention. Further, Prof. Mwang’ombe stressed the need to allow farmers to present their views in the workshop. Thereafter, she invited a representative of the DVC-RPE to officially open the workshop.

Mr. Spencer Muthoka, Intellectual Property Rights Officer – University of Nairobi

On behalf of the Deputy Vice Chancellor in charge of Research, Production and Extension (RPE), Mr. Muthoka gave an overview of the University of Nairobi’s research agenda which focuses on growing research capacity, establishing a research management structure, enhancing an enabling research infrastructure and building research competitiveness. Mr. Muthoka then officially opened the workshop.

Mr. Zachary Magara, Ministry of Agriculture in Kenya

On behalf of the Agriculture Secretary, Mr. Magara emphasized the need to make food security a business and the pivotal role of maize in the Eastern Africa region. He pointed out that the main agricultural policy document (Agricultural Sector Development Strategy – ASDS) in Kenya aims to enhance agricultural competitiveness. Further, he noted that the relatively stable trend in maize production offers scope for improving its contribution to national food security. In addition to past and on-going efforts (including liberalization of the maize market and

government initiatives to support youth involvement in agriculture for instance in rice and maize production in Mwea and Bungoma, respectively), development strategies should focus more on technology provision, input-output quality improvement, capacity building for commercialization and stakeholder participation in policymaking.

SESSION 1: SMALLHOLDER MAIZE PRODUCERS AND COMMERCIALIZATION

Session Chair: Kezia Katyamba, Deputy Director of Marketing, Ministry of Agriculture, Zambia

Presentation 1: The Smallholder Dilemma (Dr. Julius Okello, University of Nairobi)

Key issues

- Declining land sizes leading to uneconomical farm holdings that cannot generate adequate output for subsistence needs and markets
- Low and declining farm productivity
- Over reliance on rainfed agriculture
- Inadequate skills and support services for farmers to participate in high value markets
- Poor organization of smallholder farmers limits their ability (in terms of volumes supplied and bargaining power for better prices) to effectively participate in the markets
- High transaction costs
- Possible interventions: collective action, use of modern ICTs to lower transaction costs, public-private institutional arrangements for provision of support services, and rainwater harvesting.

Overview of the presentation

Smallholder farmers in eastern Africa face many production level constraints and difficulties being linked to markets.

The key production level constraints include (see Jayne, Mather and Mgenyi, 2010):

- Declining land-labour ratio leading to decline in land-to-person ratio, disparities in the distribution of land within the small farm sector and imminent landlessness among smallholder farmers (about 25%). On average, the land holdings are 0.11ha/capita in general, and 0.02 in Ethiopia, 0.03 in Rwanda, while in Malawi 70% of households have less than 1ha.
- Stagnant food crop productivity due to low input use – limited fertilizer application, limited irrigation, lack of green revolution and use of recycled seeds that may be of low quality. Essential hybrid seeds are usually either too expensive or lacking when needed.



- Lack of sufficient support services (managerial capacity and skills needed to meet complex grades and standards to enter lucrative markets).
- Poor infrastructure and public agricultural support services (poor roads, production and marketing information, absent or inadequate credit and insurance, overemphasis of extension services on production with limited focus on storage, marketing and value addition).
- Risky rainfed agriculture due to climate change.

Important market-level challenges include:

- Poorly functioning/failed markets for credit, information, technical advice and insurance.
- Small farmers are poorly integrated into better-paying output markets.
- Output markets fail for smallholder farmers because they are widely scattered making produce assembly too costly, they are poorly organized and tend to trade in relatively small volumes.



- Market failure caused by high transaction costs of doing business in both input and output markets.
- Input market failure leads to high cost of inputs.
- Output market failure leads to poor prices for producers, thin markets that only handle small volumes and relational transactions/localized personal exchange.
- Market failure traps small farmers in subsistence agriculture with low investment, low volumes and low marketable surplus leading to a vicious cycle of low equilibrium poverty trap.

The Future of Agriculture

- There is consensus that agricultural development cannot be achieved without progress in small farm sector
- Realizing progress in small farm sector requires addressing the constraints faced by small farmers especially improving their access to productive technology, efficient input markets, better paying and efficient output markets. **But how can this be done?**

Possible Strategies that work in improving smallholder agriculture

1) Strategy 1: Use of new generation Information and Communication Technology (ICT) tools

- Recent focus on the use of ICT targeting farmers (see for example the World Bank source book of ICT in agriculture)
- Many ICT-based interventions have emerged, for example a scoping study in 2007 found 39 interventions using ICT tools in Kenya alone. These interventions aim to link small farmers to better performing and well-paying input and output markets. Some of these interventions include M-farm and KACE (Kenya), MACE (Malawi), Center Songhai (Benin), eSoko (Ghana), INFOTRADE and WOUGNET (Uganda), RATIN etc. Most of the ICT interventions focused at production or marketing levels, while others such as DrumNet adopted value chain approach. Generally ICT interventions reduce transaction costs, improve access to markets and enhance commercialization of agriculture. The eSoko in Ghana is illustrated below.

Figure 1: Illustration of eSoko Market Information System in Ghana



2) *Strategy 2: Integrated/comprehensive public and/or private sector support that resolves multiple market failure problems*

For example the DrumNet model.

3) *Improvement of infrastructure e.g. rainwater harvesting*

4) *Institutional innovations via the use of collective action/contracting*

- Collective action is useful in overcoming the challenges of overly concentrated markets especially at the retail level
- Used by smallholders targeting European markets with fresh fruits and vegetables to overcome challenges of food safety standards
- Farmers able to invest in costly facilities jointly and to acquire specialized services e.g. technical assistants and clerks as a group, i.e. to exploit economies of scale
- Bungoma Farmer Field School slogan ‘The future belongs to the Organized’ – emphasizes the importance of collective action
- But is there a future in collective storage and marketing? Experiences of SACRED Africa, KPMC and NAAIAP/MOA might be useful.

The big Dilemma

- ✓ Do smallholder farmers (0.25 acres) have a future?
- ✓ Should we keep smallholder farmers in production?
- ✓ Two points of view in development discourse:
 - a) Assist smallholder farmers to transition to other employment forms e.g. off-farm labour, trade etc. But Jayne et al (2010) find that lucrative off-farm opportunities are very limited and smallholder farmers lack relevant skills for them.
 - b) Develop smallholder agriculture by pursuing strategies that increase productivity and enable efficient functioning of input and output markets. But how can this be done?

Presentation 2: History of Kenyan Maize Production, Marketing and Policies (Dr. Lilian Kiriimi, Tegemeo Institute of Agricultural Policy and Development)

Key issues

- Declining soil fertility
- Inadequate use of good quality seeds and fertilizer
- High variability of output
- High postharvest losses
- Inconsistent policy changes in agriculture (specifically, unpredictable and uncoordinated government interventions in agriculture)
- Poor distribution of milling facilities – some key maize producing areas like Bungoma lack milling companies

Overview of the presentation

- Maize is produced by 98% of the 3.5 million smallscale farmers in Kenya
- It provides over 30% of caloric intake and accounts for about 56% of cultivated land in Kenya
- It is mainly produced under rainfed conditions, with small and medium scale sector produces 75% of total output, while the rest is from large scale sector (farms over 25 acres)

Trends in maize production

- Steady increase in production from 1961 to 1976 due to various policy interventions. For instance, land distribution to small-scale farmers (575,000ha to 49,000 families), public investment in research and extension, input and credit subsidy, produce marketing and price controls.
- Decline in production (1976 – 1980) due to drought in 1980, limited agricultural expansion, inefficiencies in marketing boards and lower producer prices leading to a shift from maize to other enterprises.
- Greater variability in production (1980 – 2010). Declines correspond to drought years of 1984, 1993/94, 1996, 2000, 2008/09.

Current challenges in maize production

- Low and declining soil fertility

- Inadequate use of quality seeds (fake/poor quality seeds, delayed supply and inadequate amount of certified seeds, slow pace of hybrid replacement – 80% of farmers use old hybrid seed released in 1986; H614)
- Disease
- High fertilizer cost
- Land fragmentation and decreasing land sizes
- Dependence on rainfed production
- Substantial postharvest losses (>10%).

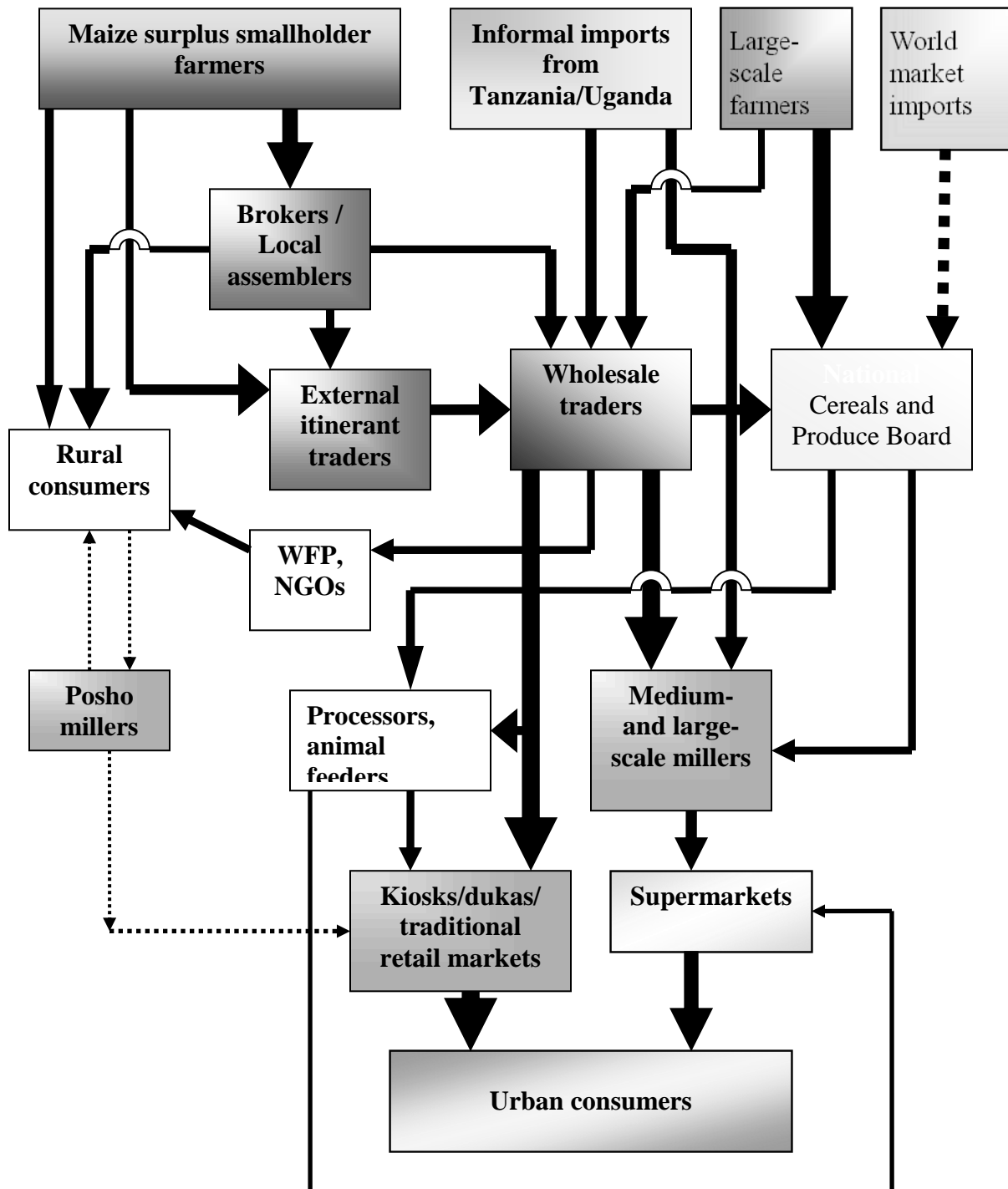
Table 1: Chronology of maize market reforms in Kenya

1979 - 1986	- Strict control of maize price, movement and storage under the National Cereal and Produce Board (NCPB)
1986 - 1990	<ul style="list-style-type: none"> - Limited relaxation of control of maize price, movement and storage - First serious market reform under Cereal Sector Reform Programme (CSRP) conditional to EEC/WB aid
1990 - 1995	<ul style="list-style-type: none"> - Gradual reduction of control of maize price, movement and storage under NCPB - Market reform under CSRP/KMDP conditional to aid
1995 - 1999	<ul style="list-style-type: none"> - Full liberalization - NCPB buyer and seller of last resort - Private sector participation - Government intervenes by imposing variable import tariff and financing NCPB operations
1999 - 2010	<ul style="list-style-type: none"> - Maize price stabilization policy (NCPB purchasing domestically produced maize at support price and maintain strategic grain reserve) - Variable import tariff on maize imports retained

Current maize marketing system in Kenya

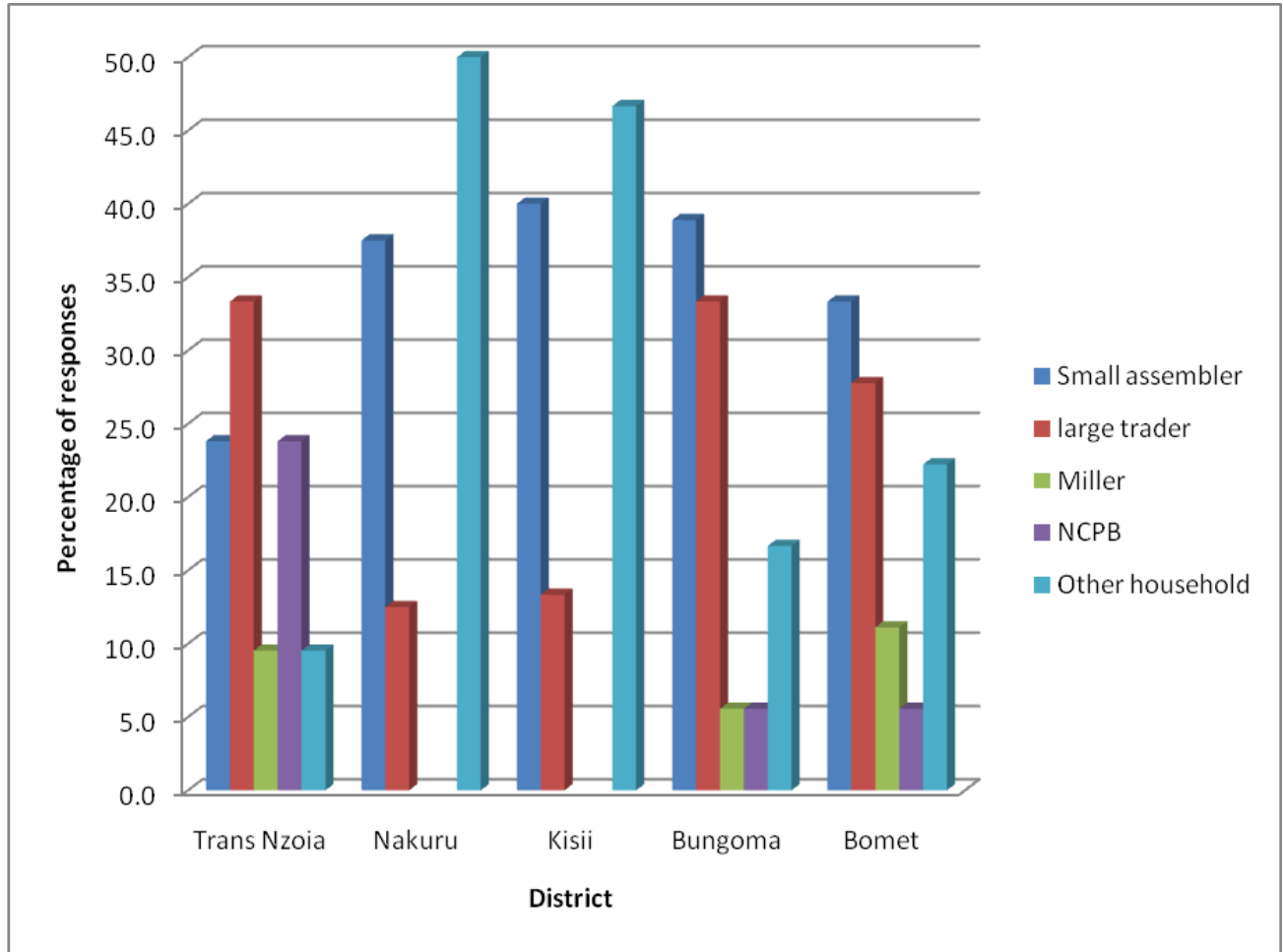
- Appears to be very complex and competitive at assembly, wholesaling and retailing levels.
- Large scale milling sector may be somewhat concentrated in some regions

Figure 2: Maize marketing system in Kenya



Farmers in most regions have many sales options as depicted below.

Figure 3: Access to maize marketing channels by farmers in Kenya



Generally, farmers in most maize growing regions in Kenya consider the marketing system to have improved over the past decade. However, there is unpredictable government intervention in maize markets. This is characterized by:

- Discretionary policy tools used by the government to influence market prices and supplies
- Uncertainty over government behaviour with respect to decisions on import tariff rates, NCPB pricing and marketing operations (setting prices for maize purchase and sale), fertilizer subsidy and export bans.

The unpredictable government interventions influence market prices and supplies, and stifles private investment in maize markets (raises market uncertainty for traders). Simultaneous subsidization of fertilizers and purchase of maize from the same farmers at prices higher than the market price does not result in lower maize prices even during peak harvest, and often leads to high consumer maize prices as farmers hold onto their maize in anticipation of better future prices.

Presentation 3: Towards a commercial model of farming – Benchmarking Kenya maize smallholder attitudes and marketing (Dr. Andrea Woolverton, FAO)

Key issues

- Understanding smallholder farmer objectives and attitudes is important in determining necessary policies for agricultural transformation
- Investing in maize quality management can improve prices
- Provision of accurate information on costs and returns from maize enterprise can enable farmers to make better decisions on whether to sell or not

Overview of the presentation

- Highlight of the project objectives

Project Background: Agricultural Transformation and Commercialization

- Discussion of preliminary research findings

The question of the day: How can these findings be used to create policy options that can be put into action incorporating linked issues?

“Agricultural Transformation”

The Project focus: Smallholders' Perspective in Smallholder Transition

- Small producers (<3 acres) produce the majority of Kenya's maize.
- If transitioning small maize producers into commercial production is the objective, then there is need to better understand farmers' decision-making.
- We know that small maize farmers in Kenya have different levels of wealth and productivity (Kirimi et al, 2011). But, we don't understand the differences across smallholder attitudes toward farming and commercialization.

- Maize Producers in Transition

It is important to understand who the maize farmer is? Does the farmer WANT to stay in agriculture?

Commercialization Benchmarking

- Attitudes and Objectives
- Planning: estimating costs and returns, deciding between selling and keeping
- Maize Quality Management
- Marketing: Choosing a Buyer
- Marketing: Temporal Arbitrage (seasonal)

Discussion Session One

A) Questions and comments

- There is need for a policy on human pests for example to manage effect of premature harvesting on quality
- Acknowledge efforts of value chain players in solving maize problems, and discuss challenges that led to collapse of some interventions e.g. the minimum guarantee schemes
- Does supervised subsidized credit have a role in maize chain?
- Can urbanization help in freeing land for agricultural commercialization in rural areas given rapid population growth?
- What are the complementary policies (e.g. Free Primary Education -FPE) to support commercial agriculture?
- Is there any insurance scheme that supports farmers affected by hailstorms?
- What market options can farmers use to bargain for better prices?
- Who are small-scale farmers?

- What policies exist to protect farmers from challenges of liberalization (e.g. proliferation of fake seeds, poor input quality and high prices)?

B) Responses and clarifications

Andrea:

- The survey did not target the Agricultural Finance Corporation (AFC), but farmers' awareness on various financing sources
- Solutions for the next generation of farmers are necessary. Smallholder farmers have limited access to resources; hence supervised credit schemes are still necessary
- The FPE programme in Kenya does not cover other issues (e.g. uniforms and exam fees) besides tuition

Olwande (for Kirimi):

- Farmers are price takers during peak harvest periods, though those who belong to organized programmes get better prices than those without collective bargaining power
- Guaranteed minimum programme was a form of insurance that improved production, but some institutions (e.g. AFC) collapsed and later revived
- Input liberalization is relative in Kenya; fertilizer and seeds markets are liberalized but there are many challenges e.g. fake seeds, though there is a new seed policy (2011) meant to address these issues

J. J. Okello:

Population pressure due to high fertility especially in Uganda is a challenge to agriculture, but numerous urban problems constrain migration. It therefore seems prudent to develop rural infrastructure and opportunities (skilled jobs instead of low-level occupation e.g. *boda boda*) to retain more people in the rural areas.

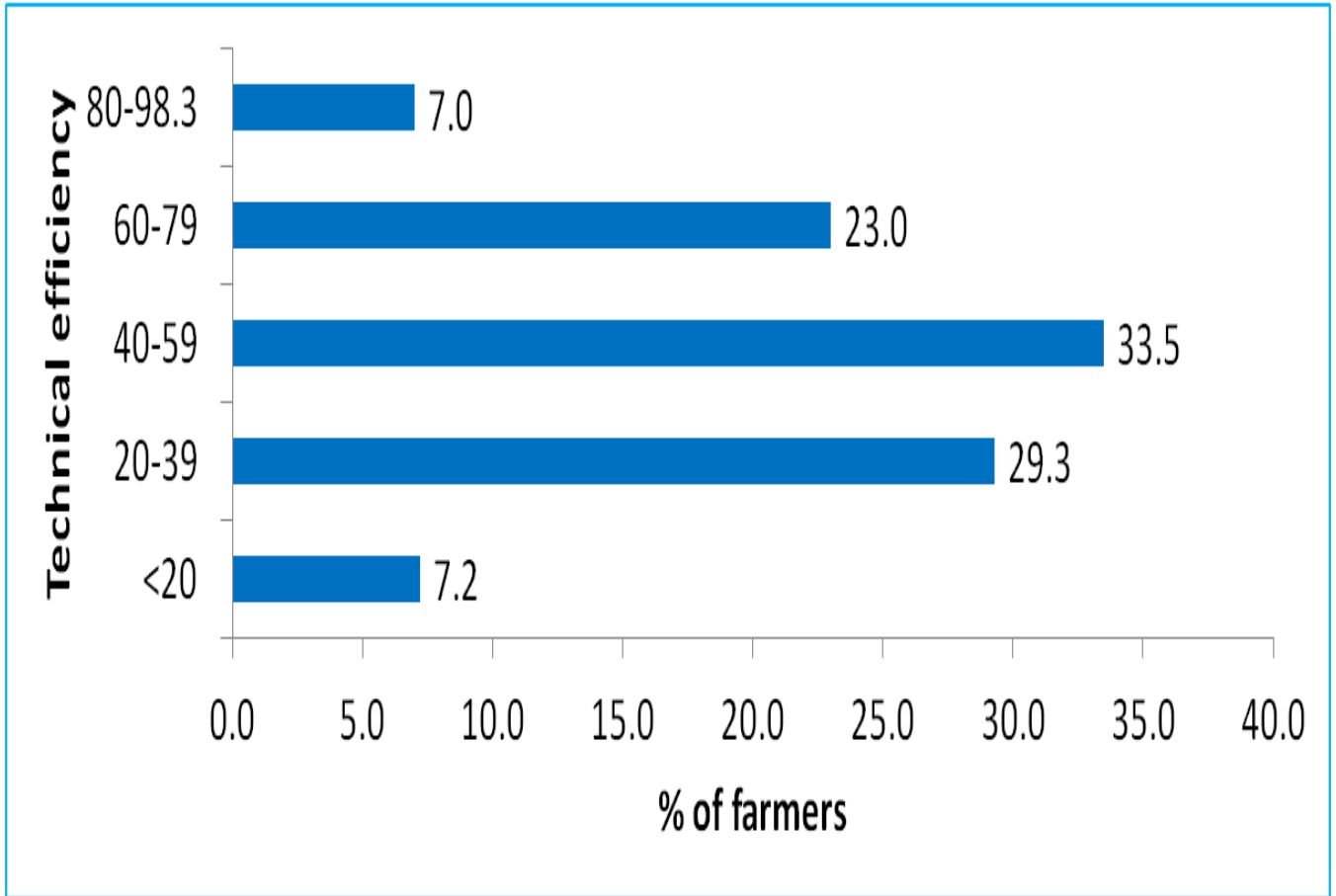
SESSION 2: MAIZE SMALLHOLDER TRANSITION AND POLICY APPROACHES

Chair: Kenneth Ayuko, Deputy Director of Policy Coordination, Ministry of Agriculture, Kenya

Presentation 4: Smallholder Efficiency in Kenya (John Olwande, Tegemeo Institute)

- Performance of agriculture sector has a great bearing on both food security and overall economic growth.
- Four main challenges in the sector include low productivity, low value addition, under-developed and inefficient markets (inputs and output) and inefficient land use.
- Smallholder production predominates 75% of total agricultural output and 70% of marketed
- Smallholder technical efficiency ranges from 7.2% to 98.3%, with a mean of 49%. Thus, there is scope of increasing maize production by 51% through adopting technologies and techniques used by optimal maize farmers.
- Over 36% of maize farmers operate below the mean technical efficiency level; only 30% are at least 60% technically efficient output.

Figure 4: Maize farmers' technical efficiency in Kenya



Source: Kibaara (2005)

Technical efficiency (TE) ranges wide across zones; efficiency lowest in low potential and highest in high potential zone; efficiency of 59% of farmers in low potential zone is less than 40%, while the efficiency of 62% of farmers in high potential zone is at least 60%.

Table 2: Technical efficiency for maize in Kenya's Agro-regional zones

Range of TE in Percent	Agro-regional zone			
	Low ^a	Medium ^b	High ^c	Overall
	-----% of farmers-----			
<20	13.1	7.2	1.7	7.2
20-39	45.9	32.3	9.3	29.3
40-59	31.0	39.4	27.1	33.5
60-79	10.0	20.1	39.3	23.0
80-98.3	0.0	1.0	22.5	7.0
Total	100.0	100.0	100.0	100.0

^a Low potential =Coastal, Eastern and Western lowlands and Marginal rain shadow

^b Medium potential =Central and Western highlands and Western Transitional

^c High potential =High potential maize zone

Source: Kibaara (2005)

Ways of improving efficiency in maize production

- More widespread and intensive use of modern farm technologies including seeds and fertilizer
- Improved extension effort
- Irrigation
- Well-functioning input and output markets

Presentation 5: Kenya Smallholder Policy: NAAIAP (Ms. Rose Mwangi, Ministry of Agriculture, Kenya)

Key issues

- Pro-poor input subsidy programs (e.g., NAAIAP) have potential to increase farmers' access to extension services, credit and markets if they are well managed
- But implementation of such programs is constrained by: poor targeting of recipients, delays in disbursement, double allocation, moral hazard (e.g., conversion of seeds and fertilizer to cash for non-farm uses), and inadequate collective action/group formation to enhance efficiency/reduce cost of input distribution.

Overview of the presentation

The National Accelerated Agricultural Inputs Access Program (NAAIAP) is a pro-poor program initiated by the government in 2007 in response to the Fertilizer Conference held in Abuja, Nigeria in 2006. NAAIAP's goal is to reach 2.5 million resource poor small-scale farmers through promotion, access and use of improved farm inputs. The objective is to increase agricultural productivity for farmers with one hectare of land through provision of basic farm inputs and mobilization of farmers' resources for re-investment in agriculture.

The NAAIAP Concept and components

Farmers begin with starter pack (*Kilimo Plus*). Later the farmers graduate to *Kilimo Biashara* where they can buy inputs on their own (about 40% of initial farmers are at this stage). Farmers can also gain access to affordable loans to expand farming enterprise (8% of *Kilimo Plus* farmers have reached this stage).

The NAAIAP has four important components:

- i) *Kilimo Plus* (Input Voucher)

- 500,000 input vouchers issued to farmers in 100 districts (100% subsidy on a one touch basis)
 - Agro-dealer training for 2,685 stockists and 305 staff
 - Training on soil testing and 8,700 soil samples collected for analysis from 145 districts.
- ii) *Kilimo Biashara* (Agriculture Credit Guarantee Scheme)
- Four main banks (Equity Bank, Family Bank, Cooperative Bank and Kenya Women Finance Trust Bank) receive Kshs 500 million to offer affordable loans to farmers (at 12% interest rate).
- iii) Drought resistant crops
- 114,459 farmers in 105 districts benefited from drought resistant seed and planting material worth Kshs 151 million
 - Irrigation infrastructure was established for 3 Kenya Agricultural Research Institute (KARI) stations (Katumani, Igoji and Marmati) at a cost of Kshs 50 million
 - Irrigation equipment purchased at a total cost of Kshs 10 million for 4 Agricultural Training Centres (Bukura, Kitui, Wambugu and Garissa)
 - Promotion of commercialization of sorghum, seed bulking training for staff and field days for farmers.
- iv) Administrative support
- Provision of supervision and backstopping services
 - ICT support in 5 pilot districts (data input and purchase of server).

The key impacts of NAAIAP include creation of demand for extension, inputs, markets, credit and partnerships. There is also increased productivity from 4 bags to 20 bags per acre, increased fertilizer consumption and reduced distance to input sources from 15-35 km to 3-9 km. However NAAIAP's progress is still hampered by some challenges including climate change, viral disease attacking maize in various parts of Kenya, fluctuating prices of inputs against voucher value, low formation of cereal banks, erratic funding, delayed disbursement of funds to the field for logistics and stockists, double allocation and sale of inputs for immediate cash needs. In future, the NAAIAP target to reach 2 million more farmers, but this requires Kshs 18.7 billion. It also expects to generate 26 million bags of marketable maize valued at Kshs 78 billion, and to

develop a grain market pull system that will attract more supply and enhance utilization of improved inputs.

Presentation 6: Tanzania Smallholder Policy: Kilimo Kwanza (Revelian Ngaiza, Ministry of Agriculture, Tanzania)

Key issues

- Farmer groups and cooperatives are important channels of enhancing farmer access to financial services
- Institutional controls are necessary to ensure desired use of agricultural funds
- Innovative fast moving business enterprises offer an effective way of retaining the youth in agriculture

Overview of the presentation

Kilimo Kwanza (Agriculture First) is a national resolve to accelerate agricultural transformation. It was launched by the president of the Republic of Tanzania (H.E. Jakaya Mrisho Kikwete) on 3rd August 2009 as a central pillar in achieving the country's Vision 2025. It comprises a holistic set of policy instruments and strategic interventions towards addressing the various sectoral challenges and taking advantage of numerous opportunities to modernize and commercialize agriculture in Tanzania. Agriculture in the context of *Kilimo Kwanza* conforms to the FAO definition, which includes crops, livestock, fisheries and bee-keeping. The *Kilimo Kwanza* initiative was formulated under the patronage of Tanzania National Business Council (TNBC), which is a forum for public/private dialogue on strategic issues for the economic development of Tanzania. TNBC comprises 40 members; 20 from the private sector and the rest drawn from the public sector, mainly appointed by the president.

The importance of agriculture in Tanzania's economy and development aspirations is best captured by the late founding president Julius Nyerere's sentiments '*Because of the importance of agriculture in our development, one would expect that agriculture and the needs of the agricultural producers would be the beginning and the central reference point of all our economic planning. Instead, we have treated agriculture as if it was something peripheral, or*

just another activity in the country, to be treated at par with all others, and used by the others without having any special claim upon them ...We are neglecting agriculture. If we are not, every ministry without exception, and every parastatal and every party meeting would be working on direct and indirect needs of the agricultural producers ...We must now stop this neglect of agriculture. We must now give it the central place in all our development planning. For agriculture is indeed the foundation of all our progress’.

Agriculture in Tanzania and past transformation initiatives

Agriculture provides livelihoods to over 70% of Tanzania’s population, accounts for about 24% of national GDP, contributes 30% of total exports and 65% of raw materials for domestic industries. Due to the crucial role of agriculture in Tanzania’s economy, various strategies have been employed in the past to transform the sector from subsistence to commercial nature. Some of the previous strategies/policies include: The Iringa Declaration of *Siasa ni Kilimo* (Politics is Agriculture) in 1974, *Kilimo cha Kufa na Kupona* (Life and death effort to improve agriculture), *Azimio la Arusha* (Arusha Declaration) of 1967, *Vijiji vya Ujamaa* (Villagelization), *Chakula ni Uhai* (Food is Life) and *Ukulima wa Kisasa* (Modern Agriculture). But despite these efforts, the development of agriculture in Tanzania is still bedeviled with numerous constraints including poor access and low use of improved seeds and fertilizers, under-investment in productivity enhancing technologies such as agricultural mechanization, limited access to financing for uptake of technologies, unreliability of rainfall in some of the regions and limited use of available water resources for irrigated agriculture.

Rationale for *Kilimo Kwanza* (Agriculture First)

- Agriculture is an economic priority for Tanzanians
- Tanzania’s unique resource potential – about 44 million hectares of arable land exist but only 23% is under effective cultivation; 19 million cattle, 17 million sheep and goats, 30 million chicken that are not commercially exploited
- Conducive internal environment – implementation of the Agricultural Sector Development Programme (ASDP), a growing private sector, an enthusiastic farming community, relatively strong public-private partnership (PPP)
- Emerging external demand for food due to rapid population growth and changes in lifestyles leading to high preference for high quality foods

Kilimo Kwanza differs from the past initiatives in that most previous efforts were centrally planned and implemented by the government. However, the *Kilimo Kwanza* initiative is a public-private mechanism whereby the private sector is the lead implementing agent and the initiative is holistic in nature.

Important pillars in the implementation of *Kilimo Kwanza* initiative

i) Resolution

Instill political will and commitment of all Tanzanians to implementation of the initiative.

ii) Financing

Mobilize financial resources from the private sector (local and international), financial institutions, government, development partners, NGOs and community-based organizations to support implementation of *Kilimo Kwanza* programme.

iii) Institutional Re-organization

Emphasis is put on good governance, better coordination, monitoring, evaluation and involvement of private sector in the management of the implementation process.

iv) Paradigm Shift

Priority setting on what to produce and market – focus on food crops, produce what is needed for domestic consumption and consume domestic output.

v) Land

Facilitate access to land for agriculture, enhance security of tenure, promote harmonious and judicious exploitation of the land resource and create an enabling environment for using land to access credit.

vi) Incentives

Introduce and review incentive policies and regulations (fiscal and non-fiscal) to attract and retain investments in the agricultural sector.

vii) Industrialization

Establish relevant industries to provide backward and forward linkages for the agricultural sector and increase access to local and foreign markets for value added products.

viii) Science, Technology and Human Resources

Promote the use of modern technologies by all producers; increase government expenditure on research and development to 1% of GDP; identify, train and effectively utilize agricultural expertise; and develop farm service centres and review agricultural training curriculum.

ix) Infrastructure Development

Develop infrastructure for irrigation, rural electrification, storage, roads, railways, ports, airports, market centres and information technology.

x) Mobilization of the Public

Sensitize Tanzanians to participate in the implementation of the *Kilimo Kwanza* initiative.

Ministry of Agriculture and *Kilimo Kwanza* Implementation

In order to achieve *Kilimo Kwanza* declaration, the Government through the Ministry of Agriculture, Food Security and Cooperatives is currently implementing a number of strategic interventions including:

- i) Improvement of farm inputs accessibility
- ii) Construction and rehabilitation of infrastructure
- iii) Promotion of agricultural mechanization
- iv) Support services and farmer empowerment
- v) Involvement of the youth in agriculture

In addition, the implementation of *Kilimo Kwanza* has adopted agricultural growth corridor approach through the Southern Agricultural Growth Corridor of Tanzania (SAGCOT concept). SAGCOT has been recognized as an important practical instrument for implementing the *Kilimo Kwanza* initiative. It is the start of a new long-term commitment by many different organizations to develop a modern private sector-led approach to agricultural development. As such, SAGCOT is the first of a sequence of phased initiatives to develop agriculture Corridors in Tanzania. Working as a public-private partnership, SAGCOT provides the framework to connect a critical mass of efficient and effective private sector investment in agricultural value chain development, while also integrating with public sector inputs and investment, especially into infrastructure, as well as small-scale farmer promotion.

Discussion Session Two

A) Questions and comments

- Explain the amount that was given to farmers through Kilimo Plus initiative
- At the farmer level, how do we measure efficiency of extension service?
- How will the youth be involved in Kilimo Kwanza?
- What is new in this workshop? Or what value added does this workshop bring?
- Has the study assessed the performance of farmers left with technologies mid way?
- How will you ensure favourable interest rates in the credit schemes for agriculture?
- How are farmers involved in choosing interventions and banks to get loans from?
- Where are millers in these interventions?
- What is the output/impact of these programmes (Kilimo Kwanza, NAAIAP)?
- What initiatives work and what measures are in place to replicate positive impacts from previous successful projects?

B) Responses and clarifications

Rose Mwangi – NAAIAP:

- NAAIAP funding is about 4.1 billion shillings
- About 22 billion worth of maize has been produced with NAAIAP funds over time
- 40% of farmers supported by NAAIAP reinvested the money
- Sustainability of NAAIAP depends on government funding
- Banks through which the NAAIAP funds are distributed were selected through a procurement process based on overall bank branch network coverage in Kenya. But this may not necessarily be representative of farmers' financial requirements.

Ngaiza:

- The youth generally prefer fast moving businesses e.g. high value crop enterprises. SAGCOT is exploring these initiatives to retain the youth within the agricultural sector
- Formation of cooperatives and farmer groups is important to enhance financial access
- Money needs effective controls to achieve desired benefits. To ensure this, agribusiness professionals are being trained in various institutions e.g., Sokoine
- Need to invest in small affordable machines/tractors

Olwande: More funding should be channeled towards increasing number of extension workers.

DAY TWO: Thursday 7th June 2012

Recap of key points from Day One Workshop Deliberations (Dr. J.J. Okello)

Overview

- What is new in this workshop?
- Constraints of smallholder farmers
- Options that have worked
- Should smallholder farmers be left to continue or is there need for transition?
- There are limited off-farm options for smallholder farmers, but they neither have requisite skills nor do they feel that they actually need skills for off-farm jobs. Rather, most of them prefer low-skill jobs e.g., *boda boda*.
- There is desire for training policies in maize sector in Kenya
- Enhancing smallholder efficiency is important
- Possible models for smallholder commercialization – attitudes towards commercialization can influence farm returns

Policy issues

- Land is declining over time – what alternative options exist (e.g. land inheritance)?
- Farmer support services have focused on production level constraints and less on higher levels of the value chain e.g., marketing and business skills. Thus, knowledge gaps exist, but what is the solution?
- Technology – rain water harvesting options
- Government support services (subsidies) e.g. NAAIAP in Kenya and Kilimo Kwanza in Tanzania are faced with sustainability challenges, have unpredictable effects on producers and consumers, and are coupled with collusion/cartels between various actors leading to double allocation. Moreover, subsidies are contradictory – government supports fertilizer subsidy and sets output prices
- Is the one touch/touch and vanish approach of development partners in farm support appropriate in lifting smallholder farmers out of poverty?
- Should the NAAIAP and Kilimo Kwanza trade in agricultural inputs or is it beneficial to revert to marketing boards?
- Are the input support schemes projects or programmes, and how should their implementation and impacts be evaluated?

SESSION 3: COLLECTIVE ACTION FOR SMALLHOLDER MARKETING

Chair: Dr. David Neven, FAO

Presentation 7: An Introduction to Collective Marketing by Smallholder Farmers (David Neven, FAO)

Key issues

- For farmer groups to effectively work, there is need for adequate capacity building, realistic demands on farmer groups, voluntary group formation with requisite internal cohesion, and a facilitative legal environment
- Group support services by external agents should recognize the changing needs of farmers in different localities
- To ensure sustainability of farmer groups, public and private sector partners' roles should not exceed farmer participation levels. Thus, the collective action models should promote greater role of farmers themselves in decision making and implementation of their activities.

Overview of the presentation

Successful cooperation among smallholder farmers requires:

- a) a strong business rationale and relationships with the private sector
- b) that the demands placed on farmer groups does not exceed the existing group management skills and financial capacities
- c) the right internal cohesion and group dynamics (small size, homogeneity, face-to-face contact, accountability among members)
- d) a supportive legal framework for the farmer organizations

Groups have a role to play but do not provide an easy institutional response to the new pressures facing smallholders in a liberalized economy. Nor should farmer cooperation be viewed as a panacea for rural development (Stringfellow et al., 1997).

Examples of existing farmer organizations

- Amul - with about 3 million farmers in India
- Juan Valdez – 500,000 coffee farmers in Colombia
- Rwanda rice cooperative program – Ucorirwa

- Githunguri Dairy Farmers Cooperative Society in Kenya
- Oromia Coffee Farmers Cooperative Union in Ethiopia
- Farmer group maize sales to P4P/Mukwano in Uganda

The FAO has developed various innovative training approaches and materials for building the capacity of farmer organizations to put in place transparent financial, management and marketing systems. The current survey indicates that farmers mainly exercise collective action in production (39%), buying inputs (29%) and marketing (13%). However, some farmers do not act collectively because they do not know who to collaborate with (29%), it is difficult to agree as a group (23%) or collaboration is considered a waste of time (22%). On average, maize farmers who collaborate in groups have incomes that are about 60% higher than non-collaborators.

The Public Role in Collective Action Models

Traditional Role ‘Push’	Alternate Role ‘Pull’
The donor or government drives group formation, and provides most (even 100%) of management, strategy, operational and marketing guidance	The donor or government has a smaller role primarily as a facilitator between producers and agribusiness, who are the joint implementers
Subsidies and grants play a big role	Equity investments play a big role
The donor operates via a fixed-term project (often not more than 4 years)	The donor provides basic services such as training on an on-going basis
The donor typically has various objectives, both social and economic	Commercial viability is the core joint objective of agribusiness and farmer groups
Private sector/agribusiness (apart from then farms themselves) has little role in the project beyond input supply and output purchasing	Donor services are provided according to the evolving needs of the farmer – agribusiness relationship and other changes in the staple market
Philosophy: use public resources to show farmers the value of the collective model and they will adopt it	Philosophy: develop the collective model through farmer, private sector, public sector, civil society partnerships

Presentation 8: Lessons from Cereal Banking in Western Kenya (Dr. Eusebius Mukhwana, SACRED Africa)

Key issues

- Commodity bulking is important to enable smallholder farmers with very low volumes to participate in cereal banks
- Proper financial record keeping is critical to ensure farmer confidence in cereal banks
- Cereal banks can facilitate access to better markets with good prices if maize quality is improved and harmonized
- Updated members registers allows easy monitoring of group participation

Overview of the presentation

Background

Smallholder farmers are trapped in ‘good season-poor market’ dilemma. This discourages technology transfer and reduces surplus production. Opportunistic middlemen often dictate farm gate prices. Inadequate storage aggravates post-harvest losses especially with the rapid invasion by the large grain borer (losses estimated to be 30 – 40%). Farmers are not prepared to operate in a liberalized market (they lack capital, capacity, business acumen, strong producer associations and market information). In Western Kenya, cereal banks (CBs) were intended to high seasonal price fluctuations inaccurate weights and measures, and farmers’ limited storage capacity. SACRED Africa established 6 cereal banks in Western Kenya: Bungoma central CB (illustrated below), Mayanja, Chwele, Bukembe, Nalondo and Sirisia.



The main activities of the cereal banks include assessing and improving post-harvest handling operations, establishing and training members of local cereal banks, and identify constraints to farmer participation in collective marketing activities. The maize marketing movement (CBs) relies on farmers working together to aggregate large volumes and volunteer labour to improve quality through shelling, drying, sorting and grading the maize in groups at the assembly points.



Group organization and capacity building in the cereal banks

- Established local marketing associations with elected officials and audited records
- Tasks assigned among members for processing, storage and marketing

- Training provided in marketing, grain quality, group management, leadership and record keeping
- Criteria established for calculating transaction costs and sharing benefits and losses

Important achievements of Cereal Banks

- Contributed towards seasonal price stabilization in the concerned villages
- Trained farmers on grain quality and running a business
- Facilitated transformation of producer associations into marketing associations
- Provided market information and built capacity of farmer groups to conduct market intelligence
- Enabled farmers to sell maize to large scale millers
- Provided small-scale credit for maize purchases and improved farm input subsidy

Challenges in the Cereal Banks

- Spatial arbitrage – CBs could not compete with private traders between geographic locations
- Local people who borrowed grain in the lean seasons felt little obligation to repay
- Losses due to speculative storage
- Deficient supervision of accounting operations led to cases of fraud
- General expectation of continued assistance by donors/NGOs and reluctance to make the CBs self-sustaining in the future
- Low level of profitability for maize
- Lending of grain in contravention of established rules
- Slow collective decision making

Key lessons from the Cereal Banks

- Many households produce too little surpluses to take part in the CBs
- Self-help groups are usually too small to become marketing associations but may be combined and then trained in quality control, storage and marketing
- Good record keeping and accounting as well as auditing are important for instilling confidence in the system

- With good quality, maize marketing is not a problem, inability to efficiently handle large volumes is more important
- Registered farmers benefit more through the business of buying and selling than enjoying a better pay for surplus sales
- The success of cereal banks as profit making enterprises depends on efficiency in maize stock turnover and cost reduction through the usual maize selling season
- It is important to facilitate farmers to access long distance and/or organized markets that may provide better prices.

Presentation 9: Agribusiness as Smallholder Service Providers (Ms. Bilha Maina, KPMC Holdings)

Key issues

- A holistic approach to commodity value chain management (e.g., through village commodity aggregation) helps to reduce costs of market access, stabilizes farm incomes, provides processing to reduce postharvest losses and hedges against risks
- Locally adaptable and low cost storage facilities enable most farmers to easily participate in commodity bulking
- Access to grants and low interest loans provide requisite seed money for installation of bulking facilities

Overview of the presentation

Village Commodity Aggregation Centres (VCACs)

i) Post-harvest losses of up to 40% cripple farmer incomes and livelihoods

- Without safe storage, farmers must sell during harvest glut when prices are lowest
- Seasonal food shortages mean farmers purchase food grain when prices are highest
- Lack of safe storage prevents aggregation, pushing farmers to use expensive brokers
- Low incomes drive negative cycle – farmers cannot buy more inputs to grow more grain

ii) VCAC's virtually eliminates post-harvest losses with internationally proven technology

- Grain is stored in a hermetically sealed cocoon, reducing losses over 6 months to <0.05%
- Cocoons deployed locally, reducing farmer's travel expense and increasing grain safety

- Additional processing available on site, improving market price with large buyers

iii) Sustainable growth for VCAC model requires initial grant and debt support

- Successful pilot program demonstrated viability and charted path to sustainability
- But market research, new product development, and a farmer awareness campaign are needed to expand model and attract commercial investment capital
- Technology to support farmer data management and an integrated financial system
- Small-scale farmers are stuck in a poverty cycle created by post harvest losses due to lack of appropriate storage facilities (e.g., storage on roof top where output might be easily rained on or affected by pests).



VCAC breaks the poverty cycle with proven storage technologies:

a) Hermetic “cocoon” virtually eliminates post-harvest losses

- Naturally traps CO₂ and decreases oxygen, killing insects and aflatoxins
- Prevents mold by stabilizing ambient moisture
- Preserves grain quality -- moisture & weight constant through storage, allowing accurate forward sales



b) Technology by GrainPro

- Successfully implemented worldwide, especially in coffee
- Multinational company with global reputation



More flexible cocoons increase trust and encourage community participation



The VCAC approach provides a complete solution (e.g., storage; processing – threshing, testing; consistent monitoring to improve buyer certainty; trading and hedging/speculation). Thus, the VCAC helps to improve farmer incomes, savings and investments through reduced post harvest losses, hedge price and enhanced food security, and linking farmers with large buyers. Storage provides considerable post harvest loss reduction. Processing opens immediate revenue streams, while bringing additional value-adding services directly to farmers. Trading stabilizes price and could encourage lending to smallholder farmers. Hedging may be lucrative in future but brings high risk and requires strong capital base and market experience.

The financing arrangement is such that there is a partnership with *Juhudi Kilimo* initiative that provides loans to farmers for inputs, while the VCAC holds grain as collateral. Further, *Juhudi* provides leases for traders and agro-dealers to operate VCACs.

Significant Progress made by VCACs

i) Farmer awareness growing – more than 7,400 farmers trained

- Model launched across Kenya Coast, Eastern, Turkana and Nyanza regions (about 800 metric tons handled)
- Business reorganized to be more efficient and with reliable staff
- Achieved progress in face of disruptive violence in one region and record high farm-gate prices

ii) Opened profitable new business lines

- Offering agency banking services on behalf of Equity Bank & Co-operative Bank in 3 regions
- Leveraging management experience to begin grain value addition & trading
- Entering Western and Rift valley regions with new PPP partnerships
- Secured delivery contracts with key buyers and millers

iii) Major partnerships formed that will drive volumes

- Extended into the region with entry into Tanzania
- Secured credit facilities and negotiating partnerships with financing partners to catalyze and support growth and volumes

Presentation 10: Purchase for Progress (P4P) – Developing farmers’ capacity (Lorna Likhanga, World Food Programme)

Key issues

- Increasing awareness and building trust among participants in a commodity value chain enables beneficial participation in collective marketing
- Training farmers on the legal requirements and need to honor contracts is essential in ensuring successful operation of marketing groups/organizations
- Flexible marketing arrangements are necessary to address farmers’ immediate cash needs

Overview of the presentation

P4P programmes aims to increase smallholder farmers/traders’ capacity to compete in the agricultural markets. It covers high potential, marginal agricultural areas and irrigation schemes where there are high levels of aflatoxin in Rift Valley, Nyanza, Western, Easter and Coast province in Kenya. P4P is a 5-year pilot initiative currently in the 4th year of implementation. Commodities purchased in the programme include sorghum, maize, beans, cowpeas and pigeon peas.



Prior to the P4P intervention, smallholder farming in the villages was characterized by no collective marketing, low quality food commodities, lack of basic storage, poor/low access to credit, poor access to markets and gender imbalance. Some of the important achievements by the P4P initiative include:

- 76 farmer organizations registered as vendors

- 35 agro-dealers and small traders registered
- Over 3,500 farmers, traders and partners trained
- Group marketing to other buyers facilitated (6,700 metric tons in 2011)
- Access to finance facilitated (over USD\$300,000 received in loans by at least 6 farmer organizations)
- Reduction of contract defaults from 25% to 10%
- Improvement of storage capacity – from 2,700 metric tons of temporary stores to 2,000 metric tons of permanent stores being built by communities
- Record keeping skills enhanced for farmer groups
- Improved food quality through reduced aflatoxin incidence
- Strong business oriented groups as a result of the marketing activity

Challenges to the P4P programme

- Recurrent drought in Eastern region resulting in crop failure
- High food demand hence price instability resulting in contract default
- Low number of farmers contributing to stocks
- Low marketing capacity for many of the groups
- Dependence on the WFP market

Way forward

- Focus is to build capacities of suppliers mainly smallholder farmers
- Support 30% of storage development
- Gender mainstreaming
- Link farmers to millers, institutional buyers and traders

Discussion Session Three

i) Questions and comments

- Are there security problems e.g., theft of grains stored outside a premise (for example on the roof top)?
- Can the storage technology (cocoons) be scaled down to household level?
- How much are farmers charged for bulk storage?
- How will the SACRED Africa initiatives be sustained?

- Possible lessons can be learnt from the Warehouse Receipt System (WRS), Saving and Credit Organizations (SACCOs) and Masindi farmers association that facilitate storage, financing and collective processing and marketing in Uganda
- Smallholder farming should be considered as a form of livelihood and policies should incorporate people's changing needs and priorities for food and cash
- How does site selling affect bulking contracts?
- What lessons can Rwanda's policy makers (public-private sector share in farm cooperatives is 60:40) borrow from Eastern Africa region initiatives to address marketing board problems?
- What is the average output per ha for SACRED Africa clients?
- Are the SACRED Africa cereal bank groups registered and for how long have they existed?
- Was SACRED Africa initially a pilot project?

ii) Responses and clarifications

KPMC:

- Commodity trading is based on farmer agreement. They decide where the storage facility should be set up. Moreover, the commodity stored is normally insured and storage facilities are set up near security offices e.g., police stations, chief centres or National Youth Service (NYS) camps
- There are smaller storage facilities for domestic or household applications: 190 kg bag costs Kshs 280 while 1 ton bag costs USD\$280
- Quality standardization services are offered in the storage facilities (at different costs e.g., USD\$100 per day depending on required services – testing, grading etc)
- KPMC also has agency banking facility to enable farmers manage funds securely.

SACRED Africa:

- The intention of SACRED Africa cereal banks was to assist farmers with ability to produce surplus. However, political interference influenced the operations of the project (misuse of money/nonrepayment of loans) threatening sustainability
- Revolving loan scheme was introduced and interest earned was to be for sustainability, but nonrepayment and mismanagement of the fund became a serious challenge. Further,

collusion by farmers and buyers to sell maize from the stores led to poor performance of the project

- Collective marketing requires understanding of farmer characteristics, attitudes and levels of responsibility. Thus, effective commercialization of maize value chain requires proper profiling of farmers who can produce surplus
- SACRED Africa cereal banks were based on creating market linkage (no focus on production) as only those with surplus were included in the project. The project had a minimum of 5 groups with common interest in Bungoma area. In the second phase the project expanded to Vihiga, Siaya and Butere-Mumias, but collapsed due to high transaction costs.

P4P:

- The P4P initiative collaborates with the Ministry of Agriculture to provide other services e.g., agronomic skills
- Collective marketing is riddled with suspicion on brokers and produce theft. Hence it is necessary to increase awareness and build trust and guarantee to enhance participation. Proper identification of lead organizations is important to reduce fraud
- The WFP encourages farmers to honour contracts. But, there are other procurement arrangements that allow occasional site selling to address emerging immediate farmer requirements for cash and reduce defaults on loans

SESSION 4: THE NEXT GENERATION OF STAPLE AGRICULTURE

Chair: Ms. Lydia Mbevi, ACIDI-VOCA Kenya

Presentation 11: Why does the debate on small-scale farming and youth matter today? – the next generation maize producer (Dr. Andrea Woolverton, FAO)

Key issues

- Rising youth population (15 – 24 years old) in South-Central Asia and Sub-Saharan Africa needs timely policy attention
- Poor attitude of the youth towards agriculture (seen as a form of drudgery and last option for societal failures) and their inability to find gainful employment in other sectors poses serious challenges to development
- Rural female youth face more obstacles in their progression than their male counterparts
- Lack of professional mentorship of the youth by agricultural experts
- Limited involvement of the youth in agricultural policy design
- Negative exploitation of youth talents and potential – for example, in Kenya the youth work but much of the compensation is paid to adults who do not take part in the work in the *Kazi kwa vijana* (work for the youth) government programme. Instead, the programme is bedeviled with corruption and is often referred to as ‘*kazi kwa vijana, pesa kwa wazee*’, i.e., the youth work while payment goes to the elders.
- Regional differences in youth attitudes and aspirations should be considered in programme design
- Solving youth problems does not necessarily require cash all the time
- Potential solutions that might have positive direct impact in the youths’ lives include: work for education, instilling sense of accountability in existing programmes, and encouraging professionals to engage in agricultural activities so as to give agriculture a positive image as a career for successful persons in the society

Overview of the presentation

It is important to attract more youth into agriculture by changing the view on agriculture and tapping professionals into agribusiness operations. Proper management of youth funds and equitably compensating the youth for their efforts are also necessary to avoid exploitation. For

example, misuse of funds e.g., ‘*Kazi kwa vijana, pesa kwa wazee*’ – work by youth and money to the old, should be avoided. Essentially, corruption discourages youth participation in development activities.

***Presentation 12: Helping Youth thrive in staple Agriculture – Learning from Experience
(Odeny Odhiambo, Kenya Youth Foundation)***

Key issues

- Agricultural development programmes targeting the youth should consult, listen to and incorporate the youth in programme design and implementation
- Use more innovative approaches such as songs, sports and drama to disseminate agricultural extension messages so as to entice the youth in agriculture
- Incorporate the youth in agricultural education programme and policy review
- Provide apprentice agricultural training as a career exit option for low-level school dropouts
- Conduct a national youth needs and aspirations survey in order to determine what aspects would entice youth in agriculture

Overview of the presentation

Box 2: Kenya Rural Youth Livelihood Strategies Programme (KERYLIP)

Youth can be defined in many contexts such as transitional, demographic, cultural, biological and social. In this context, the youth is defined within demographic and transitory paradigms. Transitional paradigm issues include independence, marriageability, responsibility, maturity and Productivity (Social and economic factors). Youth unemployment has become a major challenge in the 21st Century. The Sub-Saharan Africa is one of the regions highly affected by youth unemployment. It is estimated to be more than 21% (ILO: 2003). According to ILO projection, Sub-Saharan Africa will witness substantial growth in additional labour force of 28 million - 30 million between 2003 and 2015. While contending that the current economic growth in Sub-Saharan Africa countries will not cope with the growing number of unemployed youth in the region, alternative strategies need to be developed before situation gets out of control.

In Kenya, youth unemployment is a serious development issue. It is estimated that 64% of unemployed persons in Kenya are youth. Interestingly only 1.5% of the unemployed youth have formal education beyond secondary school level and the remaining over 92% have no vocational or professional skills training and the majorities are found in the rural Kenya. Due to inadequate opportunities in rural areas the tendency is that they migrate to urban centres to look for such opportunities. Kenyan economy heavily depends on Agriculture (30% of GDP), which is basically rural-oriented sector. Surprisingly, Kenyan agriculture is still labour-intensive thus the out-migration of young and productive labour force from rural to urban centres has a direct negative impact on agricultural production hence job creation in other sectors which are directly or indirectly linked to the sector will be reduced. A strategy of rolling back rural –urban migration by creating opportunities for employment and access of livelihoods would have a positive spiral effect on Kenya economy.

It is against this background that Kenya Rural Youth Livelihood Strategies Programme (KERYLIP: 2004) was established by Kenya Youth Foundation to create employment and livelihood access for rural youth along the Agriculture, Environment and Natural Resources Value Chain by venturing into both on-farm and off-farm enterprises/income generating activities. The programme was piloted in Ahero- Nyando District of Kisumu County. The target was to empower 200 youth members through Kinda Tura Youth Group to have access to sustainable livelihoods based on agriculture, environment and natural resources management by 2007.

Source: Kenya Youth Foundation, 2006

In designing a youth programme, you must inculcate their aspirations in positive and constructive ways and this simply means **consult them, listen to their opinions** and **work with them** in the design and execution of the programme. In as much as you would want to change their situation positively, if their aspirations are not captured in your programme, you are bound to fail as they will look for other ways to satisfy their aspirations.

Challenges facing youth in developing countries (including in Kenya)

1. Unemployment
2. Lack of value based education system

One of the unique educational models of Earth university in Costa Rica is to facilitate participatory and actively strengthen the ethical and social values that forms part of the students' holistic development. www.earth.ac.cr

3. Unequal opportunities in rural and urban settings (rural-urban migration)
4. Lack of comprehensive and coherent youth policy (current policies favours urban youth)
5. Lack of access to productive resources (land & capital)
6. Poor delivery of government services to the youth (programme design & capacities)
7. Private sector is impatient with the youth **“The Standard Newspaper”, Tuesday 5th June 2012, pg 45 “ How to deal with young restless employees” – *These young employees are opting for jobs that promise training & education opportunities as well as avenues to network with mentors and role models in a way that influence their career path.***
8. Too much focus on supply driven solutions (quantity not quality)
9. General prescriptions for the youth instead of sector specific prescriptions
10. Too much focus on immediate solutions rather than long term solutions for the youth

How to help youth thrive in Staple Agriculture

- i. Comprehensive & full cycle capacity building for target youth (needs assessment, trainings, awareness creation, implementation, monitoring & evaluation). The content must be relevant, up to date and practical
- ii. Diversification of youth involvement in the Sector (Look at the Staple Food Value Chain)
- iii. Prioritize socio-economic benefits and strategies to achieve them (It is about their aspirations) and therefore there must be a win-win situation
- iv. Training & Implementation Support even on pilot basis (Technical & Financial Support)
- v. Social interaction & entertainment should be mainstreamed (music, skits, drama, & sports as tools for agricultural extension services to farmers)
- vi. Comprehensive policy that would address full participation by youth in the entire process, training government officers to specialize in working with youth,

- collaboration with other youth service providers (NGOs, Academic & Research Institutions and Private sector), adequate funding must be secured for both short & long term programmes
- vii. Creativity, initiative, responsibility, self-reliance and involvement of other key segment of the society is important (parents & community leaders)
 - viii. Benefits & incentives to motivate youth and their leaders
 - ix. Affirmative action for disadvantaged youth (out of school youth) such as specialized training packages and access to financial and marketing services
 - x. Increased & diversification of funding for youth project (local & international)

Concluding question: What else should be done to make agriculture attractive to young people?

Sources:

www.earth.ac.cr

FAO, 1996, Expert Consultation on Extension Rural Youth Programmes & Sustainable Development

Odeny, 2000, ‘The Role of Rural Youth in Conservation Agriculture in Kenya’

Department Agricultural Extension, Reading Univeristy, 2003, “Scoping study on Youth in Agriculture & Rural Development in East Africa.”

Odeny, 2006. Enhancing the Productive Capacity of Rural Youth in Agriculture, Environment and Natural Resource Management towards Employment Creation

Odeny 2010, Capacity Strengthening Initiative Kibera

Discussion Session Four

i) Questions and comments

- How can agriculture be made attractive to the youth in terms of mechanization and putting money in agriculture?
- Do youth consider agriculture as an option for failures?
- Is the current education/training system relevant for agriculture or white collar jobs?
- Is there political will to make agriculture attractive to the youth?
- There is need to change learning curriculum to have affirmative action on agriculture to attract more students
- How is youth access to key agricultural resources such as land and credit?
- Profiling/categorizing the youth (by agenda, access to technology and literacy levels) is important
- There is need for asset-based approach in youth programme design
- Gender disaggregation of frustrated youth is important for policy making
- Other essential measures include tailoring training to labour market demand e.g., skills in music, football and interior design; farmer-to-farmer training; and legislative reform to accommodate youth in farmer-to-farmer training programmes.

ii) Responses and clarifications

- A survey on the needs and aspirations of the youth is important as a starting point for policy design
- Youth Foundation recommends agricultural mechanization to remove drudgery
- Investments in education/training is feasible and preferred by youth if they are guaranteed of jobs thereafter
- There is need for apprentice agricultural training for low-level school dropouts and incentive schemes to retain agricultural experts within the agricultural sector.

Presentation 13: Financier Panel Discussion

Key issues

- Strict monitoring of agricultural and youth enterprise funds is necessary in order to avoid misuse arising from political patronage and moral hazard
- Youth mentorship on entrepreneurial skills is important to inculcate commercial orientation in the youth
- There is limited insurance coverage on crops due to unpredictable weather
- Appropriate legal framework is essential to effectively anchor youth enterprise funds in national laws and promote sustainable continuity
- Stakeholder participation in selection of beneficiaries of youth enterprise funds is critical for equitable regional distribution of the funds

Overview of the discussion

A panel discussion was convened with representatives from key financial institutions (Agricultural Finance Corporation – AFC, Equity Bank, Kenya Youth Enterprise Development Fund in Kenya) and finance organizations in Uganda and Zambia.

i) Discussion Questions and comments

- Do financial institutions consider youth's decision making at household level in financing their activities?
- AFC does not provide waivers to farmers who incur losses due to natural calamities
- What programs does AFC have to increase youth access to loans and reduce defaults
- What criteria does the Youth Enterprise Fund use in resource allocation and how much loans does it give to farm-clients?
- How does the Youth Enterprise Fund support clients who lack proposal development skills?
- How are interest rates for agricultural clients/enterprises determined?
- How are potential beneficiaries targeted?
- Who should develop business plans for youth to reduce loan default levels?
- Does the Youth Enterprise Fund consider gender issues in targeting of clients?
- Is there any financial support to cover yield insurance?

- Share with participants best practices and experiences in youth financing
- How is abuse of farm credit managed in situations where some support is given in material form/in-kind?
- Is there sufficient legal framework to support the Youth Enterprise Fund in case there is a change of political leadership/government in Kenya?
- Are the existing financing arrangements really addressing the farm credit problems?

ii) Responses from panelists

AFC:

- Loans must be repaid whether or not calamities arise – to reduce moral hazard. However, on case-by-case basis, the AFC partners with APA insurance company to address some calamities. It also reschedules the timing and interest rates for loan repayments.
- Group products are offered as collateral/security
- Loans in kind are normally channeled to various input sellers where farmers can easily access the inputs rather than cash
- Parents and experts need to play a critical role in modeling the youth.

Equity Bank:

- Yield insurance is provided for livestock, but for crops there is none due to unpredictable nature of weather
- There is a system for updating youth ideas and innovations, and creating linkages with relevant sectors and value chains before loan approval

Youth Enterprise Fund:

- It liaises with marketing agents to sell products made by the youth (18 – 34 years)
- Links the youth in exhibitions/shows to promote their products
- Promotes mentorship, incubation programs and institutional linkages
- Provides employment abroad scheme for those interested based on skill requirement elsewhere
- Initial clients are only required to describe their business plans
- Comprehensive proposals are required from those interested in business expansion

- The Youth Enterprise Fund is a social non-profit programme (interest rate is 8%). But, it is being reviewed to enhance its commercial viability in the long-run
- Who is best placed to serve the youth (perhaps government) in order to reduce exploitation by the private sector
- The Youth Enterprise Fund is developing a credit guarantee scheme
- The Youth Enterprise Fund is currently subject to political interference since it is established through a presidential order and it is normally as campaign tool started in 2007. A sessional paper is being developed to anchor the Fund in law.
- The Fund is being implemented in 10 regions in the country
- The Fund faces serious brain drain as most youth frequently move to other sectors and countries (labour export). There is need for collaborative efforts to provide supply-driven curriculum

Uganda:

- A strict business approach is applied to manage credit to avoid political patronage – money is administered through selected commercial banks using the bank interest rates and loan recovery follows a business manner to reduce defaults. There are no gender favours.
- It is part of best practice to train youth in entrepreneurship skills (book keeping, loan management and repayment culture) before giving them money
- Mentoring and regular entrepreneurship clinics by business experts are also important for the youth

Zambia:

- Training is provided on financial management and business development
- There is partnership with the Small and Medium Enterprise (SME) department and the International Labour Organization (ILO) to train youth in preparation of business plans

SESSION 5: THINKING ABOUT THE STEPS TOWARDS AN INTEGRATED POLICY APPROACH – WORKING GROUP DISCUSSIONS

Chair: Dr. Andrea Woolverton, FAO

Group one:

Task: How would you design a program, like NAAIAP, with the objective to catalyze smallholder maize commercialization that does not interfere with private sector role?

Who is the private sector? Farmers, handlers, millers, input dealers, financiers, markets?

Collective marketing, training, input procurement or all of the above is being proposed by virtually every organization working with smallholder maize producers—yet, it appears many are not learning from their past failures in collective maize marketing.

In the case of marketing, it is very costly for farmers to lose their produce when we don't learn.

Thus, the task is to design a collective marketing model that will work for smallholder maize producers in East Africa.

Summary of points raised by group members and other participants

- Smallholders can be classified into 3 categories; those who rely on relief food, those with less than 5 acres and resource constrained/limited capital. Smallholder farmers need to be organized in terms of specialized products they produce
- Developing trust among group members
- Promoting transparent framework of leading organization
- Developing a constitution to guide farmer organizations
- Registering farmer groups and leadership structure with gender balance considered
- Who to include – those with common interests
- Facilities – storage, management/governance, business rules and flexible procurement procedures
- Capacity building
- Participatory provision of agricultural services
- Let business service development providers teach farmers necessary skills and technologies for business

- Enhance farmer organization's negotiation power with banks/financial institutions (develop bankable contracts to reduce transaction costs)

Possible strategies for commercialization

Diversification, value addition or end-market approach are potential strategies for achieving improved commercialization. If there is sufficient demand, farmers can pool output and sell as a group. In this model, farmers think of markets before producing a commodity. The model requires an enabling policy environment (with limited government interference)

Group two: *Shifting the perspective of agriculture in East Africa.*

Task: In order to provide the services needed for small maize producers to increase their income through marketing, how would you redesign extension services needed?

Should extension programs be part of early education to educate youth regarding agriculture?

At what stage should extension be taught? How can extension be tailored to meet urban consumer demands for quality and quantity?

- Extension workers have experience on production, but lack skills on marketing and value addition
- Redesign extension system to include market aspects
- Establish farmer field schools/agribusiness centres to train extension staff on marketing issues and basic accounting
- Increase the number of extension workers and motivate volunteer extension practitioners
- Design refresher courses for practicing extension staff using public-private partnerships
- Enhance the use of ICT e.g. mobile phones in extension – establish ICT village centres
- Timely market information provision by radio stations as part of Corporate Social Responsibility
- Introduce community social radios
- Improve physical infrastructure e.g., roads
- Promote extension awareness/dissemination in all meetings e.g. churches and political gatherings

- Promote extension discipline as a compulsory subject in schools. Most people do not agriculture as a compulsory subject in school – agriculture is given as a choice but it has limited value addition and has not been aggressively marketed/promoted/advertised
- Extension should be included all through commodity value chains.

Group three

Task: How would you design a program, like NAAIAP, with the objective to catalyze smallholder maize commercialization that does not interfere with private sector role?

Who is the private sector? Farmers, handlers, millers, input dealers, financiers, markets?

Summary of points raised by group members and other participants

In order to encourage farm innovations, subsidies should not be 100%

- All levels of private sector stakeholders should be appropriately consulted. Some of them include farmers, handlers, millers, millers, input dealers/stockists, financiers, markets, transporters and silo owners
- Farmers should aggregate their output for economies of scale
- Categorize farmers into two groups; serious and less serious farmers. Give less inputs to the less serious farmers, but analyze why they are in this group and warn them in possible exit from the program
- Possible training content for farmers recruited into the programme: 30% on agronomy issues and about 70% on socio-economic and market aspects. Continuous training is recommended
- Why does the group assume that if a poor farmer if given 100% inputs they automatically produce? What of other costs? Must they produce maize if given inputs? The Ministry of Agriculture normally does selection of beneficiaries – clients must be maize farmers (for food security reasons). Focus is on inputs because maize quality depends on input quality (seeds and fertilizers)
- Extension staff verifies farmer genuineness and information on their production challenges.

Synthesis of Major Policy Options (Prof. Willis Oluoch-Kosura, University of Nairobi)

Preliminary observations

The search for an integrated policy approach towards commercialization may entail repeated messages in different fora, but the focus changes depending on the circumstances (as in the sustained use of the Bible or Quran in religion for many years/generations). Ecosystem services are dynamic and this is best captured by the saying that ‘*The future belongs to the organized and those who can adapt*’. Efforts to commercialize agriculture are timely and should be cognizant of the reality that youth unemployment and poverty pose the greatest threat to national and global security.

Situation Analysis

Agriculture is the mainstay of East African economies. Further, maize is a major staple food in the region; maize shortage is synonymous with famine. However, much policy emphasis has been on production, with limited focus on markets and agribusiness. Key lessons from previous interventions such as the *SMART* subsidies in Malawi and guaranteed minimum interventions have been lost.

Finding the right definition of smallholder farmer is elusive. Should it be based on land size, output, level of sales, resource constraints or type of enterprise? Getting the right definition of a smallholder farmer is necessary for targeting of policy interventions. Other background issues include the need and urgency to make smallholder farming sustainable; need to support the aging farm populations and enticing youth to undertake agricultural investments; up scaling government investments in agriculture to bridge yield gaps (e.g., 2 – 40 bags/acre in some localities) and addressing frequent reliance on donor funding without inbuilt exit strategies. It is also evident that different actors in various sectors are undertaking many interventions but the same agricultural challenges still persist, with no solution in sight.

Key Challenges to Agricultural Commercialization

- High population growth and declining land sizes
- Limited off-farm opportunities for the low skilled smallholder farmers
- Limited and costly farmer support services

- Lack of business skills
- Poor coordination of agricultural services
- Limited technology
- Lack of supportive attitude and culture towards farming (poor image for agriculture – considered by the youth as an occupation of last resort for failures, the old - and seen to be full of drudgery)
- Endemic corruption in most institutions including those dealing with agricultural services
- Weak infrastructure

Emerging Opportunities for Agricultural Transformation

- a) On-going reforms in Eastern Africa including review of Land Acts, regional market integration efforts and constitutional reforms
- b) Goodwill and financial support from many development partners e.g., in NAAIAP programme
- c) Growing middle class offers huge demand focusing mainly on food safety and quality aspects
- d) Availability of ICT tools can attract youth in agriculture e.g. in application of internet based financing for agricultural projects
- e) Best practices in production, extension and marketing can be replicated or scaled up
- f) Private sector willingness to partner with government in agricultural investments.

Major Policy Options for Transformation of Agriculture from Subsistence to Commercialization

Generally there is need to think and act value chain and embrace collective action from research-extension-farmers-value addition-consumption. Development plans and strategies should focus on the following enablers for agricultural transformation to be effectively realized:

- ✓ Infrastructure services such as access roads in remote rural agricultural areas
- ✓ Strengthen innovation-based research
- ✓ Provide incentives to various value chain actors
- ✓ Improve input accessibility and affordability
- ✓ Enhance access to information

- ✓ Strengthen institutions/legal framework to ensure enforcement of agreements
- ✓ Promote beneficial changes in attitude and mindset regarding agricultural enterprises
- ✓ Empowerment and capacity building for local level actors, for instance through village-level training/information centres (e.g., in farmer field schools)
- ✓ Develop appropriate curriculum for the training needs of various actors including farmers and private sector participants in the commodity value chains
- ✓ Involve farmers and the youth in the setting of priorities and agenda for agricultural development
- ✓ Build capacity for collective action
- ✓ Harmonize policies with development needs across time, i.e., short term, medium and long-term objectives
- ✓ Consistent and timely interaction and balance the needs of farmers and consumers
- ✓ Integrate formal and informal markets
- ✓ Promote uptake of viable technology
- ✓ Create revolving funds to sustain agricultural enterprises
- ✓ Develop an enabling business environment for agribusiness ventures e.g., through tax harmonization and reduction.

VOTE OF THANKS

In his closing remarks, Dr. Okello expressed gratitude to participants for playing significant roles in various ways: the FAO for funding the study and workshop; presenters, session chairs and panelists; Prof. Willis Oluoch-Kosura for giving a synthesis of the workshop; all participants for their contributions, smart ideas, flexibility and patience; the facilitating team (Elizabeth, Sylvester and Ariane); the Rapporteur (Dr. David Jakinda) and the Norfolk hotel for understanding and being considerate in workshop facilitation.

The workshop was officially closed at 18:10 hours.

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