## NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

## FACULTY OF COMMERCE

## **DEPARTMENT OF MARKETING**

## **AGRI- BUSINESS MARKETING – CBU 4206**

## F INAL XAMINATION – MAY 2014

#### TIME ALLOWED: 3 HOURS, 15 MINUTES.

### **INSTRUCTIONS TO CANDIDATES**

i. Answer section A and any three questions in section B.

#### **INFORMATION TO CANDIDATES**

- i. Question one carries 40 marks, all other questions carry 20 marks each.
- ii. Questions may be answered in any order.
- iii. Credit will be given for the use of appropriate examples.
- iv. This paper contains seven questions

#### **SECTION A**

#### **QUESTION 1**

# Case title; Small is beautiful: Overcoming market failures for smallholders in sub-Saharan Africa

The unique challenges faced by smallholder farmers call for an innovative, integrated approach to spur investment, productivity, and technology adoption. Despite recurring predictions that small farms in Africa south of the Sahara (SSA) will soon disappear, they have proved remarkably resilient. Smallholder farms in sub-Saharan Africa (two ha or less) represent 80 percent of all farms and account for up to 90 percent of production in some sub-Saharan African countries. More than two thirds of the region's farm holdings have an average size of less than one hectare. Most of these smallholders either practice subsistence farming or operate largely in local markets due to inadequate links to more lucrative markets at provincial, national, or global levels. As a result, investment, agricultural productivity, and technology adoption all remain low, resulting in poverty trap.

In the 1960s, the Green Revolution helped transform Asia from a continent of hunger and despair into a regional success story under a similar structure of land ownership. So why can't such a transformation happen in sub-Saharan Africa?

Clearly, the current situation is different than that of Asia in the 1960s. Changes in production methods are not scale-neutral as they were during the Green Revolution. Today, economies of scale are crucial for inputs markets, production and processing technology, and transportation. The modern food value chain has also imposed new restrictions such as auditing and certification requirements and food safety standards; these new restrictions often prevent smallholders from linking to more dynamic markets.

Across Africa, product marketing is still largely informal, quantities supplied are not always consistent and a lack of access to credit is a perpetual problem. Add to this the problems of poor infrastructure, unproductive growing techniques and a lack of technology across many countries, and it is clear why so many smallholder producers are caught in a low-yield trap: less produce means less cash, which reduces their appetite to invest or take production risks.

Of course, smallholders are entrepreneurial; they depend for their livelihood on their own efforts. But they are also at the mercy of exogenous factors, be those weather, price changes or infrastructure. Farmers are risk-averse when it comes to adopting new technologies and techniques because they have no margin for error. However, efforts are being made to change that in some countries.

Smallholders in Ethiopia argue their living conditions are improving, and that the gaps between rural and urban living standards are starting to narrow. "Even in the urban population, there are many people living below the level of farmers," says one agricultural extension officer. "We have a good house compared to urban people," another farmer adds.

Might these improvements help encourage young people to go into agriculture? It is a challenge, the farmers admit. "Our agriculture is labour-intensive; it needs you to work to the maximum,

not like in offices. It is dirty work, you don't have a lot of machines," says Mr Kelkile. "Youngsters want clean work." Mechanisation could change that. "If we use machinery and our agriculture is less labour-intensive, youngsters will come," he argues. "We will have to bring back the youngsters with a better way of working."

But while some producers look to rich market exports, it is worth noting that a high growth rate in Africa, and other emerging areas, means producers can look to meet regional demand first. "The domestic market here in Ethiopia, especially with its growing population and changing tastes and demand from the urban centres, offers a huge opportunity for smallholder farmers," says Khalid Bomba, CEO of the Ethiopian Agricultural Transformation Agency. This is a helpful dynamic for countries like Zimbabwe and Malawi which like Ethiopia are landlocked.

Stakeholders are also focusing on job creation via agri-processing, and some companies are achieving employment outcomes even in modest value-added activities. That said, local and regional agricultural markets are often dysfunctional in Africa, affecting perishable produce, as well as inputs such as fertiliser. Farmers in Africa, and in landlocked countries especially, pay far higher prices for fertiliser than farmers in most other developing regions, pushing up other costs.

If the question is whether Africa's land ownership structure can be changed in the short or medium term to achieve the needed economies of scale, the answer is clearly no. The real question is how smallholders can escape this poverty trap.

Three instruments appear critical to breaking the deadlock. Firstly, an improved physical infrastructure, such as roads, ports, and information technologies that effectively connect smallholders to regional and international markets, Secondly, the presence of accompanying institutions that increase vertical and horizontal coordination among smallholders to allow them to achieve the needed economies of scale and lastly, the use of subsidies to encourage production is the third identified instrument.

Infrastructure plays a key role in increasing local and regional productivity, both on and off the farm. Local and regional governments need to work together to improve access, especially for rural populations. Breaking Africa's poverty trap will also require a variety of institutions to connect farmers to each other and to lucrative markets. Marketing arrangements such as contract farming can help small farmers surmount barriers to market entry (access to credit, access to

fertilizers at market prices, credible information, etc.). However, while evidence has shown contract farming to be an effective way of integrating farmers into domestic and international markets, it has been to the exclusion of, small, less-educated farmers due to size limitations and fixed costs, significant monitoring costs, and their limited power to engage in contract enforcement. Thus, it is important for innovative contract farming arrangements to incorporate both technological improvements and incentives for small farmers to engage in such arrangements and to identify mechanisms to reduce the costs faced by the contracting party. For these institutions to succeed, governments also need to provide the appropriate enabling environment to bring together farmers, private sector actors, and government agencies.

While subsidies may be justified to promote investment in infrastructure, governments should also seek to improve the functioning of their markets so that subsidies provide the maximum benefit. Successful subsidy practices would incorporate both market mechanisms and publicprivate partnerships, as unilateral public or private initiatives have less of a chance of succeeding.

Smallholder farmers face daunting barriers when it comes to accessing markets and improving their livelihoods. But with smallholders accounting for 80 percent of all farms in Africa south of the Sahara, it is clear that this population is crucial to the region's overall economic growth. The unique challenges faced by smallholder farmers in SSA call for an innovative, integrated approach to spur investment, productivity, and technology adoption.

Adapted from; Maximo Torero 2013. <u>www.thisisafrica.com</u>. A service of the financial times.

#### **Required**;

a. 'Contract farming is identified in the case study as one of the instruments that can be used to overcome market failures'. As a marketing graduate, advise policy makers and other stakeholders in Zimbabwe on what should be done to ensure better inclusion of small holders in marketing arrangements such as contract farming.

[15 marks]

b. 'Critics argue that the use of subsidies promotes poverty in developing countries by artificially driving down world prices'. Rationalize the use of subsidies as an instrument to overcome market failures in Africa.

## [15 marks]

c. Do you agree that improved physical infrastructure and information technology can help landlocked countries like Zimbabwe engage more effectively in regional and global trade? Give reasons for your position.

## [10 marks]

#### **SECTION B**

#### **QUESTION 2**

Assume that you are a processor in the agribusiness system; you bought a futures options contract for March wheat at \$4.80 per bushel, anticipating that the price would go to \$5.20 per bushel. The premium for the futures options contract cost \$42.00. The price of wheat rises to \$5.50 per bushel because of low production, exports and other unexpected happenings.

Note: CBOT wheat futures contracts = 5000 bushels.

a. Calculate your profit or loss?

[3 marks]

b. Explore the options available to you when faced with the above situation.

[7 marks]

c. What would be the profit or loss if the transaction had been a futures contract?

[3 marks]

d. As a hedger or speculator trading agricultural commodities in the futures market, would you trade futures contracts or futures options? Defend your choice. [7 marks]

#### **QUESTION 3**

'In the agri-business system like any other economic system, there are barriers that prevent producers from efficiently meeting consumer needs'. Using any agro-processing firm you are familiar with as an example, explore how a well-developed agri-business marketing system could overcome these barriers.

## [20 marks]

#### **QUESTION 4**

Suppose you have 300 acres of horticultural products soon to be harvested, evaluate the strategies you could use to market these products more profitably.

## [20 marks]

#### **QUESTION 5**

a. Using the beef industry as an example, analyze the price patterns inherent in agricultural markets.

#### [12 marks]

b. Why is the knowledge of the price patterns inherent in agriculture important to producers?

#### [8 marks]

#### **QUESTION 6**

'The use of horizontal and vertical linkages to increase market power of agricultural producers has both positive and negative effects in the agri-business marketing system'.

Appraise these effects and give recommendations to policy makers on measures to control the negative effects as well as measures to ensure the sustainability of the positive effects.

[20 marks]

# **QUESTION 7**

Using any food product of your choice, investigate the path it follows from the 'field to the table', with emphasis on the functions of the channel members found along the path.

[20 marks]

## **END OF EXAMINATION**