True Contribution of Agriculture to Economic Growth and Poverty Reduction: Malawi, Mozambique and Zambia Synthesis Report

By

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CONTENT

Executive Summary ..................................................3

1. Introduction ........................................................................7

2. Key Findings ........................................................................8
   2.1 Malawi ...........................................................................8
   2.2 Mozambique .................................................................11
   2.3 Zambia ..........................................................................13
   2.4 The True Contribution of Agriculture in the Economic Development of the Region .................................................15

3. Recommendations ..........................................................17

References .............................................................................19
Executive Summary

Agriculture continues to be a fundamental instrument for sustainable development and poverty reduction in Malawi, Mozambique and Zambia. From 31\textsuperscript{st} August to 4\textsuperscript{th} September 2009, 226 participants from 4 continents and 28 countries assembled in Maputo, Mozambique for the 9th Annual Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN) policy dialogue, which addressed the theme of “Agriculture’s True Contribution to the Economic Development of Southern Africa”.

The major objectives of this paper are to:

- Enphasize the economic and non-economic roles of agriculture in Malawi, Mozambique;
- Present and discuss the true contributions of agriculture to the economic development the three countries; and
- Suggest policies and strategies for sócio-economic development of agriculture in the region.

The research methodology used consisted of literature review, analysis of articles submitted to the the 9th Annual Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN) policy dialogue and interviews of key decision makers from the Ministries of agriculture. The data used in this paper was mainly secondary data collected by the Ministries of Agriculture, the National Institutes for Statistics and the Database from the Faculty of Agronomy and Forestry Engineering of the Universidade Eduardo Mondlane in Maputo, Mozambique.

Agriculture in Malawi plays an overwhelmingly important role in the economy. In the 2004 \textit{Malawi Economic Growth Strategy} it is stated to account for 39\% of Growth Domestic Product (GDP), 85\% of the labour force and 83\% of foreign exchange earnings. In 2010, the Malawi Confederation of Chambers of Commerce (MCCCI) states that agriculture is the mainstay of Malawi’s economy and it contributes about 33.6 percent to the economic growth.
The Constitution of Mozambique, in its article 103 states that agriculture is the basis for development. About 90% of rural households are engaged in agriculture, and this equates to 80% of the total population (approximately 21 millions) poor people dependent on agriculture.

Agriculture is the major development sector in Zambia. About 97.4% of rural households are engaged in agriculture, and this equates to 45% of the total population – approximately 4.6 million poor people dependent on agriculture. Out of the estimated 600,000 farmers, 76 percent are small-scale subsistence farmers. It is also estimated that a quarter to a third of these farming families live within 10km of the line of rail.

Agriculture’s performance and its contribution to the region’s economic development has traditionally been undervalued, since it is measured using information about harvests and the sale of raw materials, mainly crops and livestock. As a result, the backward and forward linkages with agro-industry, the services and trade sectors, and, in general, the rest of the economy, are undervalued. The value added generated by these linkages throughout the economy does not appear in the basic agricultural statistics of most countries;

The methods traditionally used to measure agriculture’s contribution also overlook its role in meeting the growing demand for environmental goods and services from urban centers. As an economic bridge between rural and urban areas. Agriculture provides food, work and natural resource services to urban dwellers;

To properly measure agriculture’s performance and contribution, account must be taken of its effects on the distribution of income among rural and urban households, wage earners and owners. This is key to evaluating its impact on poverty alleviation strategies and, in particular, on the livelihoods of rural dwellers.

To obtain an estimate of the Real Value, the study uses Social Accounting Matrices (SAMs) that offer a suitable accounting framework, since they make it possible to examine the structural links between production, consumption, trade and the accumulation and distribution of income. They can also be used to develop economic models that simulate the impact of public policies and other exogenous changes on the entire economy.

In summary, the key findings are:
1. As an economy develops and diversifies, the primary agricultural sector loses weight in terms of GDP but develops strong linkages with the rest of the economy.
2. Agriculture exhibits very strong backward and forward linkages within and outside of the sector.
3. Agriculture supports and promotes the development of rural areas and hence the quality of rural life. and
4. The sector exhibits strong multiplier effects with other economic sectors.

Value chain is very important to promote agricultural development. The utilization of the Value Chain dictates that there must be joint effort. To facilitate this at the policy level, there must be an agreed Country or Regional Plan, with established objectives, goals, and expected results (the Strategy) and a clear picture of time frames and responsibilities within the public and private sectors and institutions supporting agricultural and rural development (the Tactics).

At the commodity and/or community level, there should be a development and/or strengthening of Clusters. This aims to enable the building of understanding, trust and loyalty between the actors. This phenomenon is characterized by its absence in today’s environment. This is particularly true between producers of primary products (the farmers) and the “adders” of value to primary products (marketers and processors).

The success of agribusiness depends on being competitive and to achieve that we must be efficient in agricultural operations especially in value addition, high quality and introduction of new brands of our agricultural products through extensive research and development.

It is recommended the use of Social Accounting Matrices (SAMs) to examine the structural links between production, consumption, trade and the accumulation and distribution of income. This approach is necessary to take advantage of the backward and forward linkages that are key elements in the realization of the real value of agriculture.

Policies must avoid excessive taxing of agricultural produce in favour of the urban sector if we have to improve productivity. Assessment must be directed at the stability of markets for exports (including price stability, the role of multinational
corporations, location of processing, competition with synthetic substitutes etc.,
evaluation of corporate responsibility in agriculture (methodologies, policy
environment, legal issues, potential livelihood impact etc.) and donor
opportunities.
1. Introduction

Agriculture continues to be a fundamental instrument for sustainable development and poverty reduction in Malawi, Mozambique and Zambia. To achieve economic growth through agriculture there is the need for the:

1. Introduction of more sustainable production systems;
2. Innovative policy initiatives and strong political commitment; and
3. Improvement in local, national and global governance

From 31st August to 4th September 2009, 226 participants from 4 continents and 28 countries assembled in Maputo, Mozambique for the 9th Annual Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN) policy dialogue, which addressed the theme of “Agriculture’s True Contribution to the Economic Development of Southern Africa”.

This paper is based on the Maputo dialogue which included representatives of government ministries of agriculture and natural resources, research institutes, farmers’ organisations, the private sector, development partners, international technical partners and NGOs.

The paper is divided into three parts. The first part is an introduction about the true contributions of agriculture to the economic development of Malawi, Mozambique and Zambia which includes objectives of the paper and methodology. The second part describes the key findings. The third chapter presents recommendations coming from the dialogue as well as from the studies.

The major objectives of this paper are to:

- Emphasize the economic and non-economic roles of agriculture in Malawi, Mozambique;
- Present and discuss the true contributions of agriculture to the economic development the three countries; and
- Suggest policies and strategies for socio-economic development of agriculture in the region.
The research methodology used consisted of literature review, analysis of articles submitted to the 9th Annual Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN) policy dialogue and interviews of key decision makers from the Ministries of agriculture. The data used in this paper was mainly secondary data collected by the Ministries of Agriculture, the National Institutes for Statistics and the Database from the Faculty of Agronomy and Forestry Engineering of the Universidade Eduardo Mondlane in Maputo, Mozambique. The data included infrastructure, agricultural production, markets, policies and strategies.

The analysis included descriptive statistics, scoring methods, comparative analysis and review of bibliography. Geographic Information System (GIS) was used in preparation of maps.

2. Key Findings

2.1 Malawi

Agriculture in Malawi plays an overwhelmingly important role in the economy. In the 2004 Malawi Economic Growth Strategy it is stated to account for 39% of Growth Domestic Product (GDP), 85% of the labour force and 83% of foreign exchange earnings. In 2010, the Malawi Confederation of Chambers of Commerce (MCCCI) states that agriculture is the mainstay of Malawi’s economy and it contributes about 33.6 percent to the economic growth.

The GDP originating from agriculture is at least twice as effective in reducing poverty as GDP growth originating from outside agriculture. GDP growth from agriculture impacts upon the majority of the mostly poor section of the population and the sector supports 82 percent of the rural population in Malawi.

The main agricultural products grown by smallholder farmers are maize, tobacco, cassava, groundnuts, pulses, sorghum and millet, sweet potatoes and cotton, of which the main agricultural exports are tobacco, tea, sugar, cotton, rice and pulses.
Tea, sugar, tobacco and coffee are traditional export products that are largely grown by corporations and large scale farmers. It has been estimated that food crops account for about 70 percent of agricultural value added (World Bank, 2003). Over time, in food crops, estimates indicate that cassava and sweet potatoes are becoming important crops in the food production basket, but the extent to which has happened is controversial. In cash crops, there has been a reduction in groundnuts exports, the traditional exports of tobacco, tea and sugar continued their dominance while pulses have emerged as important non-traditional exports.

Since Independence, with varying degrees of and differences in emphasis, development strategies have focused on improving productivity of land and labour in the agricultural sector. There are a number of aspects to this challenge:

(i) intensification (i.e. raising yields) of production of food staple (principally maize) which contributes directly to household nutrition and food security of rural households, and also keeps food prices relatively low and avoids the need for large scale food imports;

(ii) smallholder production of cash crops cash incomes which provides incomes to farmers, to those they employ as labourers and to those who process and transport the crop3, as well as export earnings.

There is a positive interaction between objectives (i) and (ii) in that sustained intensification of the production of food staples should, over time, reduce the area planted to staples, as higher staple yields will allow more land to be planted to cash crops (tobacco, cotton, tea, sugar cane, pulses, paprika and chillies). Furthermore, rural households in annual net staple food deficit (the large majority at present) may begin to feel more confident specialising in cash crops and buying more staples from the market.

The major achievements are increased production of crops such as maize, tobacco, cotton and legumes. In the last five years there is an increase in number of farmers using improved farm inputs more than 55%, increase in adoption of crop production, storage technologies by smallholder farmers and increase in growth of the agricultural sector (6%).

Factors of success include good political will in Malawi, acceptance of the food insecurity problem and the current visionary leadership. The budgetary support-focus on national budget has contributed for successful financing of agriculture and constant engagement of the private sector by the government.
Farm Inputs Subsidy Programme has contributed towards the achievement of household and national food security in Malawi. This has in turn impacted on economic and social development positively. It has also contributed to poverty reduction in the country.

Farmers are poor and face long (mainly annual) production and sales cycles. They face climatic and price risks as well as possible shocks from illness. The large majority of smallholders are normally in net food deficit. Thus, they have to obtain food from the market through cash crop sales and/or off-farm activities such as ganyu (short agricultural piece work contracts), petty trade and activities such as beer-brewing. These strategies for satisfying household food needs can compromise production on households’ own land: for example they may have to weed others’ land for immediate wages rather than their own plots.

Farm households away from major roads often experience a low density of commercial activity (thin markets) and may have to travel a considerable way to buy inputs and sell outputs, which is particularly difficult for women, who comprise the majority of the farm population. Thus, given the small scale on which households might be able to produce marketable products (e.g. vegetables and fruits in addition to maize and cash crops), unit costs of market access are very high, depressing returns to labour.

Output markets are characterised by small traders with very limited liquidity. (There are exceptions, for example within the rural environs of urban Lilongwe traders harvest cassava on farmers’ land, make payment and transport it by bicycle to the city, providing fairly “thick” markets despite limited liquidity).

In input supply, which is mainly a matter of fertiliser, suppliers face narrow time windows for supply (fertiliser delivered late or over-stocked has to be stored for another 12 months or so in humid conditions); and uncertain demand, as it is not clear how much farmers will be able to afford. Unpredictable government and donor interventions further complicate the estimation of the “cash market” for fertiliser. A private supplier will tend to err on the safe side by a cautious ordering and stocking policy.

Farm finance in Malawi “normally” comes from migrants’ remittances and small surpluses gleaned from non-farm businesses. For the great majority of farmers there is no possibility of borrowing to finance the costs of inputs and labour. This much depresses the demand for inputs and agricultural yields.
2.2 Mozambique

The Constitution of Mozambique, in its article 103 states that agriculture is the basis for development. About 90% of rural households are engaged in agriculture, and this equates to 80% of the total population (approximately 21 millions) poor people dependent on agriculture.

The main agricultural products grown by smallholder farmers are maize, cassava, groundnuts, pulses, sorghum and millet, sweet potatoes and cotton, of which the main agricultural exports are tea, sugar, cotton and cashew nuts.

The role of agriculture in Mozambique includes the:

1. Supply of food to 80% of Mozambicans and it provides food security to the majority of population;
2. Provision of employment to about 80% of population from which 50% are women;
3. Supply of foreign earnings through export of agricultural produce;
4. Supply of raw materials to agro-industries and other sectors of economy; and
5. Capital accumulation.

A large number of rural people derive their livelihood from agriculture and other related rural economic activities. It follows, therefore, that the most direct and effective means of raising standards of living and alleviating poverty, hunger and malnutrition is through increasing the productivity and incomes of smallholder agriculture. Coupled with greater participation of farmers in commercial agriculture through effective agrarian and land reforms, this can lead to a transformation of the rural economy through the development of rural based agro-industry and the rural based private sector. With higher farm and rural incomes and purchasing power, Mozambique's economy will be on a solid and broad base for full industrialization, leading to social, economic and environmental stability.
The agricultural sector GDP is growing at 5-7% annually, but at a lesser rate than the overall economy, as the share of the agricultural GDP is gradually decreasing from 37% (1997) to 24% (2007, while the contribution from industry is rapidly increasing in the same period, from 22% to 31%, (Mozambique Government, 2008).

Agricultural development is fundamental for poverty reduction as rural families generate about 80% of their income from the agricultural sector, while the other 20% has a strong link with the local economy (TIA 2002, CAP, 2000). Extensive agricultural growth has reduced rural poverty. Rural poverty has declined substantially over the last decade as the agriculture sector has shown remarkable improvements. Over 70 percent of the 21 million Mozambicans live in rural areas, with nearly 40 percent in the northern and central regions. The majority of smallholders farmers grow food crops, and about 16 percent also participate in cotton and tobacco out-grower schemes.

There is evidence that crop diversification is a coping mechanism for the majority of smallholder farmers. From 1995 to 2005, the mean number of crops almost doubled from 5 to 9 per household across all income groups, especially with food crops. This is not surprising where smallholders farmers practice rainfed agriculture.

Market integration and cross-border trade are becoming crucial. With the improved infrastructure since peace was established, markets are more integrated and prices are more stable. There is increased cross-border trade with Swaziland, Malawi, Zambia, and Zimbabwe, with estimated total informal trade in maize over 200,000 tons. Mozambique supplies more than 90 percent of the trade to Malawi. There is increasing evidence that other food grain crops, such as sorghum and beans, are also traded.

The effects from neighboring countries are positive and important. Because north-south infrastructure is underdeveloped, a large part of trade is east-west. Zimbabwean farmers grow tobacco and other high-value export crops across the border in Mozambique as a result of the tumultuous political situation in their own country. Heavily subsidized inputs from Malawi and Zambia also find their way to Mozambique. The land-locked countries are also heavily dependent on Mozambican ports, hence the country earns substantial sums from the transit of freight.
The current sources of agricultural growth are not sustainable. Without close attention to the use and adoption of improved agricultural technologies, production growth may slow and rural poverty will remain widespread. Over the past decade, improved agricultural technologies have played only a minor role. For example, smallholder farmers that use fertilizer, animal traction, or small-scale irrigation only increased from 4 to about 7 percent. A limited number of smallholder farmers use drought-resistant varieties or have access to improved seeds. The highest and the lowest-income quintiles are more likely to adopt new technologies compared to middle income groups.

The New Green Revolution Strategy (GRS), approved in 2007, aims to increase the agriculture production and productivity of the smallholder farmers in a competitive and sustainable way. This is done through sustainable use of the natural resources and improving the access of the farmers to new technologies, market, information, training and financial services. There is also a need to promote the development of local agriculture and forestry based processing industries.

### 2.3 Zambia

Agriculture is the major development sector in Zambia. About 97.4 % of rural households are engaged in agriculture, and this equates to 45% of the total population – approximately 4.6 million poor people dependent on agriculture. Out of the estimated 600,000 farmers, 76 percent are small-scale subsistence farmers. It is also estimated that a quarter to a third of these farming families live within 10km of the line of rail.

The commercial farmers’ (medium and large scale) focus is on cash crops with farm sizes above 20 ha. Only an estimated 740 commercial farmers (less than one percent) have farm holdings in excess of 60 ha. Hantuba (2001) also notes the trend that the number of households in the small-scale category has been increasing while numbers of the medium and large-scale farmers have remained more or less the same.

Within the labour force of 3.4 million, 85% are employed in agriculture, 6% in industry and 9% in services. Agriculture serves as the main source of income for the rural population and especially women, who constitute a higher proportion of the rural population and agricultural labour force. With the unemployment rate
around 50% (2000 estimates, World Factbook, 2002), agriculture is often the only potential source of livelihood or income within the informal sector.

Agriculture contributes about 18% to real GDP over the past decade, making up 39% of earnings from non-traditional exports, though this has fluctuated significantly mainly due to the dependence on seasonal (unreliable) rainfall. Net resource flows into agriculture have exceeded mining in the 1995-2001 period, with 232 projects worth US$ 302 million from Zambian and foreign commitments (excluding official aid-related flows).

Between 1990 and 2000, agricultural growth was around 4.5%, increasing against the industrial sector as a proportion of total GDP. Average growth to 2004 was 3.2%. This is above the declining population growth rate, now around 2.3%. However, annual fluctuations in productivity vary dramatically (increasing or decreasing by as much as 30%) according to rainfall. Poor farmers dependent on rainfed crops are extremely vulnerable to these fluctuations.

A major trend is that the number of households in the small-scale category has been increasing, while the numbers of medium- and large-scale farmers have remained unchanged. Increased unemployment (now at 50%) has led people into agriculture as small-scale farmers (World Factbook, 2002).

The contribution of the agriculture sector towards the balance of payments has been low. However, there has been a significant increase in the variety and value of agricultural exports, and (although relatively modest) the overall growth in the sector has largely resulted from agricultural exports. The WTO (2002) remarks that Zambia’s efforts to diversify from metal exports into non-traditional exports (agricultural, and agri-processing exports in particular) should translate into improved longer-term economic prospects.

The largest exports and highest contribution are in primary agricultural products such as maize, sugar, tobacco and cotton, and floricultural and horticultural products. Other important exports include coffee (Arabica), fuzzy cotton seed, paprika, and soybeans. In some years, maize, marigold meal, groundnuts, and seeds have brought important export values, but the performance of these products seems to be erratic (WTO, 2002). Between 1995 and 2001 total non-traditional agricultural exports increased from US$43 million to US$122.1 million. As a
result, the contribution of the agricultural sector to nontraditional exports increased from 23% in 1990 to 39% in 2001 (MOFED, 2002).

There would appear to be opportunities for small-scale farmers to diversify from maize into more marketable crops, and this is confirmed by a pattern of declining maize production. Trends also show increases in more profitable, drought resistant food crops such as sorghum, cassava, millet and tubers that use less chemical fertilisers. Increases in area and production of cassava, groundnuts and millet have been particularly strong (20-50%) in the last decade. However, over 70% of households still grow maize as the major staple crop. Increasing use of fertiliser does show improved productivity for smallholders, but usage is still less than 15% nationally, with increasing prices making it difficult to afford on a commercial basis.

Small-scale farmers account for a large share of the maize crop (more than 60% of Zambia’s cultivated area), but they generally lack irrigation capability, so this production is largely rain-fed. This makes the country extremely vulnerable to swings in rainfall, such as the heavy rainfall in 2001 and drought during 2002. In 2002, as a result of the serious food shortage, the Government is planning to encourage large-scale farmers to produce maize under irrigation in order to increase local production (WTO, 2002).

2.4 The True Contribution of Agriculture in the Economic Development of the Region

Agriculture’s performance and its contribution to the region’s economic development has traditionally been undervalued, since it is measured using information about harvests and the sale of raw materials, mainly crops and livestock. As a result, the backward and forward linkages with agro-industry, the services and trade sectors, and, in general, the rest of the economy, are undervalued. The value added generated by these linkages throughout the economy does not appear in the basic agricultural statistics of most countries;

The methods traditionally used to measure agriculture’s contribution also overlook its role in meeting the growing demand for environmental goods and services from
urban centers. As an economic bridge between rural and urban areas. Agriculture provides food, work and natural resource services to urban dwellers;

To properly measure agriculture’s performance and contribution, account must be taken of its effects on the distribution of income among rural and urban households, wage earners and owners. This is key to evaluating its impact on poverty alleviation strategies and, in particular, on the livelihoods of rural dwellers.

To obtain an estimate of the Real Value, the study uses Social Accounting Matrices (SAMs) that offer a suitable accounting framework, since they make it possible to examine the structural links between production, consumption, trade and the accumulation and distribution of income. They can also be used to develop economic models that simulate the impact of public policies and other exogenous changes on the entire economy.

Agriculture is an important source of inputs for other production activities. In fact, intermediate demand for agricultural products absorbs 70% of primary agricultural production. That is, almost three quarters of agricultural production is used as an input for other industries/sectors. This compares to 45% of the output of other industries that is used in the form of inputs. This confirms the fact that agriculture’s linkages with the rest of the economy are not only important but usually underestimated.

The food and agro-industrial sectors generates a huge income for skilled and unskilled labour. Land and capital stays in the regions where the primary agricultural product is produced. Agriculture is a source of inputs for other industries, a source of foreign exchange and an important generator of value added, which remains in rural areas. Agriculture does have multiplier effects overall the region’s economy.

In summary, the key findings are:

5. As an economy develops and diversifies, the primary agricultural sector loses weight in terms of GDP but develops strong linkages with the rest of the economy.
6. Agriculture exhibits very strong backward and forward linkages within and outside of the sector.
7. Agriculture supports and promotes the development of rural areas and hence the quality of rural life.
8. The sector exhibits strong multiplier effects with other economic sectors.

Value chain is very important to promote agricultural development. The utilization of the Value Chain dictates that there must be joint effort. To facilitate this at the policy level, there must be an agreed Country or Regional Plan, with established objectives, goals, and expected results (the Strategy) and a clear picture of time frames and responsibilities within the public and private sectors and institutions supporting agricultural and rural development (the Tactics).

At the commodity and/or community level, there should be a development and/or strengthening of Clusters. This aims to enable the building of understanding, trust and loyalty between the actors. This phenomenon is characterized by its absence in today’s environment. This is particularly true between producers of primary products (the farmers) and the “adders” of value to primary products (marketers and processors).

The success of agribusiness depends on being competitive and to achieve that we must be efficient in agricultural operations especially in value addition, high quality and introduction of new brands of our agricultural products through extensive research and development.

3. Recommendations

Traditional methodology ignores the growing demand for agricultural and environmental goods. To evaluate the true contributions’ of agriculture to the economic growth, account must be taken of agriculture’s effects on income distribution among rural and urban dwellers.

The use of Social Accounting Matrices (SAMs) make it possible to examine the structural links between production, consumption, trade and the accumulation and distribution of income. This approach is necessary to take advantage of the backward and forward linkages that are key elements in the realization of the real value of agriculture.

To facilitate building trust in agriculture industry, there must be accountability and transparency. This requires multisectoral approach where partners agree on plans, objectives, and expected results and responsibilities.
Policies must avoid excessive taxing of agricultural produce in favour of the urban sector if we have to improve productivity. Assessment must be directed at the stability of markets for exports (including price stability, the role of multinational corporations, location of processing, competition with synthetic substitutes etc., evaluation of corporate responsibility in agriculture (methodologies, policy environment, legal issues, potential livelihood impact etc.) and donor opportunities.

Supplementary studies must be carried out on:
- price trends for potential export commodities;
- long-term access to inputs needed by import ability to pay for imports;
- the role of food aid and its potential negative (incentive depressing) effects; and
- positive effects on agricultural productivity and competition with highly subsidized temperate zone products (e.g. cane versus beet sugar)
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21
