TREE CROPS POLICY
MINISTRY OF FOOD AND AGRICULTURE
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
The Tree Crops Policy has been developed within the framework of the Programme for the Promotion of Perennial Crops in Ghana and funded by a grant from the Agence Française de Développement (French Cooperation Agency).

The formulation of the document has been supported through a technical assistance provided by SOFRECO (France) to MOFA.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA</td>
<td>African Cashew Alliance</td>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>ACI</td>
<td>African Cashew Initiative</td>
<td>FAO</td>
<td>Food and Agriculture Organisation</td>
</tr>
<tr>
<td>ADB</td>
<td>Agricultural Development Bank</td>
<td>FASDEP</td>
<td>Food and Agriculture Sector Development Policy</td>
</tr>
<tr>
<td>ADVANCE</td>
<td>Agriculture Development and Value Chain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AESD</td>
<td>Agricultural Engineering Services Directorate</td>
<td>FBO</td>
<td>Farmer Based Organisation</td>
</tr>
<tr>
<td>APF</td>
<td>Agence Française de Développement</td>
<td>GFDB</td>
<td>Food and Drugs Board</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
<td>FFB</td>
<td>Fresh Fruit Bunch</td>
</tr>
<tr>
<td>AFOG</td>
<td>Apex Farmers Organisation of Ghana</td>
<td>FONG</td>
<td>Farmers Organisation Network in Ghana</td>
</tr>
<tr>
<td>AgSSIP</td>
<td>Agricultural Services Sub-Sector Investment</td>
<td>GAIP</td>
<td>Ghana Agricultural Insurance Programme</td>
</tr>
<tr>
<td>B2B</td>
<td>Business To Business</td>
<td>GAP</td>
<td>Good Agricultural Practices</td>
</tr>
<tr>
<td>BoG</td>
<td>Bank of Ghana</td>
<td>GAWU</td>
<td>Ghana Agricultural Workers Union</td>
</tr>
<tr>
<td>BUSAC</td>
<td>Business Sector Advocacy Challenge</td>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>CAADP</td>
<td>Comprehensive Africa Agriculture Development Programme</td>
<td>GIDIA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biodiversity Diversity</td>
<td>GIPC</td>
<td>Ghana Investment Promotion Centre</td>
</tr>
<tr>
<td>CDP</td>
<td>Cashew Development Project</td>
<td>GIZ</td>
<td>German Agency for Technical Cooperation</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean Development Mechanism</td>
<td>GMA</td>
<td>Ghana Meteorological Agency</td>
</tr>
<tr>
<td>CGIAR</td>
<td>Consultative Group for International Agricultural Research</td>
<td>GMP</td>
<td>Good Manufacturing Practices</td>
</tr>
<tr>
<td>CIAT</td>
<td>International Centre for Tropical Agriculture</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>CIDA</td>
<td>Canadian International Development Agency</td>
<td>GIA</td>
<td>Ghana Investment Agency</td>
</tr>
<tr>
<td>COCOBOD</td>
<td>Ghana Cocoa Board</td>
<td>GID</td>
<td>Ghana Investment Development Authority</td>
</tr>
<tr>
<td>CPO</td>
<td>Crude Palm Oil</td>
<td>GIA</td>
<td>Ghana Investment Development Authority</td>
</tr>
<tr>
<td>CRI</td>
<td>Crops Research Institute</td>
<td>GID</td>
<td>Ghana Investment Development Authority</td>
</tr>
<tr>
<td>CRIG</td>
<td>Cocoa Research Institute of Ghana</td>
<td>GID</td>
<td>Ghana Investment Development Authority</td>
</tr>
<tr>
<td>CSIR</td>
<td>Council for Scientific and Industrial Research</td>
<td>GID</td>
<td>Ghana Investment Development Authority</td>
</tr>
<tr>
<td>DADU</td>
<td>District Agricultural Development Unit</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>DAES</td>
<td>Directorate of Agricultural Extension Services</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>DANIDA</td>
<td>Danish International Development Agency</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>DCS</td>
<td>Directorate of Crop Services</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>DDA</td>
<td>District Director of Agriculture</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>DPs</td>
<td>Development Partners</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>EDIF</td>
<td>Export Development and Investment Fund</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>ELWMU</td>
<td>Environment, Land and Water Management Unit</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>EMQAP</td>
<td>Export Marketing and Quality Awareness Project</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td>EPA</td>
<td>Environment Protection Agency</td>
<td>GIDA</td>
<td>Ghana Irrigation Development Authority</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**LIST OF ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITFC</td>
<td>Integrated Tamale Fruit Company</td>
</tr>
<tr>
<td>JSR</td>
<td>Joint Sector Review</td>
</tr>
<tr>
<td>KfW</td>
<td>Kreditanstalt für Wiederaufbau (German Development Bank)</td>
</tr>
<tr>
<td>KNUST</td>
<td>Kwame Nkrumah University of Science and Technology</td>
</tr>
<tr>
<td>LADP</td>
<td>Land Administration Development Project</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MDA</td>
<td>Ministries Departments and Agencies</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MDPF</td>
<td>Medium Term National Development Policy Framework</td>
</tr>
<tr>
<td>METASIP</td>
<td>Medium Term Agriculture Sector Investment Plan</td>
</tr>
<tr>
<td>MFI</td>
<td>Micro Finance Institution</td>
</tr>
<tr>
<td>MiDA</td>
<td>Millennium Development Authority</td>
</tr>
<tr>
<td>MLGRDE</td>
<td>Ministry of Local Government, Rural Development and Environment</td>
</tr>
<tr>
<td>MLNR</td>
<td>Ministry of Land and Natural Resources</td>
</tr>
<tr>
<td>MOAP</td>
<td>Market Oriented Agriculture Project</td>
</tr>
<tr>
<td>MOFA</td>
<td>Ministry of Food and Agriculture</td>
</tr>
<tr>
<td>MOFEP</td>
<td>Ministry of Finance and Economic Planning</td>
</tr>
<tr>
<td>MOT</td>
<td>Ministry of Transport</td>
</tr>
<tr>
<td>MOTI</td>
<td>Ministry of Trade and Industry</td>
</tr>
<tr>
<td>MEST</td>
<td>Ministry of Environment, Science and Technology</td>
</tr>
<tr>
<td>MRL</td>
<td>Maximum Residue Limit</td>
</tr>
<tr>
<td>Mt</td>
<td>Metric ton</td>
</tr>
<tr>
<td>NDPC</td>
<td>National Development Planning Commission</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
</tr>
<tr>
<td>NIC</td>
<td>National Insurance Commission</td>
</tr>
<tr>
<td>OMOA</td>
<td>Organic Mango Outgrower Association</td>
</tr>
<tr>
<td>OPOA</td>
<td>Oil Palm Outgrower Association</td>
</tr>
<tr>
<td>ORPI</td>
<td>Oil Palm Research Institute</td>
</tr>
<tr>
<td>OVCF</td>
<td>Out grower and Value Chain Fund</td>
</tr>
<tr>
<td>PFAG</td>
<td>Peasant Farmers Association of Ghana</td>
</tr>
<tr>
<td>PIP</td>
<td>Pesticide Initiative Programme</td>
</tr>
<tr>
<td>PPMED</td>
<td>Policy Planning Monitoring and Evaluation Directorate</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>PPPPC</td>
<td>Programme for the Promotion of Perennial Crops in Ghana</td>
</tr>
<tr>
<td>PPRSD</td>
<td>Plant Protection and Regulatory Services Directorate</td>
</tr>
<tr>
<td>RADU</td>
<td>Regional Agricultural Development Unit</td>
</tr>
<tr>
<td>RCN</td>
<td>Raw Cashew Nut</td>
</tr>
<tr>
<td>RDA</td>
<td>Regional Director of Agriculture</td>
</tr>
<tr>
<td>ROAA</td>
<td>Rubber Outgrowers and Agents Association</td>
</tr>
<tr>
<td>RSPO</td>
<td>Roundtable on Sustainable Palm Oil</td>
</tr>
<tr>
<td>RTIU</td>
<td>Rural Technology Information Unit</td>
</tr>
<tr>
<td>SADA</td>
<td>Savannah Accelerated Development Authority</td>
</tr>
<tr>
<td>SARI</td>
<td>Savannah Agricultural Research Institute Steering Committee</td>
</tr>
<tr>
<td>SC</td>
<td>Small and Medium scale Enterprise</td>
</tr>
<tr>
<td>SME</td>
<td>Netherlands Development Organisation</td>
</tr>
<tr>
<td>SNV</td>
<td>Société Française de Réalisation d’Etudes et de Conseil</td>
</tr>
<tr>
<td>SOFRECO</td>
<td>Statistics Research and Information Directorate</td>
</tr>
<tr>
<td>SRID</td>
<td>Sector Wide Approach</td>
</tr>
<tr>
<td>TA</td>
<td>Technical Assistance</td>
</tr>
<tr>
<td>TC</td>
<td>Tree Crops</td>
</tr>
<tr>
<td>TCP</td>
<td>Tree Crops Policy</td>
</tr>
<tr>
<td>TCPWG</td>
<td>Tree Crops Policy Working Group</td>
</tr>
<tr>
<td>TIPCEE</td>
<td>Trade and Investment Programme for a Competitive Export Economy</td>
</tr>
<tr>
<td>TNA</td>
<td>Training Needs Assessment</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>UDS</td>
<td>University for Development Studies</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VC</td>
<td>Value Chain</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

1.1 INSTITUTIONAL BACKGROUND

The formulation of the Tree Crops Policy (TCP) in Ghana takes into account the major policy and strategic documents developed and currently being implemented in Ghana.

This policy is mainly based on the Food and Agriculture Sector Development Policy II (FASDEP II), which was developed in 2008 by the Ministry of Food and Agriculture through an intensive stakeholder consultation process. FASDEP II provides the framework for a sustainable development of the agriculture sector.

Subsequently, the Medium Term Agriculture Sector Investment Plan (METASIP) 2011 – 2015 was adopted in September 2010 as the strategic plan to implement the medium term (2011-2015) programmes of the policy. The METASIP has been developed to achieve a target agricultural GDP growth of at least 6% annually, reduce poverty by 50% by 2015 in consonance with MDG 1 and has been based on the Maputo Declaration which requires that African governments commit at least 10% of their national budget to agriculture.

The TCP has integrated the strategies of the METASIP, and is therefore consistent with the ECOWAS Agriculture Policy and NEPAD’s Comprehensive Africa Agriculture Development Programme (ECOWAP/CAADP) which provide an integrated framework to support agricultural growth, rural development and food security in the African Region.

The formulation of the TCP has also strongly integrated the various sub-sector policies being implemented by MOFA, like the irrigation and extension policies, as well as the Plants and Fertiliser Act (2010).

The TCP is also aligned with the Ghana Shared Growth and Development Agenda (GSGDA), the Medium Term National Development Policy Framework 2010 – 2013 (MDPF) developed by the National Development Planning Commission (NDPC) following GPRS II. It is important to maintain strong linkages between sustainable agricultural development, economic growth and poverty reduction.

The total development of the Tree Crop sub-sector is thus found to be dependent on components like environmental protection, private sector development, land tenure issues, and access to finance. Therefore, the following policy and strategic documents have been considered in the development of the policy:

- The Agricultural Sector Assessment Guidelines of the Environmental Protection Agency (2006);
- Cocoa Sector Development Strategy (2011);
- The Private Sector Development Strategy (2010);
- The Ghana Investment Promotion Centre’s Strategic Documents (1994);
- SADA’s Strategy and Workplan (2010 – 2030);
1.2 RELEVANCE OF THE TREE CROPS SUB-SECTOR POLICY

The Policy is to provide a comprehensive and holistic approach for the sustainable development of the Tree Crop sub-sector and for proper targeting of support to the TC value-chains.

This policy document is the first of a set of tools (under-listed) developed by the GoG to support the TC sub-sector. Altogether, there are three tools namely:

1) Policy document which provides orientation, guidelines for strategic actions and clearly defines the vision, objectives and strategies to support the development of the TC sub-sector.

2) Strategic Plan which provides guidelines for the development of the TC value chains identified as priority and provides detailed and operational strategic programmes and budgets for the implementation of the policy.

3) Implementation Manual which provides methods and tools to transform the strategies into real operations on the field and allows for effective coordination of activities.

FIGURE 1: FORMULATION PROCESS
The Policy is to provide a comprehensive and holistic approach for the sustainable development of the Tree Crop sub-sector and for proper targeting of support to the TC value-chains.

This policy document is the first of a set of tools (under-listed) developed by the GoG to support the TC sub-sector. Altogether, there are three tools namely:

1.2.1 THE TREE CROPS POLICY AS A TOOL FOR THE DEVELOPMENT OF THE SUB-SECTOR:

The TCP has been designed as a tool, for use by all stakeholders of the TC sub-sector, for the following purposes:

1) To define the vision of GoG for the TC sub-sector.

   In spite of its decreasing involvement in direct production and marketing, the GoG is responsible for providing policy direction for the development of the TC sub-sector. The TCP will therefore, provide guidelines for the sub-sector development, identify the activities and areas to which technical and financial resources should be directed. It will also re-affirm the central role of the TC sub-sector in the development of Ghana's agriculture and Government's commitment to the Maputo Declaration.

2) To facilitate the coordination of TC activities.

   The document will define strategies with specific activities and facilitate effective coordination. It will also facilitate smooth and effective implementation by MOFA, MDAs and other stakeholders.

3) To facilitate the development and implementation of new interventions.

   The TCP is intended to be a practical document to guide all DPs, including Cooperation Agencies and Financial Institutions, for future interventions in Ghana's Agriculture. The idea is to better-target future Programmes and Projects within a structured framework in line with the vision of the GoG. It is also to prepare a SWAp by structuring interventions, preparing effective and practical Programmes with detailed budgets, monitoring & evaluation tools, and implementation guidelines.

4) To organise the interventions of the various stakeholders along the value chains.

   The TCP is also a practical tool for all stakeholders of the TC value chains to facilitate planning and implementation of activities. The policy is intended to provide the private sector- especially farmers, FBOs, small-scale processors and potential investors-practical solutions for their development and increased efficiency for economic growth.
1.2.2 THE TREE CROPS SUB-SECTOR: A GROWING SECTOR WITH HUGE POTENTIAL

The development of a policy to support the TC sub-sector is based on the analysis of the key role played by TCs in Ghana’s economy. The extraordinary success of the Cocoa sub-sector is an indication that a well-developed and coordinated TC sub-sector can contribute significantly to the economic growth of the country.

Ghana has a number of comparative advantages in the production of a large number of tree crops. These advantages include: political stability, geographic location and access to large regional and European markets, adequate sea ports, good agricultural environment (arable land, forests and water resources) suitable for the cultivation of different tree crops.

Despite these positive attributes, most of the tree crops in Ghana are still largely under-developed in terms of their potential production levels, and the organization of their value chains as compared to the cocoa VC. Consequently, Ghana’s TCs have lost their competitiveness to their neighbouring countries and Asian counterparts.

In view of the tremendous potential of the sub-sector in generating employment, contributing to poverty alleviation, foreign exchange earnings, food security and growth of GDP, the TC sub-sector must benefit from technical, financial and institutional support.

Recent developments in the TC sub-sector, significant increases of prices on the world market for some crops as well as improvement of the environment for private sector participation justify the development of an overall framework for the effective implementation of activities, coordination and monitoring of the sub-sector.

1.2.3 A HISTORICAL MODEL THAT NEEDS TO BE REVIEWED

Like many other countries, the development of tree crops in forest areas in Ghana has followed a model based on the exploitation of forest resources, cheap labour and flexibility of customary rights of access to land. Due to ageing plantations and farmers and reduced availability of forest resources, this type of exploitation is no longer feasible. Farmers now find it difficult to access new lands and therefore have no choice but to increase farm productivity to remain in business.

Farmers in the Savannah regions are also confronted with soil erosion, declining soil fertility, bush fires, deforestation, overgrazing and inappropriate crop management practices.

A new model is therefore required to support the development of the Tree Crops sub-sector. Sustainable farming systems must be promoted, including replanting of old plantations and adoption of integrated crop and pest management strategies. At the same time, the positive impact of TC on the environment must be taken into account and promoted, especially in terms of carbon sequestration and soil conservation.

Other problems remain crucial and require new approaches to mitigate the impact of the TC production and processing on the environment particularly on biodiversity, soil, water and air pollution. The TCP will therefore engage the TC sub-sector in the way of sustainable growth, made necessary by the changes in the farming systems and by the environmental challenges at the national level. It will aim at protecting and preserving the Ghanaian natural resources.
1.2.4 THE POSITIVE IMPACT OF TREE CROPS ON FOOD SECURITY

One of the major objectives of FASDEP II and MDG 1 is to increase food security, hence, the formulation of a policy for the TC sub-sector and the support for its sustainable development which should have a direct and positive impact on food security:

GPRS I and GPRS II emphasised the need for the country to make tree crops a pivot of the country’s development agenda. GPRS II stated that tree crop development should be used as a strategy to reduce poverty.

It appears that the poorest farmers who are prone to food insecurity and poverty are those whose incomes are highly dependent on a single commodity (or a limited number of commodities, mostly food crops), with strong seasonal price variations and poor value chain organisation. The promotion of crop diversification through the introduction of properly managed tree crops in the farming systems to generate additional income without hampering food crop production will be a powerful tool to enhance food security.

The improved organisations of the value chains, through capacity building of FBOs and establishment of VC committees, are also important in reducing food insecurity in the rural areas.

The establishment of large plantations based on nucleus plantations or outgrower schemes should be carefully monitored and assessed through Social and Environmental Impact Assessment, in order to avoid the clearing of large tracts of land with high biodiversity value or the displacement of small-scale farmers, thereby increasing food insecurity in the communities.
1.3 POLICY FORMULATION PROCESS

The formulation of the TCP was undertaken through the following processes:
- Broad stakeholder consultations through several workshops and meetings;
- Permanent involvement of relevant MDAs, through the setting-up of an inter-institutional working group (TreeCrop Policy Working Group).

1.3.1 STAKEHOLDER CONSULTATIONS

Several workshops and meetings were held at all levels (district, regional and national) with various stakeholders of the TC value chains with the aim of gathering information, collecting data and lessons learnt from experience. A participatory approach was adopted for the formulation of proposals for the policy and strategy documents.

Validation workshops at regional and national levels involving the major stakeholders of the sub-sector were also organised in July and August 2011 in order to collect and integrate comments into the preparation of the final document.

The development of the Strategy Document and Implementation Manual will adopt the same methodology.

1.3.2 INTER-INSTITUTIONAL COLLABORATION

Membership of the TCPWG was drawn from the major MDAs involved in the TC sub-sector: MOFA (DCS, PPMED, SRID and DAES), MOTI, EPA, GIPC, COCOBOD and ADB. The working group – appointed by the Hon. Minister of Agriculture – has been facilitating the coordination and supervision of the formulation process of the Policy, Strategy and Implementation documents.

It is in charge of validating the approach, giving orientations on the way forward and participating in the stakeholder workshop.

Other institutional partners consulted included the DPs, the major projects under implementation in the TC sub-sector and the decentralised units of MOFA (RADUs and DADUs).

The formulation of the Policy depended on institutional representation for the definition of goals, objectives and proposed strategies for the achievement of the objectives.

The Policy and Strategies should be regularly monitored and evaluated and should be reviewed once every five years.
The Tree Crop sub-sector in Ghana consists of several tree crops; however, this document has been developed with particular reference to the under-listed crops:

- Cashew
- Citrus
- Cocoa
- Coconut
- Coffee
- Dawadawa
- Kola
- Mangoes
- Oil Palm
- Rubber Tree
- Shea Nut

The TC sub-sector has other economic trees such as acacia (Gum Arabic), avocado, baobab, and tamarind.

The GoG’s vision for the development of TC crops is holistic and aims at promoting a sustainable growth of the entire sub-sector, taking into account all the differences between the crops and the various production areas.

### 2.1.1 THE TREE CROPS AT A GLANCE: A COMPLEX SUB-SECTOR WITH A GREAT VARIETY OF PRODUCTS

The wide range of tree crops in the sub-sector may be classified using different methods based on convenience. Some of the methods used are as follows:

1) **Agro-ecological Zones**

Classification is based on climatic requirements of the tree crops. The predominant tree crops found in the various agro-ecological zones are:

- **Forest zone**: cocoa, rubber, oil palm, citrus, coffee, kola, and avocado;
- **Transitional zone**: cashew, mango;
- **Northern Savannah**: cashew, shea, dawadawa, baobab, tamarind;
- **Coastal savannah**: coconut and mango;

2) **Production Criteria: Domestic And Wild Crops**

Classification is based on the degree of management. Most of the selected TC are domesticated species. However, some, such as shea, dawadawa, baobab and tamarind, found in the Savannah regions are still wild. They are protected and managed under strict rules by the local communities because of their social and economic importance. Conservation of these crops remains a challenge as more and more of these trees are felled and used for fuel wood or destroyed by bush fires.
3) **Economic importance: Food and cash crops**

Classification is based on farmer’s own objectives for farm establishment. Most of the TC can be considered as “cash crops”, meaning that farmers cultivate them purely for income and investment. This is true for rubber, cocoa, coffee, cashew, citrus, mango and kola, which are not used particularly to satisfy household needs. Some however, even if largely commercialised, are important in household food security, and can be considered as food crops. Examples of these are oil palm, coconut, shea and dawadawa.

4) **Post-harvest criteria: Perishable and non-perishable crops**

Classification is based on storability. Fresh fruits such as citrus, mango and avocado pear are highly perishable and, therefore, will require specific post-harvest management interventions such as provision of cold chains in order to preserve quality of the produce and extend the shelf life. Non-perishables such as cashew, cocoa, rubber, coconut can be stored for long periods and transported more easily after initial processing.

5) **Processing criteria: End use of the product**

Classification is based on the level of processing. Fresh fruits such as citrus and mangoes can be consumed directly and can also be processed for added-value (fruit juices, jams, dried fruits). Most of the TC products require processing at different levels, from fermentation and drying of cocoa, to more complex processes like ribbed smoked sheets from rubber, oil extraction from oil palm or coconut and the industrial shelling and peeling of cashew kernels for export. The “oil” business has a long tradition of local processing in Ghana (oil palm, shea, coconut), and involves a lot of SMEs (local mills and crushers) and generates significant rural employment. However, the degree of industrialization in most of the crops is still low and a lot more development is required to achieve the full economic potentials of the VC.
2.1.2 THE TREE CROPS SUB-SECTOR: A STRONG CONTRIBUTOR TO GROSS DOMESTIC PRODUCT

Ghana is endowed with a wide range of natural resources for growing tropical tree crops. Over 1.6 million farm families are engaged with the cultivation of tree crops, with a vast majority of them being small-scale farmers. The TC sub-sector provides a ready source of income for farmers and numerous job opportunities, thereby enhancing livelihoods of a great number of farm families. It also contributes significantly to food security as well as the macro-economic stability of the country.

Some of the important TC which are found in most of the farming systems of the country and have contributed immensely to the development of the economy are:

Cocoa: It is the most important cash and export crop of the country. Ghana is the second largest world producer after Ivory Coast, with a production of 710,638mt in 2009. It contributes 11.5% to GDP out of the total agricultural sector GDP of 34.5% and has a growth rate of 5.2% per annum. This makes cocoa the leading earning crop and the backbone of the Ghanaian economy.

Rubber: Its production area has been expanding steadily since the 1980s. Production has increased from 9,300mt in 2000 to 19,134mt in 2009, recording an increase of 74% over the period. The Ghana Rubber master plan estimates production to reach 52,000mt by 2020 and finally to 70,000 mt by 2030.

Oil Palm: Area under cultivation is approximately 300,000ha, out of which more than 80% is cultivated by small-scale farmers. In 2009, 1.5 million mt of fresh fruit bunch (FFB) were produced in Ghana, out of which 1.3 million mt of FFB and 232,700mt of Crude Palm Oil (CPO) were produced by independent small holdings. Industries on the other hand processed approximately 460,000mt of FFB in 2009, of which about 260,000mt were produced in their plantations (including out-growers and smallholders) and approximately 200,000mt were purchased from independent farmers. The vast majority of fruits from the independent smallholder are processed at village level and consumed locally. The country is not self-sufficient in palm-oil production and therefore relies on import in order to satisfy domestic demand.

Cashew: Its production in the country has been increasing steadily over the years. Area under cultivation is approximately 70,000ha. There is a vibrant non-regulated cross-border trade in raw cashew nuts (RCN). Export volumes of RCN increased from 31,335mt in 2003 to 70,177mt in 2009. Approximately 95% of RCN produced locally are exported to India, Brazil and Vietnam for processing. The processing of cashew kernels in Ghana increased from 4,250mt in 2009 to 17,600 in 2011, and is expected to reach 20-30,000mt within few years.

Citrus: It is currently the fastest growing tree crop in Ghana with increasing demand for fresh fruits from both the domestic and regional markets. Annual production is estimated at 550,000 mt. Available data indicates that 10,991mt and 11,028mt of oranges (fresh) were exported in 2008 and 2009, respectively.

Mango: It has also experienced tremendous growth in recent years. Production for 2009 was 70,000mt with 435mt being exported. Mango exports began to decline from 2009 with the incidence and spread of fruit flies.

Coffee: It engages smallholder activity with most of the farms located within the cocoa growing areas. COCOBOD is expecting Ghana's annual coffee production to increase from the current 6,000 mt to 50,000 mt over the next 10 years.

Coconut: It is a smallholder crop with average holdings of about 1.5 ha. Area under cultivation is about 40,000 ha and is estimated that there are about 30,000 small holder farmers engaged in coconut production. The Cape St Paul Wilt disease has devastated most coconut plantations along the coast.
Shea: Shea and dawadawa trees form the main tree cover of the northern savannah vegetation where they have been conserved by the communities over the years in recognition of their economic importance. They play an important role in the farming systems and are often intercropped with cereals and tubers. Efforts have been made by Research Institutes and NGOs to improve upon the shea industry but a lot more needs to be done. In addition to local consumption, shea nuts and shea-butter from Ghana are exported and most of the products are processed and used as Cocoa Butter Substitutes. The cosmetic market remains a niche market for shea.

Dawadawa: It is widely used as a condiment. There is little ongoing research and support work on this crop in spite of its economic and medicinal values.

Kola: This is one of the industrial crops under CRIG. Even though there is a vibrant informal trade in the kola sector in the whole of the West African Sub-Region, it remains largely underexploited.
The major issues identified in the sub-sector are the following:

2.2.1 LOW PRODUCTIVITY

Factors contributing to low productivity in the TC sub-sector vary with each crop. In general, TC that have specific programmes or packages supporting their development, like cocoa, oil palm and rubber have better organised VCs and improved access to inputs, technical assistance and therefore, higher productivity levels. However, the under-listed factors have been identified as general constraints contributing to low productivity in the TC sub-sector:

1) Inadequate Supply Of Improved Planting Material

The use of poor quality planting materials has serious repercussions on the financial viability of the plantation. Harvesting may either be delayed or trees could be unproductive. The quality and yields from such trees will be poor and, therefore, attract very low market prices. On the contrary using improved planting material and other GAPs will result in higher yields and improved quality of produce which will enhance revenue generated from the enterprise. The frequent use of poor quality planting materials in the sub-sector can be attributed to lack of certification and control of tree crop nurseries, the non-availability of quality seedlings in many villages and/or the high cost of improved planting materials.

Many private nurseries operate in the TC sub-sector but quality of seedlings remains low, and above all, the lack of certification or control does not encourage farmers to invest in procuring quality planting materials.

The use of a limited range of varieties poses a problem. Some of the varieties may be highly susceptible to particular pests and diseases. Production may also be concentrated within a short harvest period thereby causing gluts. With the citrus VC for example, the late Valencia remains the most widely grown variety. Large volumes of the produce are available at harvest but soon after the season, there is little available forcing processing companies to shut down. This situation impacts negatively on their productivity and profitability. Widening the range of varieties produced could reduce the seasonality by spreading the fruiting season over a longer period for the benefit of all actors.

2) Inadequate Extension Service Delivery

Extension service delivery to the sub-sector is provided by MOFA, Donor-funded Projects, NGOs and some private companies. However, extension delivery to the TC sub-sector still remains weak with extension officer/farmer ratio being very low (AEA/farmer ratio is 1:1,800). In addition, extension officers are under-resourced, poorly trained and equipped and are expected to operate in all the sectors of rural development. TC specialists are also few on the field.

Inadequate facilities for the organisation of training and demonstrations, and the lack of funds to support broadcasting of radio or television extension programmes are also often a major constraint in the promotion of GAPs.

3) Low Adoption Rate Of Improved Technologies

The low adoption rate of improved technologies has been identified as one of the major causes of low productivity of TCs. Some of the reasons contributing to the low adoption of Good Agricultural Practices are:

- Poor access and unavailability of specially formulated fertilisers for TCs;
- Inadequate supplies of recommended agrochemicals;
- Inadequate knowledge & know-how concerning quality requirements and standards;
4) Insufficient research programmes

The Cocoa industry has benefited from continuous, well-targeted research programmes from the Cocoa Research Institute of Ghana (CRIG). Similarly, the Oil Palm sector has also benefited from focused research interventions provided by the Oil Palm Research Institute (OPRI). This is not the case with the other TCs as is evidenced in their lower development and weaker VCs.

The researchable areas are numerous and require adequate funding and support. Several issues strongly affecting the sector will need to be researched into and specific programmes will need to be developed and implemented, for example, controlling the fruit fly.

An increased coordination between the various actors, including the Research Institutes and the Universities, is also needed to improve the efficiency of Research programmes in the sub-sector.

2.2.2 POORLY ORGANISED VALUE-CHAINS

Apart from the Cocoa and Rubber VCs which can be described as well organized TC value chains in general can be considered as under-organised within the FBOs, cooperatives or associations and between the various actors. Well organized VCs with strong organizations representing the various actors and strong linkages between them along the chains are key to sustainable growth since risks associated with production would be reduced. Confidence among the external partners such as the insurance companies and banks will be attracted and numerous jobs will also be created.

1) Farmer Based Organisations And Cooperatives

A lot of programmes aimed at developing FBOs in Ghana have been implemented in recent years. Yet still a lot more needs to be done in terms of building their capacities and making them more effective and functional. The privatisation of the VCs in the early 1990s has given farmers and FBOs a greater role to play in VC management and a few FBOs have managed to grow significantly to attain the critical size and effectively impact the market and VC development.

There are a few success stories in Ghana which give indications of the sustainability of FBO activities in Ghana. Some of the success stories are:

- The Cocoa Abrabopa Association is an organisation with a membership of approximately 16,000 farmers operating in seven cocoa growing regions. They have been brought together by a private fertiliser company, which provides chemical and fertiliser packages on credit to the groups. The groups' bank accounts are debited with the cost of inputs supplied at the time of payment for the cocoa beans. This organisation has evolved from the basic operation of group input acquisition to the provision of services such as extension.
and finance to its members. The sustainability of the association and its ability to grow and operate as an independent FBO and to provide additional services to its members and collaborate with other private companies other than the mother one will be worth studying.

- The Rubber Outgrowers and Agents Association (ROAA) is an organisation, created in 1995, which has been supported by the Rubber Outgrowers Plantation Projects I to III. These projects have supported the development of outgrower schemes in partnership with the private company, GREL. Since its creation, every farmer selected as an outgrower became an automatic member of ROAA.

Currently ROAA has a membership of approximately 2,800, of which 75% are male and 25% are female. Its members are found in eight districts each in the Western and Central Regions. The mission of ROAA has evolved and expanded from the initial mediation between GREL and the farmers to a larger scale of service provider, which include credit, development of nurseries and advocacy for additional resources or projects. Once again, the sustainability of the organisation with regards to its ability to advocate for the interests of its members, provide other relevant services and enhanced professionalization will be determined after the repayment of the loans when farmers are free of their obligations to the technical operator.

- Other organisations, operating within the framework of outgrower schemes are currently operating with good results in the oil palm sector (Oil Palm Outgrower Association operating with the support of the Buabin Oil Palm Outgrower Project), and in the mango sector (Organic Mango Outgrower Association collaborating with a private company in the Northern Region).

These organisations have been strongly supported either by the private or public sector. They will have to prove their ability to operate as independent FBOs in the long term. Their viability would be dependent on linkages established with efficient markets and other vibrant actors in the VC.

The continued support to FBOs is essential for VC development. FBOs should be formed around viable projects and constituted of cooperatives formed with a common business agenda. The Extension Policy of MOFA, which is currently under review, has clearly identified the support to FBOs as one of its components, and has therefore, developed activities to achieve this.

2) Poorly Organised Value Chains And Marketing Channels

In most VCs, the relations between the various actors remain extremely informal. Very few contracts are being signed and fulfilled. The market is dominated by middlemen and other numerous actors and operators involved with distribution resulting in reduced profit margins. VC analyses clearly show that farmers remain price-takers and have limited influence on pricing mechanisms.

Factors required to increase returns to actors are as follows:

- Increased Productivity: See above.

- Enhanced Product Quality: The improvement of product quality is rarely paid for in unorganised VCs and requires additional training (GAP, certification) and investment (in terms of labour or infrastructure). An improved organisation of the VCs, including definition of standards, improved grading and increased dialogue between actors will be encouraged to allow the promotion of quality.
Development of new marketing channels: The development of new marketing channels, like Fair Trade, Organic or certified products has shown significant results. Again, it has an expensive price and is only accessible to well-trained farmers and FBOs operating in organised VCs, and has to be linked to national or international markets. The support will be targeted according to prior adequate VC analysis.

Bulking of products: the grouping of products for commercialisation of larger volumes when prices are higher is possible when farmers have the financial capacity to store and delay the incomes. Such an approach must be implemented together with specific credit, for example with financial institutions accepting agricultural products as collateral.

Shortening the value chains: A direct dialogue between FBOs and end of the chain buyers (processors, exporters) can be an excellent option to increase the added value shared by actors by reducing their number. It requires well organised FBOs, a good dialogue between actors and a consolidated trust between them, which will be supported through the improved organisation of VCs in the TC sub-sector.

Contract farming and outgrower schemes: Contract farming, and to a large extent, outgrower schemes can be a solution to low prices paid to farmers, in addition to other services (financial services, extension). FBOs need to be trained and supported in preparation of, and negotiation for contracts. Clear pricing mechanisms (e.g. a fixed percentage of the world market price) must be established, and the capacity of both FBOs and private companies enhanced in order to execute their respective obligations in the contracts.

In terms of market development, the support should be given towards an increased organisation of the VCs, especially through the support to viable and sustainable FBOs and outgrower schemes. The technical support shall be business oriented, including global farm management, quality and certification, business development and market intelligence. Extension and support services shall act as Value Chain facilitation services and work as facilitators between farmers, FBOs and the private sector.

3) Export Versus Domestic Market

So far, a lot of projects or development strategies for the TC sector have targeted exports as their main objective, when a stronger and more organised domestic market could have been more effective. Most of the big agricultural nations have an extremely strong and active local market (US, Europe, Brazil, Japan) which has often been the initial basis of their export development.

The local market for palm oil (CPO) is already the major lever of the VC and can still be improved as Ghana has currently been importing, over the last five years, an average of over 50,000 mt per year.

The local market for fresh fruits and fruit juices also represents a great asset for the citrus, mango (and pineapple) VCs. Its recent and growing development is one of the key issues for improved and better-organised VCs, especially in terms of quality and volumes.

Other crops can benefit from a better organised local market, such as dawadawa and shea butter, coconut, and to a lower extent, coffee or cashew.

The development of a stronger local market can have a positive impact on several sectors like health (fruit and vegetable consumption), environment (local products requiring less fuel and transportation) and global economy (job creation, reduction of imports, increased local added-value).
2.2.3 LOW DEGREE OF INDUSTRIALISATION

The TC sub-sector in Ghana is characterised by a low level of local processing. Most of the products are exported as primary or semi-processed products (dried and fermented cocoa beans, copra, dried shea nuts, green coffee and raw cashew nuts). The only exception is the oil palm sector, where the initial processing and production of CPO is done in Ghana mostly by small scale processors.

1) Production And Processing Infrastructure In Rural Areas

Generally speaking, SMEs or FBOs operating in the agricultural sector are still under-equipped and therefore perform poorly. In the Oil Palm VC for example, extraction rates can vary between an average of 11% for small-scale processors, to over 20% for some private industrial companies (and over 25% for the best companies in Asia).

Improvement of small-scale equipment and promotion of innovation is therefore essential. In some VC like cashew, improved competitiveness could be achieved through economies of scale and professional management.

For most VC, there is a need for improved access to post-harvest and first level processing infrastructure, such as on-field storage facilities for first grading and storage, pack-houses, warehouses, drying areas, silos, mills or small processing units. These facilities are, most of the time, too expensive for small-scale individual farmers, and can only be managed by farmer groups or FBOs. This is one way services and economic benefits can be provided by FBOs to their members.

Other important factors include training in the use and management of post-harvest infrastructure and participatory planning to determine the location and management structure.

2) A Growing Number Of Industrial Partners, Still Insufficient To Boost The Sector

Several VCs have seen the development of new processing industries during the past decade. The citrus and mango sectors have seen a real development, sometimes linked to the pineapple VC, for the production of fresh fruit juices, concentrated juice, or fresh fruits cut for sale to Europe.

Several companies have also been investing in the Cocoa, Cashew and Oil Palm sectors. Future development is announced in the Shea Nut, Cashew, Rubber or Oil Palm sector in a recent future.

These investments are still not sufficient to systematically boost the TC sub-sector, even if they have locally participated in generating income and improving livelihoods.

If properly implemented and supported, promotion of new investment can be extremely valuable for all actors of the VC. The Policy will promote sustainable investments in the TC sub-sector and support the various actors to improve their collaboration and level of trust.

Experience has shown that in most cases, specific support must be provided both to the farmers/FBOs and to the industrial partners, in order to facilitate their understanding (intermediation and facilitation for contract preparation and signing, negotiations, enforcement of contracts) and to help them develop sustainable business relations.

The promotion and support to new investment in the TC sub-sector and its proper support is one of the pillars of the TCP. PPP will be promoted to attract long-term investments in the sector.
3) Small And Micro Enterprises Are Struggling To Grow And Improve Their Share In The TC Sub-sector

Several small- and medium-scale private companies have started to operate successfully in the processing of TC products, such as: roasting of cashew nuts, production of cosmetics based on shea or cocoa butter and production of alcohol from some of the fruits. These SMEs are facing serious challenges hampering their development, among which are high cost and technical capacity of labour, sourcing of quality products, food safety and hygiene issues.

They are often engaged in an extremely strong competition with larger companies, better-organised and resourced, with large networks of middlemen and agents on the field, which are most of the time exporting raw products. They are also often unable to access finance and credit facilities in order to grow and develop their businesses.

SMEs have the potential to generate significant added-value and to create jobs in all regions of the country. They shall benefit from specific support in order to allow their development and the promotion of a diversified network of SMEs. For each commodity the competitiveness on scale and processing model needs to be further assessed.

4) Promoting Innovation To Generate Added Value In The Tree Crops Sub-sector

The promotion of innovation is essential for the development of the sub-sector, especially in the field of processing. Innovation must be seen in all the aspects of the VCs, in order to increase the competitive advantage of Ghana and to generate more added-value to the sector. It is also the key for continued growth.

The recent example of the pineapple sector has shown that reactivity and innovation can be essential for the sustainability of the VCs: During the last decade, a new variety of pineapple named MD2 was promoted and has progressively taken over the European market. The Ghanaian and Côte d'Ivoire's industries have been too slow and unable to react and switch from the previous varieties (Smooth Cayenne and Sugar Loaf) to the new one. They have lost important market shares in Europe and are now struggling to recover, despite their competitive advantages compared to South and Latin American countries.

Innovation is therefore critical in triggering and driving change and can be implemented in various ways such as: the introduction of new varieties, improved processing or production techniques, improved HR management, promotion of the use of secondary products (cashew apples, Dawadawa pulp & pod, mango almond oil) or improved service to the customers.

The dynamic and diversity of the Ghanaian economy is a good environment for the promotion of innovation, which must be specifically supported.
2.2.4 UNDER-DEVELOPED INFRASTRUCTURE

1) Roads And Transport

The state of the roads and transport infrastructures remain a strong drawback for the growth of the sub-sector. The high cost of maintenance under the tropical climate, causing great damage to the road system, is obviously a serious issue. Even if roads and feeder roads are prioritised taking into account agricultural production, transportation needs remain important in a large number of areas, where farmers face great difficulty in transporting their products to markets, or even have transporters come to collect them. The road system is also a particular concern for investors, especially those relying on outgrowers.

Several projects have infrastructure components and are financing the construction, upgrading and maintenance of road infrastructures. But these actions are behind schedule and the Policy will consider accelerating infrastructure development as one of the key preconditions for agriculture and private sector development in Ghana.

High cost of transport, unavailability of trucks and use of inadequate vehicles for transportation of agricultural products are also important constraints, for farmers and processors and market agents. Quality of the products can be highly affected by poor conditions of transport or delays in the transfer to the markets or processing units.

2) Electricity And Water

The cost of electricity and water and their relative inaccessibility in remote areas clearly undermine the development of bigger processing units and the industrialisation of the sector in rural areas (close to the production sites). The installation costs of such infrastructure make it much more unattractive for the private investor, especially when the increasing cost of diesel for running generators continue to remain a major expense with serious implications for profitability.

Access to electricity and water also remains a key issue for smaller units in remote areas and electrification projects in rural areas must follow their development. The development of alternative (use of processed waste) or renewable (solar, bio-fuels or gas) energy sources will be promoted, in addition to the traditional energy projects and strategies.

3) Ports And Airports

A refrigerated terminal at Shed 9 of the Tema Harbour has been in operation since 2009. It has allowed the development of sea-freight exports for a large number of fresh products at a lower cost than air freight, thereby increasing the competitiveness of the Ghanaian horticultural industry. Several exporters also have their own cooling facilities and containerise the exports. The privatised container terminal of Tema harbour has achieved much improvement and increased efficiency in container handling, making Tema one of the most efficient harbours in the Region.

The situation is less favourable at Kotoka International Airport (KIA) where agricultural products for export are handled in the open at the forecourt to the cargo shed. Fresh products have to arrive at the airport already packaged and palletised to avoid delays in handling. Although limited cold storage is still available at the airport, its availability is unreliable and products are generally delivered in a relatively short time before loading can take place. Any delay in traffic on the roads may result in missing the flight. Some specific support has been prepared by MiDA to improve the situation.
2.2.5 BUSINESS ENVIRONMENT TO BE IMPROVED

1) Land Tenure System

Land access for agricultural production remains extremely complex especially for TCs which occupy the land for a long period. As opposed to other neighbouring countries, the land tenure system remains customary and is controlled by traditional authorities, and very few farmers hold legal land titles. Boundaries are most often not clearly defined, with no land registers and titles which create room for disputes.

Problems with the land systems in Ghana include:
- Indiscipline in the land market (encroachment, possible illegal enrichment of chiefs and intermediate, multiple sales of the same plot, unapproved development);
- Costly and time-consuming land administration services that are confronted by a huge organisational task;
- An increasingly landless population resulting in increased population pressure which inevitably politicises the acquisition of land;
- Not fully codified rules of customary tenure which remain complex and vary between local authorities, with lack of transparency and accountability;

The uncertainty of the access to land and the scarcity of available lands in a number of areas make it difficult for farmers to invest in sustainable TC production and especially to collaborate with financial institutions to support their development. The growing demand for urbanisation and the recent activities of real estate developers in peri-urban areas have caused the cost of and acquisition to increase to a level where agriculture is no longer profitable. Land disputes are also very common and difficult to judge, and rarely benefit farmers.

Furthermore, some private companies are able to access large areas of lands for agriculture and development of private plantations through direct negotiations with local chiefs, therefore expropriating large numbers of small farmers and moving them off their lands, sometimes without proper compensation. This situation is likely to happen more often following the world food crisis in 2008 and the growing pressure worldwide on arable lands for production of food crops and biofuels.

A stricter control of the state on the acquisition of land for agricultural production, the regular implementation of Social and Environmental Impact Assessment studies for such acquisition and the development of improved rules and measures for PPP development in the TC sub-sector are key to improving and securing access to land by small-scale farmers and processors.

2) Legal System And Taxation

Ghana has developed an efficient commercial legal code, which creates an improved contractual environment and should allow the development of a more formalised sector. However, the judicial system has not been able to effectively implement and enforce that code and deliver sanctions. The contractual environment (between farmers and salesmen, between middlemen and exporters, between FBOs and processors) remains mostly informal and verbal. Such laxity means that a lot of contracts are not respected. The informality of the agricultural sector, especially for contracts and land titles, is also a major drawback for the development of improved relations between farmers and banks or financial institutions, as contracts or land titles cannot be used as guarantees for loans.

A lot of initiatives have been developed over the last years to promote investment in agriculture and in rural areas
specifically, in terms of fiscal incentives or facilitation of investment: for example, Agriculture and Agribusiness benefit from tax exemptions for the first eight years of production. Investors working in Agriculture and in the TC sub-sector can also be registered as free zone companies under certain conditions, and therefore benefit from a large number of measures, such as partial or total income tax exemptions on a permanent basis or exemption of import taxes and levies. New investors can also benefit from support from GIPC, to help them prepare, register and operate their activities in Ghana.

Fiscal and para-fiscal measures can have a positive impact on new investment and on large companies operating in Ghana. However, they have little effect on the majority of actors in the TC sector who are small scale and informal operators.

To provide sustainable services, GoG has to be able to generate revenue from the sector. The choice between tax incentives for investment promotion and raising funds for infrastructure and VC development must be therefore carefully balanced. In order to generate revenue, the small-scale informal actors also need to be strengthened and brought formally into the sector.

3) Investment, Financial And Insurance Service Delivery

According to several analyses and compared to many countries in the Region, Ghana has a relatively sophisticated financial system, with a competitive and organised banking system carefully managed by a well-experienced Central Bank. The banking sector is dominated by commercial banks mostly private and has shown a relatively stable but rapid growth. A large number of rural banks are also active in all regions of the country, and a growing number of financial institutions providing micro-credit or savings and loans are also present.

Despite this positive picture, the links between agriculture and the financial sector remain extremely weak and remain a major challenge for the growth of the sector. The GoG's objectives in terms of rural employment, food security, contribution to GDP and improvement of rural livelihoods cannot be reached without a strong support from the banking system, with loans at affordable rates and of sufficient duration.

Reports also indicate that the share of agriculture in commercial bank's lending has dropped from 25% in the early 1990s (before liberalisation) to 12% in 1998 and 4.5% in 2009. The share of agriculture in the rural banks' lending is only around 15%.

The interest rates remain extremely high (between 27 to 44% annual rate on average in 2009), even with an average inflation of approximately 10% over the same period. Lending periods are short: short-term loans (maximum of 2-3 months) remain the most common options and are not suitable to TC production.

The major reasons for the diminishing interest of commercial banks for agriculture include the risky nature of agriculture production, the lack of collateral (poor farm assets or land titles, the refusal from the banks to consider agricultural products as collateral), the informality of contractual relationships and the lack of financial information. It also appears that commercial banks do not have the long term financial resources that will allow them to finance long-term loans to the agriculture sector. The lack of education in terms of agriculture and agribusiness projects and the poor understanding of the sector by the banks are also a strong factor.

Special development funds have been designed to support agriculture and export. The Export Development and Investment Fund, established in 2000, aims at financing the development and promotion of non-traditional exports on concessionary terms and is spending more than 80% of its budget on agriculture and agro-processing projects, through loans and grants. EDIF is financed on commercial imports (0.5%
excluding petrol), but in order to increase its impact and transform it into a powerful tool for the development of the Agriculture sector and the TC sub-sector in particular, the funding of EDIF should be enlarged and directly linked to the agriculture VC and its human resource and technical capacity should be strengthened.

Although they are not yet available in the TC sub-sector, there is potential to develop various agricultural insurance products against financial risks caused by extreme weather events or other problems. The reinsurance business has also the capacity to support the underwriting of agricultural insurance products when developed, which is good for the development of a viable insurance business for the agricultural sector.

The development of adequate agricultural insurance products should be targeted at reducing the risks for farmers and FBOs (mostly against extreme weather events such as droughts or excess rainfall) and other actors of the VC, including risk aggregators like processors and input dealers. Specific products should also be designed for financial institutions that are financing agriculture significantly in order to cover their risks and secure their risk assets against major weather hazards.

2.2.6 THE GROWING IMPACT OF THE TREE CROPS SUB-SECTOR ON THE ENVIRONMENT

Like most human activities, TC plantations can cause negative impacts on the environment and biodiversity, some of them being:

- Impoverishment of biodiversity;
- Waste generation;
- Loss of soil fertility;
- Greenhouse gas emissions;
- Erosion;
- Water and soil pollution;

The role of the TCP is therefore to ensure that mitigation measures are instituted to promote the positive aspects of the Tree Crops sub-sector. Some of the initiatives developed in Ghana to address some of the issues are:

1) The Roundtable for Sustainable Palm Oil

The Round table for Sustainable Palm Oil (RSPO) is a global and multi-stakeholder organisation that was established in 2003 in Kuala Lumpur (Malaysia). The RSPO has developed sustainability principles and criteria and a certification system for growers, millers, processors and other stakeholders along the oil palm VC to promote the production, procurement and use of sustainable palm oil.

The stakeholder consultations in Ghana resulted in the formation of a special working group, in charge of transposing the principles of RSPO in Ghana (Ghana National Interpretation Working Group, GNIWG), which has organised several consultations to identify the objectives and prepare the Ghanaian interpretation of RSPO.
In March 2011, the RSPO approved the National Interpretation of the Principles and Criteria for sustainable palm oil in Ghana. So far, only producers in South East Asia had obtained an RSPO certificate for a part of their production. It appears now that the major palm oil producers in Ghana are keen to start RSPO certification process.

2) The Clean Development Mechanism And Carbon Funds

The CDM is one of the “flexibility mechanisms” that have been defined in the Kyoto Protocol to promote clean development in developing countries and promote projects that reduce CO2 emissions. CDM became effective in February 2005. Based on a strict methodology, that has to be approved by the Executive Board of the Clean Development Mechanism, it allows crediting of project-based emission reductions. The credits can then be traded and sold under the Kyoto Protocol’s emissions trading scheme, and therefore generate additional funds.

In Ghana, the methodology has been developed for the rubber outgrower project, which was considered eligible. A specific methodology for developing and trading CO2 certificates for outgrower rubber plantations was accepted by the Executive Board of the Clean Development Mechanism (CDM) at the UNFCCC in April 2010. The fact that outgrowers through their association have become eligible for trading carbon certificates is unique and provides a great opportunity for the viability and sustainability of the rubber outgrower plantations and for the whole TC sub-sector.

However, final registration and implementation of CDM have not been effective yet, and the CDM programme still needs further development to be validated and to initiate the trading of carbon certificates. Other funds, such as the World Bank Carbon Fund, could also be explored for other TC.

3) Biodiversity

Regarding Biodiversity, the impact of the TCs in Ghana and in the World in general is often considered as very negative. Destruction of primary forests, clearing of vast areas with high biodiversity and the progressive destruction of the living environment (of a large number of animal and plant species) are often cited as direct consequences of expanding TCs.

In order to reduce the impact of human activities in general, several initiatives have been developed recently in addition to the existing regulations enforced in Ghana. Some tools are under construction in Ghana (definition of areas, mapping and conservation methods) that will need to be adapted specifically to tree crops. The High Conservation Value (HCV) concept was originally devised in the context of forest certification (High Conservation Value Forests or HCVF), but it is also applicable to all kinds of ecosystems and habitats. It has developed into a valuable and flexible toolkit for a variety of uses, including land-use planning, conservation advocacy, and designing responsible purchasing and investment policies.

Since 2006, a National Interpretation of the High Conservation Value (HCV) Toolkit has been developed in Ghana by several organisations: it complements international biodiversity initiatives, referring to the National Biodiversity Strategic Action Plan developed for Ghana (CBD), as part of a management prescription for each potential HCV areas. It also integrates national protected areas systems and strategies including strategic plans for the management of Globally Significant Biodiversity Areas.

The RSPO initiative for Ghana has included the HCV approach in its submission criteria. The integration of a HCV approach in other crops has not been finalised and will be supported in the framework of the implementation of the TCP.
4) **Existing Laws**

The country has a set of regulations which applies or could be adapted to TCs. The major ones concerning environmental protection are:

- Environmental Protection Agency ACT 490, 1994,
- Environmental Assessment Regulation, 1999, Li 1652,
- Environmental Assessment (Amendment) Regulation 2002, Li 1703,
- Pesticides Control and Management Act, Act 528, 1996,
- Environmental Sanitation Policy, May 1999, reprinted November 2001,

In particular:

- According to the EPA Act 490 -1994, the Agency can require an environmental impact assessment for any undertaking which in the opinion of the Board has, or is likely to have, adverse effect on the environment to submit within the period specified in the notice.

- One of the preconditions to obtain an environmental permit is the development and submission of an Environmental Impact Assessment (EIA) (or a Preliminary Environmental Report (PER) for small scale projects). The content of the EIA or PER is determined by the EPA Environmental Assessment & Audit Department in cooperation with other relevant departments.

- Regarding Palm oil, every undertaking involving land clearing of more than 40 hectares in area for agricultural purposes or every undertaking involving the construction of crude oil or oil processing facilities, must be registered by the Environmental Protection Agency (Environmental Protection Agency Act, Act 490, 1994) and must obtain an environmental permit from the agency before commencement (Environmental Assessment Regulations, 1999).

- In any case, any agricultural project of more than 40 hectares or affecting more than 20 people requires registration and environmental approval.

EPA has also developed Agriculture Sector Assessment Guidelines, which give practical tools and methodological frameworks to assess the overall impact of agriculture on the environment.
2.3 LESSONS LEARNT FROM THE PREVIOUS INTERVENTIONS AND REPLICABILITY

2.3.1 OUTGROWER SCHEMES

In Ghana, several outgrower schemes have been created and supported since the early 1990s, with significant impact on the VC sectors and on the livelihoods of the farming populations benefitting from it. As an example, the rubber and the oil palm sectors have benefitted from support from the AFD, KfW funded Programme for the Promotion of Perennial Crops in Ghana (PPPC), through the Rubber Outgrower Plantations Project phase I to III, and through the Oil Palm Outgrowers Project phase I, implemented by the MOFA.

PPPC has been built on previous successful experiences in promotion of outgrower plantations. A first phase of the rubber project was implemented in the Western Region between 1995 and 2000. It resulted in the planting of 1,200 ha of rubber trees on 400 outgrower plots. During a second phase of implementation, an additional 2,854 ha was planted on 500 outgrower plots, also in the Western Region. The total output of both phases was 4,054 ha of rubber planted with 900 outgrowers.

The third phase allowed the planting of 7,857 ha of rubber (approx. 1,800 outgrowers). The Oil Palm Outgrowers Project established 2,088 ha of oil palm (approx. 794 outgrowers).

A “triangular concept” was applied (see following figure), involving a Financial Operator which provides long term investment loans to an outgrower to finance the initial planting as well as the maintenance activities on the farm until the planted trees reach maturity and production stage. For the planting and maintenance activities all inputs, technical assistance and extension support were provided by a technical operator, with the costs debited to the loan contracted by the outgrower. When the trees start producing, about 5 to 7 years after planting, the outgrower sells his products to the technical operator. From the gross sales an amount is deducted for loan reimbursement to the financial operator.

The model has shown significant results, especially for the rubber VC which is close to a monopoly situation in Ghana, and has proven to be effective in the support to family farming, by increasing the farmers’ access to financing and adequate technical support, and therefore allow them to invest in a profitable sector.

The increases in revenues have generated spontaneous plantations by small farmers, without any additional support. Even if not yet significant, it still shows the positive impact of the model. However, the model needs a strong involvement from the State and from Development Partners to finance it, and be able to provide the necessary credit lines (until the private banking system is able to invest directly).

The reduction of the initial costs (amount borrowed by the farmers) is a next step to improve profitability and ability to replicate the model, mostly through the development of cheaper and more adequate extension support and through increased negotiations with the banking system to reduce the costs of the loans.
The impact on poverty reduction can be reduced by the fact that all farmers cannot access outgrower schemes (funding is limited), and especially poor farmers with no access to land or in remote areas where no technical operator is ready to operate. Studies have shown that beneficiaries are mostly rather well-off farmers, able to receive some training and ready to invest on a long-term basis.

Outgrower schemes must also avoid perverse effects and the selection of farmers and plots of lands for future outgrower schemes must be carefully screened, through adequate spatial planning at the District level to ensuring livelihoods and local food production and security. The moving of previous tenants and the switch in some areas from food to TC production must be clearly avoided and monitored through Social and Environment Impact Assessment studies, and improved land use planning at District and community levels. The impact on the environment of new developments must be monitored: both the positive impacts on carbon sequestration and soil conservation, but also the negative ones especially in terms of biodiversity or possible deforestation.

2.3.2 VALUE CHAIN DEVELOPMENT APPROACH

The VC Development approach has been widely implemented in Ghana over the last few years. It can be defined as the process where producers, traders, processors, manufacturers, retailers and consumers are connected and integrated in a global market system. Its implementation in Ghana has shown that sector and VC analyses, linked to policy formulation, can create opportunities for increased value in agribusiness.

The VC approach allows the integration of small-scale actors into sustainable commodity markets. Through proper-targeted support and investment, their vulnerability to market fluctuations can be reduced and their ability to raise incomes and improve livelihoods strengthened.

The approach necessitates coordination among MDAs which if properly implemented will improve chances of growth in the sector. To date, several projects (among which are ACI, ADVANCE, EMQAP, MiDA, MOAP, SNV or the West African Trade-Hub) have successfully used this approach with significant results.

The policy focuses on the replication of this approach on a larger scale in order to promote growth of the TC sub-sector.
2.3.3 THE AGRICULTURAL SERVICES SUB-SECTOR INVESTMENT PROJECT

The World Bank’s Agricultural Services Sub-Sector Investment Project (AgSSIP, 2000 - 2007) was designed as a sector investment programme aimed at the establishment of a sector-wide approach (SWAp). The objective was to improve coordination, impact and coherence in allocation of resources. After the MTR in 2004, the GoG took an increased leadership role to orientate the project towards support to commercial farming, including development of the horticulture export industry, rehabilitation of irrigation schemes, development of the palm oil industry, community fisheries, infrastructure development and agricultural mechanisation service centres and support for FBO development.

According to the World Bank, the crops and livestock subsectors, which were the most relevant sectors under AgSSIP, recorded an average growth rate of 5.4 per cent per year. While it is difficult to link the effects of a certain project to overall sector performance, it is fair to say that AgSSIP played an important role in strengthening the coordinating capacity of MOFA, helped to increase the capacity of FBOs in production and marketing and ensured the increasing involvement of the private sector in service delivery. Another positive outcome has been MOFA’s Horticulture Export Industry Initiative (HEII), which has been supporting the horticultural sector in Ghana.

One of the major learning of AgSSIP was to place the FBOs at the centre of the VCs and to try to provide adequate support for their development, including a special FBO fund, still operating.

2.3.4 THE TRADE AND INVESTMENT PROGRAMME FOR A COMPETITIVE EXPORT ECONOMY

Funded by USAID and the GoG, (2005 – 2009) with a budget of $30 million, the Trade and Investment Programme for a Competitive Export Economy (TIPCEE) seeks to achieve “exponential” growth in sales of agricultural exports by increasing the competitiveness of Ghana’s private sector in international and regional markets. TIPCEE has been USAID’s flagship project under its economic growth programme for Ghana.

The project consisted of two components: Enabling Environment (EE) and Export Business Development (EBD). EE focused on improvement of the legal and regulatory environment for private sector operations and investment with respect to trade, finance and agriculture. EBD worked with the private sector to build its capacity to compete in the regional and international markets. A major goal of TIPCEE was to integrate smallholder farmers into export-oriented and domestic market value chains; e.g. smallholder groups are linked to exporting firms in the pineapple, mango, papaya and vegetable subsectors.

TIPCEE has focused its implementation through collaboration with the private sector and only partially through GoG structures (USAID, 2007). According to TIPCEE’s reports, one of the reasons for the focus on the private sector is its ability to disseminate and react quickly to often changing market demands especially for high value export commodities, such as horticultural products. Constantly changing market demands require quick transmission of information. The involvement of the public sector remains essential but needs adaptation to fit to these requirements and to be able to propose accurate support.
2.3.5 THE CASHEW DEVELOPMENT PROJECT

The Cashew Development Project was financed by an African Development Bank concessionary loan of UA 9.89 million and a Government of Ghana contribution of UA 1.647 million. Even though the project was scheduled for implementation over a six-year period, actual implementation spanned a period of eight years to allow for the completion of feeder roads rehabilitation activities that were undertaken and also to ensure a more accelerated use of credit funds provided under the project. The Cashew Development Project focused intervention measures on production development, including provision of improved planting materials, cashew research, extension service delivery and training, and credit delivery to farmers and processors.

The Project was able to reach out to 33,400 farmers to facilitate the establishment of 26,000 ha of new cashew plantations, promote canopy substitution and train farmers in GAP. Furthermore, 60MT of improved seed were procured and distributed to farmers and more than 30,000 improved planting materials (clones) were produced from the two central nurseries and successfully distributed to farmers. Under the extension and training component, 385 Agricultural Extension Agents were trained in various cashew production techniques, and more than 20,000 cashew production and processing guides were developed and distributed to farmers and processors. During the implementation of the project, cashew yield levels have increased by two and half times (from 200 kg/ha at project inception to 550 kg/ha at project close).

Although a lot of activities were implemented, there is still a demand for cashew intervention measures in the country, especially in areas outside the CDP districts. Further support must be provided in terms of production development (planting material multiplication, extension and training, community mobilisation and development), research, and credit.

The major challenge remains the promotion of marketing & infrastructure development (including processing), to improve the cashew VC and develop new marketing channels. A second phase of the CDP is currently being prepared and submitted to the major DPs.

2.3.6 THE RURAL ENTERPRISES PROJECT (PHASES I & II)

The Rural Enterprises Project (REP) has been funded by IFAD since 1995: The second phase of REP (2003-2011) is being implemented in 66 districts nationwide. Phase one was implemented from 1995 to 2002 in 13 districts in the Ashanti and Brong-Ahafo regions.

Micro and small-scale enterprises promotion as a key tool for rural poverty reduction has been piloted, tested and evaluated in Ghana since 1995. The experience has shown that there was great potential for replication and scaling up, leading to the funding of REP II and its implementation by MOTI. REP-II promotes the establishment and growth of micro and small-scale enterprises through the provision of business development services, access to technologies and financial services. REP I & II have supported 66 districts each to establish district-based Business Advisory Centres (BACs) and 21 Rural Technology Facilities (RTFs).

REP II has achieved a total outreach of 177,000 people, facilitated access by 19,000 people to non-financial services; trained over 30,000 in income-generating activities; trained 45,000 in business and entrepreneurship skills; enrolled 128 Participating Financial Institutions (PFIs), delivered total credit of about US$1.5 million; supported the formation of Micro and Small-Scale Enterprise Sub-committees in 66 districts (data 2010).

The vision is to improve the living conditions of the rural poor, especially women, through increased incomes thereby contributing to poverty reduction in all 161 rural districts of Ghana.
3   THE POLICY FOR THE DEVELOPMENT OF THE TREE CROPS SUB-SECTOR IN GHANA

3.1   VISION FOR THE SECTOR AND GUIDING PRINCIPLES

“*A competitive and sustainable tree crops sub-sector, with focus on value chain development and improved technologies to create job opportunities, ensure food security, enhance the environment and improve livelihoods*”

Following stakeholder consultations, in-depth analysis of the sub-sector and identification of key issues, the TCP has been formulated based on the following guiding principles:

- Promotion of Good Agricultural Practices and improved technologies;
- Promotion of agribusiness and market development;
- Increased access to credit and finance;
- Promotion of Public-Private Partnerships;
- Improvement of the production and investment environment;
- Promotion of outgrower scheme models;
- Development of FBOs and VC committees;
- Mitigation of impacts on environment through regulation and promotion of sustainable management practices;
- Increased coordination between MDAs and DPs
- Support to rural employment through small-scale farming and processing;
- Decentralised planning and implementation;
- Mainstreaming of gender and consideration of impact on vulnerable groups.
3.2 OBJECTIVES FOR THE SUSTAINABLE DEVELOPMENT OF THE TREE CROPS SUB-SECTOR

These principles have been translated and developed into objectives and strategies that will be the main focus of the TCP. Six major objectives have been identified to promote the sustainable development of the TC sub-sector in Ghana:

A - Support increased production and productivity
B - Promote investment and increase processing capacities
C - Improve marketing through VC development
D - Promote sustainable practices for environmental protection
E - Support Research and Development
F - Improve coordination and management of the Policy
4 STRATEGIES FOR POLICY IMPLEMENTATION

The six objectives will be implemented as the strategies to support the sustainable growth and development of the TC sub-sector. The strategies and related activities are presented as follows:

**Strategy A - Support Increased Production And Productivity**
- Activity A1 - Enhance public extension delivery to increase rate of adoption of GAPs
- Activity A2 - Encourage increased participation of the private sector in extension delivery
- Activity A3 - Establish and implement programmes for development and distribution of certified planting materials
- Activity A4 - Support mechanisation and irrigation services
- Activity A5 - Support development and use of specific fertilisers and other agro-chemicals

**Strategy B – Promote investment and increase processing capacities**
- Sub-strategy B1 – Promote new investments
  - Activity B1.1 – Create incentives for increased investments
  - Activity B1.2 - Formulate a specific Charter for public/private collaboration
- Sub-strategy B2 - Support the local enterprises involved in the TC value-chains.
  - Activity B2.1 – Build capacity and promote Business development services
  - Activity B2.2 - Promote technology and innovation

**Strategy C - Improve marketing through VC development**
- Activity C1 - Develop and strengthen FBOs
- Activity C2 - Support access to production and processing infrastructure
- Activity C3 - Support the development of Value Chain Committees
- Activity C4 - Develop VC Facilitation Services
- Activity C5 - Improve traceability along the VC
- Activity C6 - Promote product quality and develop new markets

**Strategy D - Promote sustainable practices for environmental protection**
- Activity D1 - Set-up a conservation and reafforestation programme
- Activity D2 - Promote Agro-forestry practices
- Activity D3 - Monitor and address climate change issues
- Activity D4 - Promote biodiversity
- Activity D5 - Increase collaboration for Social and Environmental Impact Assessment
- Activity D6 - Support private initiatives for environmental protection
- Activity D7 - Mitigate the impact of production and processing
Strategy E - Support Research and Development
Activity E1 – Develop specific Research Programmes for the TC sub-sector
Activity E2 - Strengthen National coordination
Activity E3 - Increase International and Regional Collaboration
Activity E4 - Strengthen Research Institutes for the production of foundation materials
Activity E5 - Increase the collaboration between the private sector and the Research Institutes

Strategy F - Improve coordination and management
Activity F1 – Strengthen the capacity of the Directorate of Crop Services and other key implementing agencies
Activity F2 - Strengthen the ELWMU on environmental issues
Activity F3 - Design and implement strategic studies
Activity F4 - Promote the Outgrower concept
Activity F5 – Improve stakeholder involvement in coordination of activities
A. SUPPORT INCREASED PRODUCTION AND PRODUCTIVITY

Objective:

The strategy is focused on enhanced production both in terms of quality and quantity: to provide farmers and FBOs specific support, in terms of training, capacity building and equipment, to allow them to have access to the recommended inputs; such as fertilisers, agro-chemicals, planting material and extension services, in order to increase their productivity and improve incomes and livelihoods.

In order to achieve this objective, the following activities will be pursued:

Activity A1 - Enhance public extension delivery to increase rate of adoption of GAPs
Activity A2 - Encourage increased participation of the private sector to implement extension services
Activity A3 - Set-up and implement a programme for development and distribution of certified planting material
Activity A4 - Support mechanisation and irrigation
Activity A5 - Support development and recommendation of specific fertilisers and other agro-chemicals
A1 - Enhance Public Extension Delivery To Increase Rate Of Adoption Of Good Agricultural Practices

The diffusion and adoption of improved technologies and practices will be strongly promoted as the main activities to increase productivity. Given the limited resources for extension services and the key role that FBOs have to play along the VC, the support to FBOs will be systematically promoted.

Good Agricultural Practices cover all aspects of production such as land clearing, production of seedlings, planting, spacing, weeding, pruning, harvesting, grading, and pest and disease control. It needs to be implemented by well-trained, adequately equipped and skilled extension officers, close to and readily available to service the farmers and FBOs.

The intervention measures to be implemented or strengthened are:

a. Finalise training manuals and training sessions for all Tcs;

b. Train AEAs after initial training needs assessment in the various Regions and Districts, taking into account the VC needs on the field, provide them with equipment and training manuals;

c. Deliver training and capacity building to FBOs and farmers through different means (training sessions, distribution of manuals and brochures, radio and TV extension programmes, field and exchange visits, mobile phones and emails) and by using and developing the information and community centres and demonstration sites;

d. Increase the funds allocated to Research for development of appropriate technology packages and strengthen the links between FBOs, Extension officers and Research Institutes (through Research Extension Liaison Committees, RELCS) for improved coordination and decentralised planning;

e. Farmer to farmer training and extension will also be actively promoted.

Promotion of improved practices for fertility renewal, soil biodiversity conservation will be specifically encouraged, such as intercropping, composting of wastes (refuse-derived compost), use of leguminous plants and improved agro-forestry practices.

The fight against bushfires will be intensified through active consultations at community level and enforcement of district assembly bye-laws.

Improvement of the quality of TC products will also be promoted through continued training and certification (for example GlobalGAP for fruits or other certification methods): improved grading, reduction of residues and selection of clean and disease-free products.

However, promoting quality cannot be limited to training and capacity building: change must be market driven and generate additional revenues in order to be adopted by farmers. General improvement of the quality of TC products can only be obtained through increased collaboration between actors and VC development (see Strategy C) and through increased demand for processing (see Strategy B).
A2 – Encourage Increased Participation Of The Private Sector To Implement Extension Services

Given the limited public resources available for extension and the growing need for accurate support, the collaboration with processors and exporters for the implementation of extension services will be actively encouraged.

The development of contract farming and outgrower schemes has shown that processors and exporters can actively participate in developing private extension services. The objective is to reach a win-win situation, where farmers are trained and supported to increase the quality of their products, and where processors/exporters through implementation of adapted extension activities, are able to get the quality and volumes of products that they want.

An active collaboration with the public extension services for formulation of the extension programmes and control will be promoted.

The Government will commit itself in investing in the TC sub-sector to support the development of a growing industry, able to participate in building the capacity of farmers and FBOs.

In order to promote the increased participation of the private sector, several initiatives will be supported and strengthened:

a. The Export Development and Investment Fund (EDIF) will be supported technically and financially to become an effective Agriculture Fund, and its capacity will be strongly supported for improved capacity to evaluate, select and support the implementation of private projects;

b. The Outgrower Value-Chain Fund (OVCF) currently implemented by MOFA promotes the development of new Outgrower Schemes and provides financial support for their smooth and effective development, especially the capacity of the technical operators to play an active role in providing inputs and extension services;

c. In the Savannah Regions, SADA has a mandate to conduct PPP to pilot the development of the Northern Regions of Ghana and reduce the gap between North and South development.

The coordination of these initiatives for effective and active collaboration will be one of the keys of the success of the TCP.
A3-Establish And Implement A Programme For Development And Distribution Of Certified Planting Materials

Specific programmes will be designed to promote the adoption of certified planting material by all farmers starting new plantations. The objective is to allow farmers to buy certified seedlings at affordable prices, at the right period and in sufficient quantities. In the Cocoa VC, COCOBOD has organised Seed Production Units (SPU) under COCOBOD to achieve these objectives.

The conservation of the biodiversity of plants in Ghana is essential and must be specifically implemented at the national level for the TC sub-sector by the relevant research institutions. Additional funding for central nurseries, germplasm and scion banks and for the development of research activities for production of improved varieties will be made available.

Specific programmes will be designed to encourage the increased use and adoption of certified seedlings by farmers through provision of adequate support to the private nurseries. A special fund for the development of private nurseries in the TC sub-sector will be created and implemented at the national level: interested private nurseries shall submit applications, and the best will be selected to receive financial support, training and accreditation by the GSB, allowing them to produce quality seedlings at an affordable price. This will be linked to promotion campaigns on the use of certified seedlings.

The promotion of the seedling sector will be organised at different levels:

a. Finalisation of the standards for the production of seedlings of the major TCs (already finalised for mango by EMQAP) in joint collaboration between MOFA and GSB;

b. Support to the various Research Institutes in charge of production of foundation seeds (seedlings, root stock, scions, clones) and collaboration with the private nurseries;

c. Creation and management of the “Private Nursery Fund” by MOFA;

d. Training and Certification of the selected nurseries;

e. Use of radio programmes and exhibitions in promotion campaigns to encourage the adoption of improved seedlings and promote their positive impact on yields and revenues.
A4 - Support Mechanisation And Irrigation Services

In partnership with the Rural Technology Information Unit (RTIU) of Agricultural Engineering Services Directorate and the various private service providers, the further development of specific machines and equipment for the TC sub-sector will be promoted.

The TC sub-sector remains largely under-mechanised, especially compared to the cereal or food-crop sector, as very few machines are adapted to tree crop production. Most of the work remains manual (from weeding, to pruning or harvesting) and very few specific farm machineries are available.

Therefore the support to mechanisation services will be organised as follows:

a. Collaboration with the private sector for development of appropriate machinery and equipment, specifically developed for the production of TC;

b. Promotion and training for the use of appropriate equipment, including the provision of spare parts;

c. Support to FBOs for increased access to financial services and special funds (see Strategy C);

d. Development of skills through vocational training for operation and maintenance of equipment.

The level of irrigation infrastructure is also very limited and its improvement is expected to have positive impact on yields, especially in the fruit business. The high cost of acquisition, operation and maintenance however seriously reduces access to irrigation for farmers. Its development will only be possible in the framework of better-organised VCs, where irrigation costs (including operation and maintenance) can be put to work and generate additional revenues.

A5 - Support Development And Use Of Specific Fertilisers And Other Agro-chemicals

Specific fertilisers and chemicals for TC are rarely available at the farm level apart from cocoa inputs because they are either not commercialised by agro-dealers, or not purchased by farmers.

Farmers are often not aware of their effects and discouraged by their prices, especially if compared to the subsidised fertilisers. As a consequence, when some fertiliser is being applied, it is mostly traditional 15-15-15 fertiliser (N-P-K) which is not particularly adapted to most TC, and the dosage and frequency of application is hazardous.

The objective is to continue enhancing the formulation and use of appropriate fertilisers for the various TC at all the various stages of production.

Therefore, the TCP will implement the following activities:

a. Increased collaboration between the Research Institutes, farmers, MOFA and the major Agro-dealers for the formulation of specific inputs for the various TC;

b. Increased research on pesticides and Maximum Residue Limit (MLR) for the recommended practices;

c. Promotion of the results through extension services and promotion campaigns on GAPs, including safety procedures for farmers and workers (masks and protections, waste management of the empty pesticide bottles);

d. Promotion of soil and leaf analysis in the big and medium plantations and in the outgrower schemes.
B. PROMOTE INVESTMENT AND INCREASE PROCESSING CAPACITIES

Objective:

The objective is to increase the share of locally processed products in order to generate added-value to the sector, create jobs, and establish new marketing channels for farmers and cooperatives.

The specific objectives are as follows:
- Promote new investments (local or international) in the TC sub-sector.
- Support local processors to grow and increase their share in the VCs.

In order to achieve these objectives, the following sub-strategies and activities will be pursued:

Sub-strategy B1 - Promote new investments
Activity B1.1 – Create incentives to attract investments
Activity B1.2 - Formulate a specific Charter for Public/Private collaboration

Sub-strategy B2 - Support local enterprises involved in the TC value-chains.
Activity B2.1 – Build capacity and provide business development services
Activity B2.2 – Promote technology and innovation
**B1 - Promote New Investments**

Promoting investments is crucial for the development of the TC sector, and if well organised, can tackle many of the problems encountered by farmers (including access to credit, adapted inputs and extension services) as described earlier. Therefore, the GoG will consider the promotion of investment as one of the major pillars in the TCP.

**B1.1 – Create Incentives To Attract Increased Investments**

The TCP will encourage new investments by developing a specific toolkit for new investments in the TC sub-sector:

- Facilitate land access: Access to large tracts of land, which are often necessary to start a new business, is a complex problem and represents a serious restraint for the development of the sub-sector. MOFA will facilitate the development of specific land banks for the TC sub-sector. Therefore, a limited number of large tracts of land will be identified and selected by the GoG and made available to new investors in the TC sector under certain conditions (see following paragraph on charter for TC: the selected companies benefitting from these lands should provide guidelines in order to have access to the land).

- Map TC farms and develop GIS database: The detailed mapping of the TC farms has proven to be a useful tool for new investors when choosing the location for an industrial site to know precisely the location of the farmers and the variety produced. The advantage of the TC sector is that the lifecycle of trees are usually more than 20 years, and therefore updates can be done on a medium term basis and does not require annual surveys. The mapping will be organised for a limited number of selected crops, representing a high interest for processing investment such as Cashew, Citrus, Mango, Coconut, and Oil Palm.

- Facilitate Free Zone registration: In partnership with GIPC and GFZB, the registration on new companies, the submission of applications to GFZB for registration as free zone companies will be facilitated and delays will be reduced for increased collaboration.

- Facilitate access to special development funds: Special funds would be created to allow private partners have access to special funding or PPP, and therefore benefit from improved rates and facilitate their development. The role of EDIF will be strongly reinforced and its source of funding will be enlarged, to become a major driver of the development of the Agricultural sector generally and the TC sub-sector in particular. The implementation of the OVCF and the collaboration with EDIF will be a pilot initiative for the development of a sustainable Agricultural Development Fund, aiming at promoting sustainable growth of the sector in partnership with the private commercial banking system. The Savannah Accelerated Development Authority (SADA) will also have the mandate to develop specific PPP in the savannah areas for selected projects promoting the TC sub-sector.

- Develop new incentives for the TC sub-sector: A special study will be conducted in partnership with MOFEP for the identification of new possible incentives (fiscal and para-fiscal incentives, levies, tax exemptions) that should be developed specifically for the sector.
B1.2 - Formulate A Specific Charter For Public/private Collaboration

Based on the experience of collaboration between MOFA and several private companies in the TC sub-sector, a specific charter will be developed and promoted among the private partners, clearly defining the role of the GoG and that of the private companies, on the basis of the Outgrower Scheme model.

To benefit from the above mentioned toolkit, it will be compulsory for any private company to sign the charter.

The terms of the charter will be defined jointly by the GoG and a selection of private companies operating in the sector. The following points should be highlighted:

- Increased collaboration with local FBOs and signing of contracts guaranteeing fair and adequate prices;

- Development of collaboration based on the Outgrower scheme models, with provision for extension services and facilitation of access to financial services by the farmers and FBOs;

- Reinforcement of land titles acquisition and ownership of land right/use;
- Community consultations, decentralised land-use planning and social and environmental impact assessments for extension of plantations or development of outgrower schemes;

- Development and implementation of company policies for environmental responsibilities (biodiversity conservation plans on the plantations, reduced impact of factories and plantations, alternative energies);

- Development and implementation of company policies for social responsibilities (working and living conditions of workers, education, child labour, gender balance, AIDS and malaria programmes);
B2 - Support Local Enterprises Involved In The Tree Crops Value-chains

Local processors operate in most of the TC, and play major roles all along the various VC. Despite their willingness and motivation, they encounter great difficulties to grow and develop their businesses, due to many constraints, which include: low access to credit, high cost of labour, high competition with exporters (raw products), poor handling and packaging capacity.

Support to SMEs and to medium and large enterprises and increased industrialisation of the sector has been fully covered by several government documents, and more specifically by the recent Second National Medium Term Private Sector Development Strategy (PSDS II, 2010 – 2015) and the Industrial Policy and associated Industrial Sector Support Programme. Several projects are currently operating in that field, including the Rural Enterprises Project Phase II and the GRATIS Foundation. The present document, therefore, only highlights the activities for SMEs operating in the TC sub-sector and the special needs and possible interventions.

B2.1 – Build Capacity And Develop Business Development Services

The activities to be implemented and strengthened are:

a. Training in Good Manufacturing Practices: the TCP will associate and support the Food and Drugs Board (FDB) for the provision of training and technical assistance to SMEs in the field of food safety, hygiene and quality (in addition to the regular control visits supposed to be organised at least once a year). In order to allow the implementation of the strategies, additional funds should be allocated to FDB’s training centre for increased collaboration with SMEs of the TC sub-sector.

b. Training in management and business administration will also be organised in partnership with the programmes and NGOs currently supporting SMEs. Activities will include trainings in different fields, such as business management, HR management, marketing, quality packaging and advertising.

B2.2 – Promote Technology And Innovation

The following activities will be strengthened and implemented:

a. Promotion of innovation in the private sector: In order to stimulate growth in the private sector, the promotion of innovation will be facilitated through different approaches, including:

(i) creation of incentives for the private sector to innovate;
(ii) provision of enhanced tax-relief for private sector R&D;
(iii) implementation of technical and financial support to companies that come up with innovations;
(iv) Promotion of the exchange of ideas and information by encouraging participation in appropriate trade shows, or exchange visits.

b. Development of standards and certification: In partnership with the GSB and the relevant MDAs, standards for the processing of TC products (including processing of secondary products) will be reviewed and finalised, in order to promote increased quality in processing.

c. Increased access to credit: in addition to the necessary training, special access to funds will be organised through the above mentioned initiatives like EDIF, Gratis foundation and other available private development or grant funds. Other means such as pre-financing mechanisms through outgrower models, investment partnerships, or credit guarantees will also be investigated.
C. IMPROVE MARKETING THROUGH VALUE-CHAIN DEVELOPMENT

Objective:

The main objective is to increase the returns to farmers and small-scale processors, through a better organisation of the VC and support the development of new products and marketing channels.

In order to achieve this objective, the following activities will be pursued:

- Activity C1 – Develop and strengthen FBOs
- Activity C2 – Support access to infrastructure
- Activity C2 – Support the development of Value Chain Committees for each crop
- Activity C3 – Develop and strengthen VC Facilitation Services promoting multi-stakeholder collaboration
- Activity C4 – Improve traceability along the VC
- Activity C5 – Promote product quality and develop new markets
C1 – Develop And Strengthen Farmer-based Organisations

In a liberalised economy, farmers are extremely disadvantaged if not properly organised/grouped in FBOs. The information, technological and financial gaps are often too wide to be filled at the small-scale individual farmers’ level. FBOs should play an important role in terms of advocating for adapted policies and strategies (political role), and in terms of cooperative activities (economic role), such as: bulk sales, procurement of specific inputs, contracts with industrial partners / wholesalers and negotiations with banks and financial institutions.

Within the TCP, the creation and strengthening of FBOs is a central activity to the development and improved management of VCs.

Several tools and guidelines have been developed by the DAES/MOFA, such as: “Farmers' handbook for strengthening FBOs for Agribusiness” and “Strengthening FBOs, a facilitator’s manual”. These manuals have been designed for all agents and organisations aiming at promoting the development of the FBOs in Ghana and their increased participation in the management of the VCs. The Extension Policy is currently being revised and will support the TCP for implementation of these measures.

The measures that will be implemented and strengthened are:

a. Support to FBO creation, registration and development, by generating awareness and supporting the creation of new structures among TC farmers. The objective is to bring TC farmers together to form groups based on common interest and income generation (bulk sales, new markets, grouped procurement of fertilisers);

b. Training of existing FBOs: FBOs should be trained in management and business administration such as book keeping, accounting, contracting, quality management, and marketing. The training should also include technical capacity building, especially in plantation management (grafting and pruning, fertiliser management), in post harvest treatments and packaging (grading, packing, cold chain) and in quality oriented primary processing (shea butter production, dawadawa condiment production, fruit juices and jams, dried fruits and product development.);

c. Clustering of farmer groups and FBOs: The clustering of FBOs will be supported to help farmers reach a certain critical level and progressively organise themselves in bigger organisations along the VC. Supporting the development of clusters is the first step towards a stronger organisation of the VCs and the setting-up of VC committees (see activity C2).

d. Improved access to financial institutions: The registration and capacity building of FBOs, their linking to new business partners and the signing of formal contracts, their increased accountability, and their development of profitable economic activities will increase the access of FBOs to commercial banks. The special access to funds like the FBO fund (see following §), OVCF or EDIF funds will allow them to develop new financial relations with the banking system.
C2 – Support Access To Production And Processing Infrastructures

FBOs and farmers and other actors of the VC do not often have access to specific infrastructure for TC production, such as warehouses, packing houses, mills, drying areas, silos. Consequently, they often get lower incomes and the quality of the products is directly affected.

Issues include inadequate storage and conservation causing important post-harvest losses, limited grading, poor transportation means, limited access to cold chain facility.

In order to improve marketing, the TCP increase access to infrastructure through the following activities:

a. Support financial capacity of FBOs and VC actors in order to increase their sustainability and finance essential infrastructure. A special “FBO fund” will provide grants or loans to support the development of FBOs. Selection of FBOs will be based on their sustainability and access to market opportunities. Large national promotion campaigns through the media (radio, TV, newspapers) will be organised for FBOs to apply competitively for funding;

b. Train and support FBOs and other actors in the VC in the management and maintenance of infrastructure. The objective will be to insure sustainability through proper management (accounting, project planning and marketing) and appropriate maintenance.
C3 – Support The Development Of Value Chain Committees For Each Crop

VC Committees are private organisations bringing together all actors of a VC, including producers, exporters, processors, transporters and service providers. The objective is to create a common approach and strategy inside a VC.

The activities of such VC committees can be summarised as follow:

- Improve coordination between actors;
- Information/Communication/Business to Business (B2B);
- Advocacy for adapted policies;
- Improve the regulations of the sector;
- Generate new marketing opportunities;
- Generate and manage new funds for the sector (export levy or Carbon funds);
- Building confidence with financial actors;
- Strengthen international marketing (support for branding, trade fairs, other B2B events)
- Reduce smuggling in Ghana.

As initiated by several projects in different VCs, the development of VC committees at the local and regional levels is the first step for the creation of national “VC committee”, in charge of improving the management of the VC.
VC Committees shall be created on a voluntary basis by the stakeholders of a VC (from FBOs to exporters), and shall meet regularly to discuss the main issues and problems (market prices, organisation of the campaign, yields and on-farm prices, quality issues, pest control).

The clustering of stakeholders, even if highly essential for VC Development, cannot be simply decided. As a voluntary process, it requires ownership and a common vision from all the stakeholders. Private interests can be seen as endangered making important actors reluctant to participate in such a process.

Therefore common interests should be sought, as for example, on major quality issues that need to be addressed jointly, or national issues such as fruit fly infestations generating major losses for all stakeholders and putting export markets at risks.

In order to promote the initial development of such private organisations, some support will be necessary and provided to initiate the process:

(a) The GoG will support the creation of VC Committees, through the facilitation of meetings and provision of and technical support;

(b) Financial support will be provided through projects or special funding such as FBO fund and BUSAC II Fund;

(c) The GoG will also support the VC committees for the definition and implementation of adequate levies on exports in order to allow the self-funding of such VC Committees.

C4 – Develop And Strengthen Value-chain Facilitation Services

In the framework of the formulation of the new Extension Policy and the activities implemented by several projects supporting VC in Ghana, the TCP will promote the development of a common approach offering VC facilitation services along the different value chains of the TC sub-sector.

The methodology is to promote the VC development approach towards all actors in charge of providing technical assistance and advisory services in the sector, such as agents from RADUs and DADUs, Projects, NGOs, business partners or service providers.

The main objective is to support the development of fair and sustainable business relations between the VC stakeholders and especially between the private sector and the FBOs, through specific support for negotiations (contracts and price mechanisms), increased stakeholder dialogue, B2B relationships, growing market intelligence capacities and increased linkages with the commercial banking system. Such an approach will be promoted from the local to the national level.

The Facilitation services will not only be targeting FBOs and farmers, but also business partners (processors, industrial partners, banks, service providers) who often lack the field experience and need specific technical assistance (asset management, financial and HR management, business plan, source of funding) in order to secure their projects. Prior risk evaluation is crucial in the framework of new investments and should include assessment of all stakeholders, due diligence exercises of the industrial company and market assessment of the final product to evaluate the feasibility of the investment.

Such an approach should not be the role of the state on a long term basis and should progressively fall under the responsibility of large national FBOs or Value Chain Committees at the national level.
C5 – Improve Traceability Along The Value Chains

The informality of the sector and specifically the great number of unregistered actors, such as middlemen and traders along the various VC, strongly tend to hamper the revenues. In shorter VCs (reduced number of actors between producers and consumers) the margin shared by actors is usually higher.

Serious quality issues have also risen, especially for the export market, which require an improved traceability and control of the products. The most serious example is the Fruit Fly issue.

In order to promote quality and increase the incomes, the TCP will support the implementation and strengthening of the following activities:

a. Improve the registration of actors, from farmers and FBOs, middlemen and agents to processors and exporters;

b. Train the various actors in quality control and traceability requirements;

c. Design a specific traceability system for the fresh fruits VC, in partnership with PPRSD, GEPC, the Research Institutes, the Customs and the private sector companies, especially in the framework of the fight against the fruit fly.

C6 – Promote Product Quality And Develop New Markets

The objective is to develop new products and encourage the identification of alternative markets, offering new opportunities to FBOs and stakeholders, and therefore, reducing the risks and exposure to price changes.

The following activities will be implemented:

a. International certification and standards: Many of the alternative markets offer higher prices, such as niche markets for premium quality (e.g. air freight fresh fruits), Organic and Fair Trade products.

These markets require certification and increased traceability of the products, and therefore are mostly accessible to well-organised and well-trained FBOs or farmers. Several projects are currently training farmers into obtaining the GlobalGAP certification, mostly in the fruit sector. The TCP will promote the training and certification of a large number of farmers for the various certification standards used in West Africa, mostly on fruits and vegetables, but also on Cocoa and other products.

Environmental standards, such as Sustainable Agriculture Standards or Organic farming will be promoted. These certificates are attributed on a voluntary basis, and are often requested for products entering international markets, mostly in the European Union. So far, there are no quality certification procedures dedicated to national or regional markets in the West Africa region.
b. Development and enforcement of local standards: In the same way, MOFA in collaboration with the GSB will continue to develop new standards for TC products (including processed products, see B2.2) and to promote their implementation, through the promotion of GAPs (see A1) and VC Development.

c. Promotion of the Domestic market: the development of the Ghanaian market (and similarly the West African regional market) might represent the biggest opportunities for most of the TC products.

The Domestic Trade and Distribution Service of MOTI is directly in charge of promoting the development of the domestic market. Therefore, in partnership with the Ministry of Health, promotion campaigns will be launched to promote the consumption of fresh fruits and vegetables, in particular at the school level. Links with the Ghana School Feeding Programme will be encouraged to promote the consumption of fresh fruits and other TC products at school. Similarly, market development studies for other TC products in partnership with the private sector will be supported through EDIF funds or SADA.
D. PROMOTE SUSTAINABLE PRACTICES FOR ENVIRONMENTAL PROTECTION

Objective:

The objective of the strategy is to address both the negative environmental effects of TC cultivation, including pollution, deforestation, loss of biodiversity, declining soil fertility and erosion, climate change, bush fire, and the positive effects such as carbon sequestration and soil conservation. The footprint of the TC sub-sector should be reduced to a minimum through the promotion of protective measures and improved regulation.

In order to achieve this objective, the following activities will be pursued:

Activity D1 – Set-up a conservation and reafforestation programme
Activity D2 – Promotion of Agro-forestry practices
Activity D3 – Monitor and address climate change issues
Activity D4 – Promote biodiversity
Activity D5 – Increase collaboration for Social and Environmental Impact Assessment
Activity D6 – Support private initiatives for environmental protection
Activity D7 – Mitigate the impact of production and processing
D1 – Set-up A Conservation And Reafforestation Programme

This conservation programme will be directly linked to rural income generation through the conservation and propagation of indigenous tree crops, such as Dawadawa, Shea, Baobab, Tamarinds and Cashew in the Savannah regions. The objective of such a programme is to combat against deforestation, especially the felling of trees with economic and social value. The planting of shea trees has often been considered as extremely complicated, due to the particularly long gestation period of the trees (sometimes up to 20 years) and to the unavailability of improved planting material. Recent research has shown the possibility of reducing the gestation period by several years.

Main activities of the Programme will be the following:

a. Establish clonal and gene banks and replant the indigenous TC in partnership with the Research Institutes at the national and regional levels;

b. Facilitate the planning and implementation of the conservation and reafforestation activities at the District/community level, in partnership with the Research Institutes, the Forestry Commission (MLNR) and the District Assemblies;

c. Develop land-use management plans within the districts and villages and build the planning capacity within the communities; Advocating for a specific legislation;

d. Organise environmental education on bush fires and conservation measures at the district/village level in collaboration with the District Assemblies, Ghana National Fire Service (GNFS) and the Community Environmental Management Committees already in place.

D2—Promote Agro-forestry Practices

The development of TC farms has been done through the deforestation of large areas. Most of the original trees have been cut down therefore damaging the ecosystems, but also reducing the soil fertility of the farms and increasing their vulnerability to pests and diseases.

Several research programmes have shown that replanting or partial reafforestation within existing TC farms is effective for restoring biodiversity and increasing productivity. It can increase soil fertility and moisture, improve shading, increase protection against wind and generate income from timber, firewood or other products.

Therefore, the following activities will be implemented:

a. Increased funding of Research Programmes on agro-forestry in the TC sector;

b. In partnership with current programmes and COCOBOD, promotion of agro-forestry practices and training of FBOs and interested farmers;

c. Promote certification of agro-forestry farms (e.g. Sustainable Agriculture Standards);

d. Evaluate the positive impact of Agro-forestry programmes in terms of Carbon sequestration, and apply for existing Carbon funds;

e. Promote selective clearing of land for the development of new plantations in order to preserve trees of economic and social importance such as dawadawa and shea.
D3 – Monitor And Address Climate Change Issues

The following activities will be implemented:

a. Mitigate the impact of the TC sub-sector on climate change:
The major negative impact of the TC sector on climate change is deforestation for establishment of new farms and plantations. The challenge is therefore the conservation of remaining forest areas, especially primary forests.
Large commercial plantations including outgrower schemes will be subjected to Environmental Impact Assessment. The surveillance of small-scale plantations, which are not subjected to registration and environmental approval, is more complex and will require improved planning and decentralised monitoring at district level. The role of the District Assemblies and Community Forest Brigades will be reinforced.

Other activities that will be encouraged include: (i) promote renewable energies, (ii) promote energy savings for processing (including co-generation in the large processing companies) and (iii) promote alternative transport modes such as rail and naval transportation in the Volta region.

b. Manage CDM and Carbon funds in agriculture:
The positive impact of TC in carbon sequestration should be taken into consideration in order to generate additional funds (through the various existing Carbon funds) for financing of the policy. The methodology validated for Rubber will be implemented and will also be extended to other eligible TC, such as Mango, Citrus, Cashew, Dawadawa and Shea. The impact of the Conservation and Reafforestation Programme (see D1) should be taken into account.
MOFA will lead this activity, through the Environment, Land and Water Management Unit (ELWMU) in partnership with EPA.

D4 – Promote Biodiversity In The Tree Crops Sub-sector

In partnership with EPA and the MEST, a special study will be conducted to tackle the biodiversity issue in the TC sub-sector. Recommendations will be made to revise the existing legislation in order to:

a. Review existing regulations to ensure biodiversity issues are addressed;

b. Ensure that the existing mandatory environmental impact assessment includes a biodiversity assessment in order to guarantee that the status of rare, threatened or endangered species and high conservation value habitats, if any, living in the plantation or which could be affected by plantation, are identified and their conservation taken into account in management plans and operations;

c. Develop existing and new tools concerning Biodiversity management and adapt them to land management in the TC sub-sector.

d. Revise the existing Environmental permit to take into account biodiversity (threshold to be defined for each crop).

The development of a new plantation (including outgrower schemes) will be subject to the formulation of a biodiversity plan including the following points:

(I) implementation of a biodiversity management plan,
(ii) creation of biodiversity corridors and reserves inside the plantation,
(iii) promotion of GAP in terms of biodiversity,
(iv) development of agroforestry practices, based on the existing toolkit developed in the framework of the HCV initiative for Ghana.
**D5 – Increase Collaboration For Social And Environmental Impact Assessment**

Based on the Agriculture Sector Assessment Guidelines, an increased collaboration between MOFA and EPA will be promoted. The objective is to ensure that the existing regulations are adapted to mitigate environmental issues for the TC sub-sector.

More specifically, the existing regulation will be revised to take into account the specific needs of the TC sub-sector: new commercial plantations will be subject to increased control through environmental permit and social and environmental impact assessment.

Similarly, the development of new outgrower schemes, while strongly promoted by GoG, will be subject to compulsory social and environmental impact assessment. The surface area taken into account for environmental permit (plantations of more than 40 ha) will not be calculated at the farmer level, but at the level of the whole outgrower scheme.

The GoG will guarantee that new developments do not damage the local environment and do not increase poverty through the forced displacement of previous tenants or significant loss of large food-crop production. Increased participation of District Assemblies will be promoted.

**D6 – Support Private Initiatives For Environmental Protection**

In partnership with the national VC committees or the various stakeholders, initiatives like the RSPO in Ghana will be strongly encouraged.

The ELWMU in charge of Environmental issues in the TC sub-sector will be responsible for promoting similar approaches among the other VCs. The work will start with the well-organised VCs, such as Cocoa, Citrus and Mangoes, Rubber, and will then be developed along with the development of the VC Committees in the other crops.

**D7 – Mitigate The Impact Of Production And Processing**

The negative impacts of processing include poor management of effluent, high water consumption, water, soil and air pollution and poor disposal of industrial waste.

The following activities will be implemented:

a. Reviewing of existing laws and regulations on environment to ensure that they mitigate environmental issues for processing in the TC sub-sector;

b. Supporting the enforcement of the current legislation;

c. Promoting Good Agricultural Practices and Good Manufacturing Practices that mitigate the impact of production and processing on the environment;

d. Evaluation of the impact and specific needs of micro and small-scale processing companies as a specific target group affecting the environment, especially oil palm mills. A specific information and support programme will be designed to promote improved and sustainable practices for the small-scale processors.
E. SUPPORT RESEARCH AND DEVELOPMENT

Objective:

The objective is to strengthen Research and Development to support the TC sub-sector. In order to achieve this objective, the following activities will be pursued:

- Activity E1 - Development of specific Research Programmes for the TC sub-sector
- Activity E2 - Increase National coordination
- Activity E3 - Increase International and Regional Collaboration
- Activity E4 - Strengthen Research Institutes for the production of foundation material
- Activity E5 - Increase the collaboration between the private sector and the Research Institutes
E1 - Development Of Specific Research Programmes For The Tree Crops Sub-sector

The Research component will be strengthened in the TC sub-sector and specific Research Programmes will be developed and funded for the TC value chains. Activities will include:

- Breeding and development of high yielding planting material;
- Vegetative multiplication;
- Entomology, virology and pathology;
- Good agricultural practices, like integrated crop and nutrient management, plant population studies, weed control, pruning and post-harvest techniques;
- Processing and development of processing techniques for secondary products and new products; (f) Organic farming; (g) Agro-forestry and inter-cropping; (h) Formulation of specific fertilizer compositions for each crop; (i) Socioeconomic and environmental research.

In partnership with SADA, a special programme on indigenous trees will be designed, funded and implemented with CRIG, SARI and UDS.

Special funding will be made available to strengthen the Fruit Fly Programme and to develop new research on national pests and diseases, such as the mealy bug.

E2 - Increase National Coordination

For Research to effectively support the TCP, good coordination with the DCS, the CSIR and the Universities is required. Several researchable issues that have assumed a national dimension such as the ‘fruit fly’, require an extremely specific and accurate response and will be tackled with priority.

The role of the different institutions, such as OPRI, CRJ, CRIG, SARI and the Universities, will be clarified for each crop and increased collaboration will be promoted.

E3 - Increase International And Regional Collaboration

The collaboration with countries in the ECOWAS sub-region and Africa will be increased and encouraged for most TC. Participation of the Ghanaian Research Institutes in international Programmes including CGIAR, IITA, ICRISAT and ICRAF will be actively promoted.

E4 - Strengthen Research Institutes For The Production Of Foundation Material

This activity should be implemented in relation to the Planting material strategy (see A3). Research Institutes will have the role to preserve the genetic diversity of the TC and manage “foundation nurseries” through specific biotechnology techniques (scion banks, clonal gardens, germplasm plots and gene banks).

“Foundation nurseries” for all major TC will be established and elite material propagated to the selected private nurseries and other agricultural stations for distribution.
E5 – Increase Collaboration Between The Private Sector And The Research Institutes

Collaboration between the various stakeholders of the private sector and the Research Institutes will be actively promoted. That includes:

a. Effective participation of farmers, FBOs and small-scale processors in the development, implementation and evaluation of field research programmes;

b. Increased collaboration with large private companies for development and funding of programmes on researchable issues;

c. Ongoing collaboration with agro-dealers for the development of specific inputs for the TC sub-sector.
F. IMPROVE COORDINATION AND MANAGEMENT

Objective:

The objective is to strengthen the capacity of MDAs and other stakeholders for effective planning, coordination and implementation of activities under the TCP.

In order to achieve this objective, the following activities will be pursued:

- Activity F1 – Strengthen the capacity of the Directorate of Crop Services and other key implementing agencies
- Activity F2 – Strengthen the ELWMU on environmental issues
- Activity F3 – Design and implement strategic studies
- Activity F4 – Promote the outgrower concept
- Activity F5 – Improve stakeholder involvement in coordination of activities
F1 - Strengthen The Capacity Of The Directorate Of Crop Services And Other Key Implementing Agencies

The lead role in the coordination and implementation of the TCP will be played by the DCS of MOFA. The capacity of other relevant agencies will be strengthened technically and financially with respect to the TCP objectives. The number of permanent agents in charge of promoting the TC sub-sector in the Head Office and in the Regions will be increased to allow effective implementation of activities.

The main activities of DCS in the implementation of the TCP as follows:

a. Equip and train field agents based on a Training Needs Assessment. Regular trainings on up-to-date techniques will be performed inside the RADUs and DADUs located in TC areas. The training will deal with production techniques, GAPs and data collection in the field of TC, but will also promote VC facilitation (see strategy C);

b. Develop a VC Facilitation plan, in partnership with the RADUs and DADUs and the on-going projects and improve the linkages with the private sector;

d. Monitor and evaluate the TCP in partnership with PPMED services. The implementation of the TCP will be closely monitored and evaluated on a day to day basis. The objective is to follow the proper implementation of activities and to be able to adapt the interventions to the ever-evolving context (new regulations, world market).

F2 - Strengthen The Environment Land And Water Management Unit On Environmental Issues

In partnership with the EPA, the unit will be in charge of the following activities: (a) Supporting and monitoring the trading of Rubber carbon certificates and promotion of the development of new CDM methodologies for other crops; (b) Supporting RSPO and other similar private initiatives; (c) Reviewing enforcement of existing legislation to mitigate the impact of TC on environment; (d) Promoting compulsory Social and Environmental Impact Assessment for new plantations and outgrower schemes.

F3 - Design And Implement Strategic Studies

Design and implement master-plan studies for the major TCs, building on the experience of Rubber and Oil Palm master-plans (2001 and 2011), and other studies. The following studies are recommended:

- A Master Plan for the Coconut sector. The Coconut VC is highly unorganised and has been suffering from the Cape St Paul Wilt Disease for many years. The revenues of the farmers in the Coconut areas have been seriously affected and the industry is in real danger of collapse. The international market for coconut products is growing. In recent years new markets such as coconut milk, cream and water, virgin coconut oil, have created interesting opportunities for the sector.

- A Master Plan for the Cashew sector. Such a study for the cashew sector will organise interventions along the VC and promote growth in the next years.

- A Master Plan for the Citrus and Mango sector. Several studies have recently been financed by the WB and the EU on the fresh fruit and vegetable sectors in Ghana. The Master Plan for the Citrus and Mango VC should build on the studies.
- A Master Plan for the Shea and Dawadawa sectors. A study will be conducted jointly with SADA to promote an integrated approach for the development of these VCs. It will be linked to the Feasibility study of the Conservation and Reafforestation Programme (see D1).

- A Feasibility study for the development of new Outgrower schemes: The study should build on positive results of the Rubber Project (phase I to IV) in the Western Region and the OVCF. It should explore extension of rubber project in the Eastern Region and new outgrower schemes in the Oil Palm sector based on the Oil Palm Master plan.

- A Feasibility study for the continued development of the Coffee VC: COCOBOD has started to implement a programme for the revival of the Coffee VC. This programme should be strengthened in order to promote the production of coffee, as all the conditions are excellent for the country to become a major producer in West Africa.

F4 – Promote The Outgrower Concept

The following activities will be implemented: (a) Promotion of the outgrower model, based on the positive results and lesson learnt of the previous projects. It should include social and environmental impact assessment. Ongoing and new schemes will need the experience and support of MOFA officers. (b) Monitoring of the existing schemes in order to follow and guarantee the repayment of loans contracted by farmers. The GoG was involved either as the direct manager of loan funds (Rubber Project phase 1 to 3), and as the major shareholder of the bank in charge (ADB for phase 4). It is essential that the farmers respect their contractual obligations to repay the loans. Diversion and side-selling of the products to other operators than the one securing the loan should be strictly avoided. The role of the GoG is essential to make sure that the financial structure does not collapse, jeopardising the whole VC.

F5 – Improve Stakeholder Involvement In Coordination Of Activities

The increased participation of the private sector in the coordination of the TCP will be actively promoted as follows:

- The major actors of the TC value chains will be members of the Steering Committee in charge of coordinating the implementation of the TCP, including FBOs, VC committees, representatives from the banking system and major companies;

- The clustering of Farmers’ groups into larger FBOs and the development of active VC committees will be supported. This will allow the development of effective representation of the farmers, which will be involved in the coordination of the TCP;

- The decentralised implementation of the policy and the active participation of the District and Regional organisations from the different MDAs will target an increased participation of local actors in the planning, monitoring and evaluation of the implementation of activities;

- An effective M&E framework will be developed to guarantee the regular follow-up of activities, with a special emphasis on private sector participation. Regular feedback will be given at the field level.
5 CROSSCUTTING ISSUES

A large number of policies and activities have a direct impact on the TC sub-sector but are not directly covered by the current Policy document.

Major cross-cutting issues are presented as follow, and include specific recommendations for the TC sub-sector:

- Access to land
- Access to credit and adequate financial services
- Feeder Roads and Highways
- Vocational training and education
- Macroeconomic Policy
- Gender Issues
- Pro-poor approaches
- Working conditions in plantations/Child labour

5.1 ACCESS TO LAND

Access to land in Ghana remains a highly complex and multi-actor issue. Even if strongly impacting the TC sub-sector, it cannot be addressed easily since it covers a lot of issues which are not directly under the responsibility the TCP.

Extensive work in reforming the actual land tenure system is presently being done by the Lands Commission, and a large multi-donor programme is being funded over a long period to review and improve the current system (Land Administration Development Project). As far as agriculture in general, and the TC sub-sector in particular is concerned, the following points should be taken into consideration for further action in reforming the land tenure and land use models in Ghana:

- Secure access to land for small scale farmers on a long term basis and make sure that farmers are not forced to move from their lands to allow the development of real estate properties, industrial sites or even new TC plantations or outgrower schemes, without prior compulsory social and environmental impact assessment and proper compensation (both in terms of new accessible land and financial compensation). The growing pressure on arable lands (for real estate or mining) must be properly controlled and monitored. GoG should make sure that small-scale farmers benefit from adequate legal protection and advice.

The progressive use of land titles can be a positive element to reach that objective, but is not the only way to secure land access: Improved land use management at the local level (village and district) in partnership with the District Assemblies and the local Chiefs is also essential.

- Promote fair investment and sustainable development of new TC projects (nucleus plantations and outgrower schemes). The development of new industrial projects is essential for the development of the TC sub-sector, and will be strongly encouraged and supported. Such an approach can only be effective if new investors can find adequate plots of land available. Therefore, the development of land banks is essential for the GoG to keep control on the acquisition of large areas of land and their use. These banks could be managed at MOFA level for the TCP, before further centralisation at the Lands Commission level. Developed land banks will also facilitate the implementation of environmental and social impact assessment studies. Once again, active collaboration with the local Chiefs is essential.

- Promote decentralised planning and land use management at the district/village level: the implementation of the reform of the land system will require extensive community participation. The general vision has to be driven by the GoG, but its implementation needs to involve all members of the civil society and shall be based on large public consultations at the village and District levels on the needs and wills of the population.

The proposed approach is to delineate areas dedicated to the various activities implemented in the area (e.g. urban, industrial, agricultural areas, wetlands and reserves) and to agree on their use. The objective being that farm lands for example should not be subject to speculation by realtors.
5.2 ACCESS TO CREDIT, ADEQUATE FINANCIAL AND INSURANCE SERVICES

As developed above, the TCP will actively promote the development of increased financial cooperation between farmers, FBOs, small-scale processors and the commercial banking system. Rural and Commercial banks and other financial institutions are still largely reluctant to invest massively and in the long run in the agriculture sector, especially in the TC sub-sector, with the exception of Cocoa.

Experience has shown the difficulty for projects or government organisations to directly provide credit access to farmers (low returns and reimbursement rates, poor efficiency on the field). The objective should, therefore, be to better-involve the commercial banks and to build confidence between the actors of the sector through the development of a good business environment and the use of appropriate methodologies and instruments, such as:

- Strengthen the capacity of VC actors, and especially small scale farmers and processors, in business management, record keeping and project planning capacity;
- VC development and organisation to improve the links between FBOs and commercial banks;
- Promotion of contract farming and outgrower schemes to create a “triangular” system that provides security to the different actors involved in the financial operation (FBO / Technical operator / Bank). Farmers should be able to benefit from longer loans with a moratorium for repayment of loans adapted to the gestation period of the crops;
- Improvement of existing development funds and creation of new funds with increased links or operating directly with the commercial banking system (such as FBO fund, EDIF, OVCF, and other grant schemes for private sector development). These funds can offer bank guarantees to the applicants (therefore securing their applications) or propose reduced interest rates and/or long term repayment periods.

More specifically the EDIF fund will be strengthened technically and financially to act as an Agriculture Development Fund, operating notably in the TC sub-sector.

The general capacity of the commercial banks to operate in the agricultural sector should be strongly reinforced. Bank officers and managerial staff should be trained in evaluation and analysis of agricultural projects (small- and large- scale) and commercial agriculture should be progressively recognised for what it really is: a profitable sector with opportunities for business.

Specific support will also be provided for the development of economically viable agricultural insurance products. In partnership with the GAIP and the NIC, the TPC will promote the following activities:

- Support the Ghana Meteorological Agency and private stakeholders for the management and rehabilitation of meteorological infrastructure as well as improve data collection, analysis and management;
- Train and educate relevant stakeholders, such as insurance companies, banks, delivery channels and farmers in development and use of insurance products;
- Promote an enabling regulatory and political environment for agricultural insurance.
5.3 ROADS AND INFRASTRUCTURE DEVELOPMENT

In partnership with the Ministry of Transport and the Ministry of Roads and Highways, the TCP will advocate the increased development of transportation infrastructure in rural areas. More specifically the following points will be promoted:

- Improve decentralised planning of rural roads (rehabilitation or new roads) to ensure that works are linked to agricultural production and access to market.

- Increase consultation and participation of TC farmers, FBOs and VC actors, and reinforce the role of the District Assemblies in decentralised planning;

- Improve the maintenance of the feeder roads network in close collaboration with the local populations to create employment opportunities;

- Promote alternative transportation modes, such as railways, naval transport on the Volta Lake and rivers;

- Support the further development of the international Airports and Ports for agricultural exports;

- Facilitate access to electricity and water to support processing facilities.

5.4 VOCATIONAL TRAINING AND EDUCATION

As stated above, training and education of all stakeholders of the TC sector will be one of the major approaches of the TCP, such as: capacity building of FBOs and farmers, technical and managerial training for AEAs and field agents, provision of training in management and food safety to staff of processing companies.

In addition to these measures, the TCP will also encourage the following:

- Improve the agriculture curriculum at the University, Secondary and Basic School levels to reinforce the courses and lessons on Tree Crops: including on farm management techniques, Good Manufacturing Practices and processing technologies, but also marketing and management. Similarly the agricultural knowledge and capacity of analysing and understanding agricultural projects should be systematically taught and promoted in the various banking institutions.

- Promote Adult Education campaigns and programmes in the rural areas: these programmes can be directly linked to extension services or training in environmental management and GAPs (in addition to other practical topics, such as maternal and child health, sanitation, HIV) in order to increase the interests of the illiterate farmers and provide direct applicable results.
5.5 MACROECONOMIC POLICY

As stated in the FASDEP II document, the performance of the Agricultural sector and the TC sub-sector in particular is affected by macroeconomic policies. These policies are targeted towards promotion of a stable macroeconomic environment in Ghana, but may not all favour the agricultural sector:

- Inflation in the past twenty years has often exceeded 20% per year but is now approximately 10%. In order to support price stability and control inflation, the marginal lending rates of the Central Bank (Current Monetary Policy Rate of the Bank of Ghana) remain high (13% in June 2011). The main direct consequence is the high costs of interest applied by the commercial banks, which often exceed 30% (27 to 44% on average in 2009). In addition, the Ghanaian commercial banking system has poor access to long-term capital and considers the agricultural sector as risky, therefore reducing the access to credit in the sector.

- Similarly, the GoG through MOFEP and BoG, has been implementing a solid monetary policy with the objective to reduce the depreciation of the Ghanaian Cedi against the American Dollar and other currencies and to maintain the Cedi rate as stable as possible. Such an approach aims at supporting the purchasing power of the Ghanaian population, at controlling inflation and reducing the impact of public debt in foreign currencies on the deficits. It supports the ability of consumers and industries to purchase foreign goods (food or manufactured goods). It also reduces the costs of imported agricultural goods and reduces the prices paid to Ghanaian farmers or industries that are exporting products (especially in the TC sector). It therefore reduces the general competitiveness of the Ghanaian production and export sectors.

- The taxation and trade policies have been wisely used so far to promote the development of the Agricultural sector. Even if the impact of such measures is hard to assess and their enforcement must permanently be supported, the TCP will encourage the further development of specific measures to promote the growth of the sector. The development of new measures will be based on the following conditions: economic impact assessment; promotion of fair and sustainable investment through specific incentives for environmentally friendly and socially acceptable practices tackling poverty reduction and improving livelihoods.

The TCP will promotes the increased consideration of agricultural issues in the formulation of macroeconomic decisions.
5.6 GENDER ISSUES

Gender issues have become an essential element in Rural Development. The weekly workload of men and women in the agriculture remains highly unfavourable to women, especially when it comes to unpaid work and domestic labour issues. The key role of women in agriculture is progressively acknowledged but few approaches target gender equity as a major objective.

As far as the TC sector is concerned, the following facts will be taken into account in the implementation of the strategies:

- Some TC crops are quasi and exclusively managed by women (e.g. shea nut and dawadawa up to and including processing) and represent an extremely important component of the household revenue. The progressive shift towards commercial agriculture must guarantee that these women remain actors of the VC and are not pushed out, leading them towards increased poverty. The gender difference in roles and activities among the agricultural sector must be acknowledged.

- A lot of problems that farmers are facing are even greater for women, such as equal access to resources (land or credit and extension services). All activities must be implemented to fill this gap and to avoid possible perverse effects. The titling of lands, if not properly managed could, for example, lead to reducing women's access to land in the long term.

- On the contrary, the increase of national processing capacities could create employment for a lot of women, especially poor women with little education. Proper working conditions (health and safety measures, health insurance, and fair remuneration) will be promoted and controlled by the authorities.

In the implementation of the strategies, in addition to the gender mainstreaming approach proposed by FASDEP II, the following activities will be implemented:

- Development of special research and extension programmes involving and targeting rural women;

- Empowerment and capacity building of Women Groups (processing and cooperative groups);

- Promotion of systematic gender mainstreaming and analysis in projects and field interventions. Clear objectives will be established for gender actions, monitoring and impact assessment;

- Promotion of systematic gender mainstreaming in policy and strategy planning (e.g. TCP's Steering Committee);

- Development of a M&E matrix for the reduction of gender inequality and inequity (data collection and statistics with gender-differentiated information and gender disaggregated data);

- Increased recruitment of women in the GoG's entities, projects and partners.
5.7 PRO-POOR APPROACHES

Agriculture is a major opportunity for pro-poor growth in rural areas. The TCP promotes the inclusion of the poorest farmers in the value chains, through VC development and the building of linkages with commercial and financial partners. However, studies have shown that the beneficiaries of TC support are not usually “poor” farmers. Most of the proposed activities and policies in the Rural Development sector impact mostly “middle-class” farmers. Reaching the poorest is often much more complicated and requires specific support. For example, poor farmers in remote areas (little access to roads, no electricity and water, few banking or credit institutions in a close range) are less likely to see industrial partners settle an industry and promote an outgrower scheme in their area.

In order to take into account such situations, the TCP will encourage the implementation of activities such as: feeder road development in remote areas, adult education, micro-credit and micro-projects programmes, water and sanitation, reproductive health programmes and programmes to fight malnutrition.

The TCP will also promote the implementation of regular Poverty Impact Assessment and Sustainable Livelihood studies to evaluate and better-target the interventions in the rural sector and the TC sub-sector in particular.

5.8 WORKING CONDITIONS IN PLANTATIONS AND CHILD LABOUR

The improvement of working conditions in TC plantations in Ghana for permanent and temporary workers will be actively promoted, along with the representatives of the workers unions, the private companies and NGOs from civil society. The objective is that all companies provide and develop social policies for their workers, including:

- Fair and acceptable salary conditions and contracts;
- Health and Safety regulations;
- AIDS and Malaria programmes;
- Improved living conditions for the workers (housing, water and sanitation, electricity);
- Education programmes for workers’ children;
- Programmes for child labour prevention;
- Programmes for equitable gender balance.

In partnership with COCOBOD, which has been strongly involved in eradicating child labour, specific measures against child labour in the TC sub-sector will be implemented in close collaboration with the private sector. These measures include: regular assessment studies and monitoring, education at farm level and promotion campaigns for child education, increased enforcement of the laws and regulations against child labour and the development of certification systems to.

The promotion of improved working conditions through the development of social policies in the industry and the eradication of child labour will be specifically highlighted in the formulation of the charter for Public Private Partnership in the TC sub-sector.
6 IMPLEMENTATION FRAMEWORK

The implementation of the TCP, and its ability to reach its set objectives and have a real impact on the development of the TC sub-sector will, to a large extent, depend on the effectiveness of the coordination of activities.

A large number of partners from various MDAs are involved in the implementation, hence the need for effective coordination.

In order to allow a smooth and effective implementation of the TCP, two other strategic documents will be developed (by June 2012) which will include the following:

- A Strategic Plan, giving detail of the proposed strategies, budgets and M&E matrix;

- An Implementation Manual transforming the strategies into real activities on the field and support an effective coordination. The manual will include chapter for each of the identified crops.

6.1 INSTITUTIONAL PARTNERS:

The core group for the coordination and implementation of the TCP is composed of the following members:

THE MINISTRY OF FOOD AND AGRICULTURE AND ITS DIRECTORATES:

MOFA will be the executing agency for the implementation of the Policy.

More specifically, the following Directorates will be strongly committed:

- DIRECTORATE OF CROP SERVICES: the Industrial and Tree Crops Unit will be strengthened to act as the main entity responsible for implementation and coordination of the TCP;

- DIRECTORATE OF AGRICULTURAL EXTENSION SERVICES: the DAES will be responsible for redefining the Extension Policy, coordinating all extension activities under the TCP, coordinating the VC Facilitation Services and FBO support;

- POLICY PLANNING, MONITORING AND EVALUATION DIRECTORATE: PPMED will be coordinating all activities concerning M&E, review of the TCP and impact assessment;

- PLANT PROTECTION AND REGULATORY SERVICES DIRECTORATE: PPRDS will be responsible for coordinating the activities related to standards and quality, pest and disease control, and phytosanitary control;

- STATISTICAL RESEARCH AND INFORMATION DIRECTORATE: SRID will be in charge of analysing data and information in the TC sub-sector;

- REGIONAL AND DISTRICT AGRICULTURE DEVELOPMENT UNIT: RADUs and DADUs will be strongly involved in the field implementation, coordination and monitoring and evaluation of the TCP and compilation of the production figures at the regional and district levels;
THE MINISTRY OF TRADE AND INDUSTRY AND ITS DIVISIONS AND AGENCIES:
MOTI will participate directly in the implementation of the TCP, through its operational divisions and through its trade and export agencies:

- TRADE FACILITATION DIVISION: will be responsible for coordinating all activities in the field of ports and airports, cold chain management, trade facilities;

- EXPORT TRADE SUPPORT SERVICES DIVISION: will be in charge of coordinating the support services to the export sector to enable it achieve growth and expansion in export markets, as well as develop new value added products for Ghana’s export portfolio. This will be done in partnership with GEPC. This division is also in charge of EDIF;

- DOMESTIC TRADE AND DISTRIBUTION SERVICE DIVISION: is directly in charge of promoting the development of the domestic market.

- SME AND TECHNOLOGY DIVISION: will promote the development of the SMEs in the TC sector, in partnership with the active Projects, such as the Rural Enterprises Project or the GRATIS Foundation.

- EXPORT DEVELOPMENT INVESTMENT FUND: the Export Development Investment Fund will be supported to become an effective Agriculture Investment Fund. It will be a strategic instrument for the implementation of the TCP.

- GHANA EXPORT PROMOTION COUNCIL: GEPC has the sole responsibility to develop and promote exports of non-traditional products. This involves the provision of technical assistance at the enterprise level in production, marketing and training, general advisory services, as well as participation in export finance committees aimed at creating an enabling environment for non-traditional export expansion.

- GHANA FREE ZONES BOARD: GFZB will be responsible for promoting a good production and business environment. It will provide competitive free zone incentives and operation of an efficient "one-stop-shop" for the promotion and enhancement of domestic and foreign investment.

THE MINISTRY OF FINANCE AND ECONOMIC PLANNING AND THE COCOBOD:

MINISTRY OF FINANCE AND ECONOMIC PLANNING: The role of MOFEP in the implementation of the TCP will be essential including: implementation of macroeconomic policies, including trade, fiscal and monetary policies.

COCOBOD: The mission of the Board is to encourage and facilitate the production, processing and marketing of good quality cocoa, coffee and shea nut in all forms in the most efficient and cost effective manner, and maintain the best mutual industrial relation with its objectives. It will play an active role in the implementation of the TCP, notably through the future research of the Cocoa Research Institute of Ghana.

THE ENVIRONMENTAL PROTECTION AGENCY
EPA is the major public body for protecting and improving the environment in Ghana. It will be responsible for reviewing and enforcing the environmental legislation to mitigate the impact of the TC sub-sector. An increased collaboration with the MOFA will be promoted for Environmental and Social Impact Assessment studies and enforcement of environmental regulations.

GHANA INVESTMENT PROMOTION CENTRE:
GIPC co-ordinates and monitors all investment activities in Ghana and assists both domestic and foreign investors. Activities include: Enhancing the investment climate; promoting investments in and outside Ghana, through effective promotion, collection, analyses and dissemination of information about investment opportunities and sources of
investment capital; assisting investors by providing support services, including assistance with permits required for the establishment and operation of enterprises.

SAVANNAH ACCELERATED DEVELOPMENT AUTHORITY
SADA will be one of the major implementing agencies of the TCP. The objective of SADA is to bridge the developmental gap between Northern and Southern Ghana and to promote sustainable growth and development to both increase incomes among the poorest and transform the northern Ghanaian economy and society. Its major strategy is a 20 year approach based on the concept of a “Forested North and Green North”, where agricultural production is modernised and oriented towards a larger market embracing the Sahelian countries, including northern Cote d’Ivoire and Togo.

THE RESEARCH INSTITUTES AND UNIVERSITIES

The following organisations will be involved:
- Cocoa Research Institute of Ghana;
- Oil Palm Research Institute;
- Savannah Agricultural Research Institute;
- Crop Research Institute;
- Institute of Industrial Research;
- Forestry Research Institute of Ghana;
- Plant Genetics Research Institute;
- University of Ghana (Legon);
- Kwame Nkrumah University of Science and Technology (Kumasi);
- Cape Coast University;
- University for Development Studies (Tamale);

6.2 IMPLEMENTATION GOVERNANCE

The major challenge is to design an effective governance framework, allowing the planning, monitoring and active coordination of the policy, taking into account the institutional partners, allowing representation and active participation of the private sector.

The Directorate of Crop Services in charge of active coordination

DCS will be in charge of monitoring and coordinating the implementation of the TCP. Based on the Strategic Plan and the Implementation Manual of the TCP, DCS will have the following role, in close liaison with the implementing entities:

- Coordinate the activities among the different institutional stakeholders and especially organise donor coordination in the TC sub-sector;
- Follow the timely implementation of activities according to the Strategic Plan and Implementation Manual;
- Prepare quarterly and annual work plans;
- Collect data and information for appropriate M&E of the implementation of the strategies from the different MDAs and projects;
- Constantly update the Strategic Plan in line with changes in local or international context, including standards, regulations or policies;
- Promote the TCP among the different stakeholders (public and private);
- Disseminate information on the results and impacts of the TCP;
- Produce quarterly and annual reports on the implementation of the TCP;
- Assess the impact of the TCP through adequate studies;
- Periodically process revision of the TCP as necessary.

Steering Committee

A Steering Committee will be established to guide the overall direction of the TCP. It will meet biannually and will be co-chaired by the Ministry of Food and Agriculture, and the Ministry of Trade and Industry, with membership drawn from representatives of the different groups of stakeholders, as follows:

a) The major MDAs in charge, including the Research Institutes;

b) Civil society, through representatives of the GAWU and selected NGOs;

c) Private sector companies operating in the TC sub-sector, representing large industrial processors and exporters, and also representatives of SME;

d) FBOs, representing the main national associations (e.g. GNAFF, APFOG, FONG, PFAG) also including representatives of the different TC value chains from regional or national VC committees (e.g. cashew, mango, citrus, rubber, oil palm);

e) Representatives of the financial institutions.

Observers will include the Development partners involved in financing and supporting the TC sub-sector.

The role of the SC will be as follows:
- Discuss and validate the Strategic Plan;
- Adopt and validate annual budgets and work plans prepared by the various MDAs;
- Support resource mobilisation for improved implementation;
- Promote increased donor and MDA coordination in the sub-sector;
- Propose practical solutions to problems hampering the implementation of the Strategic Plan;
- Promote and disseminate information on the results and impact of the TCP;
- Provide advice to other MDAs in the formulation of policies related to the TC sub-sector (see cross-cutting issues);
- Provide guidance on the revision, updating and impact assessment of the TCP as necessary.
- Follow the timely implementation of activities according to the Strategic Plan and Implementation Manual;
- Prepare quarterly and annual work plans;
- Collect data and information for appropriate M&E of the implementation of the strategies from the different MDAs and projects;
- Constantly update the Strategic Plan in line with

Disseminate information on the results and impacts of the TCP;
- Produce quarterly and annual reports on the implementation of the TCP;
- Assess the impact of the TCP through adequate studies;
- Periodically process revision of the TCP as necessary.

Steering Committee

A Steering Committee will be established to guide the overall direction of the TCP. It will meet biannually and will be co-chaired by the Ministry of Food and Agriculture, and the Ministry of Trade and Industry, with membership drawn from representatives of the different groups of stakeholders, as follows:

a) The major MDAs in charge, including the Research Institutes;

b) Civil society, through representatives of the GAWU and selected NGOs;

c) Private sector companies operating in the TC sub-sector, representing large industrial processors and exporters, and also representatives of SME;

d) FBOs, representing the main national associations (e.g. GNAFF, APFOG, FONG, PFAG) also including representatives of the different TC value chains from regional or national VC committees (e.g. cashew, mango, citrus, rubber, oil palm);

e) Representatives of the financial institutions.

Observers will include the Development partners involved in financing and supporting the TC sub-sector.

The role of the SC will be as follows:
- Discuss and validate the Strategic Plan;
- Adopt and validate annual budgets and work plans prepared by the various MDAs;
- Support resource mobilisation for improved implementation;
- Promote increased donor and MDA coordination in the sub-sector;
- Propose practical solutions to problems hampering the implementation of the Strategic Plan;
- Promote and disseminate information on the results and impact of the TCP;
- Provide advice to other MDAs in the formulation of policies related to the TC sub-sector (see cross-cutting issues);
- Provide guidance on the revision, updating and import assessment of the TCP as necessary.