ITALIAN EMBASSY IN MOZAMBIQUE

TENDER DOCUMENTS

INTRODUCTORY STUDY ON THE POTENTIAL FOR BIO-FUEL PRODUCTION IN MOZAMBIQUE

Financed by the Government of Italy

MAPUTO, MAY 2006

SECTION I

TERMS OF REFERENCE

1_PROJECT TITLE

Introductory Study on the Potential for Bio-Fuel Production in Mozambique

2 INTRODUCTION

Context

This study arises in the context of several issues that are shaping the world's energy sector:

- 1. At the global level, several factors are at play, which combine to threaten the energy security of oil importers:
 - a. There is a tendency for the price of fossil fuels to rise, fuel consumption is increasing and oil reserves are diminishing.
 - b. At the same time, the supply of oil by oil exporters is threatening to become unstable.
- 2. Moreover, the greenhouse effect, and the danger it poses, is becoming more widely acknowledged, giving rise to pressure to reduce carbon dioxide emissions into the atmosphere, particularly in the transport sector.
- 3. The rise in the oil price has resulted in an increase in Mozambique's foreign exchange expenditure on imports of petroleum products (currently approximately US\$300 million per annum) and has made Mozambique more vulnerable in terms of energy security. This highlights the need for oil importers such as Mozambique to reduce their dependency on petroleum imports.
- 4. Parallel to this situation, it is becoming apparent that there will be a deficit of electrical power in the region, particularly in South Africa, from as early as 2007, which will constrain the region's development of its industrial base and individual consumption. In the case of Mozambique, an important large-scale project has announced that it will suspend a planned expansion due to a lack of guaranteed supply of electrical power by ESKOM because of power generation constraints.
- 5. Finally, at the individual level, households in Mozambique have limited access to power for lighting and cooking, particularly in the rural areas (only 8% of the Mozambican population has access to electrical power). There are increasing environmental problems associated with this due to the deforestation and global emissions caused by the use of wood fuel.

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Confronted with these challenges, many countries are considering the option of producing bio-fuels as a means of substituting part of their imports of gasoline, diesel, kerosene and LPG, producing electrical power and reducing carbon dioxide emissions, taking advantage of possibilities of financing new initiatives for producing bio-fuels offered by the Clean Development Mechanism.

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This situation represents an opportunity for Mozambique to attract national or foreign investment in the production and processing of raw materials for the production of biofuels for several reasons:

1. The country offers good agro-climatic conditions for the production of feedstocks for the production of bio-fuels, given the climate and availability of water and large tracts of arable land.

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- 2. There already exists a base for the production of some fermentable substrates, such as molasses, which could be made use of to kick-start the development of bio-fuels such as ethanol; the bagasse produced in this process could be channeled towards the cogeneration of electrical power.
- 3. Mozambique is well-placed to take advantage of market opportunities in the domestic, regional and international markets, including:
 - a. The domestic market for liquid bio-fuels which, despite being limited, offers a guarantee of rapidly absorbing part of bio-fuels production via a mixture of 10% of ethanol in gasoline and between 5% and 10% of bio-diesel in diesel fuel.
 - b. The EU market, where Mozambique has a tariff preference relative to non-LDCs, such as Brazil.
 - c. The domestic and regional markets for electrical power, taking into account the country's proximity to countries such as South Africa.

These factors have given rise to a great deal of interest in the production and use of biofuels in Mozambique, and many investment proposals are being advanced for the production and processing of feedstocks for bio-fuels in different parts of the country.

The Italian Embassy in Mozambique, within an Italian Cooperation programme with the Ministry of Agriculture of Mozambique (MINAG), and in partnership with the Ministry of Energy of Mozambique (with funds from???), is financing the first phase of an introductory study on the potential for bio-fuel production in Mozambique. On the part of MINAG, the Centre for the Promotion of Agriculture (CEPAGRI) will coordinate the study, in close conjunction with the National Directorate of New and Renewable Energy (DNER) of the Ministry of Energy.

The Ministry of Energy, using funds from the World Bank, will finance the second phase of the introductory study.

A Working Group on Bio-Fuels has been set up to support the Ministry of Energy in the formulation of a policy to develop the bio-fuels sector in Mozambique. The Working Group comprises key government institutions that will be involved with the Ministry of Energy in the formulation and implementation of a bio-fuels policy, including: the

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Ministries of Agriculture, Science and Technology, Planning and Development, Finance, and Trade and Industry. The focus of the Working Group is on bio-fuels that can be produced in an environmentally sustainable manner and which contribute to the reduction of carbon dioxide emissions, namely bio-ethanol, bio-diesel and bagasse for the cogeneration of energy. The Working Group will monitor the study and provide a forum for comments on the study as it is developed by the consultants. However, CEPAGRI and DNER will be the formal channels for communicating comments.

Justification for Study

While modern biomass energy offers a large range of opportunities, it can also result in significant negative impacts if the establishment and/or expansion of bio-energy systems is not thought through adequately. Given the considerable public and private interest that exists in Mozambique for the establishment of a modern bio-fuels industry, it is imperative that such development does not happen in the absence of a coherent strategy and policy framework. The Government wishes to establish such a framework before an industry develops in an ad hoc manner.

An introductory study is necessary to form the basis of a strategy that will:

- 1. Orient the technical and operational evolution of the industry;
- 2. Define the roles of the public and private sectors:
- 3. Create an enabling environment for mobilising resources; and
- Establish the appropriate social and environmental guidelines and safeguards for the operation of the sector.

3. OBJECTIVES OF THE STUDY,

The overall study will be divided into two phases.

Phase I: Prefeasibility Study

The first phase has four overarching objectives:

- 1. Evaluate the market potential for liquid bio-fuels (domestic and export markets).
- 2. Identify key feedstocks for the production of different bio-fuels.
- 3. Estimate the cost of producing different liquid bio-fuels in relation to the cost of diesel, gasoline, kerosene or LPG with the objective of:
 - a. Evaluating the competitiveness of bio-fuels.
 - b. Analysing the fiscal implications of attributing fiscal incentives, if the government decides to concede tax exemptions on sales of bio-fuels as a means of making them competitive in relation to fossil fuels.

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- c. Discussing the implications for tariff protection in order to guarantee that the biofuels produced locally, and not imported bio-fuels, benefit from the fiscal incentives.
- 4. Recommend, in a preliminary manner, appropriate policy instruments for the promotion of the bio-fuels identified as being priorities.

Phase II: Follow-On Study

For the crops and bio-fuels selected in Phase I as the most likely candidates for development in Mozambique, Phase II of the study will:

1. Confirm or narrow the selection made in Phase I of the most appropriate-feedstocks, bio-fuels, scale and technology by undertaking a more in-depth analysis of the technological, economic, social, environmental, legal and institutional issues to be taken into account in establishing government priorities in its support for the bio-fuels sector.

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- 2. Elaborate a national bio-fuels (ethanol and biodiesel) strategy proposal for Mozambique covering all the issues identified in the previous point.
- 3. Elaborate a policy and regulatory framework for the National Biofuels Strategy, paying special attention to the design of a comprehensive social and environmental safeguards framework.

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4. Propose and assist the government of Mozambique to implement a participatory and stakeholder consultation process to validate the national strategy proposal, and policy and regulatory framework.

4. SCOPE OF THE STUDY

Phase I: Prefeasibility Study

In order to achieve the objectives defined for Phase I, the study will provide the following type of information:

- 1. General information on the context of bio-fuel production.
- 2. Analysis of the principal markets arising for bio-fuel production.
- 3. An evaluation of the competitiveness of the different feedstocks for bio-fuel production, including the impact of by-product revenues and the cost of wastes generated.
- 4. An evaluation of the competitiveness of different bio-fuels in relation to fossil fuels.
- 5. Analysis of the competitiveness of imported bio-fuels compared to domestic production.
- 6. Discussion of the relationship between the production of each bio-fuel and the net carbon dioxide savings involved.

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7. On the basis of the previous calculation, undertake analysis of the possible utilization of carbon credits as a means for financing investments in each bio-fuel under the Clean Development Mechanism of the Kyoto Protocol.

Phase II: Follow-On Study

In order to achieve the objectives defined for Phase II, the follow-on study will provide the following type of information:

- 1. More detailed analysis of economic, social and environmental impacts of the cropsidentified in Phase I as being the most likely candidates for feedstocks for bio-fuel
 production, as well as the bio-fuels identified as being the most viable in Phase I.
- 2. An evaluation of the most appropriate way of producing and processing bio-fuel feedstocks in terms of:
 - a. Scale and organisation of production;
 - b. Technology; and
 - c. Environmental guidelines.
- 3. Based on this evaluation, the presentation of discounted cash flow analysis of the economics of small and large-scale bio-fuel production.
- 4. An analysis of the bio-fuel storage and distribution issues that need to be resolved, including norms and standards, and infrastructural requirements, including the need for modifications in current practices and standards applied to liquid fuel distribution and storage with the introduction of gasoline or diesel containing ethanol/ETBE or biodiesel.
- 5. Changes and/or modifications needed in end-use technologies in the main economic sectors as a result of the introduction of bio-fuels in Mozambique.
- 6. The key policy instruments that could be applied to achieve the economically, social and environmentally sustainable production of bio-fuels in Mozambique.

5. OUTPUTS AND STRUCTURE OF THE STUDY

Phase I: Prefeasibility Study

At the end of Phase I, a report will be produced with the following structure:

(a) Introduction

- 1. Context of the study, including an overview of Mozambique, its energy (fuel??) balance and the major energy challenges facing the country. NB. We need to decide whether this study is about energy or about bio-fuels because this study is focused on liquid bio-fuels rather than biological sources of energy in general.
- Methodology.

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3. Institutions involved/institutional framework.

(b) Chapter 1: Analysis of the Market Potential for Bio-fuels

- Estimate of potential demand for bio-fuels in Mozambique over the next 10 years in the different sectors, as follows:
 - In the transport sector, fuel ethanol and biodiesel use will be based on projections of gasoline and diesel demand over the next 10 years and assumptions of technically realistic blend levels. Such analysis should take into consideration the possibilities for converting ethanol into ETBE in lieu of MTBE and its use for lead displacement.
 - In the household sector, the analysis will focus on possibilities for the substitution of conventional fuels (woodfuel, kerosene and LPG) by bio-fuels in cooking, lighting and space heating.
 - In other sectors or economic activities, the potential demand for bio-fuels for alternative transport solutions and energy service delivery applications (water pumping, irrigation, crop grinding, etc.) in rural areas will be assessed. NB. What information is available to do this?
- Identification of export markets, as a function of the development of policies relating tobio-fuels that influence demand for bio-fuels in these markets.
- 3. Evaluation of the potential returns from sales, free of duty, into the identified markets on an FOB and broad ex-factory basis, highlighting the tariff and non-tariff barriers to entry to those markets.
- 4. Conclusions and recommendations.

(c) Chapter 2: Analysis of the Production Costs of Bio-fuels from Different Crops Produced in Mozambique

This chapter would contain three principal sections:

- 1. Analysis of the availability, and current and potential costs of producing oilseeds and carbohydrate crops in different regions of the country, implying the evaluation of:
 - The scope for cultivating a range of oilseeds and carbohydrate crops with the
 objective of establishing potential output volumes. This analysis should include an
 evaluation of the key areas suitable for production, highlighting the agricultural
 extension and crop research services available currently to support different crops.
 - The production cost of each crop.
 - The market price of each crop, given the current market situation, tariff rates, etc.

This section would present conclusions and recommendations regarding the potential production of bio-fuels using each crop and the cost of the raw material, presented per

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litre of bio-fuel. This analysis should highlight the impact of the possible value generated by the sale of by-products produced during the bio-fuel production process as well as the cost of wastes generated.

In addition to the economic evaluation of each crop, the analysis should also highlight relevant technical and environmental issues that may influence the choice of crop, such as the impact on soils, water needs and agro-ecological sustainability.

- 2. Assessment of the current and potential cost of transforming each crop into bio-fuel, including a general overview of:
 - The production process.
 - The scale and location of processing facilities.
 - Investment costs.
 - Operating costs.
- 3. Conclusions:
 - Summary of the scope and cost of producing bio-fuels from each crop.
 - Comparison of different crops in terms of their suitability for bio-fuel production.

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(d) Chapter 3: Analysis of the Competitiveness of Bio-fuels in Relation to Fossil Fuels

This chapter will evaluate the competitiveness of each bio-fuel relative to diesel, gasoline, kerosene or LPG as relevant. The degree of competitiveness of each fuel would be assessed excluding and including fuel taxes and other taxes.

On the basis of this analysis, two issues would be discussed:

- 1. The impact on the final pump price of each fuel of passing the total cost of each biofuel onto the consumer (in the case of transport fuels); and
- 2. The fiscal cost of conceding tax breaks that permit bio-fuels to compete with fossil fuels in terms of price.

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(e) Chapter 4: Analysis of the Competitiveness of Domestically-Produced Bio-Fuels in Relation to Imported Bio-Fuels

This chapter will analyse the level and behaviour of world markets for ethanol, bio-diesel, kerosene and LPG, with the objective of determining what level of tariff protection the government may need to consider in order to promote domestic production of these biofuels instead of depending on imported bio-fuels.

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The chapter should also highlight the scope available to Mozambique for applying tariffs to imports from different countries. This analysis will take into account Mozambique's commitments to the WTO and SADC.

(f) Chapter 5: Other Considerations

This chapter will raise other points that are central to the design of a policy to promote biofuel production, namely:

- 1. The incentives available to promote the production of bio-fuels via the creation by the government of a market for bio-fuels. This section will compare the advantages and disadvantages of different ways of creating a market for bio-fuels, such as:
 - a. The use of tax breaks and tariff protection to make domestic bio-fuel cost-competitive; and
 - b. Mandating blending of bio-fuels with diesel and gasoline.
- 2. The relationship between the production of each bio-fuel and the net carbon dioxide savings associated with each bio-fuel (equal to the difference between the carbon dioxide emitted in the production of the bio-fuel and the carbon dioxide saved by using the bio-fuel instead of burning fossil fuels). This would be expressed in terms of the cost of each bio-fuel per tonne of carbon dioxide saved.
- 3. On the basis of the previous analysis, quantify the possible use of carbon credits as a means of financing investments in each bio-fuel.

(g) Chapter 6: Conclusions and Recommendations

This chapter will, in a preliminary manner:

- 1. Identify priority target markets within and outside of Mozambique.
- 2. On the basis of this analysis, and the analysis of the relative competitiveness and agricultural suitability of different raw materials in different areas of the country, identify the priority crops and principal areas of production.
- 3. Recommend appropriate policy instruments for the promotion of the bio-fuels identified as being priorities in the previous section.

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Phase II: Follow-On Study

(h) Introduction

The introduction will summarise the main crops identified as feedstocks in Phase I of the study and the justification for their selection. It will also confirm the key forms of bio-fuels selected for promotion in Mozambique, i.e., ethanol, ETBE, biodiesel, etc.

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(i) Chapter 1: Detailed Analysis of Feasibility of Feedstock Production and Processing

This chapter will undertake a more detailed analysis of the crops selected as feedstocks for bio-fuel production with the objective of confirming their selection or narrowing the selection further once other considerations are taken into account, namely:

1. The socio-economic impact in terms of:

- a. Any possible significant impact on food security in Mozambique as a result of the scaling-up of existing bio-fuels feedstock crops (i.e., sugar cane, cassava, etc.) and/or the introduction of new bio-fuels feedstock crops in Mozambique.
- b. The employment generation effects of the scaling-up of existing bio-fuels feedstock crops and/or the introduction of new bio-fuels feedstock crops in Mozambique. This analysis would focus on the number of jobs created and the quality of those jobs (i.e., level of skills, scope for training, etc.)
- c. Any significant negative or positive impact in terms of land tenure, competition for land, disruption of food and non-food agricultural markets, etc., which could potentially result from the scaling-up of existing bio-fuels feedstock crops and/or the introduction of new bio-fuels feedstock crops in Mozambique.
- d. The impact on net foreign exchange generation, i.e., the balance between savings and inflows of foreign exchange resulting from reducing petroleum products imports, attracting foreign direct investment and exporting bio-fuels, on the one hand, and the outflows of foreign exchange associated with importing goods and services for the production of bio-fuels, repatriation of profits and debt servicing.
- e. Look at the potential for generating intersectoral linkages??
- 2. Any significant environmental issues expected to result from the scaling-up of existing biofuels feedstock crops and/or the introduction of new bio-fuels feedstock crops in Mozambique with special reference to stillage processing and disposal:
 - a. Since stillage is a major issue in ethanol making, the consultant will survey technologies and costs resulting from the present international "best practices" regarding stillage processing and disposal. Given the prospect of expanding ethanol output in Mozambique, and based on the stillage characteristics such as content of solids, organic matter and chemical composition, as well as chemical and biological oxygen demands and pH, the consultant will highlight alternative technologies and costs associated with valuing stillage as a resource for fertilizers, energy, feed and food and chemical feedstock. Of special interest will be ferti-irrigation: concentration; burning stillage concentrate; aerobic and anaerobic fermentation, yielding single cell protein and methane respectively.
 - b. End-use impacts of ethanol, ETBE and biodiesel on air quality, water and soil will be presented by the Consultant. Ethanol and ETBE permeation through plastic conduits and the possible spillage onto the environment resulting in water and soil contamination will be surveyed based on existing information such as available in Mozambique, Brazil, Europe and the US with special reference to that developed

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by the California Air Resources Board. A comment will be made on the possible gap between the estimated effects from biofuels and the Mozambican air and water quality legislation and regulatory requirements.

c. Air quality impacts of emissions originating from ethanol, ETBE containing blends and biodiesel will be surveyed on a similar basis as the permeation/spillage analysis. Ethanol, ETBE and biodiesel could have a positive impact on emissions of certain controlled substances such as carbon monoxide and unburned hydrocarbons. The consultant will comment on the relative importance of increased acetaldehyde emissions and the expected levels of nitrogen oxide emissions that may result from the increased use of ethanol and ETBE and contrast them with Mozambican legislation and regulatory requirements.

(j) Chapter 2: Evaluation of Methods of Producing and Processing Bio-fuel Feedstocks

In this chapter, the consultant will present currently used technologies, such as in Braziland India (for ethanol) and Germany and Brazil (for biodiesel) and other relevant countries as a basis for evaluating the economic evaluation of the feasibility of producing bio-fuels from the feedstocks selected.

<u>Process flow sheets will be developed for the various combinations of capacity, feedstock and process fuel.</u> The processing of stillage — in the case of ethanol — and of all other significant process wastes will be shown in these flow sheets.

A financial feasibility analysis will be carried out on the basis of reference cases for large and small-scale distilleries, feedstocks and process fuel options. Sensitivity analysis with respect to fixed investment, feedstock cost and ethanol yields will be performed to test the feasibility against these parameters. Furthermore, the Consultant will analyse for each feedstock and bio-fuels production process, the types and volumes of by-products and "wastes" generated, their costs, and potential markets and prices. DIFFERENCE BETWEEN FINANCIAL FEASIBILITY ANALYSIS AND DISCOUNTED CASH FLOW ANALYSIS??

The economics of large and small-scale ethanol and biodiesel production in Mozambique will then be assessed based on discounted cash flow analysis and expressed in terms of internal rates of return – IRR. These will be tabulated to show results for large and small capacity in terms of the following variables:

- feedstock:
- fixed investment;
- operating campaign duration;
- feed-stock price;
- bio-fuel production yields;
- process fuel options (e.g., bagasse, natural gas, fuel oil, wood residues, etc.);

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• by-products and "wastes".

(k) Chapter 3: Storage and Distribution Issues

This chapter will present an analysis of the bio-fuel storage and distribution issues that need to be resolved. The analysis will focus on:

- 1. The need for modifications in current practices and standards applied to liquid fueldistribution and storage with the introduction of gasoline or diesel containing ethanol/ETBE or biodiesel.
- 2. Infrastructural requirements for the storage and distribution of ethanol/ETBE and biodiesel.

(I) Chapter 4: End-Use Technologies

In this chapter, the Consultant will identify and evaluate the changes and/or modificationsneeded in end-use technologies (transportation vehicles, power generation equipment, household appliances, etc.) in the main economic sectors considered as a result of the introduction of bio-fuels in Mozambique. This analysis will include technological aspects, costs and any other relevant factors.

(m) Chapter 5: National Bio-Fuels Strategy, Policy and Regulatory Framework

Based on the findings in Phase I of the study and on the more detailed analysis described above, the Consultant will:

- 1. Present a summary of the key conclusions and recommendations regarding the choice of feedstock, the organisation and structure of production, the technological options for the production of bio-fuels and the principal socio-economic, environmental, legal and institutional issues identified.
- Elaborate a National Bio-fuels (ethanol/ETBE and biodiesel) Strategy proposal for <u>Mozambique including all the different program components and covering all relevant technical</u>, economic, environmental, social, financial, institutional, organizational and technological issues;
- Propose a policy and regulatory framework for the National Biofuels Strategy, paying special attention to the design of a comprehensive social and environmental safeguards framework.
- 4. Submit a proposal for a participatory and stakeholder consultation process to validate the National Bio-fuels Strategy proposal, and policy and regulatory framework, identifying the assistance that the Consultant can provide in this process.

6. METHODOLOGY AND APPROACH

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It is foreseen that local and international consultants will be recruited to undertake this study. Representatives from the different ministries involved in the Bio-fuels Working Group will actively accompany the study.

With the support of the Bio-fuels Working Group, CEPAGRI and DNER will undertake the selection of the consultants, monitor the study and approve the reports presented by the consultants. CEPAGRI and DNER will be responsible for communicating formal comments to the consultants and for any final decision regarding the study.

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Phase I: Prefeasibility Study

The research in Phase I shall be constructed around an inception report, an interim report and a draft final report. Feedback shall be provided to the team of consultants for all reports.

The draft report will be formally presented and discussed in a workshop involving all key stakeholders. On the basis of the results of the workshop, a final report shall be produced.

1. Preparation of inception report:

The purpose of this report is to include a review of existing studies and research already conducted in Mozambique, identify outstanding issues and offer a critical framework for fieldwork.

- a. The consultants' work will begin with a review of key studies, research and existing data relevant to bio-fuel production and marketing within Mozambique, focusing on: the potential for producing feedstocks in Mozambique, production costs and market analysis.
- b. In the technical proposal, the consultant will submit a detailed plan for field work activities and schedules, including the list of stakeholders to be interviewed, data gathering methodology, questionnaires and any other field analytical tool. All of the above will be reviewed and detailed in the inception report.
- c. Feedback will be given by the bio-fuels working group on the inception report before fieldwork commences.

2. Fieldwork:

Fieldwork to gather data shall form the basis of the analysis of costs of production and of local production conditions. A team of consultants shall conduct field work (according to the plan previously presented in the inception report).

The fieldwork should aim to cover five provinces, namely: Maputo, Inhambane, Zambézia, Nampula and Niassa. These provinces have been selected on the basis of two principal criteria: (i) The existence of raw material for biofuel production; and (ii) the presence of existing, or realistic potential, biofuel production projects. The consultant has the freedom to propose changes to the provinces suggested, provided that this is fully justified.

3. Preparation of interim report:

- a. The interim report will include outcomes of interviews, preliminary results from data collection and main constraints identified.
- b. Feedback will be provided on the interim report and it is expected that comments will be reflected in the draft report.

4. Preparation of draft final report:

The draft final report will present quantitative and qualitative analysis of the data gathered, overall sector analysis and policy recommendations as per the recommended structure of the report. This will be presented in a workshop and finalised with relevant stakeholders' feedback. Prior to the workshop, the bio-fuels working group will submit comments that should be taken into account in the presentation of the draft final report.

5. Organisation of the Workshop:

All stakeholders involved in the national bio-fuels sector will attend the workshop and provide feedback and indications to the consultants to be reflected in the final report.

6. Preparation and delivery of Final Report.

The consultants will incorporate the comments raised in the workshop in the final report as far as possible, while retaining the coherence of the report's analysis and recommendations,

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Phase II: Follow-On Study

Draft final report on Phase II?

Workshop to present findings and discuss report?

Final report and presentation?

7. TIMING AND COSTS

It is anticipated that the study will take up to five months and will cost approximately €60.000 excluding the logistical costs of the field visit (international travel, accommodation and internal transport), cost of organising the workshop and the costs of translating the different reports identified in Section 10 (Deliverables).

While the Italian Embassy is responsible for financing the study budget of ϵ 60.000, the Ministry of Energy of Mozambique is responsible for financing the reimbursable costs associated with the fieldwork, workshop and translation. These costs are estimated at ϵ 22.000.

NEED TO REWRITE THIS PART ONCE SCOPE AND CONTENT OF TWO PHASES OF STUDY HAVE BEEN AGREED

8. COMPOSITION OF THE TEAM

Ideally, the consultant should propose a team that has the following capacities:

14

- 1. Knowledge of Mozambique's agricultural and agro-industrial sector.
- 2. Knowledge of, and experience of analysing, bio-fuels markets.
- 3. Experience in the comparative analysis of the competitiveness of the production and processing of agricultural crops.
- 4. Knowledge of technological and technical aspects of the process of producing biofuels.
 - 5. Knowledge of environmental issues associated with the production and processing of feedstocks for bio-fuels.
 - <u>6.</u> Knowledge of experiences of promoting bio-fuels in key producing and exporting countries.
 - 7. Knowledge of the Clean Development Mechanism and its applications.
 - 8. Experience in formulating sectoral development policies and strategies, and possible policy instruments that could be used to promote bio-fuel production.

However, the identification of the most appropriate expertise required and estimated length of assignment for each specialist should be the responsibility of tendering firms within the foreseen Technical Proposals.

Proposed technical expertise should appropriately cover all aspects mentioned in the present Terms of Reference.

The evaluation of technical expertise will be amongst the criteria for award of the study to the most comprehensive and complete proposal.

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9. DURATION:

Phase I: It is foreseen that the research for Phase I will last 20 weeks (approximately 5 months), as per the following work-plan.

1. Inception Report Desk study review Presentation of Inception report Implementation of field work Implementation of field work S. Field work Teedback on Interim report Feedback on Interim report Freedback on draft report		_	Week								
	5 6	9 10	11 0	12	13 1	14 1	15 1	16 17	7 18	200	9 20
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Organisation of field work Implementation of field work 3. Interim Report Preparation of interim report Finalisation of Interim report Preparation of draft report Preparation of draft report Feedback on draft report Presentation at Final Workshop 5. Finalisation and Delivery of Feedback			44								
3. Interim Report Preparation of field work Teedback on Interim report Finalisation of Interim report Freedback on Interim report Freedback on draft report Preparation of draft report Freedback on draft report									_		
3. Interim Report Preparation of interim report Feedback on Interim report Finalisation of Interim report 4. Draft Report Preparation of draft report Feedback on draft report Presentation at Final Workshop 5. Finalisation and Delivery of											-
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5. Finalisation and Delivery of											

ASSISTANCE FROM EDUARDO DE SOUSA IN DEFINING TIMING OF PHASE II?

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10. DELIVERABLES

For Phase I, the team of consultants shall provide:

- 1. The inception report, submitted in English, with an executive summary in Portuguese.
- 2. The interim report in English.
- 3. The draft final report, submitted in both English and Portuguese.
- 4. Five copies of the final report in each language, plus one CD-Rom including the electronic version of the final report in English and Portuguese, all data collected and the analysis thereof (e.g. survey methodology and results, interviews notes, etc.).

For Phase II, the team of consultants shall provide:

- 1. The draft final report, submitted in English and Portuguese.
- 2. Five copies of the final report in each language, plus one CD-Rom including the electronic version of the final report in English and Portuguese, all data collected and the analysis thereof (e.g. survey methodology and results, interviews notes, etc.).
- 3. A comprehensive Powerpoint presentation of the findings and outcomes of Phase II of the assignment.

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SECTION II

INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

- 1. Period of validity of proposals
- 2. Maximum budget
- 3. Preparation of proposals
- 4. Form of submission
- 5. Administration
- 6. Withdrawal of proposals
- 7. Modification of proposals
- 8. Acknowledgement of amendments to request for proposals
- 9. Delivery of proposals
- 10. Proposals evaluation
- 11. Negotiations
- 12. Award of contract
- 13. Disclosure of information
- 14. Sub-contracting
- 15. Weights given to the technical and financial proposals
- 16. Evaluation criteria of technical proposals
- 17. Evaluation criteria of financial proposals

SECTION II

INSTRUCTIONS TO BIDDERS

1. Period of validity of proposals

Proposals valid for less than 60 days from the closing date for receipt of proposals for acceptance by the Italian Embassy will be considered non-responsive and will not be accepted.

2. Maximum budget

The total budget for executing all the activities and for delivering all data and information as required will not exceed 60,000 for the consultants' time and 622,000 for the re-imbursables.

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3. Preparation of proposals

Proposals must cover the entire scope of the study described in the Terms of Reference. Proposals for only part of the study will not be considered. The technical and financial proposals must be submitted in two separate envelopes.

3.1 Technical proposal

- 3.1.1 Consultants are requested to submit one original and 4 copies written in English.
- 3.1.2 The Technical Proposal shall provide the following information:
 - (i) Any comments or suggestions on the Terms of Reference and on the data, a list of services, and facilities to be provided by the Client.
 - (ii) A detailed description of the methodology and work plan for performing the assignment.
 - (iii) The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member, and their timing.
 - (iv) CVs recently signed by the proposed professional staff and the authorized representative submitting the proposal. Key information should include number of years working for the firm/entity and degree of responsibility held in various assignments during the last five (5) years. The CV's should include a signed statement confirming that the

proposed team member is available to undertake the work during the period of the study and that (s)he will fulfil the role assigned to him/her in the technical proposal.

- (v) Estimates of the total staff input (professional and support staff; staff time) needed to carry out the assignment, supported by bar chart diagrams showing the time proposed for each professional staff team member.
- (vi) The Technical Proposal shall not include any financial information.

3.2 Financial proposal

The original and 4 copies are to be submitted separately from the "Technical Proposal". This proposal should be presented in accordance with the format indicated in Appendix 1 to this section. It should contain sufficient details to enable the Italian Embassy to determine the basis of the costs estimate and should, at the minimum include the following points:

- (i) Detailed financial offer expressed in EUROS;
- Data sheet of the experts assigned to the work. This is to support all directs salary, and if applicable, consultant fees;
- (iii) Sufficient information to allow the Italian Embassy to determine whether the indirect costs indicated are reasonable;
- (iv) Proposed itinerary (ies) and charges for all travels which will be performed;
- (v) Detailed listing for other items of direct costs (equipment, communications, office supplies, insurance etc...);
- (vi) A statement in which you accept the proposed contract format.

4 Form of submission

The envelope containing the proposal should clearly indicate the reference of the request for a proposal to which you are replying, as well as the date and time set for closing. Your submission should comprise two distinct envelopes. One should be marked "technical proposals", on which should appear the name of your firm, the reference of the request for proposals, as well as the date and time set for the closing of submissions, containing information on your technical proposals. The other envelope marked "financial proposals" and on which should appear the same indications as above, will contain price details.

5 Administration

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You are kindly requested to provide the name and telephone, e-mail, telex and/or cable number of the offer which the Italian Embassy, if necessary, could contact to discuss the request for proposals or the proposal submitted.

6 Withdrawal of proposals

Proposals may be withdrawn by written or telegraphic notice received at any time prior to award. Proposals may be withdrawn in person by the authorised representative, provided his/her identity is made known and (s)he signs a receipt for the withdrawal of the offer prior to award.

7 Modification of proposals

Except as otherwise decided by Italian Embassy, modifications to proposals must be received not later than the closing date and time specified for receipt of proposals.

Modification must be made by written or telegraphic notice which clearly identifies the proposals being modified, the nature of the modification, the reference of the request for proposals as well as the closing date and time for receipt of proposals. Modifications must be delivered in writing to the office designated for receipt of proposals with the reason(s) for the modifications.

8 Acknowledgement of amendment to the request for proposals

Receipt of an amendment after solicitation by a bidder must be acknowledged by the bidder (a) by signing and returning the amendment, or (b) by letter or telegram. Such acknowledgement must be received prior to the hour and date specified for receipt of offers.

9 Delivery of proposals

Bidders are reminded that it is their responsibility to ensure delivery of their proposals to the Italian Embassy not later than the time and closing date indicated in the covering letter to the request for proposals. It is the bidders' responsibility to choose a means of delivery, which will ensure receipt by the Italian Embassy at the time and date specified. Proposals received after the time and date specified for receipt of proposals due to delays in delivery will not be considered.

10 Proposals evaluation

An Evaluation Committee, comprising representatives of the Italian Embassy, CEPAGRI and DNER, will evaluate proposals in accordance with the following procedure:

10.1 Technical Evaluation

- 10.1.1 Technical evaluation shall be done separately and independently of any financial consideration. After the evaluation of quality is completed, the Italian Embassy shall notify those consultants whose proposals did not meet the minimum qualifying mark or were considered non-responsive to the Terms of Reference, indicating that their Financial Proposals will be returned unopened after completing the selection process. The Italian embassy will simultaneously notify the consultants that have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date shall not be sooner than one week after the notification date. The notification may be sent by registered letter, cable, telex, facsimile, or electronic mail.
- 10.1.2 Technical evaluation should bring out the "best ranked consultants" The best ranked consultants are understood to be all those whose offers have been judged as the best technical qualified and whose respective scores are not more than 10% below the highest ranked consultant. Consultants scoring less than 70 points shall be rejected.

10.2 <u>Financial Evaluation</u>

The Financial Proposals will be opened publicly in the presence of the consultant's representatives who choose to attend. The name of the consultant, the quality scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened.

11 Negotiations

- 11.1 Negotiations will be held at the address indicated. The aim is to reach agreement on all points and sign a contract.
- Negotiations will include a discussion of the Technical Proposal, the proposed methodology (work plan), staffing and any suggestions made by the firm to improve the Terms of Reference. The Client and firm will then work out final Terms of Reference, staffing, and bar charts indicating activities, staff, periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the "Description of Services" and form part of the contract. Special attention will be paid to getting the most the firm can

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offer within the available budget and to clearly defining the inputs required from the Client to ensure satisfactory implementation of the assignment.

- 11.3 Having selected the firm on the basis of, among other things, an evaluation of proposed key professional staff, the Client expects to negotiate a contract on the basis of the experts named in the proposal. Before contract negotiations, the Client will require assurances that the experts will be actually available. The Client will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the assignment. If this is not the case and if it is established that key staff were offered in the proposal without confirming their availability, the firm may be disqualified.
- 11.4 The negotiations will conclude with a review of the draft form of the contract. To complete negotiations the Client and the firm will initial the agreed contract. If negotiations fail, the Client will invite the firm whose proposal received the second highest score to negotiate a Contract.

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12. Award of Contract

- 12.1 The contract will be awarded following negotiations. After negotiations are completed, the Client will promptly notify other consultants on the shortlist that they were unsuccessful and return the unopened Financial Proposals of those consultants who did not pass the technical evaluation.
- 12.2 The firm is expected to commence the assignment on the date and at the location specified in the Data Sheet.
- 12.3 The Italian Embassy reserves the right to reject any and all offers and to waive informalities and minor irregularities in offers received.
- 12.4 If negotiations are started on a particular aspect of an offer, they shall not constitute a rejection or counter.

13. Disclosure of information

In the event that a proposal includes information which the bidder does not want to be disclosed to the public or used by the Italian Embassy for any purpose other than evaluation of the proposal, the bidder must mark each sheet of data which he so wishes to restrict with the legend set forth below:

"This data furnished in response to (identify Request for Proposal) shall not be used, disclosed or duplicated in whole or in part for any purpose other than to evaluate the proposal, provided that, if a contract is awarded to this bidder as a result or in connection with the submission of such data, the Italian Embassy shall have the right to disclose, use, or duplicate this data to the extent required in the contract. This

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restriction does not limit Italian Embassy right to use information contained in such data if it is obtained from another source".

14. Sub-contracting

Except with prior written approval of the Embassy of Italy, the Consultant may not assign or transfer the Contract or only part thereof. Nor may he engage any subconsultant perform any part of the Services.

15. Weights given to the technical and financial proposals

Technical proposals	0.8
Financial proposals	0.2

16. Evaluation criteria of technical proposals

The evaluation of the technical proposals will be carried out based on the following marks:

1	Adequacy of the proposed methodology and working plan	
	responding to the ToR	20
2	Adequacy of the composition of the team in accordance with	
	designing a coherent and comprehensive strategy for the	
	development of the sector	25
3	Qualification and specific competence of the key staff and	35
	ability to undertake designated role	
4	Local participation	20
	Total points	100

The minimum technical score required to pass is: 70 points

Of these best tenders, the best technical offer is then awarded 100 points. The others receive points calculated by means of the following formula:

Points = (initial score of the tender in question/initial score of the best technical offer) x 100.

The final technical score (T) will be: Technical score achieved * 0.8

17 Evaluation criteria of financial proposal

Financial offers exceeding the maximum budget allocated for the contract are eliminated.

The lowest financial offer receives 100 points. The other are awarded points by means of the following formula:

	Lowest price
Financial score =	* 100
	Proposal under consideration

The final financial score (F) will be: Financial score achieved x 0.2

SECTION III

DATA SHEET

Clause Reference	
1.1	The name of the Client is:
	Italian Embassy in Maputo
	The method of selection is: Quality-Based Selection
1.2	Technical and Financial Proposals are requested: Yes (x) No
	A Technical Proposal only is requested: Yes No (x) The name, objectives, and description of the assignment are:
	Name: Introductory Study on the Potential for Bio-Fuel Production in Mozambique
	The objectives are:
	Evaluate the market potential for liquid bio-fuels (domestic and export-markets).
	2. Estimate the cost of producing different liquid bio-fuels in relation to the cost of diesel or gasoline, with the aim of:
	d. Evaluating the competitiveness of bio-fuels.
	e. Analysing the fiscal implications of attributing fiscal incentives, if the government decides to concede tax exemptions on sales of bio-fuels as a means of making them competitive in relation to fossil fuels.
	<u>f.</u> Discussing the implications for tariff protection in order to guarantee that the bio-fuels produced locally, and not imported bio-fuels, benefit from the fiscal incentives.
	3. Recommend, in a preliminary manner, appropriate policy instruments for the promotion of the bio-fuels identified as being priorities.
1.3	The assignment is phased: Yes No (x)

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1.4	The Client envisages the need for continuity for downstream work: Yes No (x)		
1.5	Proposals should be submitted in the following language: English	1	
1.6	(i) The Financial Proposal shall not exceed the available but 660.000 plus 625.000?? (ii)Reports that are part of the assignment must be written in the flanguage(s): English	ŭ	
1.7	Proposals must remain valid 60 days after the submission date.		
1.8	Consultants must submit an original and 4 additional copies of each Technical and Financial	ch proposal:	
1.9	The proposal submission address is: Italian Embassy in Maputo Cooperation Office Rua Damiao de Gois 381, Maputo, Mozambique Tel +258 1 491782/7/8 Fax+258 1 491725 E-Mail		
1.10	Proposals must be submitted no later than the following date a 11 February 2006, no later than 05:00 pm local time in Mozan		
1.11	The number of points to be given under each of the evaluation crit	eria are:	
	Adequacy of the proposed methodology and working plan responding to the ToR	20	
	Adequacy of the composition of the team in accordance to design a coherent and global scenario for the development of the sector	25	
	3 Qualification and specific competence of the key staff	35	
	4 Local participation	20	
	Total points	100	
1.12	The single currency for price conversions is: EURO		
	The single currency for price conversions is: EURO The source of official selling rates is: UIC (Italian Change Office)		
	The date of exchange rates is: Date of submission of the proposals		
	The formula for determining the financial scores is the following:		
	Financial score (F) =	* 0.20	
	Proposal under consideration		

1.13	The address for negotiations is: Italian Embassy in Maputo Cooperation Office Rua Damiao de Gois 381, Maputo, Mozambique Tel +258 1 491782/7/8 Fax+258 1 491725 E-Mail
1.14	The assignment is expected to commence on 15 February 2006 at the Italian Embassy in Maputo
1.15	The weights given to the Technical and Financial Proposals are: T= 0.8 P= 0.2 Final score = T + F

APPENDIX 1

OFFEROR'S COST PROPOSAL

1. Part I	Summary
2. Part II	Salaries
3. Part III	Travel Costs
4. Part IV	Logistics
5. Part V	Summary Table

CONSULTANT'S COST PROPOSAL (FIRM NAME) POST TITLE

PART I.

1/: List individual salaries in part II
 2/: List proposed travel in part III
 3/: Itemise separately in part IV

4/: List in part V

SUMMARY Items Total Total Work-Months Costs 1. Home Office salaries 1/ 2. Overhead on Home office salaries (percentage rate =) 3. Field staff Salaries 4. Overhead on Field Staff Salaries (percentage rate =) 5. Sub-total (items 1 through 4) 6. Travel and per diem personnel 2/ (a) International travel and per diem (b) Travel and per diem in the host country 7. Transportation-Materials, Supplies, Equipment 8. Other Direct Costs (excluding costs of consultants, 3/) 9. Costs of consultants, 4/ 10. Sub-total (items 6 through 9) 11. Total (items 5 and 10) 12.Profit or fee Total

PART II - <u>SALARIES</u>

POSITION OR	ESTIMATED	MONTHLY RATE	TOTAL COSTS
TITLE HOME	WORK PLAN		
OFFICE STAFF			
1.			
2.			
3.			
4.		1,000	
			Total
Field Staff			
1.			
2.			
3.			
4.	***************************************		
			Total

PART III - TRAVEL COSTS

1. International Trave	el and Per	diem				
A. Travel 1/: Origin-Destination						
1. 2. Total T						
B. Per Diem Location (City)		Rate per To				
Total	per Diem	Cost	AAT BANKSIAAAAAAAA			
2. Travel and Per Die	m in the O	Country				
A. <u>Travel 1/</u> Origin-	Destinatio	on				
B. Per Diem Location (City)	No. of <u>Days</u>	Rate per <u>Day</u>	Total <u>Costs</u>			
Tota	l Per Dien	n Cost				
1/: Only economy class air fare shall be considered.						

PART IV - LOGISTICS

ITEM	COSTS	٦
1.		٦
2.		
3.		٦
4.		1
Total Direct		٦

PART V - STAFF SUMMARY

NAME	FUNCION	CURRENT SALARY	PROPOSED SALARY INCREASE DURING WORK PERIOD

A. CERTIFICATION TO BE COMPLETED BY RESPONSIBLE REPRESENTATIVE OR FIRM.

I hereby initial that: (check one or both if applicable)

- The salary increase proposed herein conforms the salary standard prescribed in the contract.
- The salary increase herein conforms to the customary policy and practice for organisation for periodic salary increases.

B JUSTIFICATION OR REMARKS

Signature Title Date

APPENDIX 2.

SUGGESTED FORMAT OF CURRICULUM VITAE FOR THE CONSULTANT

Bidders should follow the instructions contained herein-under and supply all information as requested. Failure to comply with these instructions may disqualify a proposal. Bidder must set forth, full, accurate and complete information as required by this request for proposals (including Appendix).

Name	
Professio	
Years wi	
_	Position on
Team	
Key Qua	ifications:
po by	Under this heading, give outline of staff member's experience and training most ertinent to assigned work on proposed team. Describe <u>degree of responsibility held</u> y staff member on relevant previous assignments and give dates and locations. Use to half-a-page)
Education	<u>r</u>
st	Under this heading, summarise college/university and other specialised education of aff member, giving names of schools, dates attended and degrees obtained. Use up a quarter page.)
Experienc	ee Record:
da as	nder this heading, list all positions held by staff member since graduation, giving ites, names of employing organisation, title of position held and location of signments. For experience in last ten years, also give types of activities performed it client references, where appropriate. Use up to three-quarters of a page.
Language	s:
	ndicates proficiency in speaking, reading and writing of ch language by "excellent," or "poor".
Declaration	on:
	nereby confirm that I am available to undertake the work during the period of the ady and that I will fulfil the role assigned to me in the technical proposal.
	Date
Signature	of Staff Member

APPENDIX 3

PROPOSED CONTRACT FORMAT

Cont	ract made on (date) Between
	(hereinafter called "the Embassy of Italy") and
	hereinafter called "the Consultant")
The p	parties have agreed as follows:
1.	The Services; General Conditions; Terms of References
accor	consultant undertakes to perform the services (hereinafter called "the Services") in dance with attached general conditions and Terms of Reference (Annex 1), using the rt(s) listed in Annex 2 for the period or periods indicated therein.
2.	Remuneration
and i	to to an overall ceiling of, the Embassy of Italy shall nerate the Consultant for services rendered in a satisfactory manner in the amount in the currencies stated in Annex 3 and shall reimburse the Consultant for verified uses related to Services of the kinds described and budgeted in Annex 3 .
3.	Account
Paym	ent shall be to the Consultant's account No Bank
4.	Effectiveness
This c	contract shall become effective upon

5. Terms of Engagement

The consultant shall be engaged by the Embassy of Italy until such time as the Services have been completed, provided that the period during which the consultant shall be so engaged (called "the Term of Engagement") Shall not, except as the parties may otherwise agree, exceed working days from the Date of Commencement inclusive travel time, and provided further that the Embassy of Italy may at any time, upon giving to the Consultant reasonable notice in writing, terminate the engagement in accordance with clause 22(b) of the general conditions. The Embassy of Italy reserves the right to monitor work progress at any time during the period of engagement.

6. Commencement

The Consultants shall commence the Services within 15 days after receiving notice from the Embassy of Italy that the Contract has become effective.

7. Notices and Requests

Any notice or request required or permitted to be given or made under this Contract shall be in writing. Such notice or request shall be deemed to be duly given or made when it shall have been delivered by hand, mail, cable, telex or fax to the party to which it is required to be given or made at such party's address specified below:

(the Consultant)

Annex 1 to the Contract

GENERAL CONDITIONS FOR CONSULTING SERVICES

1. Services.

The consultant shall carry out the Services with due diligence and efficiency and in accordance with the highest professional standards. He shall abide the Terms of Reference and subsequent instructions pertaining the Terms of Reference given by the Embassy of Italy The Embassy of Italy is entitled to make amendments to the Terms of Reference without, by doing so, changing the nature or purpose of the Services. If, as a consequence hereof, the scope of the Services is widened or narrowed, the total remuneration shall be adjusted accordingly and the contract period be revised.

2. Information

Each party shall inform the other party of any event situation which may necessitate an agreement between the parties on a modification in the scope, character or execution of the Services or in other respect of the Contract. The Consultant shall furnish the Embassy of Italy with such information concerning the Services as the Embassy of Italy may from time reasonably request.

3. Sub-consultants

Except with prior written approval of the Embassy of Italy, the Consultant may not assign or transfer the Contract or only part thereof. Nor may he engage any sub-consultant perform any part of the Services.

4. Reporting

The Terms of Reference will set forth the nature and timing of reports to be prepared in the context of the Services.

5. Experts

Unless otherwise agreed, the Embassy of Italy shall approve of any change in the Expert(s) assigned to the Services.

6. Prohibition and Conflicting Activities

a) During periods when any member of the Consultant's team of Experts is assigned to the Services, he shall not, unless otherwise agreed by the Embassy of Italy, engage, directly or indirectly, in other work, business or professional activities in other than the performance of his duties and assignment under the Contract.

- b) During the term of the Contract and after its termination, the Consultant and any entity affiliated with the Consultant shall be disqualified from providing goods or works (other than Services) for any Project related to or resulting from the Services.
- c) At all times, the Consultant and any Expert(s) shall act with appropriate propriety and discretion and in particular shall refrain from making any public statement concerning the Project or the Services without the prior approval of the Embassy of Italy, and shall refrain from engaging in any political activity.

7. Confidentiality

The Consultant shall not any time communicate to any unauthorised person or entity any confidential information disclosed to him for the purpose of the Services or discovered by him in the Services. Nor shall the Consultant make public any conclusions or recommendations formulated in the course of or as a result of the Services.

8. Records

The Consultant shall permit the duly authorised representative of the Embassy of Italy from time to time to inspect its records and accounts relating to the Services.

9. Ownership of Work

Design documents, specifications, reports and all relevant data compiled or prepared in the course of the Services shall be the property of the Embassy of Italy unless otherwise decided by the Embassy of Italy. Such materials shall be sorted and indexed by the Consultant prior to delivery to the Embassy of Italy. The Consultant may retain a copy thereof, provided, however, that such material shall not be used by the Consultant for purposes unrelated to the Contract without prior written approval of the Embassy of Italy.

10. Relationship of the Parties

Nothing contained in these conditions or contract shall be construed as establishing or creating any relationships other that of independent contractor between the Embassy of Italy on the one part and the Consultant and any Expert(s) on the other.

11. Disability of Expert(s)

If at an time in the opinion of the Embassy of Italy whether for reasons of health or otherwise, any Expert(s) is (are) unable to perform or to complete the Services in an adequate manner the Embassy of Italy may at its option either terminate the Contract or require the Consultants as expeditiously as possible to replace the Expert(s) with an employee of the Consultant possessing qualifications and experience acceptable to the Embassy of Italy and at a rate of remuneration no higher than that agreed for the previous Expert(s). The Embassy of Italy may at is option require the expense of any such replacement to be borne by the Consultant.

12. Basis of Remuneration

- a) Where the remuneration is expressed in terms of a daily rate, the time spent in performing the Services shall be determined on the basis of the number of days actually spent by the Expert(s) in performing the Services including necessary travel time subject to a maximum number of 22 working days per calendar month.
- b) The remuneration specified in the Contract shall include the salary paid by the Consultant to the Expert(s) including provision for all leave, insurance, social welfare and benefits to which the Expert(s) may be or may become entitled to during the Term of Engagement. Included are also all administrative expenses, fees and other overheads of the Consultant except as may be specified otherwise in the Contract.

13. Overtime Compensation

Overtime payment will not be granted.

14. Fee during Travel Time

When travelling takes place for the purpose of the Services, actual time for travel will be regarded as payable time up to a maximum of one day each direction.

15. Adjustments

The fees are valid during the whole contract period and shall not be adjusted.

16. Travel

The travel shall be made by the most appropriate means of transport and the most direct, practicable route. In the case of air travel, the mode of travel shall be less than first class.

17. Accommodation, Subsistence and Miscellaneous Travel Expenses.

Accommodation and subsistence shall be charged at reasonable rates, as agreed.

18. Local travel

The costs for travel required for carrying out the services shall be included in the proposal.

19. Mode of Invoicing

The Invoices for the Services shall be presented in arrears by mail in four copies and refer to the number of this Contract. The invoices shall be presented not more frequently than once a month. They shall distinguish between fees, reimbursable costs and cost of goods purchased for programme. All debited amounts shall refer to the relevant budget items and be clearly described. The costs shall be expressed in the currency of the Contract. The Embassy of Italy shall enclose vouchers with the invoice only upon request. Each invoice shall contain a Cost Summary indicating the total budget for the services, the accumulated invoiced amounts and the balances outstanding.

20. Mode of Payment

- a) The Embassy of Italy shall scrutinise the Consultant's invoices promptly upon receipt. Normally, payment will be made to the Consultant within 30 days of receipt of invoice. Payment will indicate the date and number of the invoice and will be made to the Consultant's bank account stated in the Contract.
- b) Payment will be made in the currency of the Contract. Conversion from other currencies shall be made using official rates published at the beginning of each month. These rates will be applicable to expenditure incurred in the same month.

21. Termination

- a) This contract shall be subject to termination by the Embassy of Italy at any time by summary notice in writing if the Consultant or the Expert(s) commits any serious breach or any repeated or continued material breach of his obligations hereunder or shall have been guilty of conduct tending to bring himself or the Embassy of Italy into disrepute.
- b) The Embassy of Italy, subject to reasonable notice in writing, may also terminate the contract for convenience. In such cases the Embassy of Italy, will reimburse the Consultant for costs incurred during the period necessary for a prompt and orderly winding up of the Services.

Annex 2 to the Contract

List of Experts

COST ESTIMATES

DIRECT EXPENSES

- a) Remuneration (fees)
- b) Per Diem:
 per diem rates in country of assignment:
 per diem rates in (other country)

REIMBURSABLE EXPENSES

- a) Travel*
- b) Miscellaneous* (To be itemised e.g. visa fees, inoculations)

TOTAL MAXIMUM PAYMENT	====
Reimbursable cost on sub	

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It will deepen understanding of the concrete possibilities available to Mozambique to produce particular feedstocks and identify priority areas for promotion.

It will provide a foundation for conceiving the strategic actions that will be necessary for the government to implement in order to promote the sector.

It will provide a basis for the government to evaluate investment proposals in a coordinated and systematic manner.

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