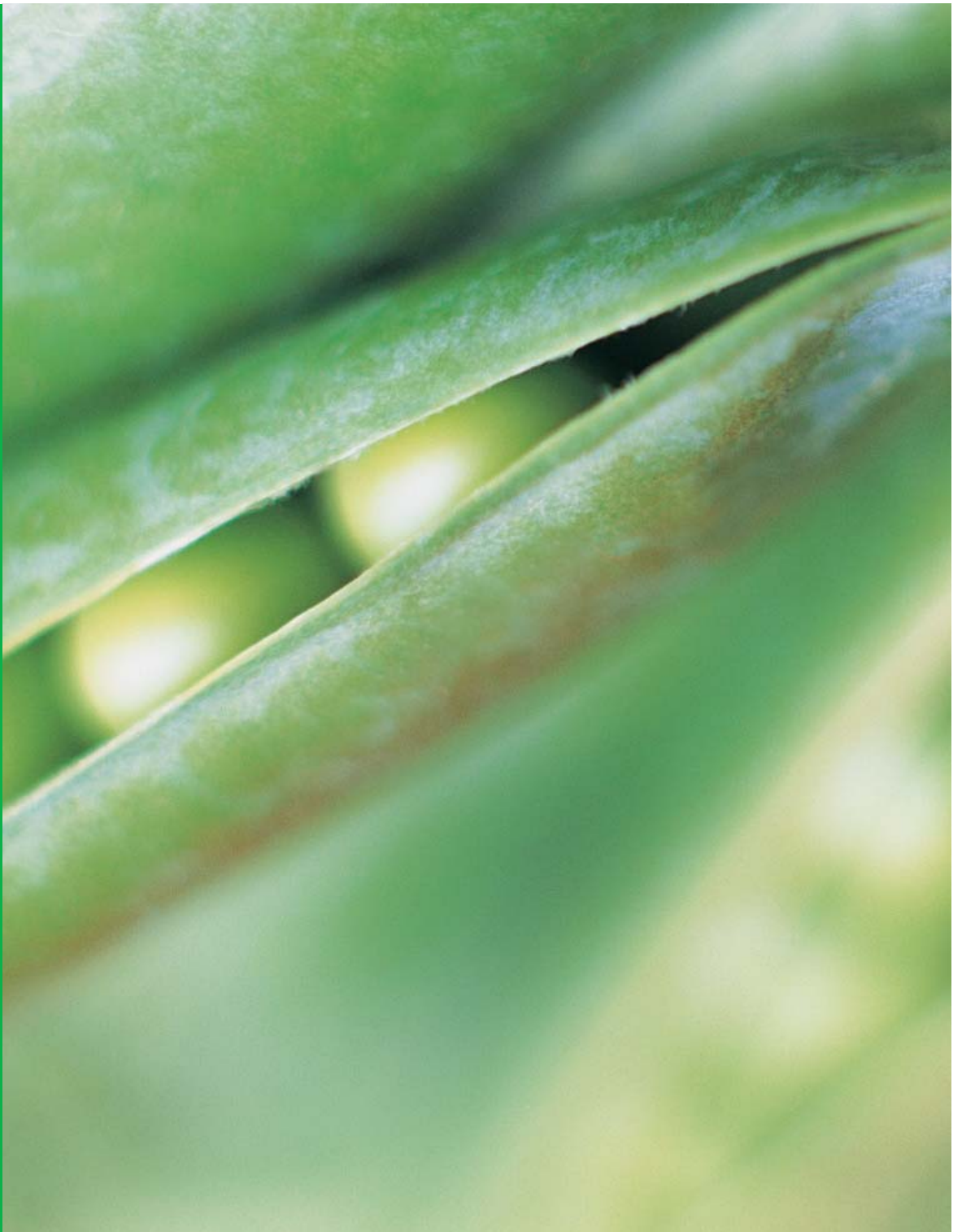


COMMUNITY MARKETS FOR CONSERVATION PROGRAMME (COMACO) PHASE II

APPRAISAL OF THE PROPOSAL TO THE ROYAL NORWEGIAN EMBASSY,
LUSAKA, ZAMBIA

BY STEIN W. BIE, ELIAS KUNTASHULA, LEWIS K. MUGHOGHO

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Zambia**

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Noragric Report No. 49
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ABBREVIATIONS

BS	Balance sheet
CF	Conservation farming
CFU	Conservation Farming Unit
COMACO	Community Market for Conservation Programme
CTC	Community trading centre
ECOCERT	Ecological certification authority
FAO	Food and Agriculture Organization of the United Nations
GMO	Genetically modified organism(s)
HQ	Headquarters
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFOAM	International Federation of Organic Agriculture Movements
LEPP	Luangwa Ecological Partnership Programme
Noragric	Dept. of International Environment and Development Studies, UMB
UMB	Norwegian University of Life Sciences
UNZA	University of Zambia
WCS	Wildlife Conservation Society of Zambia
WFP	World Food Programme
ZAWA	Zambia Wildlife Authority

EXECUTIVE SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Consultant has reviewed the proposal for a Phase 2 of the COMACO Programme covering the Eastern and Western parts of the Luangwa Valley, Zambia. Originally conceived in Phase 1 as a tool to offer poachers and charcoal burners incentives for abandoning illegal activities to protect wildlife and biodiversity through improved farming technologies and access to agricultural markets, Phase 2 emphasizes improved food security and poverty alleviation. The aims of Phase 2 correspond to revised aims of Norwegian development assistance. Norway has so far been the main donor to COMACO, and is likely to remain so. The Consultant has concluded that a COMACO Phase 2 programme represents a realistic and valuable pathway toward the stated aims, somewhat under-resourced, and with a need for improved administrative clarity of the functioning of COMACO as a legal personality, and its legal ability to receive Norwegian funding. The Consultant recommends that WCS be retained as a management agent under contract to COMACO which should be the grant recipient. The transition of the project from a donor-supported activity to a self-financing company has a reasonable chance of succeeding for the Eastern part of the Valley within 5 years, but is expected that the Western part of the Valley now under COMACO management, may require funding significantly beyond the first 5 years. Whilst Norway may exit from activities in the Eastern part within 5 years, a longer-term commitment in the Western part is likely to be required, either by Norway or other donors.

The Consultant commends COMACO and its partner WCS for presenting an interesting proposal, and can concur with its main points. Its business-oriented model is an innovative approach to poverty alleviation, improved food security and environmental sustainability. The approach carries substantial risks, both in the farming technologies proposed (organic farming as distinct from better-known conventional farming strategies, especially relating to plant nutrition, plant diseases, pest management control and weed control), in the production processes (food safety risks associated with food hygiene (salmonella, botulinus, mycotoxins, trypsin inhibitors in legumes), and in the marketing segment (securing stable markets at fair prices given increased urban consumer use of larger shopping units (supermarkets) and transporting goods to the markets when roads are poor and traffic unreliable). The Consultant suggested that a more flexible approach is taken on farming practices, in particular by allowing and supporting the use of agrochemicals on low fertility soils used for maize cultivation. The Consultant also advises that more attention is paid to agronomic detail, including planting densities of rice and maize.

The Consultant finds the proposal somewhat underdefined with respect to sociological impacts of its business model. It notes that the gender balance appears unusually good with respect to the farming communities but that concern about HIV/AIDS and other communicable and vector-borne diseases have not been covered.

COMACO, directly or through its management partner WCS, is well staffed with highly dedicated and talented employees, also willing to work in remote areas. The gender balance among professional staff leaves a lot to be desired. COMACO's

financial control systems seem adequate and there has been no evidence of fund mismanagement.

The Consultant recommends the Royal Norwegian Embassy to finance the COMACO Phase 2 proposal in full in principle, subject to a revised proposal incorporating relevant factors outlined in this report.

1. BACKGROUND

The general background to the COMACO programme request for funding for a Phase 2 *Scaling up across Luangwa Valley* is contained in the *Consultant's Terms of Reference (ToR, Appendix 1)*. Below is the Consultant's analysis of the specifics of the COMACO starting point for Phase 2. We believe this is important for a deeper understanding of the rationale for Phase 2, which is based on a business model aimed at making COMACO self-financing in Year 4 of Phase 2. *The COMACO Framework Paper (undated)* lays down the guiding framework for its principal parties: the COMACO company, producer group cooperatives and local leaders. This 19-page guiding framework details a large number of processes that will guide COMACO activities. The Consultant has paid due attention to the organizational structures of COMACO, as these are particularly important for organizational resilience to attain sustainability in the longer run, also beyond Phase 2.

The rationales for the original COMACO project (Phase 1, also supported by the Norwegian Government) were three-fold: 1) protect wildlife from illegal harvesting (poaching); 2) reducing land degradation due to illegal deforestation (charcoal production, slash-and-burn cultivation, and unsustainable land use practices; 3) ensuring income generation and food security for poor rural people. A recent paper (as yet unpublished: *D. Lewis: The COMACO Model for Poverty Reduction and Sustainable Conservation in the Luangwa Valley, Zambia*) whilst acknowledging the COMACO origins as a tool in wildlife conservation (the remit of WCS), notes that from a major WCS intervention with the World Food Programme (WFP) in 2001 for targeting and distributing food aid in the Luangwa Valley, arose the COMACO programme where poverty reduction and improved food security became first priority. Protecting wildlife and reducing unsustainable land use practices has gradually become useful by-products – but also containing some guiding principles – for attaining this first priority.

In this way the COMACO Phase 2 has incidentally aligned itself more with revised Norwegian aid targets giving priority to poverty alleviation and improved food security, whilst retaining its attention to ecosystem management. COMACO Phase 2 plans appear not to have been revised to fit the new Norwegian priorities but have developed in parallel and as a result of experience gained over a longer period of WCS activities in the Luangwa Valley.

Of particular mention is that the failed attempts to establish COMACO in the western part of the Valley due to mishandling of the original management by another organization (NOT WCS) has left that part of the valley at a low ebb, including farmer confidence, and with a great need to copy successes gained in the eastern part under Phase 1.

The important new element in Phase 2 is the increased emphasis on COMACO as a business model. COMACO was incorporated as a private company limited by shares on 31 November 2003 (shares held by 6 Zambian institutions with WCS controlling 73% of the shares), later changed on 19 April 2006 to a company limited by guarantee (the guarantors being 6 individuals of whom the current WCS Country Director (a US

citizen) is responsible for 97% of the guarantee, the rest held by Zambians)¹. COMACO is thus an independent legal personality, and should – to comply with Zambian company law – have a board of directors, and conduct annual general meetings that approve annual reports, accounts and budgets.

2. PURPOSE

In its appraisal of the proposal of COMACO Phase 2 the Consultant has put emphasis on its business elements and their relations to the operational aspects of the proposal. As appraisers it has not been the task of the Consultant to *evaluate* Phase 1 of the project (this has been done by others (*Kabeta et al. (2007)*² and *Mwima, H.K. et al. (2008)*³). The Consultant, who also carried out field visits to a series of sites within COMACO CTC-areas, observed many of the issues described by the two reviews, but wishes to see the findings more specifically in the context of a COMACO business model that should be self-financing at the end of the proposed Phase 2 (5 years) for the eastern part of the project area. The western part, more recently taken over from PAM, may require longer support before self-financing is attained. At the start of a Phase 2, special attention must be put on the western part. COMACO management itself portrays this business model as very different from other development project models (“inverted pyramid” is the term often used within COMACO), and the Consultant therefore appraises it accordingly.

The end product of the COMACO Phase 2 model is to have created a viable business enterprise, at least for the Eastern Luangwa area, where the proceeds of sales of produce grown by COMACO farmers (supplemented by others) plus the value of further processing by COMACO, and earned income from other sources, finance the long-term goals of COMACO. At this stage COMACO would no longer require grant financing from Norway or other donors for Eastern Luangwa. The non-monetarized products of Phase 2 (e.g. more game, more biodiversity, greater tourist appeal, less land degradation, better human nutrition, more social and institutional capital, less reliance on food aid, and others) do not specifically enter into the business model. The appraisers are fully aware that such non-monetarized items can be quantified and monetarized, and may significantly alter the income side of the accounts if the benefits are accrued to COMACO. However, the Phase 2 proposal has not done so, and relied on conventional income generation activities⁴. In reality Phase 2 may generate significant income invisible to COMACO and its members.⁵

¹ Company Registration No. 53769 of 24 April 2006. The guarantee is ZK 10,275,000 = USD 2,055 at 25 February 2009 exchange rates.

² Kbeta, H.M., Hichambwa, M., Lengwe, E.C. & Gulati, S.K. (2007) Mid Term Review of (COMACO) project. Report to the Royal Norwegian Embassy, Lusaka

³ Mwima, H.K., Fynn, J.F.W. & Lengwe, E.C. (2008) Final Review of (COMACO) programme. MTN Special Engagements Ltd, Lusaka

⁴ The Consultant suggests that WCS or COMACO may wish to conduct a separate study on these values. It may e.g. be a suitable topic for a dissertation. A simple example would be (see next page) (cont. Footnote 5) that COMACO, in recognition of its positive contribution to wildlife and habitat maintenance, gets a share of the entrance fees charged to the national parks in the Luangwa Valley.

It is the realism of this proposal that the appraisers will assess, and the extent to which the organizational model, including governance of COMACO, can reasonably support this notion, and whether the farming techniques advocated can be expected to create adequate production and incomes in the foodstuffs market where COMACO operates.

To support the analyses the Consultant has relied on internal WCS and COMACO documents (mostly unpublished or grey literature, often undated), interviews in Lusaka and in the field of pertinent COMACO personnel, interviews with external interested parties, and including a planning session for this appraisal with staff of the Norwegian Embassy (the major donor). And visits with farmers in the eastern and western portions of the Luangwa Valley whose lives and welfare and those of their families depend on the wise use of natural resources.

3. SCOPE OF WORK/PRIORITY ISSUES

3.1. THE QUALITY OF THE UNDERLYING ANALYSIS AND PLANNING PROCESS OF THE PROGRAMME, INCLUDING PARTICIPATION OF RELEVANT STAKEHOLDERS IN THE PROCESS

The following reports commissioned by COMACO and the Royal Norwegian Embassy provided the analytical framework for the formulation of the Phase 2 project proposal:

- COMACO Market Study for the Western Area including the Districts of Serenje and Chinsali in the Northern Province by I. Stubbs, J. Zimba, and R. Mumbwa in December 2008. This report assessed market opportunities and recommended best strategies for introducing the “COMACO business model” to the western region of the Luangwa valley ecosystem.
- COMACO Business Audit-Summer 2009 by the Haas School of Business, University of California, Berkeley, analysed the COMACO business model and provided useful ideas on its expansion.
- The Mid-Term Review of COMACO Project Phase 1 by H.M. Kabelo, M. Hichambwa, E.C. Lengwe and S.K. Gulati in April 2007 and the COMACO end of project review report by H.K. Mwima, J.F.W. Fynn and E.C. Lengwe of July 2008 made useful recommendations on activities for Phase 2.

The COMACO Phase 2 proposal was developed largely by the Chief Executive Officer of COMACO, consulting on a bilateral basis with COMACO senior managers and the COMACO advisory board. Key stakeholders of COMACO did not participate in the formulation of the proposal. The Consultant believes that the proposal would have benefited from participation by the following stakeholders in the districts of the Luangwa valley ecosystem:

- Farmers
- Ministry of Agriculture and Cooperatives
- Ministry of Tourism, Environment and Natural Resources
- Zambian Wildlife Authority
- District Chiefs
- Zambia National Farmers Union

- District Business Associations
- District Administration
- Fisheries Department
- Forestry Department

The Consultant recommends that representatives of stakeholders listed above should be involved in the implementation of COMACO Phase 2 by participating in COMACO Stakeholder Consultative Meetings/Workshops held at least once a year. The first meeting should be held to coincide with the launch of the Phase 2 project.

The Consultant thinks that brain storming meetings or workshops of representatives of these stakeholders and COMACO staff would have improved the quality and relevance of the Phase 2 proposal and engendered a feeling of ownership of the project proposal by stakeholders. It is therefore very important that they become more involved now.

The relevance of the programme with regard to the problems that the programme should solve, and the interest of the involved stakeholders

COMACO Phase 2 has identified three problems for intervention: rural poverty, food insecurity and depletion of renewable natural resources. These problems are high priorities in the Government of Zambia's Fifth National Development Plan 2006 – 2010, Vision 2030, National Policy on the Environment (2005), and the National Agricultural Policy. In fact, the Government has identified poverty reduction and economic growth as the overall objective of the economy. This means that all sectors in the economy are expected to design and implement programmes, which will make a significant contribution to poverty reduction. COMACO Phase 2 is planned to do this. All stakeholders visited by the Consultant expressed satisfaction with COMACO and desired that its activities continue and expand in Phase 2.

The use of lessons learned from earlier experience with similar programmes and/or the best available knowledge

The closest similar programme is the COMACO Phase 1. Phase 2 will benefit from the experience and lessons learned while implementing Phase 1. The proposal (pages 9-10) describes 12 lessons learned from COMACO Phase 1 which are incorporated in the COMACO policy framework and implementation manual that will be used in the implementation of Phase 2 activities. The Consultant commends COMACO on this and is satisfied that these lessons will contribute towards the efficiency of operations and success of Phase 2. An earlier study of the management of Bwindi Forest in Uganda may offer additional suggestions on how limited legalised use inside the fringes of a national park may create local vigilance against illegal deeper intrusion and misuse⁶. Lessons learned from the COMACO Phase 1 programme include the rapid scaling-up of participating food insecure low income households in order to reach critical volumes of commodities required for the COMACO business model, and the need for multiple income sources to ensure all-year income. Thus traditional income sources that rely on non-sustainable practices can be replaced by more sustainable methods.

⁶ P.J.Scott (1995) Fringe Benefits. M.Sc. thesis, Noragric, Agricultural University of Norway

Other planned or on-going programmes that may influence the implementation or the effects of the planned programme

Two programmes are of particular significance to COMACO Phase 2 since they involve activities central to the work of COMACO. These programmes are the Conservation Farming Unit (CFU) of the Zambia National Farmers Union, and the Luangwa Ecological Partnership Programme.

Compliance with conservation farming (CF) methods as expounded by the CFU by COMACO farmers is the pillar of COMACO activities in food security and sustainable management of soil and water resources. To this end, COMACO has linkages with CFU through training of staff and lead farmers in CF methods. COMACO Phase 2 proposes to expand this collaboration to include refinements in soil amendment practices to assess the level of carbon retention for potential carbon markets. The Consultant is of the view that since the Phase 1 end-of-project review, there was more rhetoric than practice in CF⁷. COMACO Phase 2 should pay particular attention to the actual adoption by farmers of CF methods by working closely with CFU. CF is a major activity in Zambia, apparently involving a much larger number of farmers than COMACO members, but critically dependent on a few leading figures in CFU. The Consultant suggests that a COMACO-CFU ‘trainer-of-trainers’-programme be formalized both at central level, with a Memorandum of Understanding, and at the local level, the latter to ensure that the activities around the CTCs are well versed in CF. Please note that the limited use of fertilizers is an integral component of CF as defined by CFU, and that COMACO may develop modifications to ensure soil fertility in cultivation practices where the label ‘organic’ is used on the produce. COMACO is well aware of this.

The Luangwa Ecological Partnership Programme (LEPP) is in the early planning phase. Its goal is to maintain and/or improve the Luangwa valley ecosystem so that they provide a range of goods and services to inhabitants of the region on a sustainable basis. COMACO is already active in the region and should play a major role in the development of the LEPP proposal. The Consultant suggests that a formal Memorandum of Understanding be entered into by COMACO, CFU and LEPP to ensure coordination and complementary of efforts, and to avoid duplication.

3.2. ASSESSMENT OF THE PROGRAMME DESIGN

Quality of design elements

The overview of the purpose and the outputs of COMACO Phase 2 are well explained in the project document. It is easy to link these elements to the goal of the project. The main purpose of Phase 2 is to scale up findings and practices from Phase 1 across the Luangwa Valley, thereby contributing significantly to a more diverse set of income opportunities and food security. The project proposes to explore and implement

⁷ H.K. Mwima, J.H.W. Fynn and E.C. Lengwe 2008. Final review of the market improvement for food security, rural income and natural resource conservation project under Community Markets for Conservation

environmentally safe production practices that will help cushion against the possible local effects of global climate change and limited market access for over 50,000 chronically hungry, low income families across 80% of the Luangwa Valley ecosystem (estimated to encompass about 300,000 people). The outputs that would feed into achieving this purpose are also clearly understandable. These elements feed into the project goal to provide links between major variables; food security through increased incomes (as a result of readily available high paying markets) and sustainable agricultural practices, and maintenance of a healthy, viable Luangwa Valley ecosystem. However, the major weakness that is observed in the design elements is the presentation of the elements themselves. For instance, one would have hoped that the purpose of the project would have been presented after the goal. To logically make sense of how the design elements such as goal, purpose, outputs etc are related, the reader is forced to read back and forth.

The other weakness is that the objective as presented in the log frame comes out as a means to achieving an end. The objective should be phrased in such a way that it clearly reflects what the project hopes to accomplish, particularly resulting in the overall goal being met. For instance the first objective states that:

A scalable business model that drives households to collectively and responsibly work together as a community to sustainably increase food and income security through improved resource management and farming practices that promote healthy ecosystem functions and improved conservation of renewable resources across the Luangwa Valley ecosystem.

Although the business model is very pertinent in scaling up COMACO activities, it should not lose sight of the end result of Phase 2, which is the accomplishment of food- and income security with the by-products from a healthy Luangwa Valley ecosystem. One suggestion is to refocus the above statement to meaningfully read:

To increase food and income security through improved resource management and farming practices that promote healthy ecosystem functions and improved conservation of renewable resources across the Luangwa Valley ecosystem through the use of a scalable business model that drives households to collectively and responsibly work together as a community.

This suggestion has an advantage in that the focus directly points to what the end result will be. The means for reaching these results are still reflected in the objective. The other advantage is that it directly buys in on the current focus on food security objectives by the donor. Objective 2 can be repackaged using the same line of reasoning.

In assessing the outputs, it is worth noting from the onset that unlike outputs associated with Objective 1, all the outputs under Objective 2 have been framed without timelines. It is important that a specified period of time is given for achieving these outputs. With a specific time frame, the measurement of effects will become clearly outlined in the project's monitoring and evaluation framework.

There is also some obvious misrepresentation of what the outputs should be after certain activities are implemented. One activity (page 19, for example) talks about

improving a rice variety for the Chinsali area to meet product quality standards of Chama Rice. The output for this particular activity says, “Chama rice variety supports an annual harvest of over 300 tons in the Chisali area”. Are we improving the rice variety in Chinsali or are we introducing Chama rice in Chinsali?

Quality of indicators and means of verification

There is a mixture of indicators and a means of verification in the same column in the log frame. First it is important to put these elements in different columns. The means of verification are not clearly provided because of the above stated shortcomings. Without the means of verifying the indicators, tracking impact of the project will prove difficult. For instance, the kind of data which needs to be collected and where will it be reported for easy access from every CTC centre and HQ should be included. The baseline information before Phase 2 should be collected.

Discussions with some members of staff suggest that a lot of data and information in the form of reports is available. Probably it is the organisation of these pieces of information that need to be put in place. How, what, when and who will monitor should explicitly be indicated in the proposal. In addition to the key activities and outputs, the means of verifying these outputs should be included in the Tables on the project log frame.

The quality, simplicity and user friendliness of the recipient’s monitoring system for the programme

The current monitoring team consists of one GIS analyst based at headquarters in Lusaka and one data analysis at each Community Trading Centre (CTC). In the Phase 2 project proposal (page 38) a monitoring and evaluation manager will be located at headquarters and each CTC will have a data manager. However, the budget on page 39 lists only three positions: a monitoring and evaluation analyst, a GIS analyst and a statistician, all presumably located at headquarters. This needs sorting out and in particular it is important that the monitoring team is headed by a competent monitoring and evaluation specialist and not by a GIS analyst, as is the case at present.

COMACO has developed an extensive monitoring and evaluation matrix with indicators and frequency of data capture for each activity, input and output. This matrix is very complex involving a total of 42 items, 92 indicators of which 37 are recorded annually, 27 monthly, 9 biannually and 4 quarterly. Consequently, data capture lacks depth and completeness. For COMACO Phase 2, it is recommended that a monitoring and evaluation specialist be hired as a consultant to thoroughly review the matrix, and in consultation with stakeholders, develop a simple but robust and relevant monitoring matrix based on prioritized activities, inputs and outputs.

Are relevant and reliable baseline data available?

Relevant and reliable baseline data of the COMACO areas of current and planned operations are not available. A pre-COMACO Phase 1 baseline survey was conducted in 2001 in the Luangwa valley by the African College for Community Based Natural Resources Management. The survey obtained data on household food security,

individual income, income sources, and estimated rates of wildlife depletion by local hunters. This data, apart from being inadequate, is out of date for the purpose of the COMACO Phase 2 project. Since the impact, and hence the success of the project, will be measured against the baseline data at the start of the project, it is recommended that a baseline survey of all the COMACO regions and not only Nyimba and Chama regions as budgeted in the project proposal, be conducted within the first year of COMACO Phase 2.

Realism of the budget and financial assurance systems

We are of the view that the budget should be presented in the usual income and expenditure format so that it will be easy to tell the different income inflows and expenditure outflows coming into and flowing out of the project. It is from this whole budget that an extraction of what the Royal Norwegian Embassy is being requested to pay can be made. In this way the budget will be more transparent and show the other sources of funds. It is important to clearly show the position of the project in terms of profit or losses when only operational costs are considered, and also when the capital expenditure is taken into consideration.

This logically fits into the notion that a separate budget be devised for each CTC so that the positions of the CTC are judged independently. This argument does not in any way imply that the CTCs cannot subsidise each other. They can and should because after all, they share the same headquarter expenses. However, decentralising the budget to local CTCs will help COMACO to strategically analyse which CTC will be operating profitably or not. Areas of major focus will then be zeroed in. Also within the CTCs it is important to project what revenues are coming from what enterprise and the costs associated with the enterprises. The profitability analyses of these enterprises will assist in prioritising which major enterprises should be involved at a particular CTC. Enterprise budgets should be used to build on the CTC budgets that could be used to establish the entire COMACO project budget. We note that the budgeting and accounting efforts at CTC level are well monitored, even on a daily basis through an advanced electronic communication system, and that there are at least monthly internal audit visits to each CTC. COMACO must be complimented on an above-average accounting system at a decentralized level. This is in itself a valuable framework for future financial sustainability, also at the local level. There is much transparency.

The building elements (quantities and prices) of sales projections for the enterprise budgets should expressly be shown in a separate Table so that it is easy to compare where the increases in the value of sales come from.

Some items such as telephone costs (extremely low monthly expenses are budgeted for), insurance of vehicles, and some salaries appear to have been under budgeted. Budgeting for procurement of used vehicles could appear cost effective but the life span of such vehicles cannot be guaranteed. We are of the view that new vehicles are procured instead. This would increase costs significantly.⁸ We note that several COMACO staff do not have salaries included in the COMACO budget but

⁸ The Consultant has noted that COMACO prefers to purchase old vehicles that they claim are easier to maintain when they break down. The logic of this escapes the Consultant, unless the vehicles are truly very old and very mechanical in all respects. But new trucks can also be simple to maintain (e.g. Tata).

(presumably) are paid directly by WCS. From an accounting point of view this WCS contribution to COMACO should appear. As this income is not noted, the budget is not a true reflection of COMACO activities.

The project proposal does not show the current COMACO position in terms of assets (both physical and human?). If the asset base, especially on physical assets, is shown e.g. in a Balance Sheet (BS), the strong standing of COMACO will be reflected. The inclusion of the availability of human assets will also help in showing the capability of the project to run Phase 2. Field discussions revealed that both asset types are in place but what is lacking is the indication of these assets in the proposal.

Management capacity to handle funds and financial assurances

There is capacity for management to handle the funds. At the HQ, the Commercial Manager is the overall boss who oversees the accountant. It is the project's aim to employ an assistant accountant. Each CTC has an accountant with an assistant, or an assistant and an accounts clerk. With the increased activities anticipated, some CTC accounts offices feel some additional personnel should be added to their offices.

There are written financial guidelines and principles that the financial and accounting staff follows.

Revolving fund sustainability

Currently the Mfuwe and Lundazi CTCs have been weaned off in terms of funding for the initial commodity purchases. Now the two CTCs have been using funds they have been making from their purchases. Although Nyimba is a new CTC, one of its sub centres (Luangwa) has been operating for some time, and indications from the field were that some enterprises such as honey production and processing have become self-funding without reliance on HQ.

The revolving funds analyses are, however, based on the fact that only the operational costs (especially those of input and marketing) are knocked off from sales or revenues. The spreading of fixed costs on these enterprises could impact negatively on the sustainability of the revolving funds.

Institutional and economic viability

More should have emerged in the proposal. Budgets for individual enterprises cumulating to whole CTC budgets and eventually the whole programme should have clearly been spelt out. What quantities and at what anticipated prices will the different enterprises sell. One is left to speculate that since the budget has overall sales, the breakdown of where these sales come from would help the programme to analyse which enterprise is making profits, which to subsidize and which to drop all together, if possible.

The over-emphasis on environmental conservation, especially wildlife conservation, has to some extent overshadowed the programme's business goals. The HQ has not yet fully inculcated its business vision to the local CTC staff. For example Lundazi

seems to be unaware that it is expected that the CTC should at some time become self-sustaining and even start contributing towards the running of the HQ.

Institutions and marketing systems

An assured market is probably what makes COMACO a special project to rural farmers. Indications from the field visits showed increased production of the commodities that COMACO purchases from the farmers. Average yields per hectare of the major crops marketed by COMACO have also been increasing since the project started. It is the Consultants understanding that demand for most COMACO products is assured.

Not much has been written about markets in the proposal. Over-simplification of the marketing systems in place mainly arise from the fact that most COMACO products presently finds itself in the main urban stores and there is reasonable demand that is outracing supply. Although this is favourable for the COMACO programme, the coming on board of the proposed farmers will definitely increase the overall output.

More analysis on future markets, comparative analysis of these markets, quantities they are willing to buy at an indicative price, etc. should be included in the proposal. In fact, this information should form a corner stone of anticipated future sales. The anticipated export markets should also be described in the project proposal. It is not the task of the Consultant to develop a marketing strategy for COMACO, neither for the eastern nor western side of Luangwa Valley, nor to comment on export potential. We note the pride of COMACO staff in finding COMACO produce on the shelves in local shops, near the producing areas. From many points of view short-travelled food is preferable, and efforts to reach local traders with COMACO produce should be intensified, and new markets opened in the western side of the valley as produce becomes available. Local CTC shops are probably marginal to local trade. Prices may be set locally, to reflect low transport costs and local purchasing power. Entry into the Lusaka and other big town supermarkets offers a display of the greater rationale of COMACO and its links to sound wildlife and habitat management. More stringent sourcing policies of supermarkets put demands on COMACO to be a reliable supplier. COMACO seems well aware of this, although the Consultants have not been able to study detailed breakdowns of profitabilities for sale in alternative markets.

COMACO's quest to receive ECOCERT organic certification for exports has so far not been successful. ECOCERT is in itself a member (based in France) of IFOAM, which does have a Norad-supported marketing programme for organic foods from developing countries and now cooperates closely with e.g. FAO. COMACO may wish to approach IFOAM for assistance with international marketing, including presence at its Biofach fairs held in many countries. The Consultant is frankly uncertain whether there is a profitable international market for current COMACO produce (e.g. honey, peanut butter and confectionary groundnuts) and would urge COMACO to liaise both with the Zambia Agri-Business Forum in Lusaka (e.g. through Daniel Ball or Felix Chizhuka) and NASFAM in Lilongwe, Malawi (e.g. Dyborn Chibonga). They both have valuable international marketing experience. Formal organic certification is probably unimportant in the Zambian market.

Extent the programme will have to rely on external support from WCS HQ in Lusaka

With a breakdown of the budgets to CTC levels, it would be very clear to know the extent to which the individual CTCs will have to rely on external support from WCS HQ in Lusaka. If this information is complemented with the enterprise budgets at the different CTCs, more strategic options for CTC not faring well might be explored. This will make it easy to estimate the extent of support needed at a particular time from HQ that apparently has revenue coming in from the other well-performing CTCs. It is expected that each CTC level and timing of support will depend on the different activities, production levels, sales etc. This also implies that the levels of self-sustainability for the CTCs might not take place at the same time.

Staff training

Training has not been budgeted for. We are of the view that there should be continuous staff training to keep them abreast with the changing business world. More specifically, some staff could be trained in project planning and management. The extension staff also could benefit from brief trainings in agronomic practices. There are some practices such as spacing of crops like rice and even maize that have been taken for granted in the field. Farmers could be losing out on productivity per given piece of land if such supposedly small mistakes are not rectified.

Collaboration with institutional organizations

The Consultant notes that during Phase 1 the COMACO project has established close association with several overseas institutions, mainly in the USA, and often of the highest standing. This is commendable. The Consultant believes also universities in Europe (including Norway) may wish to be involved. The Consultant also notes good collaboration with Zambia government institutions in wildlife management and agriculture, both at central and local level. The Consultant wonders, however, why in Phase 2 there has not been a greater emphasis on collaboration with e.g. University of Zambia (UNZA) and other research bodies nationally and in the region. The COMACO project is surely of great interest also to graduates and teachers in national institutions, and may inspire students to seek careers in COMACO⁹. COMACO spans a wide field in agricultural, natural and social sciences, and its emphasis on natural resources management (NRM) may be most relevant in the proposed establishment of a Centre of Excellence in NRM in the School of Agricultural Science at UNZA (contact: Judith Lungu, Dean).

⁹ Such spin-offs have been noticed with the Norwegian-led cooperative BEEP project, particularly at Makerere University in Uganda with agricultural economics (see Bie, S.W. and van Oosterhout, S. 2009: The Business Exchange Experience Programme. Noragric, UMB, Ås, Norway). A useful contact to review processes leading to good project-university cooperation at Makerere is Johnny Mugisha (Senior lecturer, Agricultural Economics).

3.3. ASSESSMENT OF SUSTAINABILITY AND RISKS

Policy and framework conditions

COMACO objectives are closely aligned with those of Zambia's Ministry of Agriculture and Cooperatives policies, with the exception of the COMACO emphasis on organic farming. Similarly, COMACO subscribes to conservation farming practices also advocated by the Ministry, with the exception of the use of agrochemicals. There is close cooperation with Ministry of Agriculture officials in the field, COMACO supplementing extension services offered by the Ministry. In reality COMACO undertakes the larger share of outreach services in the areas in which it operates but then focusing on COMACO members. COMACO provides some logistic support to Ministry staff. Similarly, COMACO has aligned its activities closely with those of the Zambian Wildlife Authority (ZAWA), in a complementary role of creating incentive for poachers to divert from illegal activities, and – occasionally – to provide local expertise in support of ZAWA activities. The ZAWA Director General serves on COMACO's Advisory Board. There is every reason to assume that these friendly relations will be continued in Phase 2, and the Consultant has ascertained from centrally placed external and internal individuals that this will be the case. Similarly local authorities, e.g. district commissioners, have without exception spoken positively about Phase 1 and welcomed a Phase 2. In a meeting with one chief, who has been particularly helpful to COMACO and serves in a model role as a farmer, the Consultant noted a similar attitude. COMACO appears to have prepared a useful official framework for its activities under the proposed Phase 2 both in the eastern and western areas. Under Phase 1 COMACO has instituted strict financial controls and warehouse security. The Consultant has had a single case of financial misbehaviour during Phase 1 referred to (a theft of 21 bags of groundnuts), and notes that appropriate legal action was promptly taken, leading to conviction of the culprit in the public courts. Both at central and local level COMACO appears to have adequate financial control and internal and external audit mechanisms in place. This augurs well for transparent behaviour and appropriate anti-corruption mechanisms. Without specialized expertise in this field the Consultant nevertheless concludes that all signs are that COMACO conducts a strict and orderly financial regime and will continue to do so under a Phase 2. COMACO has recently strengthened its financial staff with competent individuals, modernized its accounting practices, and moved financial monitoring into real-time through the provision of reasonable internet facilities at a local level. COMACO seems well poised to be able to handle enlarged economic activity levels, as will be required under a Phase 2, although some functions may need additional staff, e.g. internal auditing.

The proposal for Phase 2 recognizes the changes in Norwegian donor policies from primarily nature conservancy and wildlife management to a greater emphasis on food security, poverty alleviation and environmental sustainability. However, these changes essentially coincide with the rationale of the COMACO project as a whole, where incentives for sustainable smallholder farming would eliminate the need for illegal and unsustainable poaching by local residents. They appear also - in general terms - consistent with Government of Zambia policies on support to agriculture (e.g. the fertilizer subsidy scheme) and simultaneous strong efforts to preserve wildlife and habitats, both due to inherent government obligations under the Convention on Biological Diversity and as the backbone of the tourist industry.

Local leaders have offered considerable support to COMACO during Phase 1 of the project. Those interviewed by the Consultant – three district commissioners and a local chief in the eastern part of the valley – have strongly welcomed a Phase 2. COMACO has enlisted leading local figures as model farmers and similar in its Phase 1, and some of these may have received special attention to ensure that they are able to fulfil such roles. The Consultant has not identified irregular practices. In the western part of the valley extensive corruption and fraud during the PAM-led Phase 1 have brought the COMACO project into disrepute, but not WCS. Local officials interviewed displayed a ‘wait-and-see’ attitude as to COMACO performance there. With less fertile land available in the eastern part, the COMACO project needs to transfer experiences from similar areas in the western part to the eastern part. Again the use of fertilizers, and the support for their use, will become an issue.

Luangwa Valley is a relatively remote area and thinly populated by Zambian standards. Many important major roads seem to be very poorly maintained and to have suffered many years of neglect, also when donor funding for road improvement has been available. Roads constitute the important link between producers and the market, and for lower-value per kilo commodities (as those produced by COMACO) air transport is financially unrealistic (although some airports/airfields are present, it is probably environmentally unsound). The Government of Zambia is currently making attempts to improve some roads in the project area. There are local reports of inappropriate contract practices in conjunction with road repairs and reconstruction but the Consultant has had no opportunity to verify this. Road maintenance is currently not the remit of COMACO in their project area but the transport of goods for the project and produce to the market certainly is. COMACO therefore maintains a small fleet of goods carriers to be used in areas where transport is otherwise not available. At the moment COMACO does not own equipment for road and track maintenance. ZAWA maintains roads within the national parks. COMACO may in the future consider whether it needs to carry out some maintenance on some roads to ensure trafficability. Support from donors (incl. Norway) for effective road maintenance in the Luangwa area will be helpful for the project.

At the time of writing the Consultant did not have access to the Joint Assistance Strategy for Zambia, recently published. An evaluation of COMACO’s conformance with JASZ cannot therefore be made within this report.

Socio-economic and gender aspects, including HIV/AIDS

The original COMACO concept as a tool to improve wildlife management through offering alternative incomes and modes of sustenance was a socio-economic analysis of why people poach. The rationale for poaching must have been well-known in local communities, where a few more risk-loving individuals would have utility functions that favoured poaching, with all its dangers, to agricultural activities, with their dangers of under- and malnutrition and a vicious poverty trap. Similarly, given that forests constitute much of the largest source of energy for the community, over-use of forest resources for energy, also for exports out of the area (charcoal trade) and the need to supplement crop nutrients in the soil by wood ash through slash-and-burn-techniques (chitemene), have taxed the traditional sustainability of forest management. Even with the relatively low human population densities in the Luangwa Valley it must have been apparent to locals, including traditional chiefs, that

over-exploitation was taking place (e.g. through the shortening of fallow periods). Restrictive Government policies both in relation to poaching and charcoal production exemplify a national understanding of the issues and accepted limits to exploitation.

The gradual acceptance of anti-poaching alternatives, essentially by reducing the risk of the poverty trap associated with farming, and the growing acceptance of measures to reduce over-harvesting of forest resources, indicate that there are probably no inherent traditional socio-economic barriers to the COMACO approach. It would have been useful to have had serious social science studies of local utility functions as part of Phase 1 verified this assumption. A Phase 2 in the western part may usefully include a study along these lines, since less may be known there and the proposed Phase 2 scale-up has a lesser experience base.

Gender considerations play an important role in development assistance and are a basic premise for Norwegian assistance. The various population groups in the Luangwa Valley have mixed traditions of matrilineal and patrilineal arrangements. Parts of the Luangwa Valley are inhabited by groups that practice matrilineal social organization patterns. This gives women a different, and normally stronger, role in ownership, inheritance and decision issues than in patrilineal communities. Men may as a result be more marginalized, as women are often marginalized in patrilineal societies, e.g. in respect to asset ownership. In the COMACO Phase 1 project areas 50-55% of the enrolled households are female-led. In one sense there is an unusually good gender balance in the project. On the other hand several women head of households interviewed by the Consultant attributed the situation to deaths, separation/divorce and (to a lesser extent) labour migration by the male spouse. COMACO membership has offered female-led households a stronger-than-normal group identity. However, apart from support staff COMACO itself is male dominated. Phase 2 of the project has no specific mention of gender issues, but it has a notable gender balance amongst its members. In that sense gender issues may appear more mainstreamed than is the case in many development projects.

The population of both the eastern and western side of the Luangwa Valley are seriously poor and have limited food security. The Consultant observed some malnutrition and under nutrition in villages, including a case of likely kwashiorkor. The Consultant has not been able to obtain data on life expectancy and the form of the demographic pyramid in the Valley itself, nor quantified nutrition studies. Our general impression is that these are quite poor societies, with a history of limited access to food, in particular to protein-rich food. But also that the participants in COMACO Phase 1 have seen significant improvements in their living standards during the project period. This is also borne out by the Phase 1 reviews. We noticed that the COMACO groups in Phase 1 had both younger and older members, male and female. During day visits we also noted that few children of primary school age were present, a sign of significant school attendance.

Farmers in the project areas appear risk averse, as is common among smallholders. Interventions advocated by the COMACO project are generally low-risk improvements of known technologies, with emphasis on low external input, as is common in organic agriculture. There were several requests for a credit facility to be part of the COMACO project, as the cost of borrowing in the informal market is high. COMACO appears currently to practice an 'in kind' credit scheme where seed may be

repaid in (a somewhat larger amount of) seed. The Consultant has not had data to calculate 'effective interest rates' on such schemes. COMACO may – as its groups develop into small cooperatives – consider linking simple savings and credit schemes (micro-credits) to its activities. The possibilities of linking technological innovation to crop insurance gave rise to considerable interest. COMACO may wish to pursue this further in a Phase 2, as one tool to ease the transfer from a mostly subsistence economy to more market-oriented decision systems.

Zambia has an average life expectancy of about 46 years, and this has been falling over the last 10 years. This coincides with a growth in the prevalence of HIV seropositives. About 15% of all Zambians are now seropositive and a large number develop full-blown AIDS in spite of the increased access to anti retroviral drug treatments. The Consultant does not know the percentage of seropositives in the Luangwa Valley. Whilst rural areas have traditionally had a lower percentage than urban, this may no longer be so. There must be a lot of HIV/AIDS in the project area. The infection pathways are likely to be heterosexual activity, with a smaller (unknown) homosexual component. Studies in the region (see Bie, 2008 for a review¹⁰) suggest that transactional sex (occasional bartering food and goods for sex, not prostitution) is often associated with active local markets. Young girls are most vulnerable, as they find it difficult to resist pressures from family and ruthless males. Increased roles of trading centres in an area predisposes for transactional sex. A successful Phase 2 will increase activities and open up more trading centres. The Phase 2 proposal does not consider this HIV/AIDS risk.

There are other serious diseases in the area (e.g. malaria, schistosomiasis (bilharzia), gastric diseases) where vectors are associated with water-bodies. Increased irrigation (for rice) and fishponds in Phase 2 may create extended habitats for disease vectors and contamination. However, local farmers interviewed during the fieldwork for the Phase 2 appraisal did not associate paddy rice and fish ponds with increased levels of malaria (the farmed fish, tilapia, is a known omnivore and eats mosquito larvae) although schistosomiasis seems on the increase. Infant deaths from polluted water sources seem highly likely. Phase 2 does not consider these disease factors.

Common to both these diseases, to the risk of HIV-infection and the onset and severity of AIDS-related diseases, is the state of the human immune system. Poor nutrition, especially protein-deficient diets, increases the risk of infection and co-infections (see Bie, 2008). Improved nutrition, a goal of the COMACO project, is probably the cheapest and best way to strengthen human immune systems to reduce the chance of infections and to improve the speed of recovery (or prolong life). Whilst not explicitly stated in the Phase 2 proposal, it is implied as a more general nutritional objective. Special mention must be given to COMACO's careful testing for aflatoxin, a mycotoxin from a mould common on groundnuts. Aflatoxin is a known carcinogen (liver cancer) and a suspected major contributor to reduced immune-response to HIV-infections. COMACO's aflatoxin-testing in the production of peanut butter during Phase 1 is highly commendable. In a Phase 2 COMACO should also explore new aflatoxing testing techniques, e.g. those developed by ICRISAT (www.icrisat.org). COMACO may wish to extend aflatoxin tests also to maize. A careful review of COMACO food production procedures for confectionary groundnuts, peanut butter

¹⁰ Bie, S.W. Agriculture in the time of HIV/AIDS. Noragric, UMB, Ås 2008

and soya-maize instant porridge to eliminate risks of mycotoxins and bacterial infections (especially salmonella) may form part of a Phase 2, but is not explicitly mentioned. The Consultant notes that COMACO now (*primo* 2009) has a food technologist for training in the USA on such issues. To be found producing and distributing contaminated food constitutes a huge commercial risk, with massive legal implications. Insuring against such risks may be feasible but is not mentioned in the Phase 2 proposal. If COMACO produce were to enter the international markets as part of Phase 2 business plans, the risks may increase significantly.

Economic and financial aspects

COMACO's Phase 1 has largely been financed by Norway (there have also been other smaller donors), lately also supplemented by surplus from sold COMACO produce. There have been no reports of financial mismanagement, apart from a theft by an employee of 21 bags of ground nuts, which was dealt with by the courts and a conviction obtained. Phase 1 has been duly audited by the external auditor. Annual accounts have not been formally approved by the Board of Directors, nor have annual budgets, due to the fact that the Board has not met.

Board formalities apart, COMACO has had a proper hand in financial management, including strict internal auditing and now online accounting systems that allow close monitoring of financial transactions on a daily basis, even in remote areas. In preparation for a Phase 2 COMACO has strengthened its financial and business services and appears well staffed at its Lusaka headquarters to deal with a significantly larger turnover than at present. Issues of COMACO accounts and budget will in the future have to be formally approved by the COMACO Board when called or reconstituted.

Phase 2 proposed budgets have been reviewed by the Consultant. Whilst budget information is at an overall level, the Consultant is left with three main impressions:

- a) That the transition from a donor-sponsored project to a self-financing project in Eastern Luangwa Valley (the business model) is laudable and well-argued, and has a fair chance of success, in which case COMACO in Eastern Luangwa Valley becomes financially sustainable.
- b) That the dependence on donor funding for Western Luangwa Valley beyond the 5 years of Phase 2 is realistic, and whilst a transition to a self-sustaining financial model is plausible in the longer term, it is not likely within the 5 years of Phase 2.
- c) That the annual budgets for Phase 2 may be significantly under-resourced. The Consultant has asked COMACO and its Financial Adviser to revisit the budgets for their realism, and to present the budgets in a more business-style mode, but at the time of writing we have not received this feedback. Looking at individual figures the Consultant tentatively suggests that the proposed workplans cannot be carried out without an increase in income of 25-33%. We believe that increased sale of produce will not contribute adequately to the need. It must therefore, in all likelihood, be financed by a donor (Norway or other donors). Alternatively the workplans must be adjusted to allow operations within the originally suggested project income for Phase 2. The Consultant urges close scrutiny of the budgets, and notes that as the Project

Proposal for Phase 2 has not been formally endorsed by the COMACO Board, there is insufficient legal accountability for the submitted budgets.

Institutional and organizational aspects

COMACO is clearly the product of creative thinking within WCS. Key positions in COMACO are occupied by staff paid wholly or partly by COMACO and report to WCS, sometimes to its US headquarters. But without the insight, wisdom and perseverance of WCS (and its director in Zambia in particular), COMACO would not exist today. There is a strong WCS influence, but the Consultant has seen it as benign. It also notes and applauds a growing preparedness in WCS Zambia to divest itself of control functions to COMACO *sensu strictu*.

The Consultants note that COMACO in April 2006 was reconstituted under Zambian law as a private company limited by guarantee. There are 6 guarantors who were directly or indirectly shareholders in the previous COMACO company, then limited by shares. Formally the 6 guarantors (5 individuals plus WCS as an institutional guarantor) constitute at present the Board of Directors of COMACO. Although they guarantee for different amounts (the largest amount, 73%, being guaranteed by WCS) the Consultant is led to understand that they are jointly and equally responsible. The Consultant notes that this new organizational structure has been recommended by WCS's and COMACO's national and US-based lawyers as the most appropriate form to safeguard COMACO.

The Consultants further note that the Board probably does not have a useful composition at present, as Directors are widely scattered and may mostly have local community interests. The Management of COMACO has therefore not called the Board for regular Board meetings. Thus the Board appears not to have attended to its legal responsibilities in respect to approvals of annual reports, accounts and budgets. The Consultant is doubtful whether this has had a significantly negative effect on the progress of Phase 1, but mostly echo the Recommendation of the Final Review of Phase 1 that COMACO must attend to this formality with urgency. The Consultant notes that COMACO has not done this, and therefore created an untidy legal situation. This is unfortunate and worthy of criticism. However, the Consultant sympathizes with COMACO and WCS that the current formal COMACO Board is dysfunctional, and its active participation in the early stages of Phase 2 will probably cause problems of some magnitude, mainly due to local interests and allegiances.

One solution could be to reconstitute the Board suitably before the end of 2009, and to allow the current Management group, largely employees of WCS, to conduct business on a formal management contract to COMACO until the reconstituted Board is in place, including the authority to enter into a contract with the Norwegian donor for (part of) Phase 2. This may entail Norad signing a preliminary contract with WCS for an initial period of Phase 2, rather than with COMACO itself, but on the strict condition that a transfer to COMACO itself is arranged at an early date, when the Board of COMACO has been reconstituted. The Consultant, keeping in mind the interests of the many thousand COMACO farmers and households, would not recommend a postponement of Phase 2 on legalistic grounds.

COMACO's staff are largely employees of WCS at present. It seems important to the Consultant that they become COMACO employees at an early opportunity, with the exception of staff that naturally belong in WCS and are made available to COMACO on a management contract. The current overhead charged by WCS for these and other services in Phase 2 is modest (8%). It is important that WCS is also comfortable with this level of overhead, as inadequate compensation could cause wear-and-tear within WCS, whose interest and guidance in aspects of COMACO is most important for COMACO.

A significant part of the business- and financial staff has been recruited over the last year. The Consultants sense that they are of good standing and at the appropriate level for COMACO. It augurs well for a Phase 2.

The Consultant has much praise for the selection of COMACO staff in the field. It is unusual to see so many competent and dedicated national staff, at all levels, in remote areas of Zambia. They seem well poised for a Phase 2. We do note, however, that at the professional level there is a significant overrepresentation of males, and we urge that COMACO makes further efforts to recruit females into professional positions, also in the field. The Consultant is uncertain as to the sociological implications of having predominantly male extension staff, and has no solid information on which to draw conclusions.

The support staff, both secretarial and production workers at the various plants, seems well trained and motivated. In the production plants the Consultant noted reasonable to good work safety practices, in particular protection against moving machinery parts, hot surfaces and dust but maybe less attention to ear protection and with some uncertainty on food handling, particularly with groundnuts and soya/maize mixtures. However, the Consultants had neither the equipment nor the skills to offer constructive criticism for Phase 2 activities. These issues are not discussed in the proposal. Office and factory premises are neat and tidy, although some of the production lines do not offer a logical flow of material through the production process. This may partly be due to the need to keep 'hot equipment' apart from 'cold' but also because the technology chosen is basic, robust and therefore technologically appropriate. We think that the experience gained in Phase 1 will serve a Phase 2 well.

Environmental aspects

The rationale for the COMACO project is well explained in both the Phase 1 and Phase 2 documents. There is a strong argument for enhancing the biodiversity of both the game parks and the surrounding areas. The animals of the game parks would be better protected due to a decrease in poaching pressure, and the habitats of the surrounding areas would be protected from illegal charcoal production and excessive slash-and-burn agriculture. With the proviso that charcoal constitutes a renewable source of energy, distinct from fossil fuels, and therefore the production in principle may contribute less to a greenhouse effect (as forests will regenerate and recapture the CO₂), these are all laudable aims. Phase 2 of COMACO is an environmentally sound project and this is clearly spelled out in the proposal.

The proposal advocates that organic farming principles be universally applied in all project areas. The primary arguments are environmental (no pollution of a sensitive

environment by agro-chemicals), health-related (health foods) and socio-economic (less dependence on external inputs, therefore lower risks to farmers, and possibly premium prices for organic produce in the markets).

This appraisal of the Phase 2 of the proposal is not the place for a major debate on the pros and cons of organic (ecological) farming versus conventional farming. The Consultant has two concerns, however.

The first is that to be allowed into the COMACO family, COMACO farmers must follow organic farming rules for certain crops (maize excluded). These may become further sharpened should COMACO obtain ECOCERT certification for some of its produce. Although farmers *de jure* may decide to use agrochemicals, farmers feel that they cannot themselves make free choices on how to farm if they are in a COMACO area. Some farmers may see this as an infringement of their legal rights to decide production methods themselves and be *de facto* prevented to do so by a body (COMACO) that has no legal jurisdiction on this matter, whilst the body that may have this right (the Government) would surely allow conventional farming methods - as is indeed the case with Conservation Farming. As long as COMACO has a monopoly or near-monopoly of agricultural advice, inputs, processing, and sales of farm produce in a village, farmers will be unreasonably pressured to follow COMACO rules. Opting out is not a social option. The Consultant would recommend COMACO to have more flexible attitudes to the use of agro-chemicals, which – after all - was the backbone of modern agriculture in Norway and other rich countries, and of the Green Revolution in Asia. And a main ingredient in the NEPAD/AU strategies for sub-Saharan Africa. The Consultant senses that the COMACO leadership is prepared to rethink this issue. It will involve greater COMACO responsibilities in the input chain, possible introduction of savings and micro-credit schemes, and considerations of crop insurance.

The second is that the Consultant specifically believes that for certain crops in certain areas it is highly probable that farmers will be deprived of obtaining much-needed yield increases (to improve their welfare and food security) because organic farming methods will not work well. It cannot be right of COMACO to use its organizational strength to prevent agricultural progress for e.g. maize production on poor soils. COMACO proclaims to adhere to conservation farming techniques, which may well be appropriate in such areas, but conservation farming often includes inorganic fertilizers that COMACO may wish to exclude.

The Consultant finds this logic, part of the Phase 2 proposal, debatable and urges COMACO to exercise a more flexible approach to the use of agro-chemicals, especially inorganic fertilizers for maize production on infertile soils, possibly in combination with other conservation farming techniques.

Whilst the Consultant sees the logic in organic cotton growing, we must be reminded that cotton worldwide is the largest consumer of conventional pesticides and for good reasons. The Consultant is doubtful whether sustainable production levels of cotton can be maintained under organic growing conditions without at least the use of integrated pest management techniques including conventional pesticides and/or the use of GMO cotton (Bt-cotton), which is currently not certified for use by the Zambian authorities. COMACO must demonstrate convincingly to their farmers that

organic cotton growing is profitable and sustainable. We do not see evidence of this in the Phase 2 proposal.

Technical and technological aspects

The Consultant has commented under other sections on technologies that are proposed in Phase 2. One additional comment may be appropriate: The Consultant has observed that both for maize and rice rather large spacing is used in COMACO farmers' fields, giving significantly lower plant densities than is normally regarded as optimal. It has been explained that this may be a function of piecework of hired labourers, who are paid per unit area rather than by number of plants. If this is so, then planting contracts should be altered to ensure higher plant densities.

Finally, the Consultant has discussed with the COMACO leadership whether there is a case for limited use of tractors, particular for breaking new land for production of rice, but also other crops. COMACO car repair shops also have expertise in tractor maintenance. COMACO has so far had both sustainability and other management arguments against tractor use. The Consultant asks COMACO to keep this issue under review in a Phase 2 project.

4. CONCLUSIONS

The proposal for a Phase 2 of the COMACO project is generally well argued and appears to fit with current Norwegian development assistance policies on food security and poverty alleviation, also in rural areas. There is good gender sensitivity shown in Phase 1. Phase 1 has demonstrated its original approach, and the proposed scaling-up, also to the more marginal western part of the Luangwa Valley, seems a worthwhile investment. The Consultant has suggested a number of points to be considered in a revision of this proposal. The Consultant recommends that following this revision the Royal Norwegian Embassy should seriously consider the proposal for full funding. The Consultant believes that Norway's long-term involvement in the Luangwa Valley over several decades, whether for wildlife protection or now food security/poverty alleviation, is a good example of responsible donor behaviour. A continuation of this policy is recommended.

APPENDIX 1. TERMS OF REFERENCE

Terms of Reference for the Appraisal of the Community Markets for Conservation Programme (COMACO) Phase II

1. Background

The COMACO programme is a rural development approach that provides poor households living in Game Management Areas access to higher value markets in exchange for increased compliance to sustainable conservation practices. This helps in reducing pressure on wildlife and the environment and provides the added value of involving the local communities in conservation whilst at the same time addressing their livelihood needs. The Embassy is of the view that the model provides good synergy between the issues of environment and food security that is a vital element in any rural development intervention in Zambia today. This is confirmed in an end of programme review carried out in 2008. COMACO gives promise of a rural development model for consolidation in existing areas (eastern side of the Luangwa River) and possible replication to other parts of the country. It is seen as an important programme in the development of the Luangwa Ecological Partnership Programme (LEPP). A programme that shifts emphasis from wildlife to the wider ecosystem in the Luangwa valley. The programme also focuses on conservation farming and can be linked to the current support Norway is providing through CFU.

The Embassy entered into a joint partnership with Programme Against Malnutrition (PAM) as the contractual partner and Wildlife Conservation Society of Zambia (WCS) in 2005 in support of the COMACO programme. Due to a case of fraud in one of the COMACO trading centres supported by PAM, the Embassy disengaged its support from PAM in 2007. The Embassy continued to support WCS who operates on the eastern part of the Luangwa Valley. The Embassy then embarked on a search to find a new partner institution to replace PAM. In the meantime, in order to keep the former PAM COMACO trading centres operational whilst the search for the new partner was on, the Embassy engaged the services of MTN Special Engagements to run operations on the western side.

However the search for a new partner did not yield the intended results as none of the organisations that applied for the assignment could meet the required criteria. As a result, the Embassy decided to continue its cooperation with the WCS as the main partner in both the eastern and western sides of the valley. Despite the many challenges faced, the model has so far been relatively successful in enhancing productivity and it continues to provide a high value market linkage for the producers. Gender issues are important aspects of the model as it works with a high percentage of women and deliberate efforts to include women have been made.

On January 9, 2009 WCS submitted to the Embassy a proposal for the second phase of the COMACO programme with a focus on scaling up across the Luangwa Valley starting April 2009 and running for five years. It is this proposal that is the main document and rationale for this appraisal.

Project Goal:

“To realize a healthy Luangwa Valley ecosystem maintained by ecologically safe markets that sustain and integrate social, economic and environmental benefits for resource-poor households in order to protect rural people against the effects of climate change and global market perturbations.”

Project objectives:

“COMACO Phase Two seeks to mitigate the causes and negative impacts of land degradation on the structure and function of a key ecosystem in Zambia through a model that supports market-driven synergies between environmental sustainability and rural livelihoods.”

Project results, activities and outputs

1. Improved trends for healthy ecosystem functions and conservation success driven by self-financing markets in the east and progressively self-financing markets in the west that sustain increasing levels of household food security and income.
2. Increased capacity and synergies among COMACO actors to build added value benefits to conservation, markets and lessons learned for promoting adoption of COMACO elsewhere.

The activities and expected outputs in support of achieving each result are described on pp. 15-22 in the proposal.

2. Purpose

The appraisal will be carried out in order to provide the Norwegian Embassy in Lusaka with the necessary information to make a decision whether to support the COMACO phase II or not. The Appraisal team shall provide advise on potential changes to be made to the project document to enable WCS to reach programme objectives. The appraisal report will be an input in further discussions between the Embassy and WCS on possible revision of the project document. The team is expected to use the format in Norway’s development co-operation manual as a guide to the appraisal process.

3. Scope of work/priority issues

Assessment of the partner’s planning process

The appraisal shall address the quality of the underlying analysis and planning process of the programme, including participation of relevant stakeholders in the process. The linkages with other relevant programmes such as the Conservation Farming (CF) and the proposed Luangwa Ecological Partnership Programme (LEPP) should be examined.

Assessment of Programme Design

The appraisal shall address the general quality of the project design. The quality of the design elements and their inter-relationship (goal, purpose, outputs, inputs), e.g. consistency and realism. An assessment of the choice, relevance, realism, consistency and quality of activities, outputs and indicators should be done. The means of verification should be commented upon. Sufficiency and relevance of both external and internal risk factors and appropriate risk responses identified will also have to be assessed.

Risks should be assessed in terms of the probability of occurrence. A plan for risk reduction should be outlined in terms of redesigning the relevant parts of the programme. The team should also ensure that the project implementers have taken into consideration sufficient scope for monitoring risks and taking corrective actions when necessary.

The team shall assess the activities and budgets of the two components and how the detailed budgets correspond to the overall accumulated budgets. Other factors to consider include the relevance of the proposal to both Zambian and Norwegian policy as well as its sustainability and adequacy of the monitoring systems. In 2007 COMACO underwent a review and the appraisal should evaluate the extent to which the key recommendations from the review has been addressed and incorporated into the proposal.

Assessment of Sustainability and Risks

Reference should be made to the current policy framework including the Fifth National Development Plan (FNDP), the Joint Assistance Strategy, Norwegian policy framework, environmental sector policies and plans etc. Social cultural and gender aspects (incl. HIV/AIDS) should be assessed in terms of women's participation in the COMACO programme. It should be evaluated if the proposal has a well-formed strategy considering these aspects. As the Embassy is shifting focus away from the wildlife sector, the relevance of COMACO and its emphasis on wildlife should be assessed and the need for the model to emphasis on addressing poverty by enhancing rural livelihoods and food security whilst at the same time ensuring sustainability of the natural resource base.

As for economic and financial aspects, there will be need to assess the realism of the budget and the financial quality assurance systems and management capacity to handle the funds at all levels. The revolving fund should be assessed in terms of sustainability. More importantly, the business side of the model needs to be assessed in terms of institutional and economic viability of the trading centres. The team will review to what extent the local institutions and marketing systems are likely to be institutionally and economically sound during the next programme phase such that they can be sustainable and self-sufficient post-Phase 2 (and post-Norwegian support) and to what extent the programme will have to rely on external support from WCS HQ in Lusaka and external funding.

The team will review to what extent the programme presents an exit strategy from Norwegian support and the possible need for further support if the exit strategy is not feasible.

On institutional and organisational aspects, the team should consider an assessment of WCS and how it will relate to its office HQ in New York in programme concerning implementation of the COMACO programme. The programme-monitoring framework WCS has developed for the COMACO programme should be assessed. It is important that at output level indicators should address key issues related to environment, food security, gender and economic aspects of the programme.

Other relevant issues

With the Embassy's recent shift in focus away from the wildlife sector the appraisal team should assess how COMACO phase two fits into the Embassy's focus on food security, and broader ecosystem management. The team should also give a short assessment of the collaboration between COMACO /WCS and other institutions, including ZAWA, traditional leaders, local governments and academic institutions.

4. Assessment of donor coordination

Norway is at the moment the only donor considering support to this project. The team can discuss how the project fits within the framework of the larger harmonisation and JASZ framework.

5. Implementation of the appraisal

The consultants will visit Zambia in February 2009. They should meet with WCS both in the field and at national HQ. They should visit COMACO trading centres and meet producer groups. As well as other stakeholders based on their own judgment the team should also assess various key policies including the FNDP. The team shall visit a selected number of older and recently established trading centres, including producers groups on either side of the Luangwa Valley.

The team shall consist of:

The team leader should have relevant experience in reviewing and assessing rural based projects. In addition the team leader should have documented experience in at least one of the key components of the project (extension, marketing and processing agricultural produce, conservation and managing complex rural based institutions). In addition to the team leader one or possibly two additional members of the team should be recruited locally or in the region. One team member should have documented experience in marketing and processing agricultural produce in an African rural setting.

Timeframe:

The team should commence their work by mid-February. The assignment entails 10 days of field work in Zambia.

Team leader
2 days of preparation
10 days of field work
2 days of international travel
5 days report writing
19 days in total

Regional and local consultants (this may be adjusted in the final ToR)

2 days of preparation

10 days of field work

3 days of report writing

15 days in total each

6. Reporting

After the conclusion of the field work, the team shall present a draft summary of their findings and recommendations to the key stakeholders in Lusaka. A draft report shall be submitted to the Embassy by the by the latest 10 days after the conclusion of the field trip. Upon receiving comments from the Embassy and WCS, the final report shall be submitted by a maximum of 8 days after receiving the comments. The report shall be in English and five hard copies in addition to soft copies shall be submitted to the Embassy and Norad/Numi. An introductory summary with main conclusions and recommendations shall be included in the report. The main report should not exceed 30 pages

7. Key documents

Programme document Phase II

Comaco Business Audit

Mid term review report (Kabeta.)

COMACO Progress Report: Short-term Results, Longer-term Impact

APPENDIX 2. ITINERARY

17th February - 8th March 2009

Date	Time	Meeting/Activity	Venue	Participants
Tue 17th Feb	06:35	Arrival of Stein W. Bie in Lusaka	Lusaka International Airport	
	7:30	Check in at a hotel	Southern Sun	
	10:30	Courtesy visit to the Embassy	Norwegian Embassy	<ul style="list-style-type: none"> Stein W.Bie Trond Løvdal Moosho Imakando Prof.Lewis Mughogo
	14:30	Planning Session among ourselves	COMACO/ WCS Head Office	<ul style="list-style-type: none"> Appraisal Team Dale Lewis Chris Chiwenda
Wed 18th Feb	08:30	COMACO/WCS head office Staff Introduction	COMACO/WCS Head Office	<ul style="list-style-type: none"> COMACO/WCS Staff Members Appraisal Team.
	09:15	Meeting with Northern Province Minister	COMACO/WCS Head Office	<ul style="list-style-type: none"> Hon. Shawa Appraisal Team Dale Lewis
	10:00	Meeting With Director of Environment	Ministry of Tourism ,Environment & Natural Resources	<ul style="list-style-type: none"> Dr. Nkowani Appraisal Team
	11:30	Meeting With a Representative of Conservation Farming and a consultant ,Agro economist	COMACO/WCS Head Office	<ul style="list-style-type: none"> Peter Aargard Ivan Stubbs Appraisal Team
	12:30	Lunch Meeting with Gacike	COMACO/WCS Head Office	<ul style="list-style-type: none"> Appraisal Team
	14:30	Meeting with DATA MANAGER	COMACO/WCS Head Office	<ul style="list-style-type: none"> Appraisal Team Kabila Makando Dale Lewis
	16:00	Meeting with COMACO Advisory Board Chairman and COMACO Consultant.	COMACO/WCS Head Office	<ul style="list-style-type: none"> Saul Radunski, Andrew Chitembo Appraisal Team
Thu 19th February	08:30	Meeting with COMACO Business Manager and Commercial Manager	COMACO/WCS Head Office	<ul style="list-style-type: none"> Appraisal Team Mwenda Silumesi Alfred Chirwa Dale Lewis

Community Markets for Conservation Programme (COMACO) Phase II

	10:00	Meeting with the Director General	Zambia Wildlife Authority	<ul style="list-style-type: none"> • Dr. Siwana, • Edwin Matokwani • AppraisalTeam
	11:30	Meeting with Program Managers and Operations Manager	COMACO/WCS Head Office	<ul style="list-style-type: none"> • Appraisal Team • Chris Chiwenda • Ruth Simwanza • Jairos Zimba
	14:00	Meeting with ECOCERT and OPPAZ Representative	COMACO/WCS Head Office	<ul style="list-style-type: none"> • Appraisal Team • Bridget O'Conner • Edwin Abwino
	15:00			
Fri 20th February	6:00	Depart for Lundazi for field visit and with a stop at Nyimba		<ul style="list-style-type: none"> • Appraisal Team
	15:30	Arrive in Lundazi. The team will be met by the Regional Coordinator and later Check in at Castle Motel		<ul style="list-style-type: none"> • Nemiah Tembo
	16:30	Courtesy call to The District Commissioner	District Commissioner's Officer	<ul style="list-style-type: none"> • Mashutso Banda • Appraisal Team • Nemiah Tembo
Sat 21st February	08:30	Tour of CTC, visit with staff , local stakeholders	Lundazi CTC	<ul style="list-style-type: none"> • Appraisal Team • Nehemiah Tembo • John Nyirenda
	10:00	Field Visit to Farmers		<ul style="list-style-type: none"> • Appraisal Team • Nehemiah Tembo
Sun 22 February	7:00	Depart for Mfuwe from Lundazi		<ul style="list-style-type: none"> • Appraisal Team
	13:00	Visit the District Commissioner on the way to the Community Trading Centre	District Commissioner's Office	<ul style="list-style-type: none"> • John Chilowa • Appraisal Team • Dale Lewis • Daka Whiteson
	14:00	Check in at Chimfulle Lodge		<ul style="list-style-type: none"> • Appraisal Team
	15:00	Field visits, meeting with local Chief, presentation by Staff	Masumba CTC	<ul style="list-style-type: none"> • Appraisal Team • Dale Lewis • Daka Whiteson • Joshua Shonga
Mon 23 February	08:00	Continuation of Field visits		<ul style="list-style-type: none"> • Appraisal Team
Tue 24 February	09:40	Depart from Mfuwe with Proflight and arrive in Lusaka at 10:50 and they are met by the Driver		<ul style="list-style-type: none"> • Appraisal Team
	14:30	Meetings in Lusaka with COMACO Business Manager & Data Manager	COMACO/WCS Head Office	<ul style="list-style-type: none"> • AppraisalTeam • Mwenda Silumesi • Kabila Makando
Wed 25th February	09:00	Meeting Continues with the Deputy Director	COMACO/WCS Head Office	<ul style="list-style-type: none"> • Appraisal Team • Chris Chiwenda

	11:00	Meeting with the Finance Manager and COMACO Financial Manager	COMACO/WCS Head Office	<ul style="list-style-type: none"> • Appraisal Team • Mike Matokwani • Alfred Chirwa
Thu 26th February	11.00	Meeting	Embassy	Stein W. Bie
	15.00	Debriefing	COMACO/WCS Head Office	<ul style="list-style-type: none"> • Appraisal Team • COMACO/WCS Staff
Fri 27th February	06.00 09:00	Travel to Serenje Debriefing	COMACO/Field Embassy	<ul style="list-style-type: none"> • Elias Kuntashula • Bie, Mughogho
Sat 28th February	06:30	Departure for Airport Field in Serenje, return Lusaka		<ul style="list-style-type: none"> • Stein W. Bie • Elias Kuntashula
2nd February - 8th February	–	Compiling of Review Report	–	<ul style="list-style-type: none"> • Appraisal Team

APPENDIX 3.

List of people met (this supplements Appendix 2.)

Organisation	Name and position of people met
Royal Norwegian Embassy	Mr. Odd Arnesen Mr. Trond Lovdal Ms. Moosho Imakando
Zambia Wildlife Authority	Dr. Lewis Saiwana – Director General Mr. Edwin Matokwani – Director of Conservation and Management
Ministry of Tourism, Environment and Natural Resources	Mr. Godwin F. Gondwe – Chief Environment Management Officer
Provincial Administration	Hon. Mr. C. Shawa – Northern Province Minister
District Administration	Mr. Mashutso Banda – District Comm. Lundazi District Mr. John Chilowe – District Comm. Mabwe District Chief Mnkhanya – Mfuwe Chief
COMACO Advisory Board	Mr. Saul Radunski – Chairman
Conversation Farming Unit of the Zambia National Farmers Union	Mr. Peter Aagard – Manager
Consultants to COMACO	Mr. Ivan Stubbs – Agro-Economist Mr. Andrew Chitembo – Financial Consultant
Ecological Certification Authority (ECOCERT)	Ms. Bridget O’Conner – Manager
Organic Producers and Processors of Zambia (OPPAZ)	Mr. Edwin Abwino – Manager
COMACO/WCS Head Office	Dr. Dale Lewis – Chief Executive Officer Mr. Chris Chiwenda – Deputy Chief Executive Officer Mr. Kabila Makando – Data Manager Mr. Mwenda Silumesi – Business Manager Mr. Alfred Chirwa – Commercial Manager Ms. Ruth Simwaza – Programme Coordinator Mr. Jairos Zimba – Programme Manager COMACO West Mr. Mike Matokwani – Finance

	Manager
Nyimba CTC	Mr. Hansen Mseteka – Regional Coordinator
Lundazi CTC	<ul style="list-style-type: none"> ● Mr. Nemiah Tembo – Regional Coordinator and CTC staff ● Fish pond farmers
Mfuwe CTC	<ul style="list-style-type: none"> ● Mr. Whiteson Daka – Regional Coordinator and CTC staff ● Chief Mnkhanya - Kalonga Traditional Authority ● Rice Farmers ● Honey Producers ● Ms. Veronica Banda – Lead Farmer ● Groundnut and cotton farmers
Serenje CTC	<ul style="list-style-type: none"> ● Mr. Jairos Zimba – Programme Manager ● Mr. Richard Mumba – Assist. Programme Manager