

Macro Model for the Malawi Growth and Development Strategy

Mid Term Review

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Norad

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Final Report

Mid-term review Malawi:
MACRO MODEL FOR THE MALAWI
GROWTH AND DEVELOPMENT
STRATEGY (PHASE 3)
CASE NO. 1301327

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LIST OF ABBREVIATIONS

| | |
|------------|--|
| AER | Annual Economic Report |
| AfDB | African Development Bank |
| EMT | Economic Management Team |
| FPP | Financial Programming and Policies (IMF based) |
| GDP | gross domestic product |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit (German Company for International Cooperation) |
| GoM | Government of Malawi |
| ICT | Information and Communications Technology |
| IMF | International Monetary Fund |
| IO | International Organization |
| ISSAIs | Standards of Supreme Audit Institutions |
| IT | Information Technology |
| LTA | Long Term Adviser |
| MalawiMod | Macroeconomic Model for Malawi |
| MAS | Macroeconomic Analysis Section of the MEPD |
| MGDS | Malawi Growth and Development Strategy |
| MEPD | Ministry of Economic Planning and Development |
| MoF | Ministry of Finance |
| MoU | Memorandum of Understanding |
| MT | Model Team |
| NA | National Accounts |
| NAO | Malawian National Audit Office |
| NABOP | National Accounts and Balance of Payment |
| Norad | The Norwegian Agency for Development Cooperation |
| NSS | National Statistical System – Strategic Plan |
| NSO | National Statistical Office of Malawi |
| OECD / DAC | Organisation of Economic Cooperation and Development / Development Assistance Committee |
| RBM | Reserve Bank of Malawi |
| SUT | Supply and Use Tables (Input-Output-Tables) |

| | |
|-----|--------------------------------------|
| TA | Technical Assistance |
| ToR | Terms of Reference (for this review) |
| WB | World Bank |

Executive Summary

Background

Bilateral cooperation between the Norwegian Ministry of Foreign Affairs and the Government of Malawi, especially in the fields of statistics and macroeconomics, has a long history. The first statistical cooperation program between Statistics Norway and the National Statistical Office of Malawi as key stakeholder was launched in 2003. This program has come to its third phase, now being split up in a statistics program and a program focusing on macroeconomic modelling. It was initiated in 2012 when the Government of Malawi declared interest in support of the macroeconomic forecasts for the Malawi Growth and Development Strategy. The project under review hence aimed at strengthening the capacity in evidence based planning and timely production of policy analysis for policy makers in order to have a holistic and coordinated approach towards economic forecasting and to meet with international partners on more equal terms. The services provided by the Statistics Norway's experts focused mainly on technical support and training of the macroeconomic modelling staff of Malawi's Ministry of Economic Planning and Development (MEPD).

This Mid-term review aims at assessing the third phase of the project according to OECD / DAC standards focusing on relevance, effectiveness, efficiency, impact and sustainability of the project. The Terms of Reference for the review (ToR) with the questions to be assessed are attached as Annex IV.

Based on the findings of the above mentioned subjects, the team was requested to make recommendations for the continued implementation and fulfilment of the objectives of the project, and especially to advise how the results achieved and cooperation established can be continued with the aim of Malawi operating and further developing the model independently.

Main Findings and Recommendations

- The Macro Model can be managed properly by the MEPD staff. It is used partially for budgetary purposes and partially in strategic policy planning in the MEPD and the Ministry of Finance. Evidence on the use of the model can be seen in regular publications of the Government of Malawi and in several strategic papers. A more holistic and coordinated economic analysis and forecasting is technically possible and should be further promoted by the MEPD, in particular in the Economic Management Team. Especially the Line Ministries do not yet sufficiently exploit the potential of the model. The MEPD and members of the Model Team should inform and educate the strategic planners of the Line Ministries.
- The ownership of the model in the Government of Malawi (GoM) has been forwarded but not yet fully achieved. Further external support from SN especially for the MEPD is recommended. A small highly aggregated model could help newcomers in the Model Team to understand better the functionality of the model; the results could also be taken as a reference for the disaggregated model.
- The Government of Malawi is in a position to present an own analysis and projection for Malawi and is able to interact with International Organizations and development partners on more equal terms. The international organizations – like the IMF – take the results into account and as a basis for discussions being aware of the limitations due to some weaknesses of data.
- Further training of the model managers and the users is necessary:

- ▶ The model managers in the MEPD should be able to dominate major modifications of the model.
 - ▶ Also a better presentation of the assumptions and the interpretation of the results for decision making should be trained within the MEPD.
 - ▶ The Model Team should be trained further by an LTA on undertaking policy analyses (as already started) and on presenting results to users and on the dialogue with the Line Ministries.
 - ▶ For (potential) model users – such as Line Ministries – information and training is advisable on the potentials of the model for impact analysis and for the preparation of policy decisions and development strategies¹. For this reason, institutional links between the Model Team and the Line Ministries should be established. Knowledge of the Line Ministries should also be used as an input for the model and contribute to improve the assumptions of the Macro Model.
 - ▶ The Chancellor College should be involved in training civil servants and students in macroeconomic modelling. This would be an appropriate step towards increasing the sustainability of the project. The planning for this cooperation has already started.
- The data provision by NSO has to be improved. Especially the production of the Supply and Use Tables (SUT) of National Accounts – a core element of the macro model – needs more personnel and a better IT infrastructure (internet, communication facilities).
 - Gender aspects can only be included in the Macro Model when specific statistics are available.

¹ The model managers in MEPD have to undertake the model calculations and the presentation of the results. The training of the Line Ministries should concentrate on those aspects – but they should not be trained on managing the model or a part of it themselves.

1 Introduction

This Mid-term Review represents a part of the project agreement dated 28th June 2012 between the Government of the Kingdom of Norway and the Government of the Republic of Malawi (Article X) on the “Macro Model for the Malawi Growth and Development Strategy” (Agreement).

The program is now in the third phase. The program’s first phase was initiated in June 2003 and included an institutional cooperation between Statistics Norway on the one side and the Ministry of Finance (MoF), the National Statistical Office (NSO) and the Ministry of Economic Planning and Development (MEPD) on the other side. After a project extension a second phase was formally agreed in October 2007. While the first phase focused on developing the statistical basis and later on improving mechanisms, technical systems and linkages, the second phase’s technical assistance concentrated on capacity building for statistics and planning.

Based on the results from the two previous phases it was decided to continue with the third phase of the project. It was planned to be implemented from April 2012 until June 2014. In the third phase the program was split into two agreements: the first one on strengthening the cooperation with the National Statistics Office focusing on different fields of statistics and the second one on cooperation with the Ministry of Economic Planning and Development, Ministry of Finance and the Reserve Bank of Malawi (RBM).

The overall objective of the latter is to strengthen the evidence based planning and timely production of policy analysis for policy makers. The purpose of the project was by definition to strengthen and further build the capacity of the Government of Malawi (GoM) in macroeconomic modelling with the aim to have a holistic and coordinated GoM approach in economic forecasting and analysis and to enable the Government of Malawi (GoM) to meet with international institutions and partners on more equal terms. The cooperation between the SN and Malawi started by the development of a simple macroeconomic projection model. This model was later extended and replaced by a disaggregated macroeconomic model containing supply and use tables (SUT) applying the input-output methodology for fiscal and economic planning at the Governmental level. Malawi staff of the MEPD was trained intensively on using this model, on the interpretation and publishing of the results, and their application in practice. The cooperation has supported a more holistic and coordinated economic analysis and forecasting and improved the fiscal and economic planning facilities in the GoM.

This Mid-term review aims at assessing the third phase of the project according to OECD / DAC standards focusing on relevance, effectiveness, efficiency, impact and sustainability of the project. The Terms of Reference for the review (ToR) with the questions to be assessed are attached as Annex IV.

Based on the findings of the above mentioned subjects, the team was requested to make recommendations on the continued implementation and fulfilment of the objectives of the project, and especially to advise how the results achieved and cooperation established can be continued with the aim of Malawi operating and further developing the model independently.

Members of the review team were: Dr. Albert Caspers, Consultant, Germany, and Prof. Chinyamata Chipeta, Executive Director, Southern African Institute for Economic Research, Malawi, Barbara Wirth-Bauer, Consultant, ICON-INSTITUTE, Germany. Support was provided by Mr Daniel Lechner, Project Manager at ICON-INSTITUTE.

The kick-off meeting initialized and organised from Norad was held in Oslo on 15th October, 2013. Followed by a desk study the field phase was carried out in Malawi from 28th October to 8th November, 2013.

The fieldwork in Malawi took place in both Lilongwe and Zomba. Activities included interviews with the Embassy of Norway; interviews with high level officials, project coordinators and staff members of MEPD, MoF, RBM, NSO and other users of the Macro Model. Interviews were also conducted with representatives of the World Bank and the GIZ in their role of other donors, with university representatives and with a civil society organisation for data triangulation. A complete list of interview partners is attached as Annex II.

The Consultant team presented preliminary findings and recommendations in a debriefing note at the meeting at the Royal Norwegian Embassy in Lilongwe at the end of the field visit.

The Consultant team would like to thank the statistics officials from the National Statistical Office in Malawi and from the Ministry of Economic Planning and Development in Malawi, the officials from the Ministry of Finance and the officials from the Reserve Bank of Malawi for their contributions of facts and ideas and for the time they spent with the interviewers, patiently answering questions. The Consultancy team would also like to thank the Norwegian Embassy and Norad which supported the team in various ways and generously contributed by useful information.

2 Background

Malawi has a population of about 15 million inhabitants, 85 percent of whom live in rural areas with 15 percent living in urban areas. Partly reflecting this spatial distribution of population, agriculture is a significant source of the country's gross domestic product (GDP). In 2012, for example, agriculture was the source of 28.7 percent of GDP. In the same year, wholesale and retail trade contributed 15.7 percent to GDP and manufacturing was the source of only 9.3 percent of the GDP. Half the population lives below the national poverty line and the degree of income inequality is high.

This high dependence on agriculture makes the economy vulnerable to adverse weather since most of the agricultural activity is rain-fed. Changes in weather cause fluctuations in agricultural output and hence in national income. High dependence on agriculture also makes the economy vulnerable to changes in demand and prices in foreign markets where its agricultural products are sold, with decreases in export prices causing adverse changes in the terms of trade and hence in national income. The fertilizer subsidy schemes have changed over the years. On one hand they drain the state budget, on the other hand they have increased the production and reduced hunger.

The Malawian economy is also dependent on foreign aid which finances 40 percent of the recurrent expenditure and 80 percent of the development expenditure of the Government. High dependence on foreign aid makes the economy vulnerable to changes in aid policies.

Another characteristic feature of the Malawian economy is its high degree of openness. This high degree of openness exposes the economy to a variety of external shocks, such as recessions in the countries where it sells its products, increases in prices of imports, changes in trading rules and disruptions on the transport routes to the sea.

Exogenous shocks to agriculture, foreign aid and to the economies of international trading partners often cause balance of payments problems for the country and hence economic instability, and a decline in the rate of economic growth. This makes macroeconomic forecasting and hence macroeconomic models necessary for the economic management of the country.

During the first three years (2000 to 2002) of the new millennium, the rate of GDP growth was unsatisfactory, averaging -0.6 percent. The main cause of this recession was unfavourable weather. In addition to that, fiscal and monetary policies went off track from the middle of 2001. There was also a suspension of balance of payments support by a number of donors in response to bad governance and fiscal mismanagement.

In 2003 and 2004 Malawi experienced better weather conditions. Agriculture benefited from the improvement in weather and recorded positive rates of growth of value added in both years. In turn, the recovery in agriculture stimulated agro-industry and demand for the output of other sectors of the economy. As a result, the economy achieved an average rate of growth of GDP of 4.3 percent. Due to the drought which adversely affected agricultural production in 2005, the rate of growth of GDP then declined to 2.3 percent.

From 2006, the Government started implementing the country's medium term development framework, the Malawi Growth and Development Strategy (MGDS), which aims at reducing poverty through economic growth and infrastructure development. During the implementation of the MGDS I from 2006 to 2011 the rate of economic growth averaged 7 percent per annum. This satisfactory economic performance was the result of debt cancellation which not only led to an improvement in the balance of payments but also released foreign exchange resources for importing inputs, as well as producing a high rate of investment and an increase in export earnings. In addition, the country benefited from price and interest rate stability.

However, during the implementation of MGDS II which will last to 2016, Malawi has faced a number of problems. These problems have included a reduction in disposable incomes due to a decline in revenue from tobacco; scarcity of foreign exchange for importing fuel and industrial raw materials due to a decrease in export receipts from tobacco, the country's main export commodity, from over \$270 million in 2011 to less than \$200 million 2012, and lately, suspension of aid following disappearance of budget support payments.

These economic developments have worsened the balance of payments position of the country. Moreover, until 2012 the competitiveness of the economy was undermined by an overvalued exchange rate. Consequently, the economy achieved the rate of economic growth of only 4.3 percent in 2011 compared to 6.9 percent projected in the MGDS II, which was developed as an output of the macroeconomic model supported by this programme. In 2012 the rate of economic growth decelerated to 1.8 percent.

In order to address the balance of payments problem, Malawi devalued its currency in May 2012 by 49 percent and floated the exchange rate. The country also agreed with the IMF to restore the Extended Credit Facility which had been suspended. The other reform that was implemented was the removal of price controls on petroleum products and utilities. These measures led to an increase in the rate of inflation from 7.6 percent in 2011 to 18.4 percent in 2012 despite the pursuit of tight monetary and fiscal policies.

In response to the recession, the Government elaborated and started implementing an economic recovery plan in 2012. The recovery plan reaffirmed the stabilisation policies that had been agreed with the IMF and introduced measures for stimulating production and/or exports in the sectors of energy, tourism, mining, agriculture and transport infrastructure and information and communications technology (ICT).

3 Methodological approach of the Mid-term evaluation

In order to assess the project's progress, its outputs and outcomes in terms of the OECD/ DAC criteria, the evaluation team applied a multi-method approach which is explained in the following text.

Reconstruction of intervention logic:

As a basis of the review and in order to develop detailed sub-questions, the project's intervention logic was reconstructed at the beginning of the assignment. By this means the overall objective of the project could be translated into outcomes and outputs that are to be achieved. Based on the final project progress report (draft) of the second phase of the project as well as on the project agreement it was possible to reconstruct the initial situation in the macroeconomic modelling project. Taking this scenario as a base line as well as taking into consideration the before-mentioned documents allowed the team to reconstruct the activities to be implemented in order to achieve the envisaged outcomes and outputs and (partial) impacts.

Desk study:

Before the field phase a thorough desk study was conducted by the consultants in order to gain a deeper understanding of the technical aspects and administrative arrangements of the project and its previous phases. Both Norad and the Royal Norwegian Embassy of Malawi as well as the MEPD and SN kindly provided various background documents² on the project, the previous phases of the project, Statistics Norway's bilateral statistical cooperation approach and the different macroeconomic models applied. Further background information such as political and economic analyses and the Malawian development strategies were also studied and analysed.

The desk research made it possible to analyse the documentary evidence and limitations of the project's progress and provided first partial answers to the evaluation questions. It pointed out the issues still to be studied and assumptions to be tested during the field phase. The methodological design includes the customized interview guidelines and questionnaires to be applied in the field phase, the approach to the overall assessment as well as the working plan for the field phase with the key outputs.

Stakeholder interviews:

The questions defined in the terms of reference served as a starting point for the questionnaire. While these questions addressed global issues (e.g. impact of the project) it was necessary to formulate sub-questions aiming at partial aspects of the global questions. By this means all aspects of the questions could be addressed and questions were easier to answer for the respondents. Judgement criteria and indicators of achievement were defined for all sub-questions and data sources selected. Different groups of stakeholders were created e.g. project managers, statistical clerks, team leaders / heads of units in beneficiary institutions, experts from Statistics Norway, etc. Specific questionnaires with the applicable questions and sub-questions were formulated.

² The list of documents is attached in Annex I of this report.

Stakeholder interviews were conducted mainly during the field phase in Zomba and Lilongwe. Stakeholders included the National Statistical Office, the Ministry for Economic Planning and Development, the Reserve Bank, the Royal Norwegian Embassy, civil society organisations as well as members of the international donors such as GIZ and the World Bank.

As a new country economist had taken over the project coordination in the embassy some administrative questions were also addressed to former coordinators after the finalisation of the field phase.

Observations / Tests:

In order to complement the findings, further information was gathered via observations and practical tests throughout the field phase. Statisticians in the NSO and economists in the MEPD were tested on their practical knowledge of how to apply, amend and adapt the statistics and the macroeconomic model.

4 Key findings

The following chapter provides the key findings, conclusions and recommendations based on the key questions/assessment points defined in the ToR. The findings for the questions are grouped under the OECD / DAC criteria.

4.1 Relevance

f) Assess the user needs and the national capacity in terms of human and financial resources in relation to the ambitions of the programme, including the capacity to use the macro model for policy planning during the budget process and other development documents such as the Economic Recovery plan and the dialogue on the IMF program and to use it for key results indicators for development documents such as the Malawi Growth and Development Strategy

Findings

The Government of Malawi is now in a position to manage the macroeconomic model and to use it for policy programming as well as for budgetary purposes. The model is used by the Government of Malawi (GoM) for medium term projections on a regular basis – twice a year – and for policy analysis from time to time but not yet frequently.

The model is based mainly on data of National Accounts for reflecting the macroeconomic framework expressed in behaviour functions and identities. Data for the public sector are provided by the Ministry of Finance. The monetary sector is covered by data from the Reserve Bank of Malawi (RBM). Line Ministries provide data to the National Statistical Office (NSO) for the creation of the National Accounts (NA).

The analysis needed in the Line Ministries is related to their specific areas. Apart from the partial analysis already conducted in these Ministries a macroeconomic framework would allow them to analyse the interrelations with other sectors or parts of the economy from the supply and demand side. A more holistic view would be both possible and helpful. Interrelations and interactions with other parts of the economy shall be examined. This could be advantageous for the formulation of policy programmes and medium term strategies. It would improve the dialogue about the programmes of the IMF, other International Organizations and donors.

In the opinion of the MEPD and the experts working with the model, the forecasting with the Macroeconomic Model for Malawi (MalawiMod) is also necessary in the Line Ministries for the formulation and planning of programmes or policy measures. The medium term projection can provide a framework for forecasts of sectoral developments.

The forecast data are needed at the beginning of the process of designing a programme or measures for decision making. The update of the medium term projection twice a year by the MEPD would be sufficient for this task.

The interviews with Line Ministries showed that these ambitious aims have not yet been reached. The MalawiMod is not well known within these institutions and the output of the model is not used and/or not provided to the Line Ministries.

There is however awareness that a model exists and an interest in its function and the possibility of using the output. Nevertheless up to now the visibility of the model and the advantage for the midterm forecast has remained poor. So far Line Ministries use mainly their own data for planning and spreadsheets for forecasting.

In addition, there is a serious lack of awareness and knowledge about the analysis potential and forecasting facilities of the macro model within the Line Ministries.

On the other hand the MEPD that the model has been used and accepted in bi-and multilateral meetings. International Organisations – like the IMF – accept the model calculations in so far as they take them as a basis for discussion. They compare the results of the MalawiMod with their own calculations. Nevertheless they are aware of the limitations of the model calculations which are mostly due to the weakness of the base data.

The biggest problem arises from the short time series of the input-output tables provided by the NSO. The tables only exist for the years 2002 – 2007, but results for 2008 – 2010 will be provided soon. On the other hand, the same limitations exist for the model calculations of the International Organizations as they rely on the same (weak) base data.

The quality of data has improved but is not yet fully satisfying. The timeliness of NA data in particular has to be enhanced.

Until now the macroeconomic model has not yet become a part of the National Statistical Strategy (NSS) and the Government of Malawi (GoM) has so far not indicated an interest in NSS cooperation with this programme (Macro Model). At a later stage of the NSS an inclusion of the Macro Model could be envisaged.

Conclusions

The Macro Model is used by the Government of Malawi. It has so far not been used by the Line Ministries. The calculations are limited due to a weak input data base.

The Macro Model has a potential of being a framework tool for sectoral analysis and forecasts. Application can be broadened: Sectoral analysis can be supported by the MalawiMod.

The regular updating of the MalawiMod twice a year provides a sufficient basis for supporting policy formulation in the Line Ministries.

Recommendations

- The timeliness of the data provision and credibility of the data provided needs to be enhanced.
- Line Ministries should be informed about the potential analysis and forecasting facilities of the MalawiMod.
- Awareness and knowledge about the potential of the model has to be increased. The planning divisions and the statistics sections should be informed and trained accordingly.

4.2 Effectiveness

b) Review progress and results so far and to what extent the Programme's goals and objectives are expected to be achieved

Findings

The programme agreement states that the overall objective of the project is

- 1. to strengthen and further build the capacity of Government (GoM) in macroeconomic modelling*
- 2. to have a holistic and coordinated GoM approach to economic forecasting and analysis*
- 3. to enable GoM to meet with international institutions such as IMF, the World Bank and other Malawi development partners on more equal terms.*

Technical support of the project consisted mainly of creating the Macroeconomic Model (MalawiMod) including the infrastructure to handle it, to update it, as well as to present and interpret the results.

The macroeconomic model developed in the project is maintained and utilized in the Macroeconomic Analysis Section (MAS) of the Ministry of Economic Planning and Development (MEPD).

The effect for the MEPD was to upgrade the Macroeconomic Analysis Section into the position of a provider of the medium term projections for strategic planning, for the budgetary process, and for the preparation of policy decisions.

The working process and the organization were re-organized insofar as the assumptions of the model are coordinated in the Model Team consisting of representatives of the MEPD, MoF, and the RBM.

The preliminary results are then discussed in the Model Team before these go to the Economic Management Team EMT for discussion, review, and final approval. An analysis should be conducted in which way and to what extent the Line Ministries could be involved in the coordination process and in the discussion of the model results.

Although the basic functions as well as the normal update procedure and smaller changes in the model structure are dominated by the MEPD model managers – major adaptations and re-estimations of the equation system in case of big changes in the data base have to be trained further using external support.

The model is well documented. There is a user's guide and also a separate description of the model. Both documents were produced in the context of the project and are freely available. This documentation is a very important instrument for newcomers but also for the model managers. It is also useful when modifications to the model become necessary.

On-the-job training seems to be the most efficient method of training and should continue. Future support would be needed for the presentation of the underlying assumptions to non-model builders, the interpretation of the results to policy makers and other users of the model results. Beyond this the re-evaluation of the whole equation system – if necessary or indicated – is of a high importance.

On the other hand, the modelling experts of the MEPD proposed to have an additional simplified model for training purposes. This could help newcomers and other interested staff to understand better the logic and the advantages of a Macro Model.

The modelling staff of the Macroeconomic Analysis Section of the MEPD is able to apply and update the existing model and to regularly produce medium term projections and simulations. They feel sufficiently trained to make adaptations or changes in the macro model. However, for major modifications – such as introduction of new econometric equations or a total re-estimation of the behaviour relations and changes in the model structure or the extensions of the scope of the model – they would need further external support.

The emphasis of this support should be on enabling the model staff, and MEPD staff in particular, to construct and (re-)estimate parts of the macro model. They should ultimately have mastered the model in all parts. This means that they have to participate closely in the formulation of the hypothesis and the estimation of the behaviour functions applied in the Macro Model and to undertake the statistical tests necessary for the selection of the most suitable relationships.

Further training for a better understanding of all of the interrelations represented in the model was also requested. This would help to improve the interpretation of the results and to enhance their acceptance by the final users in the Government administration as well as outside users such as the IOs and other institutions. More transparency about the assumptions would also contribute to a higher acceptance of the model calculations.

The cooperation with the Ministry of Finance (MoF) and the Reserve Bank of Malawi (RBM) is close. The cooperation is organized in the Model Team created during the project. However, cooperation with Line Ministries either still has to be established or requires further intensification. The basics of the model shall be presented to the Line Ministries. They should be made aware of the possibilities of using the model for analysis and forecasting but also for simulations of the impact of policy measures and external shocks.

A big problem was the timely provision of data, especially of the NA data. The reasons are explained in detail in the next chapter. Quality of data could also be further improved, especially the more disaggregated figures.

Findings on Part 3 of the objectives of this programme - “meet with international institutions such as IMF, the World Bank and other Malawi development partners on more equal terms” - are addressed in the “Impact” chapter.

Conclusions

The macroeconomic model developed in the project is maintained and utilized at the Macroeconomic Analysis Section (MAS) of the Ministry of Economic Planning and Development (MEPD).

The MalawiMod has improved the work of the MEPD as an input for the budget preparation, strategy planning, and policy decisions.

The effects of training are visible. In particular, the Macroeconomic Analysis Section of the MEPD is now able to handle the model and produce reasonable results.

With regard to the model building process a further Long Term Assistance (LTA) would be advisable – e.g. for six months, may be divided into three missions. In this respect it would be helpful to include the work with the model and an on-the-job training. Training like this could help to phase out the external support and enhance the ownership of the model building staff.

- GoM is capable of managing the macroeconomic model.
- A user’s guide and a description of the model are available for the training of newcomers.

- On-the-job training is the most efficient method of training.
- More training and support of an LTA for major changes in the model is required.
- The model is used in the budgetary process. It is less applied in policy programming.
- The cooperation with the MoF and the RBM is good and organized in the form of the Model Team.

Recommendation

- The application of the Macro Model to policy programming should be further promoted.
- Although MEPD staff knows how to handle the model and how to make smaller changes, further training in making major modifications and re-estimating equations is required (external support).
- Training of a broader audience – especially the Line Ministries – on the potential benefits of the model calculations would support further application of the model.

g) Assess the cooperation with NSO on access to relevant data for the model

Findings

The model is based mainly on the data of National Accounts reflecting the macroeconomic framework expressed in behaviour functions and identities. If the NSO is not able to provide the MEDP with the necessary input data the Model Team cannot develop credible output at the right time.

It is obvious that the NSO does not have the necessary capacity to manage their regular statistical workflow (or has too many other tasks to fulfil). The situation of personnel in the production of the National Accounts data of the NSO is extremely challenging. There is only one (!) person working in the area of supply and use tables (SUT) – a core element of the Macro Model.

Beyond this

- past, already published data have to be revised due to the availability of new information;
- new classifications and definitions of NA have to be applied (new ISIC, new classification of product statistics); this backward revision of the old time series (2002 – 2007) will take time and absorb capacities that are currently not available;
- Internet access is very slow and caused and still causes communication difficulties, specifically with the NSO head office in Zomba and with external consultants supporting the unit. A direct IT connection between NSO Zomba and Lilongwe has been foreseen by another programme but has not yet been established.
- In 2013 all computers were stolen. The damage caused by the stolen equipment delayed the data production by several months and has only now been overcome. The next provision of data for the years 2008 to 2010 is about to be finished.

Also the annual update of the Supply and Use Tables SUT turned out to be too ambitious with regard to the existing capacities of the NSO. It is now planned to produce these SUT only every 5 years and generate the intermediate years by interpolation. The model builders have to verify if this change may influence the estimation of the behaviour functions or reduce the possibilities of the econometric approaches. It has been agreed between MEPD and SN that SN will provide special technical support to adapt the input from NA to the model accordingly. This work has already started.

Although the most important contribution of the programme was a significant improvement in National Accounts these data are the most important bottleneck in the application of the model.

Another issue to be addressed is that it seems that the division of work between the NSO and the modelling team is not really clear for all parties involved. Some members of NSO staff were of the opinion that they had to provide the economic forecast, which is obviously not their responsibility. The role of the model has not yet been sufficiently explained.

Conclusion

- Weak organisation and capacity of the NSO – in particular the delay in data provision – have had a negative effect on the modelling part of the programme.

Recommendations

- For the further success of the Macro Model application it is necessary to improve the capacity of the NSO and to find a solution for the personnel situation of the National Accounts division in the NSO.
- The working plans of the model team and the NSO staff members should be clearly defined and outlined.

i) Assess the risk mitigation measures implemented during the Programme period, based on the risk analysis in the Project Proposal from February 2011

The following risks and risk mitigation measures were defined in the Agreement between the Norwegian Ministry of Foreign Affairs and the Government of Malawi regarding development cooperation concerning MEPD Macro Model for the Malawi Growth and Development Strategy – Phase 3:

Risks:

- a) Loss of experienced team members / model team members become too involved in non-modelling tasks
- b) Team members' inability to independently upgrade their technical skills to use and maintain the model

Mitigation measures:

- a) Routines on when and how to introduce the model to new team members
 - Increased links to academic institutions through the development of the modelling university training package
 - Raising the model's profile and demand for output makes hosting institutions prioritize model work
 - Specific work share to be set aside for the model work (10-15%)
 - GoM supports part of model activities to display ownership of the model
- b) LTA to train 1-2 model group members to train others

- Model documentation package
- LTA provides TA through email/phone/short term mission after end of assignment

Findings

The model is well documented. There exists a user's guide³ and a description of the model⁴. Both documents were produced by the project and are freely available. This documentation is a very important instrument for newcomers but also for the model managers. It is also useful when modifications to the model become necessary.

A work plan was developed for macroeconomic modelling and strict rules were established to provide modelling results. Modelling deadlines are fixed but sometimes missed. The challenge here is to re-prioritise modelling over other areas of work.

New staff is trained on-the-job and can use the user's guide and the description of the model.

The model is used by the Government of Malawi (GoM) for medium term projections on a regular basis – twice a year – and for policy analysis from time to time but not yet frequently.

The cooperation with the Ministry of Finance (MoF) and the Reserve Bank of Malawi (RBM) is close. The cooperation is organized in the Model Team established during the project.

With other users including the Line Ministries the cooperation still has to be established or requires improvement.

Initial discussions have been held with the Economics Department at Chancellor College, University of Malawi, to discuss the possibility of establishing macroeconomic training for civil servants and students. The University is interested but the expensive license for the TROLL software is a problem.

MEPD has now agreed with Chancellor College to assist in establishing a module of Economic model training in the curriculum. MEPD staff will initially participate as trainers, but the University is keen to run the training themselves as soon as possible. GIZ is providing support for this extension.

Data provision from the NSO represents a challenge. It would be sufficient to have the disaggregated data every five years. However, the aggregated data are needed every year. The NSO needs more capacity to fulfil its obligations.

Conclusions

- Work plan and rules support the mitigation of risks.
- Training of the new staff is provided.
- GoM is using the model.
- Cooperation with MoF and RBM has been established.

³ Robin Choudhury, User's Guide for a Macroeconomic Model for Malawi, Version 1, May 2006

⁴ Robin Choudhury, A Macroeconomic Model for Malawi, Functions and macros

- Links to academic institutions are laid but it is not clear how the University can provide model training without the specialized software.
- MEPD has agreed with Chancellor College to assist in establishing a module of Economic model training in the curriculum.
- MEPD staff will initially participate as trainers but the University is keen to run the training themselves as soon as possible.
- GIZ is providing support for this extension.
- Shortage of NSO personnel is a challenge, especially for NA.

Recommendations

- MEPD has to be urged so that the model team staff can follow the working plan and the rules established.
- The cooperation with academic institutions should be further supported (as already started with the agreement between MEPD and the Chancellors College).
- Data production and provision especially in the field of NA need more capacity.

4.3 Efficiency

c) Review the use of resources in terms of effectiveness, efficiency and intended use

The overall goal of the programme is to strengthen the capacity in evidence based planning and timely production of policy analysis for policy makers. “The purpose of the Project is to strengthen and further build the capacity of Government (GoM) in macroeconomic modelling to have a holistic and coordinated GoM approach to economic forecasting and analysis and to enable GoM to meet with international institutions such as IMF, the World Bank and other Malawi development partners on more equal terms.”⁵

The third phase is planned for the period April 2012 to June 2014. Although the programme is divided into three different phases, the resources overlap. This could be an advantage for the workflow of the programme but on the other hand it makes it more difficult to review the specific output of the particular phase.

The outcomes, along with performance indicators, means of verification, milestones and risk mitigation measures are determined in the annex of the agreement⁶.

Following this table, in the first half of the third phase there have been some outputs achieved while others are still in the pipeline.

Findings

The input foreseen from the Norwegian Ministry of Foreign Affairs is shown in the annex of the Agreement 7 in the form of the global project budget. The overview of the planned budget can be found in annex IV of this report.

The analysis of the actual financial input was not possible due to the fact that no audit report has been provided up to now. Audit report must be submitted 2 weeks before the Annual Meeting. The last Annual Meeting was held on 27.11.13 in Lilongwe and the documentation was submitted to the Embassy on 13.11.13.

The planned budget makes it clear that no Long-Term-Assistance is foreseen. Short-Term-Assistance has also been cut in comparison to the previous phases.

Expected results are supported through further training and workshops, study tours, material for dissemination, support for conferences/courses and the Troll software for macroeconomic modelling.

The main budget positions in the Component Plan 1a (Macroeconomic Modelling and analysis) are study tours, modelling training workshops and the Troll software. The main budget positions in the

⁵ “Agreement between the Norwegian Ministry of Foreign Affairs and the Government of the Republic of Malawi regarding development cooperation concerning MEPD Macro Model for the Malawi Growth and Development Strategy – Phase 3”; Article I.2, Article I.3.

⁶ “Agreement between the Norwegian Ministry of Foreign Affairs and the Government of the Republic of Malawi regarding (...)”, l.c.; Annex 1.

⁷ “Agreement between the Norwegian Ministry of Foreign Affairs and the Government of the Republic of Malawi regarding (...)”, l.c.; Annex Overall Budget.

Component Plan 1b (Institutional Cooperation between MEDP, MoF and RBM) are international conferences/courses, printing & publication and transport.

The MEPD reported that by November 2013 four workshops had been organised, along with one study visit. According to the original time line there should have been seven internal group workshops by now and at least two participations at international conferences and several ECAMA seminars. So far the workshops and the study visit are behind the target set in the Agreement.

The feedback from interviews supports the assumption that general trainings in macroeconomic modelling may have lower impact. Modelling training sessions organized by IOs are sometimes not very useful for model managers who normally use statistical software packages other than TROLL (the software introduced by the programme), such as EVIEWS or STATA.

The model calculation is based on the TROLL software. The license fee for this statistical software is 26 000 US\$ per annum. It is essential to ensure the continuing financing of this software package in the future.

Conclusions

The resources are sufficient for the envisaged outputs. The main focus is laid on the consolidation and dissemination of the results already achieved. Further training and support for the Macro Model team requires timelines of the input data. Study visits can provide good results if participants are in a position to apply lessons learned⁸.

Recommendations

- On-the-job training should be continued as soon as the bottleneck with the input data is solved. Analysis should be conducted whether this could be realized with a medium/long term assistant.
- Tailor made study tours should be carried out as well.
- Training of a broader audience should be focused more on potential applications and the interpretation of the results instead of the technical questions about modelling.
- Financing of the TROLL software shall continue.

j) Review how the terms and procedures related to administrative arrangements in the agreement between Norway and Malawi have been followed, including a review of the financial arrangements and whether all the audit reports have been delivered and followed-up upon in line with the agreement;

⁸ Study visits give the opportunity to see in reality how work is done elsewhere and to compare it with the hosts' own activities. In the teamwork between Statistics Norway (SN) and the MEPD and NSO Malawi this comparison can be lopsided due to the fact that an organisation in an industrial country with 1,000 members of staff has no difficulties in providing the expected results. For the study tour visitors this might provide a conflict between the incentive of a study visit and the frustration of working in a small underfunded organisation.

Findings

The last progress report is the “Final Phase 2 Project Progress Report, draft, May 2013” and refers to the second phase of the programme.

The next progress report, the annex 2 matrix from the Agreement⁹, the revised working plan and the financial statements and budgets shall be submitted two weeks before the Annual Meeting. The Annual Meeting was held on Wednesday, 27.11.13 in Lilongwe and the documentation was submitted to the Embassy on 13.11.13.

MEPD reports that reporting about the project was delayed due to changes in the personnel, and that there was not enough time planned for this extra job. It was proposed that accounting personnel should be provided by the project.

Since phase 2, all expenditures from Statistic Norway must be approved by NSO/MPED. Statistic Norway prepares quarterly overviews of expenditures, which are certified by NSO and forwarded to the Embassy for reimbursement based on invoices from SN and supporting documents. Annual expenditures are presented at the Annual Meetings. Requests are made formally before any activity.

Audit reports¹⁰ are based on the Standards of Supreme Audit Institutions (ISSAIs). The audit report does not outline in detail what kind of specific verification procedures were fulfilled.

Conclusions

It would be advisable to require more frequent progress reports. Although this might seem as an additional workload for already overloaded staff members, it would nevertheless have positive effects: experience has shown that the shorter the reporting periods, the better the reports. This can be explained by the fact that as the responsible project managers become more familiar with the procedures they also become able to produce the shorter reports more quickly and of higher quality.

Most crucial however, is the fact that this formal procedure gives all stakeholders involved in the project the possibility to learn more often not only about outcomes but also about the difficulties encountered during the project implementation which makes it possible for them to react faster to constraints and technical or managerial uncertainties and problems.

To improve the transparency of the audit a standardized expenditure verification report¹¹ should be defined. The basis of expenditures should be an invoice. The invoices should be accompanied by supporting documents (payment receipts from members of staff for per diem, travel documents etc.). An improved audit procedure aims at credibility and transparency of the expenditures.

On the other hand some kind of administration fee should be provided to the GoM, as it is not easy to handle complex budgets with a weak administration.

Recommendations

⁹ “Agreement between the Norwegian Ministry of Foreign Affairs and the Government of the Republic of Malawi regarding development cooperation concerning MEPD Macro Model for the Malawi Growth and Development Strategy – Phase 3”; Article I.2, Article VII Reports.

¹⁰ These comments refer to the audit reports on the Financial Statements for the year ending 30th June 2012. This audit report does not outline the expenditures concerning the MEDP Macro Model.

¹¹ Requirements of an expenditure verification are added in Annex III.

- The audits should provide detailed expenditure verification reports. Supporting documents for invoices should be defined.
- An administration fee should be provided.

m) Review to what extent the GoM financial incentive structure, i.e. per diem and salaries are conducive for the achievement of the Programme's goals and objectives.

Findings

No specific financial incentives have been detected in the macro modelling project.

In general, one has to doubt that a specific remuneration scheme can be established in public administration. The model managers and the staff of the MEPD and MoF involved in the Model Team are paid according to their degree achieved in the Government administration. Considering the nature of their work, per diems are of no or only a very low importance because they do not participate in field work. A difference between model managers and the statisticians is that working with the model is pure desk work and no field work is required. The only opportunity to get per diems would be the participation in training courses or delivering training e.g. to students at universities or other institutions. And – as stated in the Statistics-Report – per diems should only cover additional cost but not function as an incentive.

An alternative for the model staff could be the following: The staff could be extra paid for teaching at universities as a side job as far as it does not affect their main job with the model. Teaching, participation in the research process, and discussions with students could improve and consolidate the knowledge about the models and have positive effects on their work with models for the Government. At the same time scientific research can benefit from the experts working in practice with the models.

Normally financial incentives are not possible in public administrations due to fixed remuneration schemes. But special advantages like social security measures (such as unlimited contracts, social contributions, etc.) should be assessed jointly with the responsible institution of GoM.

Staff members of the Ministries are appointed by a centralized authority of the Government, the Civil Service Commission. MEPD, MoF, and RBM select the model team. Fortunately fluctuation has so far been relatively low.

However, highly specialized staff is also very attractive for the private sector (banks, companies, research institutes) where remuneration is significantly higher than in the public administration. This can be a problem for further implementation and sustainability of the project.

Recommendation

- Incentive schemes for highly specialized staff members could be developed. As financial resources are low it could be assessed to which extent social security benefits could be interesting to employees. As this would require agreement with GoM, this scheme can only be seen as an indicative long term goal.

- Including staff of the Model Team in scientific teaching and in the process of bolstering the knowledge of models at universities and research institutions should be assessed as an opportunity for incentives.
- Non-financial benefits like social security measures (such as unlimited contracts, social contributions, etc.) should be assessed as incentives jointly with the responsible institution of GoM.
- It should be checked if in the recruitment process specific requirements for the model managers could be introduced.

k) Review the anti-corruption measures and in particular how the Norwegian zero-tolerance policy on corruption is being managed in the project.

Findings

The Agreement stipulates that invitations to tender for the project shall include a clause on cancellation in case of illegal or corrupt practices and a number of other anti-corruption and transparency regulations.

The agreement between the Norwegian Ministry of Foreign Affairs and the Government of the Republic Malawi regarding development cooperation concerning MEDP Macro Model for the Malawi Growth and Development Strategy – Phase 3 contains a brief section about the payment procedures.

Special anti-corruption measures are neither defined nor considered by the program.

There is no report on illegal or corrupt practices in the third phase of the project.

The financial input of the Government of Norway should only be used to reach the programme's objectives.

As far as accounts are concerned, the Agreement specifies that the auditing of project accounts will be done by the Malawian National Audit Office (NAO) and will be presented to Norway no later than six months after each financial year. The audit reports provided do not provide a detailed explanation of the audit procedures.

Conclusions

To improve the anti-corruption measures an expenditures verification report should be provided.¹²

¹² Further explanations were made on page 19, Findings to question j.

4.4 Impact

According to the OECD Development Assistance Committee impacts are defined as „positive, negative, primary and secondary long-term effects produced by the development intervention, directly or indirectly, intended or unintended”.

Thematically relevant literature suggests that in order to evaluate impact a comparison between the state of affairs in the supported institution before and after the intervention should be applied. However, this method requires the availability of baseline data. Basically retrospective techniques (asking the interviewees to describe their trained/supported abilities before and after the intervention) could also be applied. However, it is strongly preferable to compare with baseline data as answers gained from the retrospective technique might be biased.

Highest standard evaluations according to OECD/DAC standards additionally take counterfactual aspects into consideration (e.g. what would have happened without the intervention?). In such evaluations changes/improvements in the trained sector (e.g. ability to apply macroeconomic models) are discussed with the predefined control group. If a control group has been established in the context of a baseline survey the same control group could also be interviewed.

It is worth mentioning that these technically demanding approaches are applied mainly in final impact evaluations. As no such baseline data has been collected at the beginning of any of the three phases and as this project by its nature does not allow the creation of control groups and has in any case not yet been finalized, it is not possible to apply a significant, reliable and valid impact evaluation according to OECD / DAC standards in this review.

Nonetheless, the more qualitative and triangulation-oriented approaches applied allow to outline a tendency or direction in which the project is heading. The consultant team addressed questions such as “What has happened as a result of the programme or project?”, “What real difference has the activity made to the beneficiaries?” or “How many people have been affected and in what way?” and discussed these and similar topics with stakeholders at different levels.

a) If possible, assess impact of the Programme taking into account achievements reached in Phase 1 and 2

Findings

Review of documents and detailed interviews came to the following findings about the impact of the programme:

Poverty reduction is one of the major aims of the programme. It is assumed that this overall aim is supported by a target-oriented and consistent strategy for growth and development. Although the Macro Model does not contain a section specific designed for measures of poverty reduction, the model is an instrument for the formulation of a better founded, holistic, and improved macroeconomic policy leading to higher growth, employment and reduction in inequality, hence creating the basis for a reduction in poverty and increase in welfare.

Impacts could thus mainly be attained by upgrading the knowledge and capacity of the economist applying the macroeconomic model. Observations and tests have shown that the capacity of managing the model and applying it for medium term projections and macroeconomic analysis has been created but the capacity for the building of models or perform major changes in the structure of the existing model has not yet been sufficiently developed.

The impact of the model programme during the third phase is greater in comparison with the first and second phases. The earlier phases focused on laying the groundwork. In the third phase the

programme contributed to the correct use of the model as well as to its utilization in making medium-term projections.

The model results are used in the GoM as a basic tool in several areas of policy formulation and hence for decision making. The analyses and forecasts based on the model are communicated to the decision makers. They are cornerstones in strategic papers and Government publications about economic policy.

Moreover, the model results are regularly used for the “Annual Economic Report” (AER) where the macroeconomic policy framework and the sectoral policies of the GoM are described. An important part of this AER is the macroeconomic projection for Malawi based on the calculations of the macroeconomic model – the results of the MalawiMod – created in the project. The results of the model are coordinated by the Economic Management Team EMT (see below). Model results are presented to the Parliament during the budget session which takes place in June.

These medium term projections were also applied for the formulation of several development strategies, e.g. the “Malawi Growth and Development Strategy 2011-2016”. The projections were also included in a joint paper produced during the project¹³. Thus evidence can be shown in several documents published by the Government but also in internal memos and unpublished papers. The most important publication however is the “(Annual) Economic Report” (AER) published by the MEPD.

In the process of setting up the Government budget the model results are taken into account for the 3-year fiscal planning. The estimates are taken to the Parliament by the Minister of Finance as the basis for the budget proposals. If Parliament passes the budget, the proposals of the Government become the approved budget.

The GoM is now in a position to present its own macroeconomic medium term projections to the International Organizations (IO). Although the IOs use their own models according to their aims and needs, the projections of the GoM are a respected and accepted basis for discussions and a reference for negotiations.

Conclusions

The programme has contributed to a holistic and coordinated approach of the Government of Malawi for economic forecasting and analysis. The existence of the model calculation has stimulated interest in and the possibility of such a holistic view of the economic and social development.

The coordination of the model results by the Economic Management Team EMT is a very important fact for developing consistent strategies and policy decisions. The management seems to accept this instrument. The demand for the analysis and forecasts on basis of the Macro Model is reported to be very high – although the shortcomings of data still exist (mainly the short time series of the input-output tables) and the limitations of these calculations are known.

Line Ministries are not yet sufficiently aware of the possibilities of the model calculations, e.g. simulations of the effect of policy measures. They are also neither adequately involved in the process of setting up the assumptions nor in the discussion of the results. The results of their own sectoral analysis and forecasts could contribute valuable information to the Macro Model. This could lead to an improvement of the model results as well as to an increased acceptance of the model for policy programming in general and especially in the Line Ministries. They should be made aware of the possibilities of the macro model and be encouraged to use its potential in

¹³ Ådne Cappelen, Robin Choudhury, Hamilton Kamwana, Chipso Msowoya, Wavisanga Munyenyembe and Arnold Palamu leni “The 2007/8 Malawi Budget, Macroeconomic implications.

cooperation with the model team¹⁴. This would require specific training for the staff of the Line Ministries.

Although for the first of these three years the Financial Programming and Policies (FPP) tables are applied according to IMF requests – they are designed for short term forecasting. For two subsequent years, Government projects revenue and expenditure take the medium term projection into account. It is usual to have special models for the short term forecasts (one to two years) which can include data from the business cycle. Medium term models are oriented to trends or potential growth but do not reflect the business cycle.

At least the third year of the budget should be in line with the medium term projection. It can be discussed if a competence for short term macroeconomic forecasting can also be established in the MEPD or in the MoF instead of leaving this competence to the Technical Group of National Accounts and Balance of Payments (NABOP).

- The Model results are evidently being considered in several documents and publications. In particular in the Annual Economic Report they are published regularly and find the necessary attention.
- International Organizations accept the model as a tool for analysis and forecasts and take the model calculations into account.
- The impact of the model might be larger if it would capture the features, behaviour and institutions from wider informal sector of the economy, and if this sector was given due consideration in economic policies and strategies.

Recommendations:

- There should be a discussion about establishing a competence for short term macroeconomic forecasting in the MEPD or MoF.
- Line Ministries should be made aware of the potential of the model.
- Line Ministries should be encouraged to make use of the model results.
- Line Ministries should be involved in the set-up of the input of the model (assumption, sector forecasts).
- Training to the Line Ministries should support the application of the Macro Model for policy programming.

¹⁴ The Line Ministries should only know about the possibilities of the model calculation and the use of the results. The training should concentrate on those aspects – but they should not be trained in managing the model or part of it themselves. This can only be done by the model team specialists.

4.5 Sustainability

Sustainability is concerned with the question whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be both environmentally as well as financially sustainable.

d) Assess sustainability elements, with special focus on institutional and organisational sustainability

Findings

The application of the model for projection purposes and as an instrument for the impact analysis is seen as very useful especially in the MEPD and by the actual staff up to the Principal Secretary. It will very probably be sustainable. In particular the regular publication of the Annual Economic Report AER including the results of the macroeconomic projection seems to be a sustainable tool for policy making. The AER is also presented to the public and – according to the head of the MAS – demanded and respected by private sector companies and banks.

This fact may result in a broader and more holistic view of economic development with regard to the interrelations and the influence of policy measures on the performance of the macroeconomic development of the country.

One institutional working group, the “Model Team” (MT), was established in the second phase of the project. It consists of four members of the MEPD, three members of the Ministry of Finance MoF, and three members of the Reserve Bank of Malawi RBM. This MT cooperates in setting up the model, with the MoF providing the fiscal data and with the RBM providing the monetary data. The assumptions as well as the results are discussed and harmonized. The MT is self-sustained and does not need any further external support.

An important step in the institutionalization process was the delegation of the responsibility for the coordination of the model results to the Economic Management Team (EMT). Since then the team has reviewed the medium term projection at political level. The coordinated figures are finally approved by the Economic Management Team (EMT) and then become binding for the Government. No external support is required.

Although the structures seem to be sustainable, further effort and support is necessary in the institutional cooperation procedures (e.g. between MEPD and Line Ministries). This has to be organized in the GoM internally but external support would be helpful.

On the other hand the Line Ministries are not yet sufficiently involved in the modelling procedure and the use of the results. It is highly recommended to establish institutional relations between the Model Team and the planning and statistics units of the Line Ministries.

No problems with the IT maintenance were reported by the MEPD. An IT support team is available.

The fact that the National Accounts division of the NSO is situated in Lilongwe implies that a close cooperation between MEPD and NSO is easily facilitated. The major need is a sufficient staffing of the NA division of the NSO; this is crucial for the further success of the model. The cooperation between MEPD and NSO at working level is reported to be very good.

Difficulties encountered in data exchange, availability and quality: See below “Unexpected Factors”. These difficulties are due not to the organization but rather to external effects.

During the interviews the consultant team found out that there is a proposal to involve the Economics Department at Chancellor College, University of Malawi, in training civil servants and students in macroeconomic modelling. The team was told that this idea arose from previous reviews of the Macro Model Project and that the aim was to improve its sustainability. The Ministry of Economic planning and Development (MEPD) had approached the Department of Economics about it. In response, the Department of Economics had requested the MEPD to prepare a memorandum of understanding (MoU) as a basis for collaboration. The MEPD obliged. It sent a MoU to the Department of Economics. The latter made comments on it and sent it back to the MEPD. It is now awaiting the MEPD's reaction.

Under this initiative, civil servants would receive training via workshops or a master's level postgraduate program where they would take general courses in the first year and do a research project based on the Macro Model in the second year.

Master's degree students would have macro modelling included in their macro and policy analysis and management courses. Alternatively, a new course would be designed for them.

As already mentioned in the chapter 4.2 (i) Effectiveness about risk mitigation, MEPD has agreed with Chancellor College to assist in establishing a module of economic model training in the curriculum. GIZ is providing support for this extension.

Conclusions

Institutionalization has been accomplished: The "Model Team" at technical level and the "Economic Management Team" EMT at policy level regularly use the model results. This organization seems to be sustainable without external support.

Line Ministries are not yet sufficiently involved in modelling.

Involving Chancellor College in training civil servants and students in macroeconomic modelling is an appropriate step towards increasing the sustainability of the project. However, the annual costs for the software license might hinder this idea.

Recommendations

- Further institutional cooperation should be set up with the Line Ministries to take more advantage of the potential of the model e.g. for simulating the economic effects of policy measures. This work should start with the model team doing sector-related macro-economic analysis using the model.
- Data provision has to be improved mainly by strengthening the NA division of the NSO.
- Early conclusion of negotiations with Chancellor College for the establishment of macroeconomic model training scheme.
- It should be checked if the TROLL software and a copy of the MalawiMod would be good for training purposes at the training institutions (universities).
- To check if the cooperation with GIZ would be advantageous taking into account that GIZ supports the University's training in modelling.

e) Assess the Malawian ownership of the program

Findings

In the MEPD, the MoF, and the RBM the output of the model calculations are regarded as very valuable. Nevertheless, higher quality of the output based on more reliable data would improve acceptance and extend application.

The awareness of the Line Ministries regarding the potential of the model results is still low and the potential of the model calculations – especially the facility of policy simulations – is not yet known nor used. Therefore the model is hardly ever applied for planning of policy measures in the Line Ministries.

Various proposals from the Malawian stakeholders during the interviews showed that there exists an interest in knowing more about the MalawiMod created in the programme. For example GIZ is running a project on strengthening public financial and economic management in Malawi. The counterparts are MEPD, MoF, and NSO. One important part is the support of forecasting of the revenue side of the budget. Macro Model is an important instrument for this tasks. The project management is strongly interested in the output of the Macro Model and in cooperating with the MEPD and the Model Team.

Conclusions

Malawian stakeholders see the contribution of the MalawiMod as valuable and important for the day-to-day work and for the planning of policy measures.

The demand for analysis based on the model is said to be high in the MEPD.

In the Line Ministries the possibilities of the model remain still unexploited.

Recommendations

- Promotion of greater use of the model for policy planning and impact analysis should be extended, especially to the Line Ministries.
- Proposals of the Malawian stakeholders about their expectation about the macroeconomic model and its application should be collected and taken into account in further activities of the programme.

1) Review any unexpected factors that have occurred that may prevent achievement of expected results. This should include institutional and organisational aspects, financial aspects and technological aspects or any other aspect that could influence the Programme negatively.

Findings

The following unexpected aspects have had the most significant negative influence on the production of the model results:

The situation of personnel in the production of the National Accounts data of the NSO is extremely challenging. There is only one (!) person available to produce the supply and use tables (SUT) – a core element of the Macro Model. Beyond this

- the previously published data have to be revised due to the availability of new information;

- new NA classifications and definitions had to be applied (new ISIC, new classification of product statistics); this backward revision of the old time series (2002 – 2007) will take time and absorb capacities that are not available at the moment;
- internet access is very slow causing difficulties in communication, especially with the NSO head office in Zomba but also in general and with external consultants supporting the unit. A direct IT connection between NSO Zomba and Lilongwe was foreseen by another programme but has not yet been established.
- In 2013 all computers were stolen. The damage caused by the stolen equipment delayed data production by several months and has only now been overcome. The next provision of data for the years 2008 to 2010 is about to be finished.

In addition the annual update of the Supply and Use Tables SUT turned out to be too ambitious with regard to the NSO's limited capacities. It is now planned to produce these SUT only every 5 years and generate the intermediate years by interpolation. The model builders have to check whether this change may influence the estimation of the behaviour functions and/or reduce the possibilities of the econometric approaches. MEPD and SN have agreed that SN will provide special technical support for adapting the input from NA to the model accordingly.

Although the most important contribution of the programme was a significant improvement in NA, these data are a significant bottleneck in the application of the model.

Further unexpected factors were:

- Recruitment of personnel for NA is difficult.
- Research at universities is not sufficiently directed towards basic but rather to highly sophisticated topics.

Conclusions

Unexpected factors – mainly the delay in data provision – have had a negative effect on the modelling part of the program.

Recommendations

- For the success of the Macro Model application it is necessary to strengthen the capacity of the National Accounts division in the NSO, especially for the production of the SUT.

4.6 Cross Cutting issues

This section focuses on the question to which extent cross cutting issues, e.g. gender equality, anti-corruption policy, human rights based approach etc. have been included in the implementation of the programme.

h) Assess if gender issues are sufficiently addressed throughout the project, including in the team composition, also in basic economic statistics that are used in the modelling component

Findings

Gender is not even mentioned in the Project Document. Awareness of gender issues is limited in MEPD and the Line Ministries. Only two female employees are members of the modelling team. However there are many female economists in the Government and Reserve Bank from whom more can be selected into the MT.

Gender is neither mainstreamed in the model nor in the statistics used. Up to now no specific statistics for treating gender in a Macro Model are available.

If gender issues should be focused in future, the statistics would have to be created and extended (e.g. producing a Social Accounting Matrix SAM (if possible) including gender aspects and then it would have to be incorporated into the Macro Model). However, it is not to be expected that such a statistics could be set up in a short time. If there is a gender statistics experience within the SN then it could be checked if a similar statistics could be set up in Malawi. Beyond this, the type of macro-economic model used in Malawi would require for an inclusion of gender aspects time series data for at least five years. Therefore in the scope of this program an incorporation of the gender aspect seems not to be a realistic option.

There is an active debate on gender in the country. In Malawi there are civil society organisations promoting gender equality which supports the conclusion that it is regarded as important for the development of the country.

Conclusion

- Female representation in the MT is far too inadequate.
- Gender is not within the focus of the MalawiMod.
- Gender specific statistics are not (yet) available or incorporated in the Macro Model.
- The lack of gender specific data in Malawi does – up to now and even in the near future – not allow an inclusion of gender aspects in the Macro Model.

Recommendation

- If female economists with necessary skills are available and interested, more of them should be selected into the MT.
- Existing experience in gender statistics and its application in macroeconomic models in SN should be checked for a possible application in Malawi.

5 Annexes

- Annex I: List of documents for the desk research
- Annex II: List of Stakeholders – Interview Partners
- Annex III: Expenditure Verification Procedure
- Annex IV: Terms of Reference

5.1 Annex I: List of documents for the desk research

Annex 2 - List of revised documents

Macro Model

Macroeconomic Model for Malawi - Functions and macros (Power Point Presentation);
Robin Choudhury.

Macroeconomic Model for Malawi (Draft version); Statistics Norway Research Department;
Ådne Cappelen, Robin Choudhury and Torfinn Harding; December 2007.

Macroeconomic modelling in developing Countries - an example from Malawi; Statistics
Norway; Robin Choudhury, 2012.

Practical approach for model-based poverty prediction; Statistics Norway; Astrid
Mathiassen; Geir Øvensen; September 2007.

Small macroeconomic model for Malawi; Statistics Norway Research Department; Ådne
Cappelen, Robin Choudhury and Torfinn Harding; February 2006.

Programm Documents

Agreement between the Norwegian Ministry of Foreign Affairs and the Government of the
Republic of Malawi regarding development cooperation concerning MEPD Macro Model for
the Malawian Growth and Development Strategy - Phase 3; Governments of Norway and
Malawi, Lilongwe, 28. June 2012.

Audit reports for the years 2010-2012; Y.E.B. Kamphale (Auditor).

Letter of Invitation, Division for Development Cooperation Norway (Quantity 4)

Mid-term review of the NSO/MPED/MoF Malawi Statistics Norway Project; Norwegian
Ministry of Foreign Affairs; Jan Isaksen, Brian Mtonya; Bergen, Lilongwe, April 2006.

Project Budget: detailed budget costing for the 3rd phase Institutional Cooperation project;
Statistics Norway / Embassy

Project Progress Report, May 2012 to April 2012: Statistics for the Malawi Growth and
Development Strategy – Institutional Cooperation between NSO, MEPD, MoF/EAD and
SSB; Ministry for Economic Planning and Development and Finance; June 2013.

Project Progress Report, Final Phase 2 (draft): Statistics for the Malawi Growth and
Development Strategy – Institutional Cooperation between NSO, MEPD, MoF/EAD and
SSB; Ministry for Economic Planning and Development and Finance; May 2013.

Project Progress Report, Phase 3; Statistics for the Malawi Growth and Development
Strategy – Institutional Cooperation between NSO, MEPD, MoF/EAD and SSB; Ministry for
Economic Planning and Development and Finance; May 2012 to April 2013 .

Project Report - Phase 2 Final Institutional Cooperation between the Ministry Finance, the
Ministry of Economic Planning and Development, the National Statistical Office and
Statistics Norway ; National Statistical Office of Malawi (NSO).

Terms of Reference - Macro modeling long-term mission; Statistics Norway / Embassy.

The 2007/8 Malawi Budget - Macroeconomic implications; Statistics Norway, Department
of Management Support.

User Guide for the Macroeconomic Model; Robin Chodhury.

Various Terms of Reference for short term missions; Statistics Norway / Embassy (Quantity 4).

Other Documents

Country Assistance Strategy; World Bank / IFC.

Economic Recovery Plan; Ms Joyce Banda, President of Malawi.

Economic Report; Government of Malawi.

Gender Assessment for Malawi; Astrid Mathiassen, Rhoda Eliasi, Mylen Mahowe, David Chunga, Gunvor Iversen.

Institutional Development Cooperation in Statistics Norway; Irene Tuveng, Vibeke Oestreich Nielsen, Geir Øvensen, Bjørn Wold and Ellen Cathrine Kiøsterud; May 2013.

Malawi Growth and Development Strategy (MGDS).

Malawi Growth and Development Strategy II (MGDS II); Dr. Ken Lipenga.

Malawi National Statistical System; Strategic Plan 2013-2017; Malawi National Statistical System, Zomba, August 2013.

Monitoring and Evaluation Masterplan (M & E Masterplan); Ministry of Economic Planning and Development (MEPD).

Norad's Strategy towards 2015: Results in the fight against poverty; NORAD

Results management in Norwegian Development Cooperation; NORAD

Sharing for prosperity; Norwegian Ministry of Foreign Affairs

The 2007/8 Malawi Budget - Macroeconomic implications, Statistiks Norway; Department of Management Support; Adne Cappelen, Robin Choudhury, Hamilton Kamwana, Chipso Msowoya, Wavisanga Munyenembe and Arnold Palamuleni; 2007.

5.2 Annex II: List of Stakeholders – Interview Partners

Annex 2 - List of interview partners (alphabetical order)

| TITLE | NAME | SURNAME | INSTITUTION | POSITIONS |
|--------------|-------------|----------------|--------------------------------|---------------------------------|
| Ms | Ann-Kristin | Braendvang | Statistics Norway | National Accounts |
| Ms | Takondwa | Chauma | Reserve Bank of Malawi | |
| Mrs | Lizzie | Chikoti | NSO | Assistant Regional Commissioner |
| Mr | Austin | Chiumia | Reserve Bank of Malawi | |
| Mrs | Sook-Jung | Dofel | GIZ | Project Leader |
| Mr | Temwa | Gondwe | World Bank | Economist |
| Mr | Joy | Hara | Ministry of Industry and Trade | Chief Economist |
| Mr | Daniel | Jenya | Min of Finance | |
| Mr | Wytone | Jombo | Reserve Bank of Malawi | |
| Mr | Francis | Kalonja | Ministry of Agriculture | Assistant Statistician |
| Mr | Hamilton | Kamwana | MEPD | Economist |
| Ms | Priscilla | Kandoole | MEPD | Economist |

| TITLE | NAME | SURNAME | INSTITUTION | POSITIONS |
|--------------|-------------|----------------|--------------------------------|------------------------------|
| Mr | Stan | Longwe | Min of Finance | |
| Mr | Mishede | Longwe | Ministry of Industry and Trade | Chief Economist |
| Mr | Lars | Ludgren | ICON | |
| Mr | Charles | Machinjili | NSO | Commissioner for statistics |
| Mr | John | Mataya | Local consultant | |
| Mrs | Appolenia | Mbowe | World Bank | Senior Economist |
| Mr | Timothy | Mmanga | NSO | Statistician |
| Dr | Richard | Mussa | Chancellor College | Head of Economics Department |
| Ms | Kettie | Musukwa | Ministry of Finance | Assistant Director |
| Mr | Emmanuel | Mwanaleza | Ministry of Agriculture | Statistician |
| Mr | Pachalo | Mwanza | MEPD | Economist |
| Dr | Rockwell | Mzonde | MEPD | Deputy Director |
| Mr | James | Namalima | Ministry of Mining | Economist |
| Mr | Golden | Nyasulu | Min of Finance | |

| TITLE | NAME | SURNAME | INSTITUTION | POSITIONS |
|--------------|-------------|----------------|--------------------------------|------------------------|
| Mr | Andrew | Nyirenda | MEPD | Head of Unit |
| Ms | Eluphy | Nyirenda | Ministry of Industry and Trade | Economist |
| Mr | Jan Hakon | Olsson | Norwegian Embassy | Deputy |
| Mr | Arnold | Palamuleni | Reserve Bank of Malawi | |
| Dr | Kisu | Simwaka | Reserve Bank of Malawi | Principal Economist |
| Mr | Ted | Sitima-Wina | MEPD | PS |
| Ms | Mwiza | Thindwa | Ministry of Industry and Trade | Economist |
| Mr | Ralph | Tseka | Reserve Bank of Malawi | Director |
| Mr | Wasim | Ul Haque | Norwegian Embassy | Country |
| Mr | Simeon | Yosefe | Ministry of Energy | Principal Statistician |
| Mr | Francis | Zhuwao | Min of Finance | Director |

5.3 Annex III: Expenditure Verification Procedure

Annex 6: Verification Process and Methodology

1. Listing of Procedures, Documentation and Verification Evidence

The evidence to be used for performing the expenditure verification is all financial and non-financial information which makes it possible to examine the expenditure declared in the Record of Expenditure. Verification means that the Auditor examines the factual information in the Record of Expenditure of the Consulting Company and compares it with the terms and conditions of the Contract. The Auditor uses the evidence obtained from these procedures as the basis for the report of factual findings.

The Auditor documents matters which are important in providing evidence to support the report of factual findings, and evidence that the work was carried out in accordance with the contract.

1. Planning - Start of the verification

The Contracting Authority requires the verification of the expenditure to commence as soon as possible but not later than within <xx calendar> days after the signature of the Contracting Authority's order form/contract.

2. Reporting

The report on this expenditure verification should describe the purpose, the agreed-upon procedures and the factual findings of the engagement in sufficient detail in order to enable the Contracting Authority to understand the nature and extent of the procedures performed by the Auditor and the factual findings reported by the Auditor.

It is recommended that the auditor submits, before issuing the final report, a draft report to the Consulting Company in order to validate the findings (i.e. to sort out potential misunderstandings, additional information/documents to be provided, etc).

3. Procedures to verify selected Expenditure

The Auditor verifies, for each expenditure item selected, the compliance and so the eligibility of the expenditure with the terms and conditions of the applicable Financing Agreement. For this purpose the Auditor examines supporting documents (e.g. invoices, contracts) and proof of payment. The Auditor also examines proof of work done, goods received or services rendered and he/she verifies the existence of assets if applicable.

The Auditor verifies that the expenditure for a selected item was actually incurred for and pertains to the PE. For this purpose the Auditor examines supporting documents (e.g. invoices, contracts) and proof of payment. The Auditor also examines proof of work done, goods received or services rendered and he/she verifies the existence of assets if applicable. The Auditor verifies besides that the expenditure for a selected item was indicated in the budget.

- ▶ The Auditor verifies whether it is plausible that the expenditure for a selected item was necessary for the implementation of the Project and that it had to be incurred for the contracted activities by examining the nature of the expenditure with supporting documents.
- ▶ The Auditor verifies that expenditure for a selected item is recorded in the accounting system and that it was recorded in accordance with the applicable accounting standards and the usual cost accounting practices of the country where the Project is implemented.
- ▶ The Auditor verifies that expenditure for a selected item is substantiated by evidence and notably the supporting documents.
- ▶ The Auditor examines the nature of the expenditure for a selected item and verifies that the expenditure item has been classified under the correct (sub)heading of the Record of Expenditure.

- ▶ The Auditor verifies that expenditure for a selected item is substantiated by evidence (see section 1 of Annex 2B, Guidelines for Specific Procedures to be performed) and notably the supporting documents as specified in Section 4.1.3 of the Practical Guide.
- ▶ The Auditor verifies that the monetary value of a selected expenditure item agrees with underlying documents (e.g. invoices, salary statements) and that correct exchange rates are used where applicable.
- ▶ The Auditor examines the nature of the expenditure for a selected item and verifies that the expenditure item has been classified under the correct (sub)heading of the Record of Expenditure.

Where applicable the Auditor examines which procurement, nationality and origin rules apply for a certain expenditure (sub)heading, a class of expenditure items or an expenditure item. The Auditor verifies whether the expenditure was incurred in accordance with such rules by examining the underlying documents of the procurement and purchase process. Where the Auditor finds issues of non-compliance with procurement rules, he/she reports the nature of such events as well as their financial impact in terms of ineligible expenditure. When examining procurement documentation the Auditor takes into account the risk indicators listed in Annex 2B and he/she reports, if applicable, which of these indicators were found. When examining these procurement documents the Auditor takes into account the risk indicators listed at the end of this page.

4. Risk Indicators Procurement

Inconsistencies in the dates of the documents or illogical sequence of dates.

Examples:

- Offer dated after the award of contract or before the sending of the invitations to tender
- Offer of the winning tenderer dated before the publication date of the tender or dated significantly later than offers of other tenderers
- Offers of different candidates participating in the same tenders all having the same date
- Dates on documents not plausible/consistent with dates on accompanying documentation (e.g. date on the offer not plausible/consistent with the postal date on the envelope; date of a fax not plausible/consistent with the printed date of the fax machine)

Unusual similarities in offers of candidates participating in the same tender. Examples:

- Same wording, sentences and terminology in offers of different tenderers
- Same layout and format (e.g. font type, font size, margin sizes, indents, paragraph wrapping, etc) in offers of different tenderers
- Similar letterhead paper or logos
- Same prices used in offers of different tenderers for a number of subcomponents or line items
- Identical grammatical, orthographical or typing errors in offers of different tenderers
- Use of similar stamps and similarities in signatures

Financial statement or other information indicating that two tenderers participating in the same tender are related or part of a same group (e.g. where financial statements are provided, the notes to the financial statements may disclose ultimate ownership of the group. Ownership information may also be found in public registers for accounts)

Inconsistencies in the selection and award decision process. Examples:

- Award decisions not plausible / consistent with selection and award criteria
- Errors in the application of the selection and award criteria
- A regular supplier of the beneficiary participates as a member of a tender evaluation committee

Other elements and examples indicating a risk of privileged relationship with tenderers:

- A same tenderer (or small group of tenderers) is invited to different tenders with unusual frequency
- A same tenderer (or small group of tenderers) wins an unusually high proportion of the bids
- A tenderer is frequently awarded contracts for different types of goods or services
- The winning tenderer invoices additional goods not foreseen in the offer (e.g. additional spare parts invoiced without clear justification, installation costs invoiced while not foreseen in the offer).

Other documentation, issues and examples indicating a risk of irregularities:

- Use of photocopies instead of original documents
- Use of pro-forma invoices as supporting documents instead of official invoices
- Manual changes on original documents (e.g. figures manually changed, figures "tippexed", etc)
- Use of non-official documents (e.g. letterhead paper not showing certain official and/or compulsory information such as commercial registry number, company tax number, etc.)

The Auditor shall undertake this engagement in accordance with:

- the International Standard on Related Services ('ISRS') 4400 Engagements to perform Agreed-upon Procedures regarding Financial Information as promulgated by the IFAC;
- the Code of Ethics for Professional Accountants issued by the IFAC. Although ISRS 4400 provides that independence is not a requirement for agreed-upon procedures engagements, the Contracting Authority requires that the Auditor is independent from the Beneficiary and complies with the independence requirements of the Code of Ethics for Professional Accountants.

5.4 Annex IV: Terms of Reference

TERMS OF REFERENCE (ToR):

MID-TERM REVIEW

**MACRO MODEL FOR THE MALAWI GROWTH AND DEVELOPMENT
STRATEGY (PHASE 3)**

MWI-2617 – MWI-11/0047

1. BACKGROUND

The Governments of Norway and Malawi signed an Agreement regarding institutional co-operation between the Ministry of Finance (MoF), Ministry of Economic Planning and Development (MEPD), the National Statistical Office (NSO) and Statistics Norway (SN) on 3 June 2003 which was prolonged by Addendum dated 17 July 2007, for Phase 1.

This cooperation was continued in a new Agreement regarding Capacity Building for Statistics and Planning (Phase 2) entered into 12 October 2007, extended by Addendum No 1 dated 9th June 2010 and Addendum No 2 dated 9th December 2010.

Based on the results from the two previous phases it was decided to continue with a third phase of the project. In the third phase the program was split in two agreements, one concerning the cooperation with National Statistics Office and Statistics Norway and one concerning the cooperation with Ministry of Economic Planning and Development, Ministry of Finance and the Reserve Bank of Malawi (RBM). An agreement for the Macro-Model component was entered into 28th of June 2012, based on the program document of 15^h February 2012.

The overall goal of the Project is to strengthen the capacity in evidence based planning and timely production of policy analysis for policy makers.

The purpose of the Project is to strengthen and further build the capacity of Government (GoM) in macroeconomic modelling, to have a holistic and coordinated GoM approach to economic forecasting and analysis and to enable GoM to meet with international institutions such as IMF, the World Bank and other Malawi development partners on more equal terms.

According to Article X in the Agreement dated 28th June 2012, a Mid-Term review shall be carried out by September 2013.

2. PURPOSE, CONTEXT AND INTENDED USE

The purpose of the review is to review implementation, progress and impact up to date and to make recommendations for improvements of the current support and any future support. The institutions involved in the Programme will, on basis of the findings and recommendations from the review, consider any need for changes in the implementation of the Programme. The review may also form a basis for a dialog between Norway and Malawi in terms of a follow-up and how support to evidence based planning through scientifically accepted models can be organised in the future.

The review report will be shared by other stakeholders involved in support to Malawi's Public Financial and Economic Management.

3. SCOPE OF WORK

The scope of work includes both review of available documentation and field work with interviews with relevant parties as described in section 4. The review covers the present third phase of the project from 2012, but shall also include lessons learned from the previous two phases. The work shall comprise, but not necessarily be limited to, the following tasks:

- a) If possible, assess impact of the Programme taking into account achievements reached in Phase 1 and 2
- b) Review progress and results so far and to what extent the Programme's goals and objectives are expected to be achieved.
- c) Review the use of resources in terms of effectiveness, efficiency and intended use;
- d) Assess sustainability elements, with special focus on institutional and organisational sustainability;
- e) Assess the Malawian ownership of the program;
- f) Assess the user needs and the national capacity in terms of human and financial resources in relation to the ambitions of the programme, including the capacity to use the macro model for policy planning during the budget process and other development documents such as the Economic Recovery plan and the dialog on the IMF program and to use it for key results indicators for development documents such as the Malawi Growth and Development Strategy;
- g) Assess the cooperation with NSO on access to relevant data for the model;
- h) Assess if gender issues are sufficiently addressed throughout the project, including in the team composition, also in basic economic statistics that are used in the modeling component.
- i) Assess the risk mitigation measures implemented during the Programme period, based on the risk analysis in the Project Proposal from February 2011;
- j) Review how the terms and procedures related to administrative arrangements in the agreement between Norway and Malawi have been followed, including a review of the financial arrangements and whether all the audit reports have been delivered and followed-up upon in line with the agreement;
- k) Review the anti-corruption measures and in particular how the Norwegian zero-tolerance policy on corruption is being managed in the project.
- l) Review any unexpected factors that have occurred that may prevent achievement of expected results. This should include institutional and organisational aspects, financial aspects and technological aspects or any other aspect that could influence the Programme negatively.
- m) Review to what extent the GoM financial incentive structure, i.e. per diem and salaries is conducive for the achievement of the Programme's goals and objectives.

Based on the assessment of the above points, the team will make recommendations for the continued implementation and fulfilment of the objectives of the project, and especially advice on how the results achieved and cooperation established can be continued with the aim of Malawi operating and further develop the model independently.

4. IMPLEMENTATION OF THE REVIEW

Norway by Norad will appoint the review team. The team will consist of 1 – 2 international consultant (s) and one local consultant. The team leader will be (one of the) international consultant (s). One of the team members should preferably be based in Malawi or have extensive knowledge and experience from working in Malawi. A senior adviser from Norad may assist the team.

The team members should familiarise themselves with all relevant project documents, reports etc. that shall be provided by the involved partners. The Team will be expected to familiarise themselves with Norwegian development policy regarding Malawi.

The team shall meet and interview staff in MEPD, MoF, RBM, NSO, SN and the Royal Norwegian Embassy. Other donor representatives or other stakeholders may also be interviewed. The Embassy will assist the team in making appointments. The team will report to Norad, that will also approve the review report after consultation with the stakeholders as indicated below.

The Consultant team shall present preliminary findings and recommendations in a debriefing note to be presented at a meeting in Lilongwe at the end of the field visit.

The consultants are expected to start preparations for the review in September/October 2013 for the field visit to Malawi to take place in October.

5. REPORTING

The team will submit a draft report to Norad not later than two weeks after the end of the field visit. The report will be in Word format in English, and of up to 25 pages, excluding annexes and executive summary. Norad will submit the review to MEPD, MoF, NSO, SN and the Royal Norwegian Embassy for comments. Any comments shall be submitted to the consultants within two weeks and the consultant team shall submit their final report to the above institutions two weeks thereafter. The report will be the property of the Government of Malawi and the Royal Norwegian Embassy in Lilongwe and shall be publicly available.

