

PROCEEDINGS OF THE DISCUSSION MEETING ON THE FINDINGS OF THE COST OF PRODUCTION OF MAIZE AMONG SMALLHOLDER FARMERS IN ZAMBIA IN 2009/10 AGRICULTURAL SEASON

On 2nd February 2, 2011 at Belvedere Lodge, Longacres, Lusaka

By

Munguzwe Hichaambwa

Background

The meeting fed into the programme of Training of Masters' Trainers for the 2010/11 Crop Forecasting Survey (CFS) by the Ministry of Agriculture and Cooperatives (MACO) and the Central Statistical Office (CSO). Review of the CFS questionnaire reached the part where an additional module was introduced in the previous year to capture data necessary for the analysis of the cost of production of maize. This was felt to be a good entry point for sharing results of the analysis of the cost of production of maize from the last seasons' CFS at the technical level with MACO, CSO and FRA as well share insights into the quality of the data collected year for the benefit of the training programme. Those who were in attendance outside this programme were:

- | | |
|-----------------------|---|
| 1. Mr. J. J. Shawa | Director, Policy and Planning Division, MACO |
| 2. Mr. M. Banda | Director, Agriculture and Environment Division, CSO |
| 3. Mr. G. Sinyenga | Deputy Director, Economics and Social Statistics Division, CSO |
| 4. Ms. K. Katyamba | Deputy Director, Agribusiness and Marketing Division, MACO |
| 5. Mr. M. Isimwaa | National Early Warning Unit, MACO |
| 6. Mr. P. M. Kabwe | Food Reserve & Marketing Coordinator - South, Food Reserve Agency |
| 7. Mr. C. Kabaghe | Director, Food Security Research Project |
| 8. Prof. T. Jayne | Advisor, Food Security Research Project |
| 9. Dr. A. Chapoto | Research Coordinator, Food Security Research Project |
| 10. Mr. W. Burke | Research Specialist, Food Security Research Project |
| 11. Mr. M. Hichaambwa | Research Specialist, Food Security Research Project |
| 12. Mr. Solomon Tembo | Research Coordinator, Food Security Research Project |

Introductory Remarks by Mr. Isimwaa

In his introductory remarks, Mr. Isimwaa explained that stakeholder need for knowledge on the cost of production of maize among smallholder farmers has greatly increased since the year 2007/8 following the global financial pressure which affected external trade especially from the point of view of regional competitiveness. Issues of productivity as well as those of the cost of production have featured prominently among stakeholder debates in order to have local maize prices that are favorable to both producers and consumers and that are competitive in the region. The issues of productivity are being addressed through other avenues while the understanding of the cost of production is being addressed through this analysis based on CFS data as a starting point. The subject is frequently at the center of national development and policy debates such as the annual determination of the price offered to farmers by the Food Reserve Agency (FRA). In order to address the lack of empirical data on the maize production costs the 2009/10 CFS was modified to include specific questions relating to the smallholders' land, labor and capital costs associated with producing and marketing maize. Analysis of this data has been completed by FSRP and this forum has been organized to initiate the sharing of insights from this analysis.

He further informed the meeting that officials in MACO were in agreement that the data for these costs is better captured through a smallholder household diary system like the one used to capture household expenditure in the Living Conditions Monitoring Surveys whereby farmers would be recording relevant information as the activities are taking place. This could be done, for example, every five years and analysis of these data could be used to validate the annual data captured through the CFS. Thus the main objective of the presentation of the results of the analysis of the cost of production of maize at the time is to influence Government decision with regard to setting up of FRA maize prices through the Directors and Deputy Directors of MACO and CSO present in the meeting. Interaction with the Stocks Monitoring Committee which is composed of various other stakeholders with an interest in the FRA maize pricing including the Zambia National farmers Union (ZNFU), the Millers Association of Zambia (MAZ), and the Grain Traders Association of Zambia (GTAZ) among others would follow thereafter.

Before calling upon Messrs Dingiswayo Banda (MACO) and William Burke (FSRP) to present the insights of the findings of the analysis, he took the meeting through the time schedule for the conducting this year's CFS from field data collection up to data cleaning and tabulation. He further indicated that this year's CFS will incorporate a post-harvest estimation aspect which will be used to validate last season's crop production estimates. In addition, the cost of production module in the questionnaire was going to include rice and cassava in addition to maize.

Issues Arising from the Presentation

During the presentation, Mr. Banda took the meeting through the methodology used to generate the data for this analysis and highlighted salient findings while Mr. Burke went further to elaborate on variations within cost of production from region to region and indeed farmer to farmer. The following were issues arising from the presentation:

- a. *Continuous monitoring of the cost of production is important:* The meeting learnt that this was a key issue as far as MACO was concerned as there have been serious arguments among stakeholders when it came to determining the FRA price for maize. Emphasizing that there was no single cost of production was also important as it would guide stakeholders during consultations on setting the FRA maize price. Furthermore, it was reported that MACO was delighted that this analysis would be extended to two other crops (rice and cassava) this year, and that the ministry was in fact looking forward to a time when the analysis would be done for all crops on which marketing arguments are usually encountered by stakeholders.
- b. *Arrangements are being made to present these findings to a broader audience of stakeholders:* The meeting also learnt that MACO Permanent Secretary had been informed on the need to present the findings of this analysis to the Stocks Monitoring Committee so that stakeholders could be better guided during consultations to arrive at the FRA price, or even when monitoring market prices other than the one offered by FRA. The analysis would also be presented to the Minister as it is very important that he was well informed on these issues.
- c. *This kind of information is also required in estimation of value added (in Gross Domestic Product):* The CSO has been looking for the cost of production of not only crops but other farm enterprises to help it net out costs in the estimation of the Gross Domestic Product. In its absence CSO has been using ratios imputed using data from a Post-Harvest Survey (PHS) conducted a long time ago.
- d. *Zambia is a high cost production country for maize:* This was clear from the analysis and it was noted that stakeholders needed to get together to find strategies through which the cost of producing maize can be reduced guided by the nature and level of the cost structures analyzed. However, the meeting wondered how this cost compares with that of smallholder farmers in the region especially considering that the maize imported from say South Africa (produced by commercial farmers) is more expensive than that produced by commercial farmers in Zambia due to higher yield potentials (4

compared to 7 tons per hectare). For insistence, analysis by FRA last year estimated the cost of producing a 50 Kg bag of maize by commercial farmers in Zambia at ZMK35,000. The overriding point over this issue, however, is that most of the maize in Zambia is produced by smallholder and not commercial farmers.

- e. *Family labor greatly contributes to the cost of production:* This was noted and some concern was registered as to whether it was fair to use market rates for labor costs when smallholder farmers normally would have no alternative application for this labor which actually significantly pushes the cost of production up. It was later clarified that actually some stakeholders like ZNFU use the national wage rates from CSO when computing their labor costs and, hence, this analysis did a better job by applying rates that were applicable in specific areas based on local observations. This way stakeholder concerns as to under valuing labor costs would have been addressed.
- f. *The crop production estimates and National Food Balance Sheet are scheduled to be released on 14 May 2011:* Concern was raised on the very high likelihood of market prices being announced by the Minister of Agriculture and Cooperatives on 1 May 2011 before the crop estimates are finalized and the meeting wondered whether it was possible to bring the schedule a couple of weeks forward so that the crop estimates could be ready before the market prices are determined and announced on 1 May 2011. However, it was pointed out that the time schedule for finalizing the CFS figures was based on realistic considerations of how much could be achieved during the period in question. The main issue should really then be convincing the MACO and other stakeholders to shift the start of marketing season from 1 May to 1 June of each year by which time the CFS process would have been completed. In any case, very little maize marketing takes place in May and, in fact according to experience of FRA, the moisture content of the maize grain is normally too high for marketing in most places during this month, and may still be too high in some places by the month of August.
- g. *The cost of production analysis is a useful tool for setting up the FRA maize price:* This notwithstanding, the meeting noted that the current analysis of the cost of production is based on last season's data and some participants wondered whether this analysis could not be based on current data in order to guide the FRA price more appropriately. It was pointed out that some cost structures such as those of labor, oxen and machinery could still be applied and only the costs of capital inputs be modified with current prices. Still some participants felt that this was still not good enough and urged the meeting to critically consider if it was practically impossible to do these annual analyses based on current CFS data. This would entail better data collection made possible through better commitment and training at all levels including improved field data checks which would reduce the time required to clean this data. The actual analysis would then take much less time since the programming for this has now been developed.
- h. *What price would be recommended to the Minister of MACO based on this analysis?* Some participants wondered on how practical the analysis can be by posing this question. The meeting was of consensus that a number of things need to be taken into account such as:
 - The national break-even price with considerations on regional and other variations,
 - That significant cost is contributed by family labor which is usually not paid for by the majority of smallholder farmers and reduces the cost of production significantly when excluded,
 - That only 30% of the smallholder maize sellers sell to FRA, and
 - The cost to the national treasury.

Remarks by FSRP - Prof. T. Jayne

Professor Jayne said that FSRP was encouraged by attendance at the meeting of senior management officials at director and deputy director levels from MACO and CSO as well as the positive discussions

emanating from the various stakeholders. He also thanked the team that was involved in this analysis and further wondered whether this process could be institutionalized in MACO and CSO.

Remarks by CSO – Mr. G. Sinyenga

Mr. Sinyenga reiterated that CSO welcomes this process as it enhances the estimation of value added in Gross Domestic Product computations. He further emphasized that data collection needs close supervision and that there was need for the CFS training programme to spend deliberate time on this aspect of survey work. This would greatly improve the quality of data. Lastly, he bemoaned that the CFS process ends up with only the crop production estimates and the National Food Balance Sheet without any other outputs. He stated that the various types of information required in the CFS questionnaire were put there for a purpose and should be analyzed and synthesized into CFS reports to inform policy decisions.

Closing Remarks by MACO – Mr. J. J. Shawa

In his closing remarks, Mr. Shawa commended FSRP for spearheading this work and mentioned that MACO would want it done annually. Arrangements were being made to arrange that this presentation be made to the Minister. He further said that institutionalizing the process would not be a problem through capacity building of selected officials within MACO and CSO working with the FSRP team, not forgetting the Farm Management Unit in the Department of Agriculture within MACO which is fundamental in such matters.

On the CFS process, he urged the master trainers to take the training process seriously so that quality work can be done as soon as possible as resources for the CFS have already been released and higher ranking Government officials would soon start asking for the CFS figures. He stressed the importance of improving the quality of the data each year learning from lessons of previous years which should be tabulated/recorded for ease of reference. Logistics especially in the provinces need to be put in place to speed up the process as releasing the CFS figures on 14 May 2011 is too late as the Minister has to announce the prices on 1 May 2011.