Questions and Answers on Fertiliser Reform in Zambia*

September 3, 2009 Press Query to ACF/FSRP:

Press Query to ACF/FSRP: Previously there have been reports that the Fertilizer Support Programme (FSP) has failed Zambian in many ways and from reports as of last years the number of bags were reported to have been stolen, many small scale farmers did not benefits and such other reports. This prompted stake holders to call for its disbandment (FSP). While some had suggested to government to change the system so that many farmers benefit from the system. And last year government constituted a team to of various stakeholders to neighboring countries to look at how similar programme has worked and so that it can also improve on this and make some changes.

And yesterday government announced some changes in this year FSP programme 2009/2010 farming season. Some of the changes are:

1. Increasing the number of beneficiaries from 200,000 to 534,000 small scale farmers (SCF)
2. Reduced the amount of seeds, fertilizer given to the SCF from 8X 50 kg bags of fertilizer and 4X50 kg bags of seeds
3. Incorporated the creation of camp agricultural committee to involve chiefs and religious leaders.
4. Has changed the name from Fertilizer Support Programme (FSP) to Farmers Input Support Programme (FISP)

Question: From these I would like your comment on how you think this will help the farmers and also help the country improve its food security.

ACF/FSRP Reply: The changes outlined above (especially 1, 2 & 3), when well implemented, have the potential to put FISP on a pathway towards positive benefits for needy smallholder farmers to be reached. This would help them primarily as direct consumers of the additional maize and other crops they need to produce. The objective of increasing substantially the number of beneficiaries, as feature 1 above indicates, has the potential to clearly help bring many more smallholders closer to being able to produce enough to feed their families and to perhaps also have something more to sell to the market. FISP implementation details are still being finalized, but from general discussion in the Zambian press it is understood that one of the important changes in the FISP selection criteria is that participating farmers will no longer need to have the capacity to grow 1 hectare of maize but can participate by cultivating as little as 2 limas (0.5 ha). This change has the potential to allow the programme to cater to a greater number of smaller and needier farmers.

At the same time there are still as many as 20-25 % of smallholders who normally cultivate less than 2 limas of maize, and there are some 16 % of smallholders who do not cultivate maize (2006/07 crop year). Broadening the future FISP to also fit the conditions of these kinds of needy smallholders will be needed. Importantly, what was learned by the FSP Study Tour team from all 3 countries visited (Kenya, Tanzania and Malawi) is that pack size was 2 x 50 kg bags of fertiliser, as these programmes were each aimed at assisting some of the most needy smallholders. And the objective of reaching more of the population of needy smallholders in Zambia is not likely to be achieved in just one production season. But the new features of FISP are consistent with a longer-term opportunity for success, providing there are careful design and implementation efforts to identify needy households, and to utilize the camp agricultural committees to assure their selection into the programme.

In general, reaching more needy rural households with an effective assistance package would greatly improve household-level food security in Zambia since so many smallholders are still
not able to produce enough to adequately feed their own families. Some households even have to purchase maize and other staples if they have cash resources to allow this. Helping needy households become more self-sufficient in feeding themselves maize (and other crops) will also contribute to national-level food security since fewer rural families will be purchasing maize, thus leaving more of what is marketed for use by urban and remaining rural net buyers.

Questions among some stakeholders have been raised about the fact that beneficiary smallholders under the new FISP will only receive 200 kgs of fertilizer and 10 kgs of seed. From ACF/FSRP analysis of the 2007/2008 nation-wide PHS Supplemental Survey, we know that there were a total of some 1,493,000 smallholders cultivating crops in that year, and that about 31 % of these smallholders (466,768) used fertiliser on maize. However, only about one third of these users (some 165,000 households) obtained FSP subsidized fertilizer, and over half of the households that did receive FSP used 250 kgs of fertilizer or less on maize. In other words, even though the official FSP pack size in prior years was 400 kg of fertiliser, most subsidy participants received and/or used significantly less than the full pack size. So the new FISP with the target of reaching 500,000 households will allow a very large increase in the number of smallholders receiving assistance in the form of 200 kg of fertilizer and 10 kgs of high quality seeds. If this can be implemented, it will be a major accomplishment. One of the many additional challenges in all of this, but also one of the biggest potential contributors to yield increase, is getting the inputs delivered to target farmers on time so they can plant and begin fertilizing at the first rains. There is considerable research and practical knowledge in Zambia which documents the high payoff to timely planting as well as use of improved seeds in raising productivity.

Of course, even with the proposed changes, many smallholder farmers will not be reached, or may be reached with an assistance package smaller than they received in the past. These farmers may be unhappy under the new operating procedures. For example, if they had been receiving a subsidy on 8 x 50 kg bags of fertilizer and now receive less (or none), then there will be complaints. The hope is that those receiving in the past the full subsidy of the old 8 X 50 kg package were able to take good advantage of the FSP assistance to recapitalize their household asset position and to also improve their understanding of more effective use of commercial inputs. With these accomplishments they know the payoff to using fertilizer and may now be able to more easily purchase it and other inputs from private agro-dealers. Likewise even with the potential large increase in the number of beneficiary farmers in just one season, a good number of needy smallholders will still not be reached because GRZ resources for subsidies are limited, and getting even larger budget allocations is constrained because there are critical competing uses for budget resources in the agricultural and livestock sectors. Hopefully, unassisted households will be more confident in waiting to become involved in future years. This expectation can be reinforced if the new camp-level committees can be supported with MACO’s implementation of an effective camp-level farmer registry and clear selection criteria to identify needy participants. This kind of dynamic information system will be required to reassure farmers that FISP administrators will be in a good position to have the knowledge to effectively rotate future benefits to the needy who are still waiting.

It is also important for policy makers, FISP programme implementers and other stakeholders to understand that there is an important portion of the smallholder community in Zambia that has already shown the capability to purchase commercial fertilizer and seeds based on the use of their own household’s retained earning from crops, livestock, non-farm income and in some minor cases, the use of formal credit. For example, according to ACF/FSRP analysis, over the production seasons 02/03 until 06/07 there was a 44 % increase in the number of smallholders purchasing fertilizer from commercial sources, and the total tonnage of fertilizer moving through these channels was up some 87 %, reaching a national total of over 95,000 metric tons in the 06/07 production season. As a comparison for the same 06/07 season, the national sample of smallholders interviewed reported receiving a total of slightly over 61,000 metric tons of
fertiliser through FSP. Over this same 02/03 to 06/07 period study results show that the growth in the number of smallholders making commercial fertiliser purchases moved from slightly over 200,000 up to nearly 300,000, while the number of FSP programme users increased from about 100,000 in the 02/03 season to some 165,000 farmers by 06/07. As we will discuss further below, the growth of smallholder farmer use of private agro-dealers for acquiring commercial inputs is important and also needs to be further stimulated so farmers can have timely access to inputs as well as to accompanying agro-dealer extension advice on effective crop and livestock input use.

Looking beyond the immediate subsidy in fertilizer and seeds, and assuming more agro-dealer involvement, all smallholders will benefit if additional resources can also be allocated to help upgrade MACO and ZARI knowledge bases and extension capacity to strengthen the ability to assist smallholder in learning how to raise productivity (yield) on maize and other crops by using improved inputs and management methods. Many different studies in Zambia show that the average benefit of using inorganic fertiliser on maize is too often only about 1000 kgs (or sometime even less) per hectare of additional output. But good smallholder farm management, favourable agro-ecological conditions, and conservation farming practices can help smallholders that use inorganic fertilizer and improved seed to achieve 3 to 5 tons total per hectare. It is this kind of productivity performance that Zambia requires to effectively use agriculture as a broad-based engine of growth.

**Question:** Do you think the measures taken will help on the system?

**ACF/FSRP Reply:** We understand this question to focus on changes 3 & 4 (above) that is, the actual operational dimensions of FISP. More detailed information is needed on the actual design and implementation of announced changes before results can be seen or even expected. Yet it must be recognized that the challenge of locating and targeting effectively the needy smallholder is daunting. Fortunately the idea of involving camp agricultural committees, including local civil and religious as well as NGO leaders is right on target with recommendations coming from the FSP Study Tour Team. The change in who selects beneficiaries is aimed at involving local knowledge. The payoff to this is in part demonstrated by the relatively successful targeting experiences in Zambia of the NGO “Programme Against Malnutrition” in implementing prior years the Food Security Pack. PAM involved multiple local-level decision makers and it is believed that this increased the likelihood of identifying the smallholders who really require the assistance. With more of this kind of involvement in decision making processes it is also hoped that in the following years there will be more success in graduating farmers from programme participation after two or more rounds of involvement so that other needy smallholders can also be given assistance. As mentioned before, the farmer registry that MACO is working on for all agricultural camps in Zambia will also be important over the longer-run in the process of transparent camp-level identification and monitoring of programme participants.

The name change is also positive as it indicates GRZ intentions over the longer-run to try to assist smallholders with a wider range of crops and agricultural inputs, including the strengthening of extension advice on topics such as management practices and conservation farming techniques to assist in raising yields for a broader set of crops, and helping to make it more profitable to use purchased inputs.

**Question:** And any other information concerning the subject or not in the subject that you fell can be of helpful to me.

**ACF/FSRP Reply:** Changes announced for the new FISP, assuming they can be effectively implemented, can be part of the way forward in reforming the approach to providing assistance to smallholders. But there are a number of other reforms suggested by the FSP Study Team that
-are still under review and are thought to also be part of the solution to achieving the longer-run full potential for programme improvement. For example, one of the most important of these recommendations still under review is to reorganize how the input subsidy is given-out in title and retrieved in-kind in order to remove potential negative effects of untargeted subsidies on private dealer incentives, and to achieve much greater growth in private agro-dealer sales and services for smallholders. As we have already discussed, more smallholders currently obtain inputs such as fertilizer and hybrid seed from cash purchases at agro-dealers than from the FSP/FISP programme. But as seen from experience in Kenya, FSP Study Tour participants agreed that private agro-dealer networks in Zambia need to be further expanded and strengthened significantly in order to serve the entire smallholder farming community with timely and cost effective access to input use and practical commercial extension advice.

Vouchers are also being considered as a method for more cost effective targeting as well as a tool for additional stimulus to agro-dealer development. Based on existing experience in cotton growing areas with electronic payment transactions (SMS-based) over the past 2 - 3 years in tasks such as paying farmers for seed cotton sales, Zambia has a comparative advantage in the Southern Africa Region to design and implement an SMS based e-voucher system for helping to transfer and audit more efficient assistance to agreed upon targeted households. The e-vouchers would likewise be redeemed by farmer beneficiaries at authorized private agro-dealers, thereby also stimulating private sector agro-business development in rural areas. More information about the workings of an e-voucher programme was presented by the ACF/FSRP team in written and oral contributions in April, 2009, to the Parliamentary Committee on Agricultural and Lands review of the Fertiliser Support Programme. These are available at:

- Written Submission - 1) On Performance of the Fertiliser Support Programme (http://www.aec.msu.edu/fs2/zambia/Performance_FSP_for_Ag_Lands_committee.pdf)

In closing, it is pretty broadly agreed that improving the effectiveness of fertilizer and other input assistance efforts, and making such subsidy allocations sustainable is very important as part of achieving FNDP goals of poverty reduction and broad-based rural income growth in Zambia. The fertilizer assistance programme has grown since it started in its current form in the 2002/2003 cropping season to occupy in the 2009 budget some 75 % of GRZ allocations to MACO’s poverty reduction programmes. Along with allocations to the Food Reserve Agency for crop purchases as part of the strategic grain reserve, poverty reduction programmes occupy the vast majority of Zambia’s annual allocation to developing the agricultural sector. Given the difficulty in increasing significantly the overall budget to agriculture, there is concern among many stakeholders that other strategic priority investments are being crowded out, such as resources for improved rural roads, irrigation infrastructure, rural electrification, and even agricultural research and extension improvements. So GRZ efforts to reform the FSP are most welcome, and need to be appreciated and supported by all stakeholders.

ACF/FSRP has also written another recent news story on the need for continued FSP reform and this is available for review at:

- The Need to Reform the Fertilizer Support Programme (FSP) (http://www.aec.msu.edu/fs2/zambia/FSP_Reform_2009_08.pdf)