

ANNEX 4

AIDE MÉMOIRE (with Feedback)



Food and Agriculture
Organization of the United
Nations

Office of Evaluation

Final Evaluation of the Farmer Input Support Response Initiative (FISRI) To Rising Prices Of Agricultural Commodities In Zambia (GCP/ZAM/071/EC)

Aide Mémoire (incorporating feedback)

May 2012

Final

Food and Agriculture Organization of the United Nations

Office of Evaluation (OED)

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1.0 Executive Summary

1.1 Background to the Final Evaluation

The overall aim of the final evaluation is to provide information on lessons learnt from implementing the three FISRI projects to assist decision-makers in the Ministry of Agriculture and Livestock (MAL), EC and FAO on the best way to scale-up conservation agriculture in Zambia. The implementation periods of these projects have some overlaps and a limited period within which the beneficiary and partners have had to implement these projects (absorbing €16.9million in 36 months). While indications point to the projects being broadly successful and producing some expected results, it is deemed necessary to carry-out a detailed evaluation of the three projects so that the findings are fed into the formulation of the foreseen follow-up 'Conservation Agriculture Scaling-Up' (CASU) programme, to be implemented in 2013 using the same aid modality and implementation arrangements under EDF10.

The Final Evaluation was conducted in 2 phases, as follows:

- **Phase 1: Beneficiary Assessment Study (08.03-03.05.2012)**, by means of Desk Research, Field Study (11 Districts), Synthesis and Beneficiary Assessment Study/Report;
- **Phase 2: Final Evaluation Mission (22.04-31.05.2012)**, by means of Desk Research, Consultation/Field Visits (4 Districts), Aide Mémoire Presentation, Synthesis and Beneficiary Assessment Study/Report;

1.2 Evaluation Criteria

The Evaluation Criteria can be summarised as:

- **Relevance** (Problems & Needs): Satisfactory i.e. highly relevant to Zambia strategic plans;
- **Effectiveness** (Achievement of Purpose): Satisfactory i.e. innovative in approach to increasing access to inputs, using technology and engagement with the private sector for greater outreach;
- **Efficiency** (Sound Management & Value-for-Money): Less Than Satisfactory i.e. weak M&E has resulted in poor quality reporting and insufficient evidence-based data collection/analysis;
- **Impact** (Achievement of Wider Effects): Satisfactory i.e. CA best-practice adoption is well underway, led by the Government of Zambia and supported by international donors, including the EU through FISRI;
- **Sustainability** (Likely Continuation of Achieved Results): Satisfactory i.e. while sustainability may be questionable were FISRI to cease fully, the continuation of CFU and the follow-up with CASU will augment and sustain the efforts underway under FISRI;

Overall, the rating for the Final Evaluation of FISRI (I-III) is a qualified 'Satisfactory' with special attention drawn to the shortcomings in project management, notably progress reporting and M&E¹.

1.3 Overall and Main Conclusions

FISRI (I-III) can be seen as a 'qualified success' in terms of its efforts to integrate with MAL in addressing the promotion of CA as a means of augmenting food security and a mitigation of the effects of increasing food and input prices by means of: (i) targeting of capacity-building/training to MAL CEOs and to lead farmers in enhancing extension approaches; (ii) increasing access to inputs and equipment for lead-farmers; (iii) facilitating payment for inputs and services through an e-voucher system; and (iv) introduction of a pilot mechanisation scheme, through development of private sector agri-contractors. Where applied in the selected districts, there is definite evidence of benefit accruing to lead-farmers (and in turn to some participating farmers) of increased yields, improved CA farming practices and some improved linkages with agri-dealers and agri-contractors, though its documentation and demonstration effect is somewhat restricted.

FISRI is a very strategic and high-profile project that is a major support to government and MAL policy on promoting CA as a contributor to climate-smart, sustainable agricultural practices and increased food security. Its major strengths (as identified under the SWOT Analysis) include strong integration with MAL and government structures, promotion of private sector participation and introduction of innovative approaches to accessing inputs and agri-services through the e-voucher scheme and initial mechanisation up-scaling approaches.

¹ Definitions: Highly Satisfactory (i.e. fully according to plan or better); Satisfactory (i.e. on balance according to plan, positive aspects outweighing negative aspects); Less Than Satisfactory (i.e. not sufficiently according to plan, taking account of the evolving context; a few positive aspects, but outweighed by negative aspects); Highly Unsatisfactory (i.e. seriously deficient, very few or no positive aspects).

As an external evaluation exercise, the focus of the evaluation is not necessarily concentrated on highlighting the successes and achievements of FISRI, but more in identifying the areas for improvement and the lessons learned that can be taken forward in the remaining period of FISRI III and in the context of future programming, in particular that of CASU.

The Main Conclusions are summarised (under 7 main headings) as:

A. Conservation Agriculture Best-Practice Approaches

1. CA best-practice approaches can be reinforced more effectively through better informational, educational and communication approaches;
2. FISRI promoted strong linkages with MAL but this needs to be enhanced further through improved and integrated governance, reporting and M&E;
3. FISRI and FISP (the Farmer Input Support Programme) should be more clearly delineated to ensure they complement each other more effectively in the promotion of CA best-practice;
4. CA best-practice has not been effectively ‘institutionalised’ across the sector in terms of its integration into policy, research and educational institutions;
5. There needs to be greater understanding at all levels of the philosophy and principles of CA before it is adopted as a best-practice approach, as there is evidence that it is becoming more activity-based with less understanding of why it should be adopted in the first place;

B. Lead-Farmers & Participating (‘Follower’) Farmers

6. As an extension approach, the role of the lead-farmer was not performance-based and was not sufficiently understood by the follower-farmer (often leading to resentment);
7. Follower-farmers were essentially ‘members without benefits’ as they were not eligible to qualify for the e-vouchers at any stage (regardless of their performance or potential);
8. While there was evidence of CA demonstration plots organised by lead-farmers, the quality of some demonstration plots² failed to portray the real potential of CA due to poor management and lack of attention to detail and, as such, failed to fulfil their function;

C. Capacity-building & Training

9. Training and capacity-building appears to be un-programmed as it was not based on a comprehensive training needs assessment (across CEOs, lead-farmers, follower-farmers, agri-dealers and agri-contractors) and was sometimes out-of-synch with the farming cycle, was ad-hoc and too brief to be effective, and there was insufficient follow-up and verification to ensure comprehension and application;
10. MAL DACOs and CEO are critical to CA adoption, but the BEOs³ were excluded in the process, with the result that communication, logistical support and efficiencies were often less than effective;
11. In the absence of a performance-based approach to FISRI implementation at camp level, the effectiveness of the capacity-building and training could have had greater impact if targeted at ‘early adapters’ and more progressive lead-farmers and follower-farmers using a more ‘open’ system;

D. E-Voucher Scheme & Mechanisation

12. The e-voucher scheme facilitated the development of the agri-dealers and increased access to inputs to the lead-farmers in an innovative and cost-effective manner. However, the e-voucher distribution to lead-farmers and other facilitators was not performance-based and did not evolve to meet the on-going development needs of the farmer;
13. Mechanisation is key to up-scaling CA, but there are challenges in terms of availability of equipment, knowledge of its use and maintenance and delays in accessing mechanised services as early as possible in the season;
14. The ‘static’ approach to the application of the e-voucher scheme may have inadvertently contributed to the creation of a ‘dependency syndrome’, with an over-focus on provision of inputs to selected lead-farmers without a performance-based approach to its on-going application;

² The labelling of some farmer groups as Farmer Field Schools was a misnomer, as the lead-farmer system follows a different approach. However, it may be worth re-visiting the role of the demonstration plot in the FFS model.

³ Block Extension Officers

E. Gender Mainstreaming & Food Security

15. Gender Mainstreaming and related social aspects were not adequately addressed in FISRI and there were no specific targets for outcomes, outputs and activities in this regard;
16. Food Security is not comprehensively addressed in the project design, though it is focused on food production and availability, as it has not addressed nutrition requirements, food storage and food safety aspects;

F. Market-orientation & 'Commercialisation'

17. FISRI was predominantly production-oriented in its approach to promotion of CA, which was a necessary requirement at the early stages of the project cycle. However, attention to market aspects (in terms of market access, market information, supply/value-chain development etc.) and access to finance is not sufficiently addressed in FISRI and must be incorporated into CASU (or other relevant programmes);

G. M&E and Project Design Issues

18. Overall, as a cross-cutting issue, the project M&E was very weak arising from a mix of project design and implementation challenges (including staff turnover) that affected project performance and efficiency as a result of poor data collection/analysis, reporting and validation/follow-up aspects;

1.4 Key Lessons Learned

The key Lessons Learned are summarised as:

1. There is a need for stronger integration and co-ordination of the key stakeholders and players in CA in Zambia in order to capitalise on the significant efforts achieved so far and to enhance the peer review, learning and leverage of resources and talent available through donor, private sector and research/educational institutions, where synchronisation and co-ordination of projects should have been better implemented;
2. Maize and fertiliser should not have been made available under the FISRI e-voucher scheme, particularly when maize and fertiliser were available under FISP (as a farming input project). As a consequence, the FISRI project may have been inadvertently misconstrued by farmers as an input project (due the inclusion of maize and fertiliser in the e-voucher scheme), somewhat compromising its impact as a CA promotion project;
3. There was no natural progression and evolution within FISRI in terms widening the levels of participation and the development/graduation (through performance-based approaches) of the various participants;
4. Concentration of key interventions and activities into 'specialised nodes' (e.g. procurement, application and use of herbicides) would serve to minimise risk of mis-use, maximise capacity-building and enhance training effect, particularly at the early stages of target-farmer development;
5. A major opportunity was missed to establish meaningful CA best-practice demonstration effect and a foundation for on-going research (through GART) as a result of delayed and/or ineffective M&E and data collection/analysis;
6. Focus on CA technical issues without attention to gender relations, equality and social issues can reduce the impact of CA in terms of its adoption, impact and sustainability. Lack of consideration of socially ascribed gender roles in CA, the differential access and control of benefits and resources, practical and strategic gender needs of women and men in the community can reduce CA adoption and up-scaling;

1.5 Key Recommendations

The key Recommendations are summarised as:

Balance of FISRI III

1. In the remaining 6 months of FISRI III, address the urgent requirement to improve the governance, M&E and reporting to improve project performance further. This will also assist in the preparation for the transition to CASU (in early 2013) by ensuring adequate systems and procedures are reinforced to maximise the seamless relay from FISRI to CASU in terms of improved integration between MAL and FAO technical backstopping and improved camp-level data collection and analysis under a tighter M&E system (integrated into MAL systems);
2. FAO technical backstopping should be more integrated with MAL systems and personnel on an on-going operational basis. Consideration should be given to the relocation of the existing FAO M&E and Agronomist staff to MAL, on a part-time basis, to better integrate with MAL structures and to provide real-time proactive technical advice and back-stopping within MAL in order to: (i) address existing issues for improvement within FISRI; and (ii) prepare the necessary systems and structures that will be required for a 'seamless transition' from FISRI to CASU;
3. An 'End-Line Survey' should be conducted by the end of FISRI III, based on the Baselines undertaken in FISRI I and II, to determine the impact and benefit of FISRI through survey techniques, to compensate for the absence of meaningful M&E evidence-based data for FISRI (i.e. absence of consistent progress reports, as well as systematic verification and spot-checks over the project cycle);

Future Programming (CASU) and Promotion of CA

A. Conservation Agriculture Best-Practice Approaches

1. CA needs to be better 'institutionalised' in terms of its integration into policy, research and educational institutions, and needs to be better promoted and incorporated into existing farmer practices through more effective best-practice demonstration approaches;
2. CA best-practices need to be more effectively documented for evidence of CA impact in terms of climate-smart approaches, increased yields and reduced input and labour costs;
3. There is a need for greater cross-collaboration and co-ordination between the various CA initiatives underway, in particular between FISRI (and CASU) and CFU, to promote greater peer-review and information-sharing;

B. Lead-Farmers & Participating ('Follower') Farmers

4. CA programmes must ensure greater engagement at participating-farmer level – a bottom-up approach – with greater emphasis on CA extension approaches being targeted at this level, promoting best-practice approaches linked to performance-based incentives;

C. Capacity-building & Training

5. Capacity-building and training needs to become more sustainable and replicable through increased Train-the-Trainer approaches linked to performance-based incentives;
6. A comprehensive Field Training Manual needs to be developed and adopted to ensure more consistent and relevant training and capacity-building is achieved (incorporating: CA concept/principles; CA best-practice approaches; Inputs use; Farm Management/Cost-Benefit Analysis; etc.);

D. E-Voucher Scheme & Mechanisation

7. E-Voucher Schemes need to become more evolutionary in nature through linkage with the inflation index, greater recognition of the farmer development stage and increased focus and emphasis on performance-based approaches to use of incentives in order to minimise the risk of creating a 'dependency syndrome';
8. Mechanisation needs to be scaled-up in developing 'commercial' CA, but care is needed in ensuring economically viable approaches/business models are adopted, while availability of equipment, access to finance/leasing and development of alternative ownership models need further exploration and focus;

E. Gender Mainstreaming & Food Security

9. Gender Mainstreaming and ‘latent’ social issues need to be addressed in any CA adoption programmes, as issues around mechanisation, cash-crops and access to markets have residual issues to be addressed which affect womens’ involvement and empowerment;

F. Market-orientation & ‘Commercialisation’

10. In order to achieve economies of scale and to avoid an over-emphasis on production-oriented CA approaches, there is a need to incorporate ‘commercial’ best-practice to CA development in CASU. This can be achieved through strengthening of the supply-chain, enhanced value-chain development (through greater emphasis on value-adding/processing activities), an increased focus on market access (local, regional, national and international) and market support measures, including market information, with greater emphasis on farmer organisation, marketing and access to seasonal working capital/trade finance;

G. M&E and Project Design Issues

11. Project M&E needs to be comprehensively addressed and strengthened in CASU, with greater emphasis on integrated (not parallel) systems being developed in MAL, with active on-going support from FAO technical backstopping, including active deployment of FAO project staff in MAL to enhance more effective integration and synergy⁴;

⁴ As a back-up (and/or if regular comprehensive reporting has operational problems), a sample survey approach should be adopted whereby selected project sites are regularly monitored in order to identify trends and issues.

2.0 Rationale and Focus

2.1 Background to the Final Evaluation

The overall aim of the final evaluation is to provide information on lessons learnt from implementing the three FISRI projects to assist decision-makers in the Ministry of Agriculture and Livestock (MAL), EC and FAO on the best way to scale-up conservation agriculture in Zambia. The implementation periods of these projects have some overlaps and a limited period within which the beneficiary and partners have had to implement these projects (absorbing €16.9million in 36 months). While indications point to the projects being broadly successful and producing some expected results, it is deemed necessary to carry-out a detailed evaluation of the three projects so that the findings are fed into the formulation of the foreseen follow-up 'Conservation Agriculture Scaling-Up' (CASU) programme, to be implemented in 2013 using the same aid modality and implementation arrangements under EDF10.

2.1.1 Purpose of the Final Evaluation

The final evaluation has the following specific objectives:

- Assess progress made, identify areas for improvement and make recommendations for the remaining implementation period of the project;
- Assess the need for adjustments to the project's timeframe and make recommendations on the modalities (major design components, implementation approach) of a follow-up phase or replication phase of the project;
- Document lessons learned so far;

2.1.2 Scope of the Final Evaluation

The final evaluation will assess the project according to the following categories:

Its relevance to: national development priorities, needs of the population, and farmers in particular; FAO Global Goals and Strategic Objectives/Core Functions and other aid programmes in the sector;

Robustness and realism of the theory of change underpinning the project, including logic of causal relationship between inputs, activities, expected outputs, outcomes and impacts (against specific and development objectives) and validity of indicators, assumptions and risks;

Quality and realism of the project design, including:

- Duration;
- Stakeholder and beneficiary identification;
- Institutional set-up and management arrangements;
- Approach and methodology;

Financial resources management, including:

- Adequacy of budget allocations to achieve outputs;
- Coherence and soundness of Budget Revisions in matching necessary adjustments to requirements of implementation;
- Rate of delivery and budget balance at the time of the evaluation;

Management and implementation, including:

- Effectiveness of management, including quality and realism of work plans;
- Efficiency and effectiveness of operations management;
- Gaps and delays if any between planned and achieved outputs, the causes and consequences of delays and assessment of any remedial measures taken, efficiency in producing outputs;
- Effectiveness of internal monitoring and review processes;
- Efficiency and effectiveness of coordination and steering bodies (if any);
- Co-ordination with other projects active in the same sector;
- Quality and quantity of administrative and technical support by FAO; and
- Timeliness, quality and quantity of inputs and support by the Government and resource partner;

Extent to which the expected outputs have been produced, their quality and timeliness;

Extent to which the expected outcomes have been achieved, in particular with regard to the following aspects:

- Sustainable agricultural development and natural resource management: extent and quality of activities and impacts on environmental sustainability of natural resource management practices promoted by the project; extent and quality of activities and impacts on socio-economic and cultural sustainability of practices promoted by the project;
- Policies: extent and quality of activities and impacts on creating a conducive national policy and legal environment for the objectives of the project; extent and quality of activities to support the wider GIAHS Initiative in creating a conducive international policy and legal environment for its objectives;

Use made by the initiative of FAO's normative products and actual/potential contribution of the initiative to the normative work of the Organization (in particular Organizational Result F1: Countries promoting and developing sustainable land management and Organizational Result A1: Policies and strategies on sustainable crop production intensification and diversification at national and regional levels);

Assessment of gender mainstreaming in the initiative. This will cover:

- Analysis of how gender issues were reflected in project objectives, design, identification of beneficiaries and implementation;
- Analysis of how gender relations and equality are likely to be affected by the initiative;
- Extent to which gender issues were taken into account in project management;

The prospects for sustaining and up-scaling the initiative's results by the beneficiaries and the host institutions after the termination of the initiative. The assessment of sustainability will include, as appropriate:

- Institutional, technical, economic and social sustainability of proposed technologies, innovations and/or processes;
- Perspectives for institutional uptake and mainstreaming of the newly acquired capacities, or diffusion beyond the beneficiaries or the project;
- Environmental sustainability: the initiative's contribution to sustainable natural resource management, in terms of maintenance and/or regeneration of the natural resource base;

Overall performance of the project: extent to which the initiative has attained, or is expected to attain, its intermediate/specific objectives and FAO Organizational Result/s (impact), and hence, to the relevant Strategic Objectives and Core Functions; this will also include the identification of actual and potential positive and negative impacts produced by the initiative, directly or indirectly, intended or unintended;

The mission will also evaluate if project resources were efficiently used to support the overall project objective given the overall adverse factors during project life.

Based on the above analysis, the evaluation will draw specific conclusions and formulate recommendations for any necessary further action by Government, FAO and/or other parties to ensure sustainable development, including any need for follow-up action. The evaluation will draw attention to specific good practices and lessons of interest to other similar activities. Any proposal for further assistance should include specification of major objectives and outputs and indicative inputs required.

2.1.3 Methodology of the Final Evaluation

Under the overall guidance of the FAO Office of Evaluation:

- The evaluation will adhere to the UNEG Norms & Standards⁵;
- The evaluation will adopt a consultative and transparent approach with internal-external stakeholders throughout the evaluation process. Triangulation of evidence and information gathered will underpin the validation of evidence collected and its analysis and will support conclusions and recommendations;
- The evaluation will make use of the following tools: review of existing reports, semi-structured interviews with key informants, stakeholders and participants, supported by check lists and/or interview protocols; direct observation during field visits; surveys and questionnaires; the Sustainable Livelihoods Framework⁶; the Strengths, Weaknesses, Opportunities and Threats (SWOT) framework for assessment of project results⁷.

⁵ <http://www.uneval.org/normsandstandards>

⁶ The Sustainable Livelihoods Framework identifies five different capitals (human, social, natural, financial, and physical), each including different assets. It helps in improving understanding of livelihoods, in particular of the poor. For more information, among others: http://www.livelihoods.org/info/guidance_sheets_pdfs/section2.pdf

⁷ SWOT is a widely used strategic planning tool, useful also in the assessment of development interventions, to canvass their strengths and weaknesses, as well as future perspectives. It is particularly used in focus groups, but it can be adapted to individual interviews as well.

The Final Evaluation was conducted in 2 phases, as follows:

- Phase 1: Beneficiary Assessment Study (08.03-03.05.2012)
 - Desk Research
 - Field Study (11 Districts)
 - Synthesis and Study Report
- Phase 2: Final Evaluation Mission (22.04-31.05.2012)
 - Desk Research
 - Consultation and Field Study (4 Districts)
 - Aide Mémoire Presentation
 - Synthesis and Final Report

2.1.4 Final Evaluation Team

The Evaluation Team comprised:

- | | |
|---|---|
| - Mr. Flor E. Healy (Irish, resident in South Africa) | Team Leader and Rural Development Specialist |
| - Mr. Bernd Bultemeier (German, FAO HQ - Italy) | FAO Evaluation Manager |
| - Mr. Mukelabai Ndiyoi (Zambian) | Team Leader, Beneficiary Assessment Study
– Farming Systems Specialist |
| - Dr. Mick Mwala (Zambian) | Member, Beneficiary Assessment Study
– Capacity-building Specialist |
| - Ms. Sepo Marongwe (Zimbabwean) | Member, Beneficiary Assessment Study
– Conservation Agriculture Specialist |
| - Ms. Shinga Mupindu (Zimbabwean) | Member, Beneficiary Assessment Study
– Gender and Food Security Specialist |

2.2 Background of FISRI

The Zambian Government has endorsed the CA (policy) as one of its agricultural developmental vehicles for sustainable agriculture. The Ministry of Agriculture and Livestock (MAL) has a ten year strategy to implement the CA programs through the framework of Conservation Agriculture for Sustainable Development (CASAD). The Farmer Input Support Response Initiative (FISRI) I, II and III fit in this programme which will see the Government promote CA to over 600,000 farmers by 2015. The strategy includes working with the same farmers for a minimum of five years to allow consistency in the application of CA technologies and building the CA capacity of the farmer.

The FISRI I & II projects (2009 to-date) and the CASPP Project funded by the Norwegian Government (from 2009-2010) targeted 11,872 lead farmers for training during the agricultural season of 2010 and 2011 (of which 3,920 through the EUFF project and 7,952 through FISRI II project in 28 districts).

The current project FISRI III, is aimed at increasing the adoption of environmentally-friendly farming systems leading to improved production from given inputs, increased food supply, reduced hunger and improved responses to food emergency crisis by extending the area of land under CA practices. In particular, the following specific problems would be addressed by this project:

- A lack of consistent application of best-practices in land and crop husbandry;
- A need to strengthen mechanization since the current complement of tractors in Zambia is only 6,000 and the most efficient way to provide mechanization services is through private agricultural contracting. It is estimated that a farmer would need to have 100ha to justify the cost of a new tractor on their own and this is well beyond the capability of the average Zambian smallholder farmer;
- A need to intensify capacity development in CA practices within camps instead of targeting additional districts and Provinces;

The FISRI III project aims to complement current existing efforts aimed at up-scaling Conservation Agriculture among small-scale farmers in Zambia. Due to unforeseen delays, FISRI III may now be extended to December 2012 (scheduled to end April 2012).

The stakeholders of the current project include: MAL, EC, ZNFU's CFU, GART, the Palabana Farm Power Training Centre, ZARI, University of Zambia, FAO and selected communities.

2.2.1 Objectives and Purpose of FISRI

There are at least 3 versions of the Log-frame in existence and it is unclear which version is approved for adoption and being adhered to for the purposes of project performance management. In summary, the following is perceived to apply:

The overall objective of FISRI is “to contribute to greater food security as a result of increased food production and more sustainable use of environmental resources”.

The purpose of FISRI is “to increase food production through improved access to agricultural inputs and promotion of CA principles in order to help mitigate the effects of soaring food and input prices”.

The FISRI project has 4 main output result areas (and 2 other output result areas identified), notably:

1. Increased capacity of MAL staff and lead-farmers to provide future extension support in CA to the beneficiaries in the country;
2. Inputs and equipment made available to lead-farmers and farm beneficiaries, including through the use of electronic vouchers and subsidies, and used in line with the training and extension provided;
3. Facilitation of farmer access to markets and e-voucher payment in order to strengthen commercialisation as a pull factor for production and increased farm incomes to ensure sustainability of CA systems:
 - i. Market information system enhancement through contracting AMAC and ZNFU commodity marketing systems services;
 - ii. Improved contracts between producer groups and buyers in order to increase the bargaining power of beneficiaries and to facilitate commercialisation of expected increased production;
 - iii. Expansion of existing e-voucher payment system for input procurement in terms of targeted beneficiaries and areas;
4. Support to CA mechanisation to scale-up technology adoption, increase the number of adopters and increase the area under cultivation through provision of agricultural mechanisation (tractors – 60hp; tractor-drawn CA implements and other similar equipment);
5. Effective institutional and governance framework enabling project planning, operation and sustained results;
6. Efficient and effective monitoring, reporting and lesson learning system in place;

2.2.2 Funding and Duration of FISRI

The three FISRI projects have all been financed from the European Union Food Facility (EUFF) instrument through standard contribution agreements between EC and FAO and the funding has been as illustrated in the table below:

Project	Budget	Implementation Dates	Implementation Duration
FISRI I	€7,472,052	01.05.2009 – 30.06.2011	26 months
FISRI II**	€3,578,904	02.05.2011 – 01.01.2012	8 months
FISRI III***	€5,800,000	01.07.2011 – 31.05.2012	11 months
Total	€16,850,956		

** ‘Expansion of the Farmer Input Support Response Initiative (FISRI) to Rising Prices of Agricultural Commodities in Zambia’

*** ‘Assistance to Consolidate Best Agricultural Practices in Small-Scale Farming in Zambia’

Due to overlaps, the overall dates and duration of implementation of these projects is from 1st May 2009 to 31st May 2012 and a total of 36 months respectively.

Budget and Expenditure aspects require further analysis, subject to receipt of information from FAO.

3.0 Evaluation Synthesis

Where the evaluation ratings applicable are as follows:

- 1 **Highly Satisfactory** (i.e. fully according to plan or better)
- 2 **Satisfactory** (i.e. on balance according to plan, positive aspects outweighing negative aspects)
- 3 **Less Than Satisfactory** (i.e. not sufficiently according to plan, taking account of the evolving context; a few positive aspects, but outweighed by negative aspects)
- 4 **Highly Unsatisfactory** (i.e. seriously deficient, very few or no positive aspects)

Using the standard DAC evaluation criteria, the following aspects are identified:

3.1 Relevance (Problems & Needs)

The relevance of a project/programme relates primarily to its design and concerns **the extent to which its stated objectives correctly address the identified problems or real needs**. It needs to be kept under review throughout the life of the project/programme in case changes occur either in the nature of the very problems originally identified, or in the circumstances – whether physical, political, economic, social, environmental, institutional or policy – in which the project/programme takes place, necessitating a corresponding change of focus. In other words, relevance concerns the appropriateness of the project design to the problems to be resolved at two points in time: when the project was designed and, at the time of the evaluation.

- International best-practice in CA applied to the Zambia-specific situation;
- Country-specific Framework – very integrated with NDP and MAL Policy;
- Very relevant to climate change, sustainable agricultural practices, food security and livelihood development;
- FAO Global Objectives are being applied and addressed;

A rating of **2** or **Satisfactory** (i.e. on balance according to plan, positive aspects outweighing negative aspects)

3.2 Effectiveness (Achievement of Purpose)

The effectiveness criterion, in log-frame terminology, concerns how far the project/programme results were used or their potential benefits were realised – in other words, whether they achieved the project purpose. The key question is: What difference the project/programme made in practice, as measured by how far the intended beneficiaries really benefitted from the products or services it made available.

- Strong contribution in integrating with MAL structures to promote CA best-practices at District levels;
- Innovative approaches to increasing access to inputs through adoption of technology (e-voucher) and engagement of the private sector (agri-dealers and agri-contractors) in increasing outreach and access;
- Deployment of lead-farmers and demonstration effect, while effective, could be improved further though greater performance-based approaches and wider involvement of participating-farmers;

A rating of **2** or **Satisfactory** (i.e. on balance according to plan, positive aspects outweighing negative aspects)

3.3 Efficiency (Sound Management & Value-for-Money)

The efficiency criterion concerns how well the various activities transformed the available resources into the intended results (sometimes referred to as outputs), in terms of quality, quantity and timeliness. A key question it asks is: “Were things done right?” and thereby, also addresses value-for-money, that is whether similar results could have been achieved more by other means at lower cost in the same time.

- Weak M&E, reporting and verification of the camp-level activity;
- Lack of sufficient evidence-based data/information in a standardised format and on a consistent basis from the district/camp-level that demonstrates measurable progress, impact and trends;
- Insufficient project information made available to the Evaluation Team during the field-stage evaluation process, in particular project progress reports and financial reporting (detailing funds flows and expenditure);

A rating of **3** or **Less Than Satisfactory** (i.e. not sufficiently according to plan, taking account of the evolving context; a few positive aspects, but outweighed by negative aspects)

3.4 Impact (Achievement of Wider Effects)

The term impact (sometimes referred to as outcome), denotes the relationship between the project/programme purpose and overall objectives, that is the extent to which the benefits received by the target beneficiaries had a wider overall effect on larger numbers of people in the sector or region or in the country as a whole. The analysis, which should be both quantitative and qualitative wherever possible, will need to take account of the fact that, at this level, the project/programme will normally be only one of a number of influences contributing to the wider outcome.

- CA best-practice adoption is a process that is well underway in Zambia, fully supported by the Government of Zambia and augmented by the international donors, including the EU through FISRI;
- FISRI has played an important role in driving the CA agenda, alongside CFU and others, and the implementation of CASU will further increase the impact in this regard;

A rating of **2 or Satisfactory** (i.e. on balance according to plan, positive aspects outweighing negative aspects)

3.5 Sustainability (Likely Continuation of Achieved Results)

Often the most important criterion, sustainability relates to whether the positive outcomes of the project/programme at purpose level are likely to continue after external funding ends, and also whether its longer-term impact on the wider development process can also be sustained at the level of the sector, region or country.

- Certain aspects of FISRI outputs may not necessarily be sustainable if project activities were to cease fully;
- With the continuation of CFU and the follow-up of CASU (to FISRI), certain aspects introduced under FISRI can be augmented and sustained further to give them a stronger foundation and base from which to develop further;

A rating of **2 or Satisfactory** (i.e. on balance according to plan, positive aspects outweighing negative aspects)

4.0 SWOT Analysis and Main Conclusions

4.1 SWOT Analysis

STRENGTHS (of FISRI)	WEAKNESSES (of FISRI)
<ul style="list-style-type: none"> CA focus has resulted in demonstrable productivity improvements and interventions that strongly support food security, environmental sustainability and poverty alleviation through a combination of the lead-farmers and CEOs; Strong linkages with MAL, integrating with the district network outreach through the CEOs; Public-Private Partnerships (PPPs) are promoted, especially through the use of agri-dealers and agri-contractors; Project funds are targeted and released directly to the district level, in terms of targeting of the CEOs and lead-farmers; 	<ul style="list-style-type: none"> FISRI has stopped-short at the lead-farmer level, with limited engagement with participating farmers, hampering meaningful understanding of the issues on-the-ground; M&E is a concern in terms of adoption by MAL and support by FAO in terms of follow-up (for tracking, aggregation/disaggregation, progress reporting etc.). M&E is not perceived as an evolving and learning process for MAL. Data collection and analysis, in terms of yields, costs of production, cost-benefit etc. is limited and ineffective; Capacity-building does not appear to be 'programmed' or a 'process' and is not as responsive to 'felt' needs. Lead farmers were to be trained through the farmer field schools, but they were often under-resourced and limited in terms of impact, whereas capacity-building is unlikely to be sustainable as a train-the-trainer approach is not sufficiently addressed and developed; Promotion of CA is not effective in terms of clarity of concept, long-term benefits and the main ethos behind CA (i.e. a way of 'thinking before doing') – it is not clear whether CA adoption is based on incentives (e-voucher) or is a 'passion' among participating-farmers; FISRI project design issues undermine its effectiveness in terms of: targeting end-users, gender, progressive/performance-based approaches, M&E etc., with no meaningful review/reflection points between phases I-III; E-Vouchers were not evolving in terms of indexation, linkage to specific/required farmer activity, stage of farmer development and/or progression/performance management; FISRI may be contributing inadvertently to the creation of a 'dependency syndrome' through its current e-voucher scheme and a focus on provision of inputs; MAL DACO/CEOs perceive FISRI/CA as an added 'chore' rather than 'core' to their existing duties – whereas FISRI is not linked to FISP; CA may be perceived as the 'poor man's agriculture' by more progressive farmers (without introduction of new technologies and mechanisation); CA principles are not being correctly applied and adhered to (in terms of soil disturbance, mulching and crop rotation/interactions), issues of difference in effectiveness between available CA options (basins and ripping) are not clear and livestock is not integrated with crop production in application of CA; Gender issues have not been adequately integrated into all FISRI processes (as a result of design) and social factors have not been sufficiently addressed (in terms of HIV-AIDS, traditional/social mores) in adoption of CA practices; CA has not been adequately 'institutionalised' into MAL, research/training institutes and policy, where exposure to the principles of CA should happen earlier and more comprehensively;

OPPORTUNITIES (for CASU)	THREATS (to CASU)
<ul style="list-style-type: none"> ▪ The potential offered by mechanisation and herbicide use has transformed CA into a more attractive prospect and approach; ▪ CA promotes more sustainable agriculture practices to meet the Zambia-specific situation, in terms of climate change (drought), environmental protection (soil erosion) and food security (crop yields); ▪ E-Vouchers, applied appropriately, can enhance participation of a wider base of farmers into CA and graduate experienced practitioners to higher levels for scale-up or as mentors, particularly when performance-based; 	<ul style="list-style-type: none"> ▪ Supports to CA scale-up need to be put in place in terms of ensuring an increased focus on market aspects, especially input supply, market access/marketing, supply/value-chain development and access to finance/working capital; ▪ CA will not succeed in its scale-up without full adhesion to CA principles, as ad-hoc application will serve to undermine its effectiveness and may eventually result in disadoption; ▪ CA up-scaling needs to better incorporate basic science and new technologies and research, whereas mechanisation will contribute to lessening of the stigma of CA as being perceived as the 'poor man's agriculture'. However, care needs to be taken in over-mechanisation and/or rapid scale-up (towards 'commercialisation'), where moves to conventional agriculture may result (as in ploughing, over-reliance on herbicides etc.);

4.2 Overall Conclusion

1. FISRI (I-III) can be seen as a 'qualified success' in terms of its efforts to integrate with MAL in addressing the promotion of CA as a means of augmenting food security and a mitigation of the effects of increasing food and input prices by means of: (i) targeting of capacity-building/training to MAL CEOs and to lead farmers in enhancing extension approaches; (ii) increasing access to inputs and equipment for lead-farmers; (iii) facilitating payment for inputs and services through an e-voucher system; and (iv) introduction of a pilot mechanisation scheme, through development of private sector agri-contractors. Where applied in the selected districts, there is definite evidence of benefit accruing to lead-farmers (and in turn to some participating farmers) of increased yields, improved CA farming practices and some improved linkages with agri-dealers and agri-contractors, though its documentation and demonstration effect is somewhat restricted.

FISRI is a very strategic and high-profile project that is a major support to government and MAL policy on promoting CA as a contributor to climate-smart, food security and sustainable agricultural practice. Its major strengths (as identified under the SWOT Analysis) include strong integration with MAL and government structures, promotion of private sector participation and introduction of innovative approaches to accessing inputs and agri-services through the e-voucher scheme and initial mechanisation up-scaling approaches.

As an external evaluation exercise, the focus of the evaluation is not necessarily concentrated on highlighting the successes and achievements of FISRI, of which there are some, but more in identifying the areas for improvement and the lessons learned that can be taken forward in the remaining period of FISRI III and in the context of future programming, in particular that of CASU. [\[Follow-up: Flor Healy\]](#)

4.3 Main Conclusions

A. Conservation Agriculture 'Best-practice' Approaches

2. CA best-practice approaches can be reinforced more effectively through better informational, educational and communication approaches, notably:
 - Farmer testimonies and observations from the field have indicated several benefits from implementing CA (e.g. higher crop yields, timely planting, efficient use of small quantities of fertiliser/lime, reduction in labour demand due to herbicide use etc.) but there is still need for the systematic collection of evidence of CA performance over the long-term;
 - It is important to operate within standard agronomic and recommended principles, for example use of certain CA implements is compromising plant population in crops like groundnuts. There is therefore, a need to adhere to recommendations on plant population in order to enhance acceptance of CA by all stakeholders. This is a result of the absence of standard guidelines and regular interaction platforms for agencies implementing CA;
 - FISRI has not developed information, educational and communication on its best-practices to market CA and does not appear to have a FISRI communication strategy; [\[Follow-up: Sepo Marongwe\]](#)

3. FISRI promoted strong linkages with MAL but this needs to be enhanced further through improved and integrated governance, reporting and M&E. The FISRI has provided a platform for interaction between the DRRMU and the MAL Project Management Unit. However, the linkages have not been formalised, meaning that the meetings between the two are irregular. Through joint programming of activities and regular periodic meetings, the NPCU and the DRRMU could enhance these linkages and contribute to improved FISRI governance, reporting and M&E effectiveness; [Follow-up: Mukelabai Ndiyoi]
4. FISRI and FISP should be more clearly delineated to ensure they complement each other more effectively in the promotion of CA best-practice. The components of farmer support by FISRI included inputs, CA implements and CA supporting services for the demonstration and thereby uptake of CA by participating farmers, who did not receive any direct support. Concurrently in Zambia under MAL, there is the FISP which focuses on inputs only. The inclusion of the fertiliser and maize seed as inputs on the e-voucher under FISRI compromises the CA principles application as the project mimics the FISP. There is need to separate these two programmes in terms of content so that each pursues its ultimate goal. Ideally FISP inputs should be used in FISRI to promote greater adoption of CA principles and best-practice approaches (though an element of performance-based management should also be considered in this case); [Follow-up: Mukelabai Ndiyoi]
5. CA best-practice has not been effectively ‘institutionalised’ across the sector in terms of its integration into policy, research and educational institutions, notably:
 - Institutionalization has at least two meanings. The first refers to “introduction”, thus we may examine the introduction of Conservation Agriculture through the Crops department based at MAL headquarters in Mulungushi House. In this first meaning of institutionalization, the FISRI is ‘established’ in an existing organization to function as part of that organization. This meaning will be examined closely to determine the degree to which the internalization of the CA into MAL has been;
 - The second meaning is that of “tradition” or “practice” through which institutions control individual behaviour by a) restraining certain actions, b) liberating certain actions, and c) expanding the scope of influence of certain actions. Further, such institutions must be stable enough to give the individuals some security of expectations⁸. This meaning is important as it was the initial desire of the funding to FISRI and CA in general to ensure that the capacity to promote CA is built so that in future the MAL can continue to support CA. Indications that the Ministry may order tractors without ploughs but rippers are valuable indicators of institutionalization. The practice is changing;
 - The degree to which the desire to see CA practiced has not permeated the whole sector. The students coming out of tertiary education should all be fully appraised on CA and its application; [Follow-up: Mukelabai Ndiyoi]
6. There needs to be greater understanding at all levels of the philosophy and principles of CA before it is adopted as a best-practice approach, as there is evidence that it is becoming more activity-based with less understanding of why it should be adopted in the first place. Exclusively focusing on activity-based CA training will limit the understanding of CA by farmers who will not have a clear appreciation of the CA concept in terms of its long-term benefits. This presents a danger of farmers reverting to conventional farming practices after project support is withdrawn. There is therefore, need to continually re-enforce the CA principles and benefits by using simple models that can be understood by farmers (i.e. models showing soil quality, infiltration, erosion, etc.). Clear understanding of the CA principles will allow the farmer to innovate and adapt CA, while still staying within the three core principles of effective CA practice; [Follow-up: Sepo Marongwe]

B. Lead-Farmers and Participating (‘Follower’) Farmers

7. The role of the lead-farmer, as an extension approach, was not performance-based and was not sufficiently understood by the follower-farmer (often leading to resentment), in terms of:
 - The Incentives for the lead-farmers were not adequately linked to performance and follow-up (M&E);
 - Inadequate record-keeping and documentation (in follow-up with the follower-farmers) resulted in the neglect of the ‘follower’ farmers;
 - CEOs concentrated more on the lead-farmers rather than use the lead-farmers to develop participating farmers;

⁸ Tertiary education is an institution; it conditions our choice of subjects in high school and sets the level of grades we should aim for in final exams. Will FISRI condition the behaviour of the society members to the same extent as tertiary education does? That is the purpose of the second meaning of institutionalization.

- The lead-farmers were more ‘beneficiaries’ than a ‘conduit’ to development of the participating farmers on CA and KRAs were not clearly defined;
 - The funding for farmer field schools, which provide a platform for learning for the lead-farmer, was not catered for and affected their performance. Despite this absence, most camps visited relied on farmer field schools for training lead-farmers; [Follow-up: Sepo Marongwe]
8. Follower-farmers were essentially ‘members without benefits’ as they were not eligible to qualify for the e-vouchers at any stage (regardless of their performance or potential). Some of them came on board due to initial indications that they would also receive some input support and obviously lost interest when the support was not forthcoming. The absence of a budget allocation for the follower-farmers meant that they do not receive any targeted technical support, apart from what they are assumed to be receiving from the lead-farmer; [Follow-up: Sepo Marongwe]
 9. While there was evidence of CA demonstration plots organised by lead-farmers, the quality of some demonstration plots failed to portray the real potential of CA due to poor management and lack of attention to detail and, as such, failed to fulfil their function. The loss of the demonstration effect as the farmers out-scale means that the cumulative effects of CA are also lost. Technical capacity among CEOs to establish demonstrations was also perceived to be limited and there is need for training in that aspect. There was also need to recognise the limited capacities among public extension systems and training should have gone ‘beyond CA’ to include other technical and agronomic aspects, especially relating to non-traditional crops introduced in rotations and interactions; [Follow-up: Sepo Marongwe]

C. Capacity-building and Training

10. Training and capacity-building appears to be un-programmed as it was not based on a comprehensive training needs assessment (across CEOs, lead-farmers, follower-farmers, agri-dealers and agri-contractors) and was sometimes out-of-synch with the farming cycle, was ad-hoc and too brief to be effective, and there was insufficient follow-up and verification to ensure comprehension and application. There was no comprehensive training programme, while capacity-building was taking place at all levels (with MAL staff, agri-dealers, agri-contractors, lead-farmers and to some very limited extent, with participating farmers). The training was not well aligned with the training needs of the farmers as it was not based on training needs assessments that would have guided the topics for the specific target beneficiary category. Evident also was that the interventions, while targeted, were of varying quality in terms of ‘fitness for purpose’, with some training being out-of-sync with season, while some was too brief to be of any real effect, as was the case with tractor operators on agri-business principles, maintenance and record-keeping, which was conducted in one day only. Indeed, the need for expediting the roll-out of tractors was clearly expressed but necessary minimum training was required but not conducted; [Follow-up: Mick Mwala]
11. MAL DACOs and CEO are critical to CA adoption, but the BEOs were excluded in the process, with the result that communication, logistical support and efficiencies were often less than effective. Unfortunately, they are currently not as effective in ensuring adoption of the technologies due to poor logistical support in terms of fuel provision, allowances and transport repairs. The functionality of the system is further compromised in the project by the omission of the Block Extension Officer, who is the direct supervisor of the field staff and who ensures closer follow-up of implementation of activities; [Follow-up: Mick Mwala]
12. In the absence of a performance-based approach to FISRI implementation at camp level, the effectiveness of the capacity-building and training could have had greater impact if targeted at ‘early adapters’ and more progressive lead-farmers and follower-farmers using a more ‘open’ system. The frame used by the FISRI project in implementing CA was inefficient compared to those used by other players in terms of scope, application of the lead-farmer model, targeted farmers, capacity-building approach and the use of the e-voucher concept as an incentive for improved performance, among others. As a process project, FISRI should have opted for an ‘open’ participation to all farmers so as to identify and empower ‘early starters/adopters’. The support to lead-farmers should have been based on performance allowing for weaning-off of those not making the grade and indeed avoiding a possible situation of farmers developing a dependency on inputs; [Follow-up: Mick Mwala]

D. E-Voucher Scheme and Mechanisation

13. The e-voucher scheme successfully facilitated the development of the agri-dealers and increased access to inputs to the lead-farmers in an innovative and cost-effective manner. However, the e-voucher was not performance-based and did not evolve to meet the on-going development needs of the farmer. Agro-dealers have opened shops beyond their district headquarters and have expanded their stock composition to cater for CA. The e-vouchers are a major innovation for outreach (including improvements to targeting, M&E and anti-fraud). Further enriching of the farmer database by the MTZ will provide researchers and other users a data set on the demand and spread of inputs, equipment and services in the country. The e-vouchers have been a cost-effective means of decentralised distribution of inputs and services. Rather than relying on a centralised project distribution system, as is still the case with FISP, the agro-dealers take care of the distribution as they source the inputs from their suppliers and do their best to capture the effective demand in the district. The e-vouchers were targeted at the lead-farmer and the CEOs to permit them the experience of CA.

This assessment found that the link between the lead-farmer and the participating farmer was the weakest and suggests that the e-voucher could be used differently in future. E-vouchers were not evolving and adjusting to farmer needs and were certainly not performance-based. For example, the e-voucher could be given to different farmers every year as a reward for past performance and to enhance the capacity to implement CA on a wider base of practicing farmers, while retaining and up-scaling those who are already in the scheme; [Follow-up: Mukelabai Ndiyoi]

14. Mechanisation is key to up-scaling CA, but there are challenges in terms of availability of equipment, knowledge of its use and maintenance and delays in accessing mechanised services as early as possible in the season:
- This shortage of draft power has led to late crop establishment, a matter which was one of the justifications for use of planting basins prepared by hoe well before the start of the rains. A farmer so prepared will plant early at the start of the rains whereas before, he had to wait for the ground to be wet then plough. However, the use of the chaka hoe for basin making has come up against the constraint of the hoe in general which oxenization programmes have been trying to solve since the 20th Century. FISRI is one in line of projects that are promoting faster, larger and earlier land preparation. Planting basins may be earlier but they are not faster or lighter on the practitioner. The ox-drawn ripper solves the scale and speed limitation of the chaka hoe and conventional ploughing. Going further up the ladder, the tractor drawn ripper and planter improves upon the ox-drawn implements. FISRI is set to score many good things with mechanization. This stage, however, is accessible largely by hire, removing the control of time from the hands of the farmer to the operator. As long as the barrier to entry is the cost of the tractors, operators will enter the business until profits become zero. To avoid over-concentration in the hands of a few the financing institutions should vary the repayment period from 3 years when the demand is high to 6 years when the demand is in equilibrium with supply. Keeping the number of operators high in this manner will open access to more farmers;
 - As the farmers' associations grow financially, the ZNFU may find it profitably to lend to the group. Past experiences on group ownership of machinery suggest private ownership or by organizations closely associated than farmer groups is to be preferred;
 - The contractors have had problems with machinery operations due to limited knowledge of the machinery regarding operation, maintenance and storage. Tractors and attachments were often found in the sun and un-oiled. The lack of designated maintenance provider means that the operators seek their own solutions such as tying pieces with ordinary wire in the absence of an approved clip;
 - The limited training spread to the use of inputs such as the herbicides, fertilizers and seed. The operation of attachments that apply these inputs is yet to gain proficiency in a lot of operators. The service contractors could offer a more complete package to the farmers;
 - The time to observe the mechanization services is short, it is only in October 2012 that the operators will have one year of data. The record keeping is yet to be standardized by the Ministry of Agriculture and Livestock. Meanwhile the performance of the business model can be estimated from the excellent repayment rates achieved by the 10 operators who are surpassing expectations; [Follow-up: Mukelabai Ndiyoi]
15. The 'static' approach to the application of the e-voucher scheme may have inadvertently contributed to the creation of a 'dependency syndrome', with an over-focus on provision of inputs to selected lead-farmers without a performance-based approach to its on-going application. The manner in which the targeted farmers participated in the project made them the exclusive recipients of the support.

The Beneficiary Assessment Study revealed that most farmers asked for an increase in the value of the e-voucher and the extension of the same to participating farmers, for the way forward. No other component of the project was highlighted as being equally important on the way forward, depicting a strong tendency for reliance on the e-voucher in CA application; [Follow-up: Mukelabai Ndoyi and Mick Mwala]

E. Gender Mainstreaming and Food Security

16. Gender Mainstreaming and related social aspects were not adequately addressed in FISRI and there were no specific targets for outcomes, outputs and activities in this regard. The three phases have not clearly defined the desired gender equity objectives, outcomes, outputs and indicators. No gender analysis appears to have been done before the inception of each phase in order to feed the results into programming (an updating of the log-frame). The differential gender roles, strategic and practical gender needs, differential access and control of resources by women and men were not systematically addressed in the project. Women and men were considered as a homogenous group, yet there are gender relations and social issues that affected women and men differently. There were no clear staff responsibilities and accountabilities with regards to gender integration. CA capacity-building has not included gender equity, social and HIV/AIDS; [Follow-up: Shinga Mupindu]
17. Food Security is not comprehensively addressed in the project design, though it is focused on food production and availability, as it has not addressed nutrition requirements, food storage and food safety aspects. FISRI has enabled households to have adequate food for household consumption as a result of increased productivity. The CA approach used in FISRI offered production diversification through crop rotation and provided an opportunity for dietary diversification. However, the project design has not integrated other important food security components such as food storage, nutrition and food safety; [Follow-up: Shinga Mupindu]

F. Market-orientation and 'Commercialisation' Aspects

18. FISRI was predominantly production-oriented in its approach to promotion of CA, which was a necessary requirement at the early stages of the project cycle. However, attention to market aspects (in terms of market access, market information, supply/value-chain development etc.) and access to finance is not addressed in FISRI and must be incorporated into CASU (or other relevant programmes). In the absence of better organised market information and facilitation services to small-holder farmers, there are many instances of lead-farmers and in particular, participating-farmers, not being able to sell their produce on the market as they are either unaware of the market linkages available (such as ZNFU) or in some cases, they have come up against unscrupulous buyers who dupe them into selling at very low prices; [Follow-up: Flor Healy]

G. M&E and Project Design Issues

19. Overall, as a cross-cutting issue, the project M&E was very weak arising from a mix of project design and implementation challenges that affected project performance and efficiency as a result of poor data collection/analysis, reporting and validation/follow-up aspects, in particular:
 - The project design and log-frame for FISRI I was not updated to reflect FISRI II and FISRI III, with the result that sufficient review was not undertaken in FISRI I to ensure that FISRI II and FISRI III were correctly planned and the appropriate M&E systems reinforced;
 - At least 3 different versions of a log-frame exist and it is unclear which log-frame was adopted and applied to FISRI (as approvals are not evident);
 - Delayed recruitment and deployment by FAO of a project M&E specialist (none existed in FISRI I), and MAL M&E personnel who were not dedicated to FISRI, resulted in no meaningful M&E being undertaken, with the result that poor record keeping at all levels was evident, insufficient data collection and analysis was undertaken and an integrated working system of M&E was not established (between MAL and FAO). FAO technical back-stopping needs to be strengthened and integrated with MAL;
 - Progress Reporting from the district level was not sufficiently standardised and rigorously enforced to ensure proper evidence-based data collection to enable impact and trend analysis, while these reports were not sufficiently verified by on-the-spot checks and more frequent field visits;

- In terms of its application at CEO and lead-farmer level, within the broad M&E framework, data collection is a function at all levels of operation as it follows the effects of the implemented activities. Specific data and information must be collected in the field by the CEOs and lead farmers to form a basis of evidence. In FISRI, this function was in its infancy and there was no evidence of feedback resulting from analysis of the data so far. The effect of the project was to be traced through definite emerging trends at participating farmer level. No data was collected from these farmers by the lead-farmers and by CEOs, introducing redundancies in the M&E system; [Follow-up: Mick Mwala]
- In terms of CA ‘best-practice’, the need for collection of data from on-going activities cannot be over-emphasised, as this will provide evidence-based learning and allow for adaptation of CA over the long-term. The absence of standard frameworks for data collection across project sites resulted in variations in the quality and quantity of data collected and consequently the reliability of the data being used; [Follow-up: Sepo Marongwe]
- In terms of application at agri-dealer and agri-contractor levels, the challenges faced by agro-dealers in attending to farmers requires documentation and analysis. Because the e-voucher did not change over time, farmers confronted the agro-dealer with request to buy items not on the e-voucher or to buy only seed and fertilisers - in line with FISP. Regarding the Agro-dealers, the information they have will be better organised by an overall structure issued from the project management. It will be particularly important to know the profiles of clients accessing the services for cash and vouchers and the timing of such services. Data from the Contractors may reveal a clearer segmentation of the farmers and their spatial distribution; [Follow-up: Mukelabai Ndiyai]
- Gender disaggregation and social issues: M&E system has not collected sex disaggregated data, social and gender qualitative information. The little sex disaggregated data that has been collected has not been effectively analysed and utilised; [Follow-up: Shinga Mupindu]

5.0 Key Lessons Learned

1. There is a need for stronger integration and co-ordination of the key stakeholders and players in CA in Zambia in order to capitalise on the significant efforts achieved so far and to enhance the peer review, learning and leverage of resources and talent available through donor, private sector and research/educational institutions. Synchronisation and co-ordination of projects should have been better implemented in terms of:
 - The CA Taskforce;
 - CAA;
 - MPCU Co-ordinating Forum needs to be reinforced/formalised;
 - Capitalise on synergies: FISP; FISRI; CFU; Others (Concern, CARE, Dunevant);
 - There is value in harnessing the strengths of existing initiatives for public good. FISRI would have made greater strides if it took all the best from the existing CA initiatives in Zambia and rationalised it for wider dissemination. As a government co-ordinated project it would have constituted a platform for exchange of ideas on CA. The element of ‘competition’ among players in CA would have been substituted by ‘complementation’; [Follow-up: Mukelabai Ndiyai]
2. Maize and fertiliser should not have been made available under the FISRI e-voucher scheme, particularly when maize and fertiliser were available under FISP (as a farming input project). As a consequence, the FISRI project may have been inadvertently misconstrued by farmers as an input project (due the inclusion of maize and fertiliser in the e-voucher scheme), somewhat compromising its impact as a CA promotion project. The thrust of FISRI was the CA application, thus support must have been for those critical components that reinforced adoption of CA principles of minimum soil disturbance, crop rotation and crop residue management:
 - Focus on inputs (in particular, maize and fertiliser);
 - Focus on ‘commodities’ of maize/cotton (a traditional commercial farmer produce) rather than other options e.g. legumes, soya etc.;
 - The promotion of the CA/FISRI agenda was compromised by the inclusion of maize seed and fertilizer in the FISRI e-voucher scheme as this made the project appear like FISP, an input support project. The thrust of FISRI was the CA application, thus support must have been for those critical components that reinforced adoption of CA principles of minimum soil disturbance, crop rotation and crop residue management;

- The value of the lead-farmer is questioned due to the disparity between the lead-farmer and follower-farmer regarding the e-voucher scheme. Going forward, the application of the e-voucher scheme requires a review. In hindsight, the e-voucher inputs should have had more performance-based elements attached to their issuance, subjecting beneficiaries to performance-based efforts and targeted more at high-achievers/high-performers, including graduating participating farmers (to lead-farmers) and experienced lead-farmers to mentors (of new lead-farmers); [Follow-up: Mick Mwala and Mukelabai Ndiyoi]
3. There was no natural progression and evolution within FISRI in terms widening the levels of participation and the development/graduation (through performance-based approaches) of:
 - Progressive lead-farmers becoming mentors
 - Progressive participating-farmers becoming lead-farmers
 - Evolution of the e-voucher system (to reflect indexation, needs, development stage etc.)
 - Certification of progressive CA practitioners to enable them to access finance etc.

The FISRI project selected a set of farmers that it worked with exclusively over a 3-5 year period. This was cardinal to ensure following-up of changes in the farmers 'mind-set' and in the farming practices being applied. Unfortunately the model did not provide for 'early-adopters' to advance beyond the level they were found; that is a lead-farmer was always a lead-farmer, and yet some of these farmers could graduate to more responsible status of 'mentors'. Equally the participating-farmers were always participating-farmers without any opportunity for them to graduate to become lead-farmers. Another dimension of the absence of progression in the FISRI was with the e-voucher scheme, whose value remained the same over the period and the components did not reflect farmers' developmental stage or the inflation index; [Follow-up: Mukelabai Ndiyoi and Mick Mwala]
 4. Concentration of key interventions and activities into 'specialised nodes' would serve to minimise risk, maximise capacity-building and enhance training effect, particularly at the early stages of target-farmer development. The 'specialised nodes' would provide services such as ripping, herbicide application (e.g. agri-contractors being trained on use of herbicides, creating synergies in bringing together spraying equipment, procurement of herbicides and application of herbicides more effectively), tractor maintenance, and others of this nature, which would have been concentrated into few hands of 'specialist practitioners'. This would make training more effective, as a few but detailed points of interventions would be created, reducing risk and improving learning. Undoubtedly the strategy would encourage more private sector participation. Diffusion of such service provision would increase with farmers becoming more advanced in their knowledge and uptake of these technologies; [Follow-up: Mick Mwala]
 5. A major opportunity was missed to establish meaningful CA best-practice demonstration effect and a foundation for on-going research (through GART) as a result of delayed and/or ineffective M&E and data collection/analysis. In most of the FISRI documentation, it is implicitly assumed that the Senior Agricultural Officer (SAOs) office is able to employ complete enumeration. However, this is not possible and we may be getting far less information than we would if a statistically valid sample were taken. Much effort should be expended to achieve acceptable sample surveys so that conclusions from such surveys may be accepted with a known degree of reliability. Because it is costly and practically impossible to attain 100% enumeration of all households in the district, sampling should be an important component of the FISRI monitoring system. The sampling process should recognise and take into account inherent variations in farming systems and agro-ecological conditions. The exact stratification scheme is likely to differ from district to district, depending on each district's specific characteristics. Data should be available at the smallest unit, which in FISRI is the sub-plot of the participating farmer, the lead-farmer, and the camp officer. This is a rare opportunity to collect rich data at the farm level which can contribute to CA research and progression; [Follow-up: Mukelabai Ndiyoi]
 6. Focus on CA technical issues without attention to gender relations, equality and social issues can reduce the impact of CA in terms of its adoption, impact and sustainability. Lack of consideration of socially ascribed gender roles in CA, the differential access and control of benefits and resources, practical and strategic gender needs of women and men in the community can reduce CA adoption and up-scaling; [Follow-up: Shinga Mupindu]

6.0 Key Recommendations

6.1 Balance of FISRI III

1. In the remaining 6 months of FISRI III, address the urgent requirement to improve the governance, M&E and reporting to improve project performance further. This will also assist in the preparation for the transition to CASU (in early 2013) by ensuring adequate systems and procedures are reinforced to maximise the seamless relay from FISRI to CASU in terms of improved integration between MAL and FAO technical backstopping and improved camp-level data collection and analysis under a tighter M&E system (integrated into MAL systems); [Follow-up: Bernd Bultemeier and Flor Healy]
2. FAO technical backstopping should be more integrated with MAL systems and personnel on an on-going operational basis. Consideration should be given to the relocation of the existing FAO M&E and Agronomist staff to MAL, on a semi full-time basis, to better integrate with MAL structures and to provide real-time proactive technical advice and back-stopping within MAL in order to: (i) address existing issues for improvement within FISRI; and (ii) prepare the necessary systems and structures that will be required for a 'seamless transition' from FISRI to CASU; [Follow-up: Bernd Bultemeier and Flor Healy]
3. An 'End-Line Survey' should be conducted by the end of FISRI III, based on the Baselines undertaken in FISRI I and II, to determine the impact and benefit of FISRI through survey techniques, to compensate for the absence of meaningful M&E evidence-based data for FISRI (i.e. absence of consistent progress reports, as well as systematic verification and spot-checks over the project cycle); [Follow-up: Bernd Bultemeier and Flor Healy]

6.2 Future Programming (CASU) and Promotion of CA

A. CA 'Best-Practice' Approaches and Innovation

1. CA needs to be better 'institutionalised' in terms of its integration into policy, research and educational institutions, and needs to be better promoted and incorporated into existing farmer practices through more effective best-practice demonstration approaches. Sometimes accommodating CA requirements, such as the need for spacing, compromises standard agronomic principles. The CA Task Force within MAL should actively link with other programmes through the CAA platform. Such a platform brings to all the challenges and valuable lessons learned by practitioners and the industry regarding CA application. There is need to include CA into MAL training programmes, and work plans for sustainability should be facilitated. Inclusion of CA into curricula of tertiary institutions to ensure potential extension workers are introduced to technology. There is need to strengthen existing CA platform for learning and documentation, CA is already in place, it therefore just needs to be strengthened; [Follow-up: Mukelabai Ndiyo]
2. CA best-practices need to be more effectively documented for evidence of CA impact in terms of climate-smart approaches, increased yields and reduced input and labour costs. CA research & development needs to be strengthened by closely working with research institutions (e.g. GART and ZARI) to adapt CA to the Zambia-specific situation and the different agro-ecologies. These adaptations could include the integration of livestock issues into CA activities to enhance adoption and sustainability. Issues of pasture availability for livestock during the Winter and use of alternative sources of mulch to reduce pressure on crop residues could compliment CA programmes. A CA policy document could lay the framework for promoting the best-practices and provide important guidelines and support; [Follow-up: Sepo Marongwe]
3. There is a need for greater cross-collaboration and co-ordination between the various CA initiatives underway, in particular between FISRI (and CASU) and CFU, to promote greater peer-review and information-sharing, while the ultimate beneficiary in the guise of the Zambian farmer benefits from this collective effort. Enhanced and faster development can be achieved when an objective rationalisation of past initiatives is used for planning and implementation of future activities and in this regard, future government CA initiatives actively utilize all existing relevant experience on CA for the benefit of Zambia and the Zambian farmer; [Follow-up: Mick Mwala]

B. Lead-Farmers and Participating ('Follower') Farmers

4. CA programmes must ensure greater engagement at participating-farmer level – a bottom-up approach – with greater emphasis on CA extension approaches being targeted at this level, promoting best-practice approaches linked to performance-based incentives.

The role of the lead-farmers continues to be needed, but needs to be redefined for best-effect. Interaction with the beneficiaries at field-level is the key to enhancing learning and future improvement in project activities. Such platforms should be encouraged and documented. Best performing lead-farmers should be identified and documented for greater and more effective 'lesson learning'; [Follow-up: Mick Mwala]

C. Capacity-building and Training

5. Capacity-building needs to become more sustainable and replicable through a Train-the-Trainer (ToT) approach linked to performance-based incentives. Embarking on a ToT programme to sustain capacity-building of CA in the farming community is thus a key success factor for future initiatives; [Follow-up: Mick Mwala]
6. A comprehensive Field Training Manual needs to be developed and adopted to ensure more consistent and relevant training and capacity-building is achieved, which should include among other topics, the following: (i) CA concept, principles, and benefits; (ii) A variety of basic CA options (manual, animal and tractor-powered); (iii) Possible extension approaches, including the requirements; (iv) Simple examples of gross margin calculations for CA and non-CA; (v) General herbicide issues. Such a Manual will ensure more effective training and capacity-building; [Follow-up: Sepo Marongwe]

D. E-Voucher Scheme and Mechanisation

7. E-Voucher Schemes need to become more evolutionary in nature through linkage with the inflation index, greater recognition of the farmer development stage and increased focus and emphasis on performance-based approaches to use of incentives in order to minimise the risk of creating a 'dependency syndrome'; [Follow-up: Mukelabai Ndiyo]
8. Mechanisation needs to be scaled-up in developing 'commercial' CA, but care is needed in ensuring economically viable approaches/business models are adopted, while availability of equipment, access to finance/leasing and development of alternative ownership models need further exploration and focus. The use of the chaka hoe for basin-making has come up against the constraint of the hoe in general, which oxenisation programmes have been trying to solve since the 20th Century. FISRI is one in a line of projects that are promoting faster, larger, earlier, and environmentally-friendly land preparation methods. Planting basins may achieve earlier results but they are not faster or lighter on the practitioner. The ox-drawn ripper solves the scale and speed limitation of the chaka hoe and conventional ploughing. Going further up the ladder, the tractor drawn ripper and planter improves upon the ox-drawn implements. This stage, however, is accessible largely by hire, putting the control of time of planting in the hands of the operator instead of the farmer. As long as the barrier to entry is the cost of the tractors, operators will enter the business until profits become zero. To avoid over-concentration in the hands of a few, the financing institutions should vary the repayment period from 3 years when the demand is high to 6 years when the demand is in equilibrium with supply. Keeping the number of operators high in this manner will open access to more farmers and retain support for the viability of the operator; [Follow-up: Mukelabai Ndiyo]

E. Gender Mainstreaming and Social Aspects

9. Gender Mainstreaming and 'latent' social issues need to be addressed in any CA adoption programmes, as issues around mechanisation, cash-crops and access to markets have residual issues to be addressed which affect womens' involvement and empowerment:
 - Future, programming should take into account differential access and control of resources, gender roles, as well as strategic and practical gender needs;
 - Develop clear gender equity outcomes and indicators and establish clear gender mainstreaming responsibilities and accountabilities within project staff and the extension delivery systems. Appoint a project Gender Focal Person (GFP), from within current project staff, with clear terms of reference;
 - Gender equality and women empowerment, HIV/AIDS and leadership should be in-built in CA extension service delivery and capacity-building;

- M&E systems should collect sex disaggregated data, gender and social issues information which should be analysed and utilised for improved gender-sensitive programming;
- There is need for development of a gender strategy that can provide guidance on how to mainstream gender in CA activities; [Follow-up: Shinga Mupindu]

F. Market-orientation and ‘Commercialisation’ Supports

10. In order to achieve economies of scale and to avoid an over-emphasis on production-oriented CA approaches, there is a need to incorporate ‘commercial’ best-practice to CA development in CASU. This can be achieved through strengthening of the supply-chain, enhanced value-chain development (through greater emphasis on value-adding/processing activities), an increased focus on market access (local, regional, national and international) and market support measures, including market information, with greater emphasis on farmer organisation, marketing and access to seasonal working capital/trade finance; [Follow-up: Flor Healy]

G. Governance, Project Management, Reporting and M&E

11. Project M&E needs to be comprehensively addressed and strengthened in CASU, with greater emphasis on integrated (not parallel) systems being developed in MAL, with active on-going support from FAO technical backstopping, including active deployment of FAO project staff in MAL to enhance more effective integration and synergy; [Follow-up: Bernd Bultemeier and Flor Healy]

7.0 Annexes

7.1 Terms of Reference of the Final Evaluation (and Final Evaluation Team)

7.2 Summary of the Beneficiary Assessment Study Report

7.3 Consultation Meetings Held

7.4 Reference Documents

7.5 Stakeholder Feedback

Annex 1
Terms of Reference



Food and Agriculture
Organisation of the United
Nations

Food and Draft Terms of Reference Evaluation of Farmer Input Support Response Initiative (FISRI) to rising prices of agricultural commodities in Zambia (GCP/ZAM/071/EC)

Food and Agriculture Organization of the United Nations

Office of Evaluation (OED)

This TOR template is available in electronic format at: <http://www.fao.org/evaluation>

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Acronyms:

CASAD	Conservation Agriculture for Sustainable Development
CASPP	Conservation Agriculture Scaling up for increased Productivity and Production
CF	Conservation Farming
CFU	Conservation Farming Unit (of ZNFU)
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FISRI	Farmer Input Support Response Initiative
GART	Golden Valley Agricultural Research Trust
MACO	Ministry of Agriculture and Cooperatives
ZARI	Zambia Agriculture Research Institute
ZNFU	Zambia National Farmers' Union

1 Background of the Initiative

Food security in the Republic of Zambia is largely dependent on rainfed agriculture, with maize as the primary food crop. Over 80% of the national food requirement is produced by small-scale farmers. The challenges faced by small-scale farmers include low farm productivity and continuing yield decline as a result of soil degradation associated with inappropriate farming practices. HIV/AIDS, together with high costs of external inputs and the vagaries of climate change continue to negatively impact on the agricultural landscape.

The Zambian Government has endorsed the CA (policy) as one of its agricultural developmental vehicles for sustainable agriculture. The Ministry of Agriculture and Cooperatives (MACO) has a ten year strategy to implement the CA programs through the framework of Conservation Agriculture for Sustainable Development (CASAD). The **Farmer Input Support Response Initiative** (FISRI) I, II and III (this project) fit in this programme which will see the Government promote CA to over 600,000 farmers by 2015. The strategy includes working with the same farmers for a minimum of five years to allow consistency in the application of CA technologies and building the CA capacity of the farmer.

The FISRI I&II projects (GCP/ZAM/066/EC; funded by EUFF from 2009-2011) and the CASPP Project funded by the Norwegian Government (from 2009-2010) targeted 11,872 lead farmers for training during the agricultural season of 2010 and 2011 (of which 3,920 through the EUFF project and 7,952 through FISRI II project in 28 districts).

The current project FISRI III, is aimed at increasing the adoption of environmentally-friendly farming systems leading to improved production from given inputs, increased food supply, reduced hunger and improved responses to food emergency crisis by extending the area of land under CA practices. In particular, the following specific problems would be addressed by this project:

- lack of consistent application of best practices in land and crop husbandry;
- need to strengthen mechanization since the current complement of tractors in Zambia is only 6,000 and the most efficient way to provide mechanization services is through private agricultural contracting. It is estimated that a farmer would need to have 100 ha to justify the cost of a new tractor on his own and this is well beyond the capability of the average Zambian smallholder farmer;
- need to intensify capacity development in CA practices within camps instead of targeting additional districts and Provinces.

The FISRI III project aims to complement current existing efforts aimed at up-scaling Conservation Agriculture among small-scale farmers in Zambia. The project duration was originally proposed for one year (July 2011 – June 2012), but eventually reduced to 10 months (current NTE 30 April 2012); the project was to be implemented jointly by MACO, FAO and other stakeholders. Apart from providing inputs to farmers, the intention was to lay the groundwork for enhancing the capacity of MACO's Department of Agriculture and lead farmers in the lead farmer extension model – in anticipation of a longer term investment in CA expansion countrywide.

The stakeholders of the current project include: MACO, ZNFU's CFU, EC, GART, the Palabana Farm Power Training Centre, ZARI, University of Zambia, FAO and selected communities.

2 Purpose of the Evaluation

The evaluation has the following specific objectives:

- Assess progress made, identify areas for improvement and make recommendations for the remaining implementation period of the project.
- Assess the need for adjustments to the project's timeframe and make recommendations on the modalities (major design components, implementation approach) of a follow-up phase or replication phase of the project.
- Document lessons learned so far.

3 Scope of the Evaluation

The evaluation will assess the project according to the following categories:

- a. Its relevance to: national development priorities, needs of the population, and farmers in particular; FAO Global Goals and Strategic Objectives/Core Functions and other aid programmes in the sector.
- b. Robustness and realism of the theory of change underpinning the project, including logic of causal relationship between inputs, activities, expected outputs, outcomes and impacts (against specific and development objectives) and validity of indicators, assumptions and risks.
- c. Quality and realism of the project design, including:
Duration;
Stakeholder and beneficiary identification;
Institutional set-up and management arrangements;
Approach and Methodology.
- d. Financial resources management, including:
Adequacy of budget allocations to achieve outputs;
Coherence and soundness of Budget Revisions in matching necessary adjustments to requirements of implementation;
Rate of delivery and budget balance at the time of the evaluation.
- e. Management and implementation, including:
Effectiveness of management, including quality and realism of work plans;
Efficiency and effectiveness of operations management;
Gaps and delays if any between planned and achieved outputs, the causes and consequences of delays and assessment of any remedial measures taken, efficiency in producing outputs;
Effectiveness of internal monitoring and review processes;
Efficiency and effectiveness of coordination and steering bodies (if any);
Coordination with other projects active in the same sector
Quality and quantity of administrative and technical support by FAO; and
Timeliness, quality and quantity of inputs and support by the Government and resource partner.
- f. Extent to which the expected outputs have been produced, their quality and timeliness.
- g. Extent to which the expected outcomes have been achieved, in particular with regard to the following aspects:
Sustainable agricultural development and natural resource management: extent and quality of activities and impacts on environmental sustainability of natural resource management practices promoted by the project; extent and quality of activities and impacts on socio-economic and cultural sustainability of practices promoted by the project;
Policies: extent and quality of activities and impacts on creating a conducive national policy and legal environment for the objectives of the project; extent and quality of activities to support the wider GIAHS Initiative in creating a conducive international policy and legal environment for its objectives.
- h. Use made by the initiative of FAO's normative products and actual and potential contribution of the initiative to the normative work of the Organization in particular Organizational Result F1: Countries promoting and developing sustainable land management and Organizational Result A1: Policies and strategies on sustainable crop production intensification and diversification at national and regional levels.
- i. Assessment of gender mainstreaming in the initiative. This will cover:
Analysis of how gender issues were reflected in project objectives, design, identification of beneficiaries and implementation;
Analysis of how gender relations and equality are likely to be affected by the initiative;
Extent to which gender issues were taken into account in project management.
- j. The prospects for sustaining and up-scaling the initiative's results by the beneficiaries and the host institutions after the termination of the initiative. The assessment of sustainability will include, as appropriate:

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- Institutional, technical, economic and social sustainability of proposed technologies, innovations and/or processes;
- Perspectives for institutional uptake and mainstreaming of the newly acquired capacities, or diffusion beyond the beneficiaries or the project.
- Environmental sustainability: the initiative's contribution to sustainable natural resource management, in terms of maintenance and/or regeneration of the natural resource base.

k. Overall performance of the project: extent to which the initiative has attained, or is expected to attain, its intermediate/specific objectives and FAO Organizational Result/s (impact), and hence, to the relevant Strategic Objectives and Core Functions; this will also include the identification of actual and potential positive and negative impacts produced by the initiative, directly or indirectly, intended or unintended.

The mission will also evaluate if project resources were efficiently used to support the overall project objective given the overall adverse factors during project life.

Based on the above analysis, the evaluation will draw specific conclusions and formulate recommendations for any necessary further action by Government, FAO and/or other parties to ensure sustainable development, including any need for follow-up action. The evaluation will draw attention to specific good practices and lessons of interest to other similar activities. Any proposal for further assistance should include specification of major objectives and outputs and indicative inputs required.

4 Evaluation methodology

Under the overall guidance of the FAO Office of Evaluation:

- The evaluation will adhere to the UNEG Norms & Standards⁹;
- The evaluation will adopt a consultative and transparent approach with internal and external stakeholders throughout the evaluation process. Triangulation of evidence and information gathered will underpin the validation of evidence collected and its analysis and will support conclusions and recommendations;
- The evaluation will make use of the following tools: review of existing reports, semi-structured interviews with key informants, stakeholders and participants, supported by check lists and/or interview protocols; direct observation during field visits; surveys and questionnaires; the Sustainable Livelihoods Framework¹⁰; the Strengths, Weaknesses, Opportunities and Threats (SWOT) framework for assessment of project results¹¹.

5 Consultation Process

The evaluation team will maintain close liaison with the FAO Office of Evaluation, project management, the LTU and Task Force members at headquarters, regional, sub-regional or country level, and all key stakeholders. Although the mission is free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitment on behalf of the Government, the donor or FAO.

The evaluation briefing and debriefing process will include the Government, the resource partners, the FAO Representation and other relevant actors

The team will present its preliminary findings, conclusions and recommendations to the key stakeholders, to obtain feedback from them.

The debriefing will include the Government, representatives of the donor, the FAO Representation and staff involved in the implementation of the project as well as any other partners or relevant actors.

The Evaluation Team Leader will have a debriefing meeting in FAO HQ to present the results of the mission (to be decided). S/He bears responsibility for finalization of the report, which will be submitted to FAO within

⁹ <http://www.uneval.org/normsandstandards>

¹⁰ The Sustainable Livelihoods Framework identifies five different capitals (human, social, natural, financial, and physical), each including different assets. It helps in improving understanding of livelihoods, in particular of the poor. For more information, among others: http://www.livelihoods.org/info/guidance_sheets_pdfs/section2.pdf

¹¹ SWOT is a widely used strategic planning tool, useful also in the assessment of development interventions, to canvass their strengths and weaknesses, as well as future perspectives. It is particularly used in focus groups, but it can be adapted to individual interviews as well.

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four weeks of mission completion. FAO will submit the report within four to the Government and the donor together with its comments.

The draft evaluation report will be circulated among key stakeholders for comments before finalization; suggestions will be incorporated as deemed appropriate by the evaluation team.

6 The Evaluation Team

The mission will comprise experts/expertise to handle different components.

- Project management and evaluation
- Sustainable agricultural and rural development
- Food Security programmes
- Capacity development
- Sustainable crop production intensification
- Gender and social inclusion issues, and
- Social development and participatory processes

The evaluation will be organized in two stages: during the first phase, national evaluators (agronomist/, arming systems expert, possibly other resource persons) will be commissioned to review the existing field-level information and undertake beneficiary assessments. The second stage will comprise the whole evaluation team (international evaluation team leader, FAO evaluation manager, national evaluators, possibly other resource persons) to follow up on, and validate the beneficiary assessment findings, analyse issues at the programme and policy level, and explore the follow-up options.

All team members will have a University Degree and a minimum of 10 years of professional experience in their respective areas of specialization. All will be fluent in English. Mission members will have no previous direct involvement with the project either with regard to its formulation, implementation or backstopping. All will have signed the Declaration of Interest form of the FAO Office of Evaluation.

Mission members will have had no previous direct involvement in the formulation, implementation or backstopping of the initiative. All will sign the Declaration of Interest form of the FAO Office of Evaluation.

The Evaluation Team is responsible for conducting the evaluation and applying the methodology. All team members, including the Team Leader, will participate in briefing and debriefing meetings, discussions, field visits, and will contribute to the evaluation with written inputs.

The Evaluation Team is fully responsible for its independent report which may not necessarily reflect the views of the Government or of FAO. An evaluation report is not subject to technical clearance by FAO although OED is responsible for ensuring conformity of the evaluation report with standards for project/programme evaluation in FAO.

7 The Evaluation Report

The evaluation report will illustrate the evidence found that responds to the evaluation issues, questions and criteria listed in the TOR. It will include an executive summary; supporting data and analysis will be annexed to the report when considered important to complement the main report.

The recommendations will be addressed to the different stakeholders and prioritized: they will be evidence-based, relevant, focused, clearly formulated and actionable.

The evaluation team will agree on the outline of the report early in the evaluation process, based on the template provided in Annex I of this TOR. The report will be prepared in English, with numbered paragraphs.

The team leader bears responsibility for submitting the final draft report to FAO within four weeks from the conclusion of the mission. Within four additional weeks, FAO will submit to the team its comments and suggestions that the team leader will include as appropriate in the final report within one week.

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Annexes to the evaluation report will include, but are not limited to:

- Terms of reference for the evaluation;
- List of Persons Met, including job titles;
- Itinerary of the evaluation team mission;
- Data collection instruments (e.g. copies of questionnaires, surveys – if applicable)

8 Evaluation Timetable

This section should provide a tentative work-plan and time-table for the whole evaluation including timing for clearance of both ToR and draft evaluation report.

Tentative Timetable: FISRI Evaluation Zambia 2012	
late Feb - early March 2012	Inception Phase (Briefings, determine scope evaluation exercise, selection of project sites, development of beneficiary assessment approaches and tools)
5 - 30 March 2012	Conduct of Beneficiary Assessments
2-13 April 2012	Analysis of Beneficiary Assessment Findings, Write-up
16 - 27 April 2012	Evaluation Mission and Debriefing
May 2012	Finalization of Evaluation Report

OED, separate project evaluation report outline

Annex 1. Annotated Separate Project Evaluation Report Outline

The annotated outline is to be included as an annex to the evaluation Terms of Reference. An evaluation team can modify the structure, as long as the key contents are maintained in the report and the flow of information and analysis is coherent and clear.

The report should be presented with numbered chapters and paragraphs; the length of a project/programme evaluation reports should be 15-18,000 words, excluding executive summary and annexes.

Acknowledgements

Composition of the Evaluation Team

Evaluation Team

FAO Office of Evaluation

Table of Contents

Acronyms

When an abbreviation is used for the first time in the text, it should be explained in full; it will be included in the list of acronyms when it is used repeatedly within the report.

Executive Summary

The Executive Summary should:

- *Be in length approximately 10-15% of the main report, excluding annexes;*
- *Provide key information on the evaluation process and methodology;*
- *Illustrate key findings and conclusions;*
- *List all recommendations: this will facilitate the drafting of the FAO Management Response to the evaluation.*¹²

1. Introduction

1.1 Background and purposes of the evaluation

1. This section will include:

- the purpose of the evaluation, as stated in the Terms of Reference;
- project/programme title, starting and closing dates, initial and current total budget;
- dates of implementation of the evaluation.

2. It will also mention that Annex I of the evaluation report is the evaluation Terms of Reference.

1.2 Methodology of the evaluation

3. This section will comprise a description of the methodology and tools used and evaluation criteria that were applied by the evaluation. This should also note any limitations incurred in applying the methodology by the evaluation team.

2. Context of the project/programme

4. This section will include a description of the developmental context relevant to the project/programme (global/regional/national as appropriate) including major challenges in the area of the intervention, political and legislative issues, etc.

5. It will also describe the process by which the project/programme was identified and developed and cite other related UN (including FAO) and bilateral interventions if relevant.

3. Concept and relevance

3.1 Design

6. Programmes and projects are built on assumptions on how and why they are supposed to achieve the agreed objectives through the selected strategy; this set of assumptions constitutes the programme theory or 'theory of change' and can be explicit (e.g. in a logical framework matrix)¹³ or implicit in a project/programme document.

¹² The Management Response is the written reply by FAO to the evaluation; it illustrates acceptance or justified partial acceptance or rejection of recommendations, including actions, responsibilities and time plan for their implementation.

¹³ Logical framework matrix, if present, should be reproduced as an Annex to the report.

7. This section will include a short description of the project/programme theory of change, of its objectives and assumptions and will analyse critically:

- The appropriateness of stated development goals and outcomes (immediate objectives);
- The causal relationship between inputs, activities, outputs, outcomes (immediate objectives) and impact (development objectives);
- The relevance and appropriateness of indicators;
- The validity of assumptions and risks.

8. This section will also critically assess:

- The project/programme's institutional set-up and management arrangements;
- The adequacy of the time-frame for implementation;
- The adequacy of resources from all parties and appropriateness of budget allocations to achieve intended results;
- The adequacy of the methodology of implementation to achieve intended results;
- The quality of the stakeholders' and beneficiaries identification.

3.2 Relevance

9. This section will analyse the extent to which the project/programme's objectives and strategy were consistent with country's expressed requirements and policies, with beneficiaries' needs, and other major aid programmes, at the time of approval and at the time of the evaluation.

10. There will also be an analysis of the degree to which the project/programme corresponds to priorities in the FAO Country Programming Framework.

4. Implementation

4.1 Budget and Expenditure

11. This section will contain the analysis of project/programme financial resources and management, including:

- Efficiency in production of outputs;
- Coherence and soundness of Budget Revisions in matching implementation needs and project/programme objectives; and
- Assessment of rate of delivery and budget balance at the time of the evaluation, compared to the initial plan.

4.2 Project/programme Management

12. This section will analyse the performance of the management function, including:

- efficiency and effectiveness of operations management, both within the project/programme and by FAO including timeliness, quality, reasons for delays and assessment of remedial measures taken if any;
- effectiveness of strategic decision-making by project/programme management;
- realism of annual work-plans;
- efficiency and effectiveness of monitoring system and internal evaluation processes;
- elaboration and implementation of an exit strategy;
- role and effectiveness of institutional set-up, including steering bodies;

4.3 Technical Backstopping

13. This section will analyse the extent, timeliness and quality of technical backstopping the project/programme received from involved units in FAO, at all levels (HQ, regional, sub-regional and country offices).

4.4 *Government's participation*

14. This section will analyse government's commitment and support to the project/programme, in particular:

- Financial and human resources made available for project/programme operations;
- Uptake of outputs and outcomes through policy or investment for up-scaling.

5. *Results and contribution to stated objectives*¹⁴

5.1 *Outputs and outcomes*

15. This section will critically analyse the project/programme outputs: ideally, the evaluation team should directly assess all of these, but this is not always feasible due to time and resources constraints. Thus, the detailed analysis should be done on a representative sample of outputs that were assessed directly, while a complete list of outputs prepared by the project/programme team should be included as annex. If appropriate, the section will also include an analysis of gaps and delays and their causes and consequences.

16. Further, the section will critically analyse to what extent expected outcomes (specific/immediate objectives) were achieved, or are likely to be achieved during the project/programme life's time. It will also identify and analyse the main factors influencing their achievement and the contributions of the various stakeholders to them.

5.2 *Gender issues*

17. This section will analyse if and how the project/programme mainstreamed gender issues. The assessment will cover:

- Analysis of how gender issues were reflected in objectives, design, identification of beneficiaries and implementation;
- Analysis of how gender relations and equality and processes of women's inclusion were and are likely to be affected by the initiative;
- Extent to which gender issues were taken into account in project/programme management.

5.3 *Capacity development*

18. The evaluation will assess

- the extent and quality of project/programme work in capacity development of beneficiaries;
- the perspectives for institutional uptake and mainstreaming of the newly acquired capacities, or diffusion beyond the beneficiaries or the project/programme.

5.4 *Sustainability*

19. This section will assess the prospects for long-term use of outputs and outcomes, from an institutional, social, technical and economic perspective. If applicable, there will also be an analysis of environmental sustainability (maintenance and/or regeneration of the natural resource base).

5.5 *Impact*

20. This section will assess the current and foreseeable positive and negative impacts produced as a result of the project/programme, directly or indirectly, intended or unintended.

¹⁴ The term 'results' includes outputs, outcomes and impact.

21. It will assess the actual or potential contribution of the project/programme to the planned development objective and to FAO's Strategic Objectives, Core Functions and Organizational Results.¹⁵

6. Conclusions and Recommendations

22. Conclusions need to be substantiated by findings consistent with data collected and methodology, and represent insights into identification and/ or solutions of important problems or issues. They may address specific evaluation questions raised in the Terms of Reference and should provide a clear basis for the recommendations which follow.

23. The Conclusions will synthesise the main findings from the preceding sections: main achievements, major weaknesses and gaps in implementation, factors affecting strengths and weaknesses, prospects for follow-up, any emerging issues. It will consolidate the assessment of various aspects to judge the extent to which the project/programme has attained, or is expected to attain, its intermediate/specific objectives. Considerations about relevance, costs, implementation strategy and quantity and quality of outputs and outcomes should be brought to bear on the aggregate final assessment.

24. The section will include an assessment of FAO's role as implementing/ executing agency and the quality of the feedback loop between the project/programme and FAO's normative role, namely:

- actual use by the project/programme of relevant FAO's normative products (databases, publications, methodologies, etc.);
- actual and potential contribution of project/programme outputs and outcomes to FAO's normative work.

25. Recommendations should be firmly based on evidence and analysis, be relevant and realistic, with priorities for action made clear. They can tackle strategic, thematic or operational issues. Recommendations concerned with on-going activities should be presented separately from those relating to follow-up once the project/programme is terminated.

26. Each recommendation should each be introduced by the rationale for it; alternatively, it should be referenced to the paragraphs in the report to which it is linked.

27. Each recommendation should be clearly addressed to the appropriate party(ies), i.e. the Government, the resource partner, FAO at different levels (HQ, regional, sub-regional, national) and the project/programme management. Responsibilities and the time frame for their implementation should be stated, to the extent possible.

28. Although it is not possible to identify a 'correct' number of recommendations in an evaluation report, the evaluation team should consider that each recommendation must receive a response.

7. Lessons Learned

29. Not all evaluations generate lessons. Lessons should only be drawn if they represent contributions to general knowledge.

30. Where this is the case, the evaluation will identify lessons and good practices on substantive, methodological or procedural issues, which could be relevant to the design, implementation and evaluation of similar projects or programmes. Such lessons/practices must have been innovative, demonstrated success, had an impact, and be replicable.

¹⁵ See Annex 2 of the Terms of Reference

Annexes to the Evaluation Report

- I. Evaluation Terms of Reference
- II. Brief profile of evaluation team members
- III. List of documents reviewed
- IV. List of institutions and stakeholders met during the evaluation process

The team will decide whether to report the full name and/or the function of the people who were interviewed in this list

- V. List of project outputs

This includes training events, meetings, reports/publications, initiatives supported through the project/programme. It should be prepared by the Project/programme staff, in a format decided by the evaluation team, when details cannot be provided in the main text because too cumbersome

- VI. Evaluation tools

Annex 2. Global Goals of FAO Member States, FAO Strategic Objectives, Organizational Results and Core Functions 2010-19

Box 1. Global Goals of FAO Member States

- a) Reduction of the absolute number of people suffering from hunger, progressively ensuring a world in which all people at all times have sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life;
- b) Elimination of poverty and the driving forward of economic and social progress for all with increased food production, enhanced rural development and sustainable livelihoods;
- c) Sustainable management and utilisation of natural resources, including land, water, air, climate and genetic resources, for the benefit of present and future generations.

Box 2. FAO Strategic Objectives and Organizational Results

Code	Title	Lead Unit
A	Sustainable intensification of crop production	AG
A01	Policies and strategies on sustainable crop production intensification and diversification at national and regional levels	AGP
A02	Risks from outbreaks of trans-boundary plant pests and diseases are sustainably reduced at national, regional and global levels	AGP
A03	Risks from pesticides are sustainably reduced at national, regional and global levels	AGP
A04	Effective policies and enabled capacities for a better management of plant genetic resources for food and agriculture (PGRFA) including seed systems at the national and regional levels	AGP
B	Increased sustainable livestock production	AG
B01	The livestock sector effectively and efficiently contributes to food security, poverty alleviation and economic development	AGA
B02	Reduced animal disease and associated human health risks	AGA
B03	Better management of natural resources, including animal genetic resources, in livestock production	AGA
B04	Policy and practice for guiding the livestock sector are based on timely and reliable information	AGA
C	Sustainable management and use of fisheries and aquaculture resources	FI
C01	Members and other stakeholders have improved formulation of policies and standards that facilitate the implementation of the Code of Conduct for Responsible Fisheries (CCRF) and other international instruments, as well as response to emerging issues	FI
C02	Governance of fisheries and aquaculture has improved through the establishment or strengthening of national and regional institutions, including RFBs	FIE
C03	More effective management of marine and inland capture fisheries by FAO Members and other stakeholders has contributed to the improved state of fisheries resources, ecosystems and their sustainable use	FIM
C04	Members and other stakeholders have benefited from increased production of fish and fish products from sustainable expansion and intensification of aquaculture	FIM
C05	Operation of fisheries, including the use of vessels and fishing gear, is made safer, more technically and socio-economically efficient, environmentally-friendly and compliant with rules at all levels	FII
C06	Members and other stakeholders have achieved more responsible post-harvest utilization and trade of fisheries and aquaculture products, including more predictable and harmonized market access requirements	FII
D	Improved quality and safety of food at all stages of the food chain	AG
D01	New and revised internationally agreed standards and recommendations for food safety and quality that serve as the reference for international harmonization	AGN

OED, Project evaluation report outline

D02	Institutional, policy and legal frameworks for food safety/quality management that support an integrated food chain approach	AGN
D03	National/regional authorities are effectively designing and implementing programmes of food safety and quality management and control, according to international norms	AGN
D04	Countries establish effective programmes to promote improved adherence of food producers/businesses to international recommendations on good practices in food safety and quality at all stages of the food chain, and conformity with market requirements	AGN
E	Sustainable management of forests and trees	FO
E01	Policy and practice affecting forests and forestry are based on timely and reliable information	FOM
E02	Policy and practice affecting forests and forestry are reinforced by international cooperation and debate	FOE
E03	Institutions governing forests are strengthened and decision-making improved, including involvement of forest stakeholders in the development of forest policies and legislation, thereby enhancing an enabling environment for investment in forestry and forest industries. Forestry is better integrated into national development plans and processes, considering interfaces between forests and other land uses	FOE
E04	Sustainable management of forests and trees is more broadly adopted, leading to reductions in deforestation and forest degradation and increased contributions of forests and trees to improve livelihoods and to contribute to climate change mitigation and adaptation	FOM
E05	Social and economic values and livelihood benefits of forests and trees are enhanced, and markets for forest products and services contribute to making forestry a more economically-viable land-use option	FOE
E06	Environmental values of forests, trees outside forests and forestry are better realized; strategies for conservation of forest biodiversity and genetic resources, climate change mitigation and adaptation, rehabilitation of degraded lands, and water and wildlife management are effectively implemented	FOM
F	Sustainable management of land, water and genetic resources and improved responses to global environmental challenges affecting food and agriculture	NR
F01	Countries promoting and developing sustainable land management	NRL
F02	Countries address water scarcity in agriculture and strengthen their capacities to improve water productivity of agricultural systems at national and river-basin levels including trans-boundary water systems	NRL
F03	Policies and programmes are strengthened at national, regional and international levels to ensure the conservation and sustainable use of biological diversity for food and agriculture and the equitable sharing of benefits arising from the use of genetic resources	NRD
F04	An international framework is developed and countries' capacities are reinforced for responsible governance of access to, and secure and equitable tenure of land and its interface with other natural resources, with particular emphasis on its contribution to rural development	NRC
F05	Countries have strengthened capacities to address emerging environmental challenges, such as climate change and bioenergy	NRC
F06	Improved access to and sharing of knowledge for natural resource management	OEK
G	Enabling environment for markets to improve livelihoods and rural development	ES
G01	Appropriate analysis, policies and services enable small producers to improve competitiveness, diversify into new enterprises, increase value addition and meet market requirements	
G02	Rural employment creation, access to land and income diversification are integrated into agricultural and rural development policies, programmes and partnerships	ESW
G03	National and regional policies, regulations and institutions enhance the developmental and poverty reduction impacts of agribusiness and agro-industries	
G04	Countries have increased awareness of and capacity to analyse developments in international agricultural markets, trade policies and trade rules to identify trade opportunities and to formulate appropriate and effective pro-poor trade policies and strategies	EST
H	Improved food security and better nutrition	ES

H01	Countries and other stakeholders have strengthened capacity to formulate and implement coherent policies and programmes that address the root causes of hunger, food insecurity and malnutrition	ESA
H02	Member countries and other stakeholders strengthen food security governance through the triple-track approach and the implementation of the Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security	ESA
H03	Strengthened capacity of member countries and other stakeholders to address specific nutrition concerns in food and agriculture	AGN
H04	Strengthened capacity of member countries and other stakeholders to generate, manage, analyse and access data and statistics for improved food security and better nutrition	ESS
H05	Member countries and other stakeholders have better access to FAO analysis and information products and services on food security, agriculture and nutrition, and strengthened own capacity to exchange knowledge	ESA
I	Improved preparedness for, and effective response to, food and agricultural threats and emergencies	TC
I01	Countries' vulnerability to crisis, threats and emergencies is reduced through better preparedness and integration of risk prevention and mitigation into policies, programmes and interventions	TCE
I02	Countries and partners respond more effectively to crises and emergencies with food and agriculture-related interventions	TCE
I03	Countries and partners have improved transition and linkages between emergency, rehabilitation and development	TCE
K	Gender equity in access to resources, goods, services and decision-making in the rural areas	ES
K01	Rural gender equality is incorporated into UN policies and joint programmes for food security, agriculture and rural development	ESW
K02	Governments develop enhanced capacities to incorporate gender and social equality issues in agriculture, food security and rural development programmes, projects and policies using sex-disaggregated statistics, other relevant information and resources	ESW
K03	Governments are formulating gender-sensitive, inclusive and participatory policies in agriculture and rural development	ESW
K04	FAO management and staff have demonstrated commitment and capacity to address gender dimensions in their work	ESW
L	Increased and more effective public and private investment in agriculture and rural development	TC
L01	Greater inclusion of food and sustainable agriculture and rural development investment strategies and policies into national and regional development plans and frameworks	TCI
L02	Improved public and private sector organisations' capacity to plan, implement and enhance the sustainability of food and agriculture and rural development investment operations	TCI
L03	Quality assured public/private sector investment programmes, in line with national priorities and requirements, developed and financed	TCI

Box 3. FAO Core Functions

a	Monitoring and assessment of long-term and medium-term trends and perspectives
b	Assembly and provision of information, knowledge and statistics
c	Development of international instruments, norms and standards
d	Policy and strategy options and advice
e	Technical support to promote technology transfer and build capacity
f	Advocacy and communication
g	Inter-disciplinarily and innovation
h	Partnerships and alliances

Annex 2
Beneficiary Assessment Study
- Executive Summary

Beneficiary Assessment Evaluation of “Expansion of the Farmer Input Support Response Initiative (FISRI) to Rising Prices of Agricultural Commodities in Zambia”

GCP/ZAM/071/EC.

1. The study was an input into the final evaluation of the FISRI and was meant to provide information at beneficiary level regarding the structures constructed to service the target farmers and how such were supported to deliver the services now and into the future.
2. A team of four consultants¹⁶ undertook the study of “Beneficiary Assessment of FISRI” in the period 14 March 23 April 2012. The field visit was concentrated in the 11 districts namely Chibombo, Kapiri Mposhi, Mumbwa, Mpongwe, Chipata, Petauke, Chongwe, Kalomo, Monze, Sinazongwe, and Kaoma. The districts were chosen on the basis of length of period they have been with the project, the agro-ecological regions of the country and the accessibility. Data used in the evaluation exercise were obtained through a participatory rural appraisal in selected project communities, complimented with records from the FAO project team and the district project offices
3. The camps within districts were randomly selected from the camp officers available at the district. Lead Farmers in selected camps were brought to a central place for focus group interviews. Three were selected for follow-up case studies. The Follower Farmers under one of the Lead Farmers were interviewed in a focus group at camp level. At most three of the follower farmers were visited to observe their field and interview them individually.
4. The FISRI project set out to improve food security at household level of farmers in the rural Zambia. To enhance this, the project selected agricultural production practices that had proven track record of increasing productivity and thus contribute to increased production. Against a background of long research on production practices in Zambia Conservation Agriculture technologies were identified and promoted. The specific practices that constituted the Best Agricultural Practices in CA were guided by three key principles: (i) Minimum soil disturbance, (ii) Crop residue management, (iii) Crop rotations.
5. Most of the beneficiaries have been involved in FISRI and the best practices for 3 years starting in 2009. Some districts came on board in 2010 and 2011. Both men and women were talked to during the study and women comprised 34% of respondents. Over the project period, the area under CA was 34% overall. Demonstration plots were used in the extension of CA among the beneficiaries. The demos were established by camp extension officers and by lead farmers.
6. However, the quality of the demonstrations compromised the message that was intended and may have led to the number of follower farmers being often less than the 15 that each lead farmer was meant to have. The ultimate beneficiary of the FISRI is the follower farmer but the project has limited documentation of this beneficiary. This results from equating beneficiary to receiving vouchers.
7. Minimum Tillage and Crop Rotations were the two key CA principles that were practiced while mulching was almost absent. There was evidence of the knowledge of the reasons behind the practice of CA.
8. The management practices like weeding and plant population have direct impact on maize yields. A low plant population encourages weed growth and leads to decline in yield and increased expenditure on weed control. Herbicides have the advantage of killing the weeds before the crop emerges. The crop has potential to grow in a weed free environment thereby improving productivity. A lot more farmers have bought herbicides for cash. The vouchers have induced an interest in herbicides far beyond expectations.

¹⁶ Mr. Mukelabai Ndiyo Farming Systems Expert, Dr Micky Mwala, (Capacity-building), Shinga Mupindo (Gender/Food Security), Sepo Marongwe (Conservation Agriculture).

9. The *extension model used was the Lead Farmer*. This model adds a layer of community extension workers called the lead farmer below the Camp officer. The camp officer interfaces with the ultimate target, the participating farmer, through the Lead Farmer. The appreciation of the role and responsibilities of the CEO was mixed. For example, the application of the voucher received by the camp officers varied between camps. This ambiguity about the role of the voucher is reflected in the quality of the demonstrations at their camps which, were not configured to cater for large number of visitors.
10. The performance of the *lead farmer approach* calls for closer scrutiny. There is a growing discontent between the lead and follower farmers, a consequence of vouchers received by lead and not follower farmers. The FISP and FISRI could be better synchronized so that follower farmers receive FISP inputs as is the case in some district. Given the discord between the lead farmer and the follower farmers, a careful examination is required to establish where the benefits of the e-voucher for lead farmer falls. If the benefits are the heightened appreciation of CA leading to adoption onto the full field, and the corresponding despondence of the follower farmer, then a system of rotation or graduation of the lead farmers is strongly recommended.
11. *Follower Farmers* are essentially “club members” without benefits. The project is seen as a source of support for members. There is a growing division between lead and follower farmers because of this apparent exclusion from the perceived benefits of the project. The district extension has explained that the Lead Farmer demo is for all follower farmers to learn from.
12. The expansion or replication pathway for the lead farmer model of extension has stalled. The discord between the lead farmer and follower farmer is palpable. New camps on to which the programme has expanded do not have follower farmers due to the conflict over e-vouchers and bicycles which lead farmers have and follower farmers do not. Overall, the number of follower farmers is lower than planned as often only 8 out of the 15 are actively or purposively involved in the project activities. In this regards, the e-voucher does not sit well with the lead farmer concept and may be an obstacle to the linkages between the Lead Farmer and the follower farmer, quite the opposite of what it was meant to be.
13. Agro-dealers and the e-voucher scheme have given rise to an emerging competition amongst agro-dealers which is contributing to an environment of fair prices for farm the inputs. Despite this positive development, there are concerns about reported differences in prices between voucher and non-voucher shops during the voucher season.
14. E-vouchers have greatly facilitated access to inputs and CA implements thereby making it possible for farmers to experience the application of CA at scale. The vouchers have also stimulated the agro-dealers to increase their network and grow their business thereby bringing inputs closer to the farmers. The e-voucher was cost effective compared to the project distributing the inputs directly.
15. *Conservation agriculture mechanization pilot* was key to up-scaling of CA. Mechanization in conjunction with herbicides has changed the way constraints are viewed on smallholder farms. If we are going to promote mechanization, we ought to do so at scale. The first season with 10 tractors has demonstrated that the demand far outstrips supply and that queuing up for the service resulted in some reverting to conventional farming. We recommend that the number of tractors in the district be increased while the operators remain profitable.
16. The introduction of mechanization has usually resulted in advantages such as (a) - The average area under cultivation increasing dramatically, (b) - Average total production of maize among oxen owners doubling. As in the beginning of mechanization in 1900, there have not been enough oxen for every farmer even in cattle owning regions of the country. Late planting was experienced this year due to waiting for the tractor or other mechanization options.

The use of the chaka hoe for basin making has come up against the constraint of the hoe in general which oxenization programmes have been trying to solve since the 20th Century. FISRI is one in line of projects that are promoting faster, larger and earlier land preparation. Planting basins may be earlier but they are not faster or lighter on the practitioner. The tractor-drawn ripper and planter improves upon the ox-drawn implements. This stage, however, is accessible largely by hire, removing the control of time in the hands of the operator exposing the farmer to late planting, constraint first addressed by making basins.

17. The per capita availability of Farm Implements such as a ripper or plough is still at the same or lower rate as in the 1980s or from the time the plough became part of smallholder agriculture in Zambia. In the interim, before all farmers own their own draft power or can afford to hire, we shall experience delays in crop establishment. The solution in the interim is the chaka hoe until such time that the per capita income rises to permit independence in draft power.
18. Project M&E system in place was not able to avail sufficient data and information from the farmer to the national level. The new methods of land preparation have not been well studied on farm yet the data reaching the headquarters does not attend to variables that may permit understanding the contribution of these new methods to productivity. Given that FISRI is promoting new methods of planting, it is an omission that no data is available on plant population density. As farmers still plant large tracts under conventional ploughing practices, the above should also be collected on plots not under CA.
19. Capacity building was meant to enable the extension system from the headquarters in Lusaka to the lead farmer to function to support the promotion of CA now and in the future. Depending on the level in the chain, CAPACITY Building; training conducted at all levels was taking place outside a documented plan. Expression of the knowledge acquired was difficult to discern at follower farmer level due to limited access to inputs
20. The FISRI should attend to market access for crops other than maize. Crops grown in rotation are perceived not to have a market, leading to putting them on a low priority in farmer's activities. To encourage crop rotations, crop buyers should flag their intentions early in the season so that farmers can plan their cropping. Market access is integral to on-farm practice. FISRI should link up with other programmes attending to crop marketing such as Dunavant.

Recommendations

1. To improve monitoring and evaluation, the people who collect data must have the use for it. It is unlikely that data will be collected if the capacity or the need to use it does not exist. Until recently, there was no single person designated to lead Monitoring and Evaluation function in the project. Although staff at various levels report of monitoring and backstopping visits, these visits do not fall in any defined framework and it is difficult to document the results of such "monitoring visits". The FISRI management should designate a member of the core team at each level, from the national to the district, who should coordinate the M&E. The data availed to the team was often aggregated at district level or camp level with rare disaggregation into gender, for example. The capacity to integrate gender concerns at implementing level is required.
2. In the face of alienation of the follower farmers and the loss of the demo at out scaling in farm, the justification for keeping the lead farmer is diminished. Instead the best performing follower farmer should be picked every two years so that members of a group know they have a chance to access the e-voucher. Or better still the each member of a study group may have an equal chance of hosting the voucher by randomly selecting a voucher recipient every two years.

3. The participating farmer in this project represents the ultimate impact of the project. As such, it is important to monitor the uptake processes of the various components of CA and other project elements among the participating farmers. Long term monitoring guidelines for these farmers are important as they provide indicators for the sustainable adoption of the CA technologies and other project elements that were promoted. There is need to identify the successful participating farmers and use them as platforms for lesson learning and understanding of adoption issues.
4. Other forms of non-voucher incentives should be considered. For instance the farmer could receive certification to prove they have attained a yield level above 5 tons per hectare while using CA. Such certification would indicate the farmer is less vulnerable to weather changes and, therefore attractive to finance institutions who may find it safe to extend seasonal loans to such farmers. The fact that CA practice should confer preference for loans should be a stronger but neutral incentive limited only by the level a farmer dedicates to CA practice.
5. As long as the barrier to entry is the cost of the tractors, operators will enter the business until profits become zero. To avoid over-concentration in the hands of a few the financing institutions should vary the repayment period from 3 years when the demand is high to 6 years when the demand is in equilibrium with supply. Keeping the number of operators high in this manner will open access to more farmers. In scaling up to meet the demand, more tractors per operator is to be preferred to many one-tractor operators. Such tractors working in series will serve all clients effectively.
6. The graduation from the ox to 4-wheel tractor is too steep; the FISRI may consider other power sources in between. The project teams should ensure there is equitable access to mechanization services to women given the factors that may limit that access such as social assets.
7. Since FISRI aims to increase productivity (i.e. yield etc.), it is necessary to pay attention to yield components. Monitoring data should be collected on a sample of farmers covering the following:
 - a. Plant population at emergence
 - b. Plant population at harvest
 - c. Weed score at 2 months after planting.
8. During the 12/13 season, FISRI M&E should establish the factors that determine plant population under the various seedbed preparation methods. To achieve that, the camp officers need a tape measure to be part of their field kit.
9. Once the advantages of the fiterelli planters are clearly documented (i.e. plant population, accurate fertilizer application, speed etc.) farmers should be encouraged to buy their own fiterelli or team up in groups of 5 or more to share the cost of one unit.
10. For future programming there is need to have gender analysis and use of the results in programming to ensure that gender concerns are mainstreamed.
11. There is need to develop clear gender equity outcomes and indicators and to establish clear gender mainstreaming responsibilities and accountability.
12. Gender equality and women empowerment should be inbuilt in extension service delivery especially in CA capacity building and implementation processes at all levels of the project.
13. Monitoring and evaluation systems should integrate gender aspects. Data that is generated from the project should be disaggregated, analyzed and used for programming.
14. There is need for a gender strategy that can provide guidance on how to mainstream gender in CA activities.

Annex 3
Schedule of Meetings Held

Phase 2: Final Evaluation Exercise

Lusaka Meetings and District Field Visits

Day	Date	Morning	Afternoon
Sun	22.04	Travel	
Mon	23.04	Project Mobilisation - FAO	
Tue	24.04	Team Briefing	
Wed	25.04	10:00 EUD; 12:00 ZNFU;	14:00 MTZ (Training); 15:00 CFU; 16:00 MAL;
Thu	26.04	Chongwe – Field Visit (FISRI & CFU)	Chongwe – Field Visit (FISRI & CFU)
Fri	27.04	09:00 MAL; 12:00 MTZ;	Team Review and Planning
Sat	28.04	Beneficiary Assessment Report Writing	Follow-up: Meeting Notes; Reference Documents
Sun	29.04	Follow-up: Meeting Notes; Reference Documents	Follow-up: Meeting Notes; Reference Documents
Mon	30.04	Mazabuka – Field Visits (FISRI & CFU)	Mazabuka – Field Visits (FISRI & CFU)
Tue	01.05	Team Workshop – Aide Memoire Preparation	Team Workshop – Aide Memoire Preparation
Wed	02.05	GART	FAO Focus Group
Thu	03.05	Chibombo – Field Visit (FISRI & CFU)	Chibombo – Field Visit (FISRI & CFU)
Fri	04.05	Mumbwa – Field Visit (FISRI & CFU)	Mumbwa – Field Visit (FISRI & CFU)
Sat	05.05	Team Follow-up –	Aide Memoire preparation
Sun	06.05	Aide Memoire preparation	Aide Memoire preparation
Mon	07.05	Aide Memoire preparation	Steering Group presentation
Tue	08.05	Team Debrief and Wrap-up	Depart & Travel
Wed	09.05	Off-site follow-up	Draft Final Report write-up
Thu	10.05	Off-site follow-up	Draft Final Report write-up
Fri	11.05	Off-site follow-up	Draft Final Report write-up

The following individuals were met individually:

FAO	Mr. Ad Spijkers	FAO Representative
	Dr. Jim Belemu	Manager, DRRMU
	Mr. Zumbi Siwale	Administrative Officer
	Mr. Anderson Mutinta	National Agronomist, DRRMU
	Ms. Rebecca Nalungwe	Programme Assistant - Agronomist
	Mr. Crispin Kapunda	Food Security and M&E Office (DRRMU)
	Ms. Chimba Mutale	M&E Assistant
	Mr. James Breen	International Consultant
MAL	Mr. Alick Daka	Deputy Director (Crops), MAL
EU	Ms. Kirsi Pekuri	Head of Section (Economics, Private Sector & Rural Development)
	Mr. Bazak Lungu	Programme Officer (Economics & Rural Development)
GART	Dr. Stephen Muliokela	Director
CFU	Mr. Peter Aagaard	Executive Director
	Mr. Collins Nkatiko	Director, Field Operations
ZNFU	Ms. Cynthia Makunka	?
MTZ	Mr. Hans Hesse	E-Vouchers Payments Manager
Other	Mr. John Fynn	Consultant

Phase 1: Beneficiary Assessment Study

Lusaka Meetings and District Field Visits

Name Of Respondent	Gender	District	Position	Contact
Benny Tembo	M	Kapiri Mposhi	DACO	
Kanyata Muchulu	M	Kapiri Mposhi	SAO	
Patrick Musonda	M	Kapiri Mposhi	CEO	
Cheelo. H. Mudenda	F	Kapiri Mposhi	TSP	
Maurine Chibo	F	Kapiri Mposhi	Agro Dealer	
Alice Mangolwa	F	Kapiri Mposhi	Lead Farmer	
William Banda	M	Kapiri Mposhi	Agro Dealer	
Maxwell Monga	M	Kapiri Mposhi	Lead Farmer	
Regina Hachikaka	F	Kapiri Mposhi	Lead Farmer	
Hitler Mayanda	M	Kapiri Mposhi	Lead farmer	
Noah Chonga	M	Kaoma	Lead farmer	
Christine Moyele	F	Kaoma	Lead farmer	
Judith Nanyangwe	F	Kaoma	JTO	
McChabby Lupiya	M	Kaoma	TO	
John Matombo	M	Kaoma	JTO	
Milimo Mnakenda	M	Kaoma	NSAO	
Lawrence Witola	M	Kaoma	JTO	
Naiwa Sipyambango	M	Kaoma	PTO	
Aubrey Chanda	M	Kaoma	DACO	
Chuma Mwiya	F	Kaoma	Block Extension Officer	
Mukungu	M	Kaoma	PAO	
Kennedy Kakwava	M	Kaoma	Lead Farmer	
Christetar Makunya	F	Kaoma	Participating Farmer	
Inonge Munalulu	F	Kaoma	Lead Farmer	
Ngwira	M	Kaoma	Agro Dealer	
Boston Ngasimbs	M	Kaoma	Agro Dealer	

Tom Mwansabomba	Chisanga	M	Mumbwa	Acting CEO	
Siame Masida		M	Mumbwa	Junior TSP	
Phillis Mwansa		F	Mumbwa	CEO	
Chanda		F	Mumbwa	Agro dealer	
Timothy Tehuho		M	Mumbwa	CEO	
Kaputo Surrion		M	Mumbwa	CEO	
Bwalya Katongo		M	Mumbwa	Participating farmer	
Exild Tepu		F	Mumbwa	Satisfactory farmer	Participating
Eunice Shikonde		F	Mumbwa	Participating Farmer	
Geofrey Nyirenda		M	Chipata	Camp Officer	0979-625487
Shikasako M. Mosa		M	Chipata	Camp Officer	0977-978669
Etson Phiri		M	Chipata	Camp Officer	0967-7318371
Simuzile King		M	Chipata	Camp Officer	0977-131340
Muyeko Phiri		M	Chipata	Camp Officer	0977-195595
Mutinta C. Hangombe		M	Chipata	Camp Officer	0965-349266
John Phiri		M	Chipata	Camp Officer	0978-173973
Benjamin Nyoni		M	Chipata	Camp Officer	0979-124246
Floridah M. Hamvumba		F	Chipata	Camp Officer	0979-122634
Martin Mhanza		M	Chipata	Camp Officer	0978-049955
Nakombe Joyce M.		F	Chipata	Camp Officer	0977-967568
Mulenga Catherine		F	Chipata	Camp Officer	0979-625652
Evans Chileshe		M	Petauke	Camp Officer	0977-382160
Godfrey Njobvu		M	Petauke	Camp Officer	0977-890818
Ephraim John Phiri		M	Petauke	Camp Officer	0974-855902
Tembo Sophia		F	Petauke	Camp Officer	0977-987354
Elijah Mkandawire		M	Petauke	Camp Officer	0975-171350
Nchimunya Beyani		F	Monze	Camp officer	0977-661092
Katema Motive		M	Monze	Camp officer	0979-754745
Sara Goma Sikota		F	Monze	Agricultural Officer	0976-901150
Pamela C. L. Daka		F	Monze	Hamapande	0977-253962

Paul M. Nyambe	M	Monze	SAO - District	0976-654445
Mr Masungu Hansenka	M	Monze	Camp Officer	0977-680694
Mr Louis Chinene	M	Monze	Camp Officer	0975-625986
Mukamba Monde	F	Kalomo	Camp Officer	0977-727464
Clement Kayungwa	M	Kalomo	Camp Officer	0977-789877
Gift Miyanda	M	Kalomo	Camp Officer	0962-191362
Alfred Hamaundu	M	Kalomo	Camp Officer	0974-365004
Grace Hansende	F	Kalomo	Camp Officer	0976-232628
Kwesela Christopher	M	Kalomo	Camp Officer	0978-306525
Kayombo Kashweka	M	Kalomo	Camp Officer	0964-155552
Dickson Siamungulu	M	Kalomo	Camp Officer	0978-385834
Rich Chizyuka	M	Kalomo	Camp Officer	0979-961256
Christine Muloba	F	Kalomo	Camp Officer	0979-303219
Peter Munkombwe	M	Kalomo	Camp Officer	0975-967100
Roy Chiinda	M	Kalomo	Camp Officer	0966-211222
Ben Chisenga	M	Kalomo	Camp Officer	0977-228507
David Malumo	M	Kalomo	Camp Officer	0977-196123
Rosemary Kanunka	F	Kalomo	Camp Officer	0974-745913
Lillian Hamusiya	F	Sinazongwe	Camp Officer	0977-882608
Solomon Ngoma	M	Sinazongwe	Camp Officer	0979-442375
Mwiindwe Alice	F	Sinazongwe	Camp Officer	0979-490184
Mandala Kelly	M	Sinazongwe	Camp Officer	0977-533306
Bachenge Nyirenda	M	Chongwe	Agro Dealer	097-746-0456
Victor Njovu	M	Chongwe	District	097-723-3488
Francis Kubi	M	Chongwe	District	
Simwami Nickson	M	Chongwe	Ag Sup	
Simulunda Charles	M	Chongwe	DACO	
mulonda Richard	M	Chongwe	BEO	097-962-3003
Kenthern Banda	M	Chongwe	BEO	977-377-9312
Samba S, Inamwae	F	Chongwe	Agr Sup	097-711-9770

Olivia Makina	F	Chongwe	Camp Officer	097-639-1505
Soneni Sayi	F	Chongwe	Agro Dealer	097-882-5512
Webby M. Kwalombota	M	Chongwe	Contractor Fitereli	097-938-9543
Titus Kabanso	M	Chongwe	Agro Dealer	
Warren Nansukuma	M	Monze	Contractor Tractor	
Rosta Nchimunya	F	Monze	Farmer	
Gilbert Vlahakis	M	Monze	Agro Dealer	955-850-0232
Jean Vlahakis	F	Monze	Agro Dealer	955-850-0232
Phillip Kaocha	M	Monze	Agro Dealer	097-780-0632
Bristol Twaambo	M	Monze	Agro Dealer	096-515-5651
Nakwala Mutaneko	F	Monze	Camp Officer	
		Kalomo	SAO - District	
Request Mulwani	M	Kalomo	Contractor - tractor	097-793-4266
Albert Muyimbwa	M	Kalomo	Farmer	097-774-3894
Benjamin Mwanza	M	Kalomo	Agro Dealer	097-782-2198
Prudence Sefa	F	Kalomo	Agro Dealer	097-655-3233
Andrew Mwambazi	M	Kalomo	Agro Dealer	097-779-3643
Perrot Mboози	M	Kalomo	Agro Dealer	097-762-4217
Samuel Siyunyi	M	Sinazongwe	Methodologis	097-575-1070
Jackson Phiri	M	Sinazongwe	Farm Power	097-304-7491
Joseph Mbozi	M	Sinazongwe	Marketing	097-753-4146
Judith Chipaila	F	Sinazongwe	Agro Dealer	097-721-8270
Potious Lungu	M	Chipata	Agro Dealer	097-735-8244
Mary S. Phiri	F	Chipata	Agro Dealer	097-807-3292
Evans Chileshe	M	Chipata	Camp Officer	097-738-2160
Godfrey Njovu	M	Chipata	Camp Officer	097-789-0818
John Phiri	M	Chipata	Camp Officer	097-485-5902
Tembo Sophia	F	Chipata	Camp Officer	097-798-7354
Elija Mkandawire	M	Chipata	Camp Officer	097-517-1350
Stella Phiri	F	Petauke	Agro Dealer	097-930-1807

Collins Nkantiko	M	Lusaka	CFU	097-779-3999
Peter Agaard	M	Lusaka	CFU	096-686-1481
Sinya	M	Lusaka	CFU	096-523-8008
Madalitso	M	Lusaka	CFU	096-523-8084
Alick Daka	M	Lusaka	Deputy Director	
Eddy Delaunay-Belleville	M	Lusaka	EU Delegation	
Hans Hesse	M	Lusaka	MTZL	096-757-3001
Cynthia M. Belemu	F	Lusaka	ZNFU	
Stephen Muliokela	M	Lusaka	GART	
Jim Belemu	M	Lusaka	FAO Project Team	
Bazak Z. Lungu	M	Lusaka	EU Delegation	021-125-5583
Kirsi Pekuri	F	Lusaka	EU Delegation	021-125-5583
James Breen	M	Lusaka	FAO Consultant	097-538-9697
Christian Thierfelder	M	Monze	CIMMYT	

Annex 4

Reference Documents

To be finalised and attached to the Final Evaluation Report.

Annex 5

Stakeholder Feedback

Notes on Evaluation Aide-Memoire on FISRI Projects

By James Breen

I have read the Aide Memoire and have the following comments to make:

1. The 'Efficiency' of the project was deemed 'less than satisfactory', largely because of weak M&E. I am not sure if the Evaluation Team read the Post-Harvest Survey of Conservation Agriculture Projects in Zambia: An Assessment of Farmer Practices and Production in the 2010/11 Agricultural Season. A total of 681 farmers were interviewed for this report, in 17 districts. Maize yields under CA in basins and rip-lines were 3.2t/ha and 2.9t/ha, respectively, against 2.3 t/ha under conventional tillage. This is a yield increase of 39 percent and 26 percent, respectively. Farmers using basin CA obtained 19x50 kg bags or 900kg/ha more than those practicing conventional tillage. The labour involved in basin CA resulted in small plots being prepared, but this is now being addressed directly by the project's DAP and tractor mechanization schemes.

Overall, there is need for an experienced, full-time M&E person either in MAL or FAO to oversee this aspect of the project. His/her duties would include the training of CEOs in collection of such data as would clearly indicate in terms of crop yield, gender sensitivity and environmental conservation, the respective productivity over time of CA and conventional agriculture.

2. The Evaluation focus was on 'identifying areas for improvement' and 'lessons learned'. The positive achievements of the project, especially in bringing together the farmers, agro-dealers and MAL under the E-Voucher Scheme and the introduction of mechanization, were downplayed.
3. The project was criticised for not getting CA 'institutionalized' into policy, research and education. I think that this is beyond the scope of the project. In Southern Africa, research and education have not taken CA seriously, with a few exceptions, such as Zimbabwe, where CA is on university and agricultural college curricula.
4. Block extension officers were left out of the project, if they were not directly involved in manning a camp. Some BOEs got motorcycles and so benefited from the project. They also benefited from funds sent to the district and from training.
5. The 'Non-Evolution' of the E-Voucher system was mentioned, noting it was not linked to inflation and to changing farmer needs. The K500 000 voucher could be and was spent on a wide variety of inputs. Its flexibility was an asset and Lead Farmers' preferences changed in years 2 and 3.
6. On the scarcity of mechanization services, these are a fact of life in all countries. Farmers want work done NOW, but weather conditions and availability of machinery on the designated day do not always fit with farmers' plans. The project's 10 tractors and 234 DAP planters, of which 180 were for contracting service provision, greatly expanded the land preparation, planting and spraying services available to farmers. This service greatly reduced the work-load of women, who normally bear the brunt of such tasks as weeding. The Evaluation did not comment on the huge pent-up and effective demand for private and unsubsidized agricultural contracting services that the project uncovered.
7. Gender issues and how the project dealt with them were criticised. The selection of lead farmers was done at village/camp level and the project could not dictate how many women should be chosen. It would have been socially unacceptable and probably counter-productive to impose a 'quota' of women Lead Farmers. Extension staff could have gently lobbied for more women perhaps, especially the large number of female Camp Extension Officers.
8. The suggestion that fertilizer and maize should have been left out would have gone against the project's objective to 'contribute to greater food security due to increased food production and more sustainable use of environmental resources'. Maize is unquestionably the staple food of Zambia and hence needed to be included. CFU does leave out maize and fertilizer from its incentives, but they are different from those of this project.
9. The suggestion of an End Line Survey at the end of FISRI III is a good one and this is already being planned by project management.
10. It is also agreed that there is need for more effective evidence and documentation of the results of CA.
11. Some participating farmers are disgruntled at not getting E-Vouchers. Originally the project planned to give them incentives, but this was dropped at the insistence of GRZ which saw that such large numbers of farmers could not be given incentives after the project ended. Instead, the project was extended from 12 districts to 28 districts and latterly to 30 districts, benefiting many more lead farmers and expanding CA knowledge much more widely in Zambia.

On market orientation and commercialization, the project has worked closely with ZNFU. Farmers can obtain price quotations for crops and livestock through a ZNFU text-line.

12. The question of credit availability is a major problem in Zambia and it is outside the scope of the project. By building up the agricultural input supply business through E-vouchers, the project has laid the groundwork for agro-dealers to provide harvest credit in the same way it is done in the developed world. Agro-dealers, given the right policy incentives, can become buyers of agricultural products, as they do in Europe and the USA.
 13. The non-integration of livestock into CA was mentioned. (A separation of livestock and agriculture Ministries came into force during the project period).
 14. The way smallholder livestock are managed in Zambia, with no winter feed being provided and dependence during winter on the crop residues of other farmers is clearly unsustainable. Free ranging livestock are inimical to CA. Stock are put in a kraal at night, the very time when in nature they do most of their grazing, cuts productivity to a large degree and too often kraal manure is wasted. The absence of effective fencing leaves stock open to rustling. Under such conditions, it is difficult to integrate livestock into CA in such a short time frame as the project has. However, the CASU project can and should do more to integrate livestock with CA, in collaboration with MAL and traditional authorities. It will not be easy, as too many people benefit from the *status quo*.
 15. There is little danger of 'over-reliance' on herbicides, or fertilizers. Herbicides, used correctly and in the right time and conditions, are an essential part of CA. Continued and repeated training is needed in the proper and safe use of herbicides. The way forward is to make maximum use of well-trained private agricultural contractors using DAP and tractor mounted CA equipment including effective use of the most modern and safe herbicides.

Fertilizer use in Zambia is very low and as a result, yields are low. More use of soil tests and increased use of agricultural lime are essential for the future. CA presents the means of using fertilizers more efficiently.
 16. The need for more, and repeated, training of agricultural contractors, extension staff and all farmers in improved implementation of CA is agreed.
 17. A Field Training Manual on CA would be very useful and such a manual exists in Zimbabwe, prepared by the CA Task Force. It would not need much adjustment for use in Zambia. CIMMYT has produced six Extension Briefs on CA and these should be re-printed and distributed, in English and the major languages of Zambia. Overall, much more CA extension material in local languages is needed, but a sufficient budget is needed for this.
-

From: Belemu, Jim (FAOZM)

Sent: 04 June 2012 16:50

To: Bultemeier, Bernd (OEDD); Were, Jacqueline (TCEO); Kienzle, Josef (AGS); Friedrich, Theodor (AGPM); MulilaMitti, Joyce (FAOSFS)

Cc: Jaff, Sarah (OEDD); OED-Registry; Spijkers, Ad (FAOZM); 'James Breen'

Subject: RE: GCP/ZAM/071/EC FISRI Evaluation Mission - Comments from Jim Belemu

Dear Bernd,

I wish to point out that most comments have already been dealt with by my colleagues James Breen and Joyce Mulila-Miti. However, I just wish to make a comment on the M&E and see if my addition will add a little bit of value.

My first comment is that this project was premised on a request from the Government wishing an implementation model which would be strong in the Government structures. We came up with the structure where FAO was to provide technical assistance and operational capacity to the Project while the Ministry of Agriculture, managed the National Policy Coordination and the Technical team (both in ministry of Agriculture). This is a formalized structure (and operational) and NOT adhoc as it may have been understood by the evaluation.

My second comment: On the contrary to the assertion by the evaluation that the M& E was almost non-existent , I wish to comment by providing you how M & E framework has been used to generate very important trends from FISRI data for use now and any future programs on CA. It is NOT possible to achieve the way this project achieved without M& E framework. The M&E framework is built out of the M&E CA tool kit developed by FAO Southern Africa, with a lot of input from Zambia (CFU, GART, MAL, ZARI) in 2008. This was adapted to the Project for evidence based monitoring. The data templates have been used with slight modification after the recommendations from the Result Oriented Mission in 2010.

The important M&E data sources include baseline surveys, Post planting surveys, Post-harvest surveys, Case studies on issues , Evaluation Mission by the ROM, reports and internal data collection requirements from the camps and districts. The M& E information was used to make significant changes on the project implementation and so appropriately because positive results have been such as: 1. The change to increase trainings and extension on use of herbicides 2. The use of agricultural machinery – mechanization.

The only weakness we observe and it is known to us managing the project is the data analysis at the districts. As far as the Project is concerned the relevant M&E framework is very dependable and robust enough to give the required results on trends of how the Project is performing.

Please see some of the excerpts from our situation analysis based on mostly 2 seasons and some information from the 201/2012 season.

It is my hope that this information will add value, as I recognize that this evaluation also has valuable points we have taken into account.

Thank you once again to the evaluation team for their work.

Best regards,

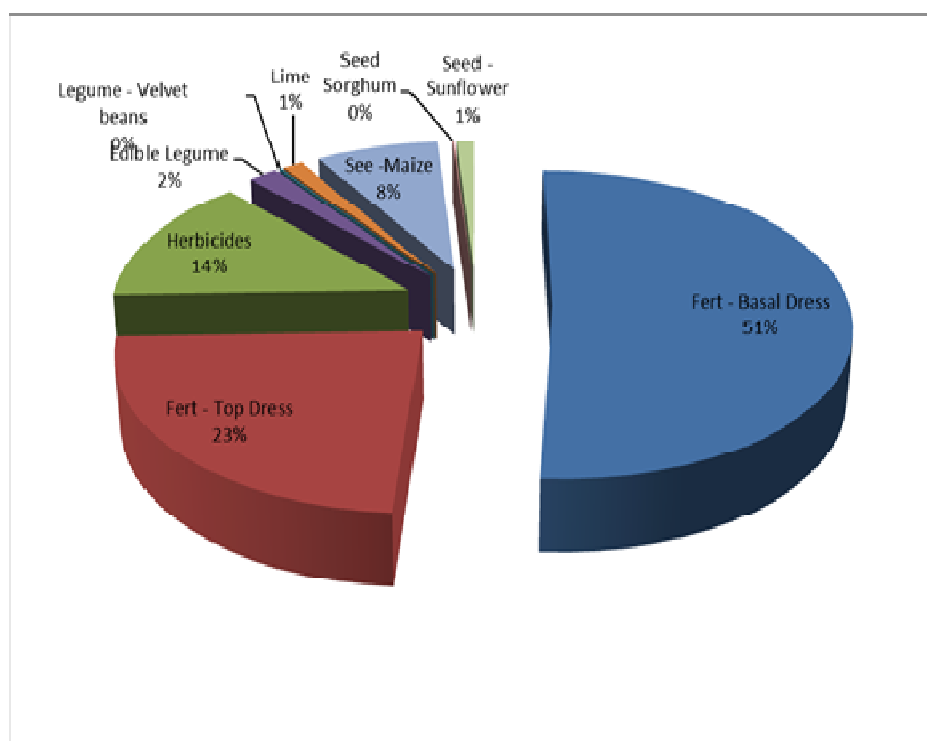
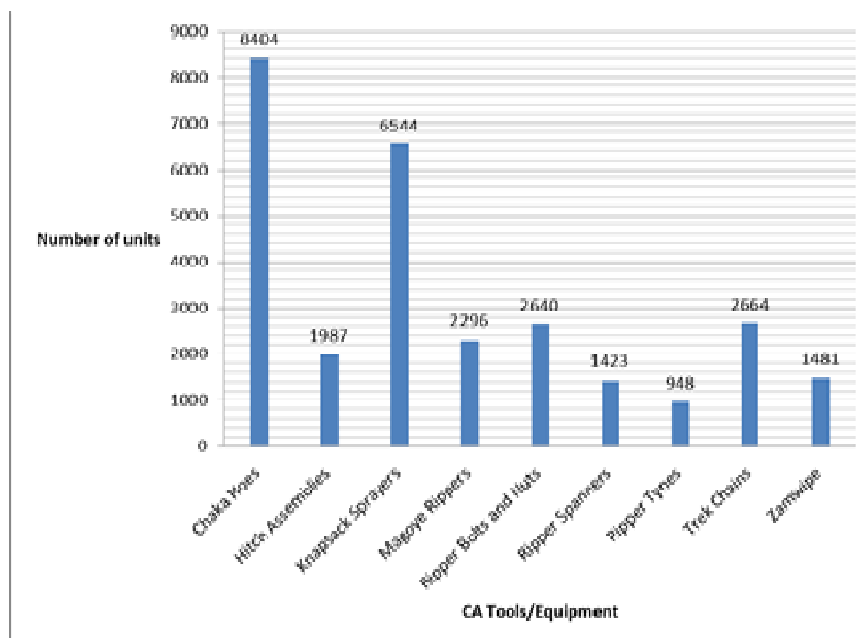
Jim

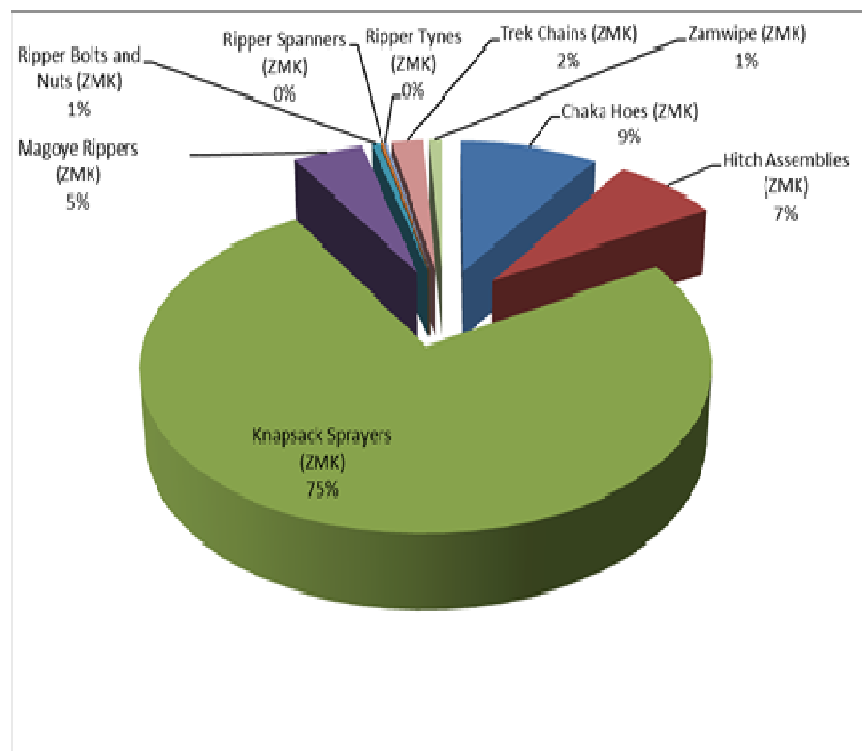
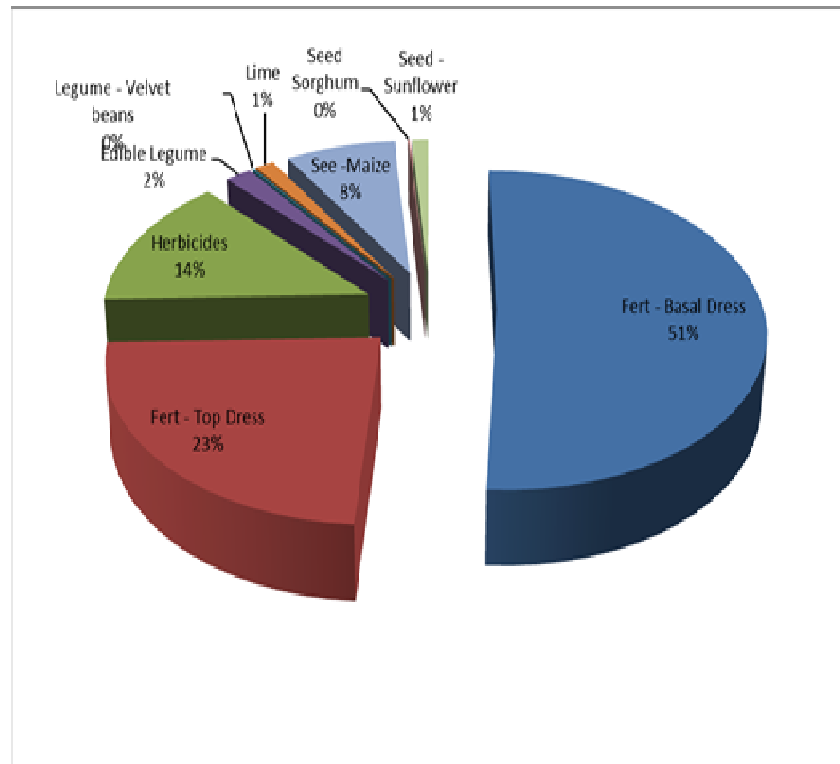
Comments from Jim Belemu, Emergency Coordinator, DRRMU FAO Zambia
4th June 2012

The E-voucher data being captured under the M& E

Point G: Because the e-voucher did not change over time, farmers confronted the agro-dealer with request to buy items not on the e-voucher or to buy only seed and fertilizers - in line with FISP. Regarding the Agro-dealers, the information they have will be better organized by an overall structure issued from the project management.

My response: The e-voucher provided a choice for the farmer and this has been monitored to analyse the farmer preferences. As you can see from the information below there was significant choices farmers made during their redeeming of the vouchers. This data shows clearly that the purchase of herbicides and the sprayers sky rocketed. This result also is correlating with the findings on the ground that use of herbicides has tremendously increased.





Comments on the M& E by Jim Belemu, Emergency Coordinator, FAO Zambia 4th June 2012

Point G: In terms of CA 'best-practice', the need for collection of data from on-going activities cannot be over emphasized, as this will provide evidence-based learning and allow for adaptation of CA over the long term. The absence of standard frameworks for data collection across project sites resulted in variations in the quality and quantity of data collected and consequently the reliability of the data being used.

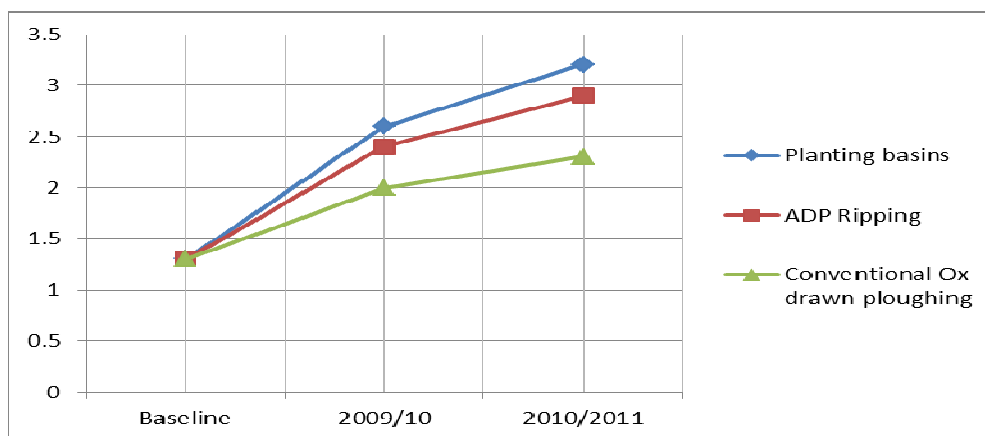
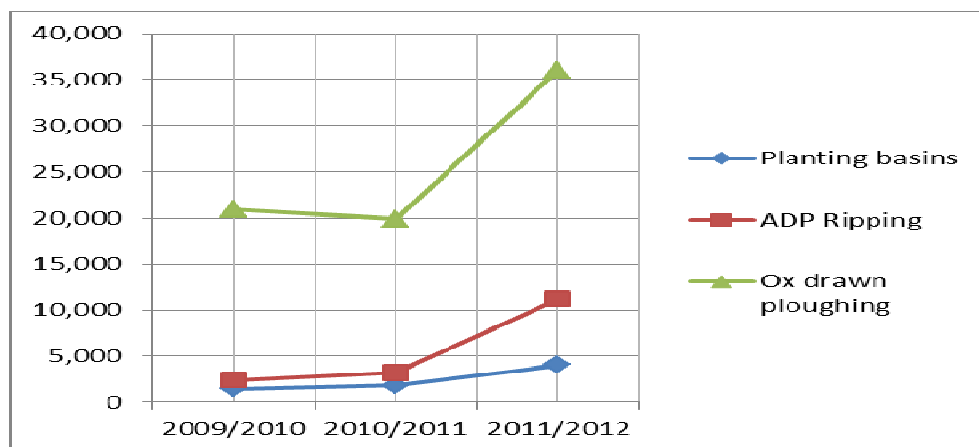
See some of our trends from the M& E framework.

The Adoption was looked at in terms of the CA Technologies

- Minimum Tillage practices
- Soil Improvement practices
- Weed control Methods
- Planting Methods
- Soil Protection Practices

Kindly see the below table derived from the templates, post planting and post-harvest reports.

CA Tillage practice	% Farmers Practicing		
	BASELINE (December 2009)	2009/2010	2010/2011
Hand hoe Planting basin	16.2%	60%	53%
ADP Ripping	6.6%	51%	31%
Conventional Ox drawn	78.6%	76.1%	57%



The above trends are showing the increase in CA practices from baseline. You will note that ox-drawn conventional farming is still the highest practice but the data shows tremendous increase in basin and ox- drawn ripping.

Cropping patterns: The project has evidence that there was a change on the cropping patterns from available data. You will observe at baseline maize constituted 66% and reduced to 31% in 2010 season and 24% in 2011 season.

1. Cropping patterns suggest crop diversification
2. Increased productivity in the staple crop maize
3. Increase in the number of months beneficiaries acknowledge food sufficiency
4. Increase in the number of households acknowledging surplus for sale
5. Improved extension services to the farmers

Food Sufficiency

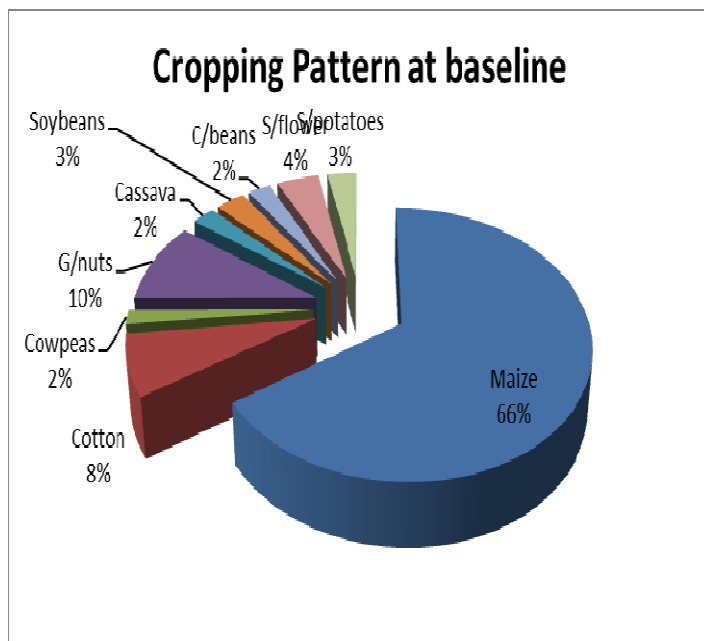
- Increase in the number of months beneficiaries acknowledge food sufficiency has increased from 6 months on average at baseline to 9 Months in 2010 and 10 months in 2011
- Precipitate maize retention at household level increased from 309 Kg/household in 2010 to 710Kg/household in 2011

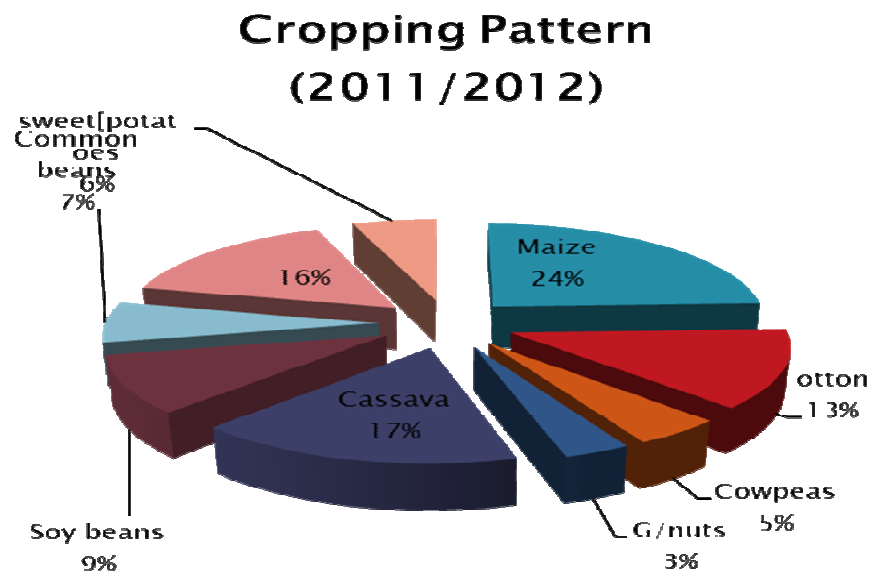
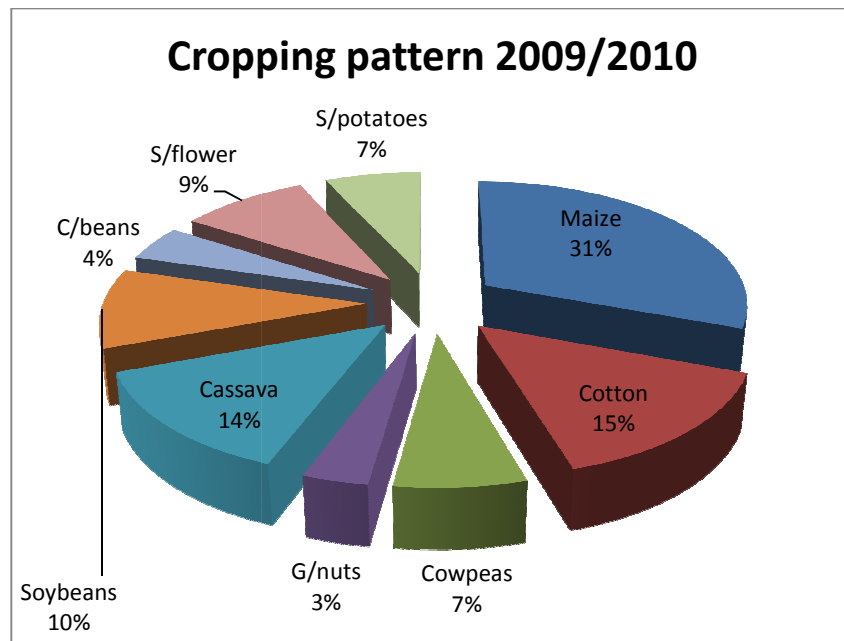
Increase in production

- Households acknowledging sale of surplus has increased from 47 percent at baseline to 58 percent in 2010 and 79 percent in 2011
- Here is an increase in the number of household s that participated in marketing their maize from 58 percent in the 2009/10 season to 78 percent in the 2010/11 season.
- The average number of maize bags marketed increased from 72 X 50kg bags in 2009/10 season to 128 X 50kg bags in the 2010/11 season among beneficiaries

Yields from our data analysis

- Average maize yield increase from 1.3 TonsHa⁻¹ at baseline to 2.6 TonsHa⁻¹ in 2009/10 and 3.2 TonsHa⁻¹ in 2010/2011
- In 2009/10 season a farmer who grew maize under the planting basins had an incremental yield of 18 x 50 Kg bags of maize on every 1 hectare of land cultivated
- In 2010/11 season a farmer who grew maize under the planting basins had an incremental yield of 18 x 50 Kg bags of maize on every 1 hectare of land cultivated
- Maize yield under ADP Ripping was also statistically different from that under the Ox drawn ploughing in 2010/2011





Point G Unfortunately the model did not provide for ‘early-adopters’ to advance beyond the level they were found; that is a lead-farmer was always a lead-farmer, and yet some of these farmers could graduate to more responsible status of ‘mentors’. Equally the participating-farmers were always participating-farmers without any opportunity for them to graduate to become lead-farmers.

My response: It should be noted that the Lead farmer is a “teacher” if you like and is being paid for doing this job. It is therefore not foreseen that a lead farmer can graduate because it is not an educational response for the lead farmer but him to teach others. On the contrary participating farmers can graduate to Lead farmers depending on their good performance. To this effect in 2011 an expansion covering well deserving participating farmers was undertaken up to 3,013 participating farmers selected.

Farmer fall out – participating farmers – at 21 – 30 % in the FISRI I & II.

Reasons:

The participating fall out has been monitored since the Government formally proposed the addendum to the project which led to subtraction of participating farmers from being incentivised. This decision came from an early observation that the FISRI was going to be considered as another “FISP” if inputs were provided to the wider group of farmers “participating farmers”. It was also common knowledge that those who hoped for inputs would fall, hence continued to capture the fallout. Currently this fallout is stabilising at 30 % which leaves 70% non-input beneficiaries practising CA. This is a good result from our analysis and we have continued with sensitization. The departure from this incentive to participating farmers on the contrary has continued to form a good foundation for future CA projects where inputs will not be a conditionality. We see it as a strength rather than a weakness.

- Fall out of Participating farmers due to lack of incentives
- Limiting the practice of CA to demonstration plot size is now construed as a norm by some farmers
- Disharmony in approaches, incentives and message among CA promoters
- Stakeholders are very optimistic about the immediate benefits of CA. But CA is a gradual process.
- Farmer attitudes

Comments on draft Aide Memoire of FISRI Project Evaluation (GCP/ZAM/071/EC)

Josef Kienzle, Agricultural Engineer, Rural Infrastructure and Agro-industries Division (AGS); Project LTO

Overview

The Evaluation team should note that FISRI projects derived from the Food Crisis aftermath. The projects are part of the EU Food Facility (EUFF). These project portfolios had the objective to rapidly respond the food crisis. Focus was on input supply. The EUFF was set from the beginning to be managed and implemented by the TCE Division of FAO. EU often reduced budget for technical support especially from FAO Technical Divisions in HQ. Nevertheless, FAO rules foresee a Project LTU and LTO that is to oversee the project. In this case it was AGS, AGP together with FAO SFS. Formally, AGS is registered in the FPIMS as LTU.

For the specific Zambia case one basic idea was to not just build a FISRI that focuses on input supply. But to build on on-going emergency projects that were also tackling the persistent drought or occasional floods and the depleted soils and subsequently very low yields. The conservation farming approach was trialled in Zambia since the late 1990ties. FAO Emergency programmes (before FISRI) were part of project implementers and donors to promote and scale conservation farming. Hence, it was a good and logical approach to give the FISRI project a concept that was also strongly backed up by the technical Divisions. The concept was: sustainable production intensification and more specifically CA.

For FISRI III: The specific discussion on up-scaling CA to a mechanized level was core. Many colleagues including managers in FAO HQ perceived the Chaka hoe based conservation farming / CA, as promoted in Zambia more as a tool for water harvesting for smallholder and subsistence farmers and not as a viable farming concept for up-scaling and commercialization of agriculture. Hence the move to introduce option for mechanized CA with FISRI III.

Against this background, it should be recognized that successful private-public or private-private sector business models for mechanization services are rare. To top-up such models with an effort to make mechanization more environmentally sustainable and embed it in the CA concept is even rarer and hence very innovative. The introduction of the E-voucher system for inputs, tools, equipment and services is equally innovative and rare as very new.

It is at this stage where there is a major conflict within the FISRI III project concept. Innovative ideas require technical support, time, and even to some extent the tolerance for 'failure'. It requires probably an open mind to piloting. It should probably be not implemented in the context of a short term project that operates in the context of emergency response. This is an issue of concern that has to be discussed further within the FAO country team and among technical divisions as well as donors.

Nevertheless, the approach of the Project to introduce mechanized CA systems together with E-vouchers marks cornerstone that is very valuable. Technical divisions should back this approach up through accompanying studies and support to come up with workable business models for improved projects to up-scale CA, mechanization and private sector led business models.

Specific comments on Aide Memoire

Evaluation Synthesis: Agreed to the Evaluation team synthesis.

SWOT Analysis FISRI:

- Opportunities: Fully agreed that PPPs are prompted through the use of agro-dealers and agri-contractors.
- Threats: Agree that CA may be perceived as 'poor man's agriculture' and that this may be contradictory to the intend to promote CA. Hence, the appropriate emphasis on mechanized inputs should be even more in focus; however, FISRI project may not have been set-up to put more emphasize on CA mechanization; it has no national agricultural engineer/CA machinery specialist; no CA business model specialist; training programme was weak and difficult to oversee or steer from HQ through consultants.

SWOT Analysis: for CASU

- Opportunities: E-vouchers should be applied more widely including also for the complete services sector for mechanization (ripping, planting, spraying), and for implements and CA equipment.

Conclusion

- Fully agreed that FISRI is a very strategic high-profile project. It is highly innovative by promoting private sector and introduction of innovative approaches to accessing inputs and agri-services through the E-voucher scheme and **initial** mechanization up-scaling approaches.
- Follow-up projects (CASU?) should be designed to develop these approaches further and should have the right mix of Project staff and technical backstopping.
- Agreed to continually re-inforce the CA principles while focus on up-scaling, especially for machinery services business models: mechanization yes – but in line with CA principles (no discing/minimal soil disturbance)

- E-vouchers allow for a decentralizing input and services supply and allow for involving the existing private sector dealer network. This should be the overall intention of FISRI and CASU: FAO to not compete with existing dealer and agri-services networks but to support and strengthen them instead.
- Fully agreed to statement (14) “mechanization is key to up-scaling, but there are challenges in terms of availability of equipment, knowledge of its use and delays in accessing mechanized services as early as possible” All points need to be taken in to account for future CA projects such as CASU. However, care needs to be taken that the Project/FAO will not interfere directly into ‘dealing’ with these issues but will facilitate an ‘enabling environment’ for mechanization development support services to happen through private sector. Important jigsaw puzzle for it should be for example:
 - Conducive government policy that allows private sector machinery suppliers to do business
 - Smart subsidies for CA related inputs and equipment
 - Project to Enhance E-voucher scheme for CA equipment
 - Project to develop options for different mechanization business models for different farm power levels or farmer levels (hand tool based, animal traction based, tractor based)
 - Full support to the establishment of hire service and repair businesses
 - Continued training in operation and maintenance of CA equipment; training could be outsourced to machinery supplier as part of the business deal
- Sentence “as long as barrier to entry is the cost of the tractors, operators will enter the business until profits become zero” – sentence is not clear please explain?
- Fully agree that FISRI up-scaling (CASU) need to expand from predominantly production oriented to value addition, post-harvest/processing and market linkages to enhance income.

Key lessons learnt

- Not clear what is meant with ‘specialized nodes’. If it is specialized services providers for ripping and herbicide application; I would like to favour that here different options should be tried out. Specialized service providers may not provide the service at the right time and at the right quality level but may conduct the service in a rush and with low quality. The best compromise may be to support lead farmers to become a specialized service provider for the limited surroundings of this/her farm. Service providers should be known to farmers. It would increase the social pressure to undertake a good and timely service.
- Timely operations (ripping, planting spraying) remain the key challenge and at the same time key objective of a mechanized CA approach.
- Need for up-scaling E-vouchers and mechanization to a ‘commercial’ CA is supported. However, up-scaling approaches will have to be accompanied by studies and reviews and by accepting that to a certain extend a ‘trial and error’ approach may have to be used in order to identify the best possible business model that would support CA up-scaling.
- Part of the commercialization process should be the strengthening of the input and equipment supply chain as well as a greater emphasis on value addition, processing activities. This should be done through creating an enabling environment and conducive incentives and Government policies.
- With regard to Governance, Project management, Reporting and M&E, I fully agree that Project M&E needs to be comprehensively addressed and strengthened in CASU and/or other follow-up projects.
- All stakeholders concerned with CA in Zambia should be working better together – and perceive each other as competitors against donors
- At the same time the EU as major donor should be made more aware that it should make full use of FAO as a knowledge organization to implement such a complex Project and not just draw on the specialized emergency response DRRM Unit of the FAO Country Office.
- FAO Zambia should form a more integrated National team that would also better link up internally between the Operational wing and the Technical/knowledge wing of the FAO. This is in particular important as the up-scaling of CA along with the introduction of highly innovative concepts such as E-vouchers and highly controversial and debated concepts such as mechanization will require a very good FAO country team that is backed up by the technical divisions concerned in HQ and in SFE.