THE FAST TRACK INITIATIVE

An Assessment of a Public-Private Partnership Process on developing the fertilizer value chain in Tanzania

By Paul Vedeld and Zabron Kengera

Noragric Report No. 37
Department of International Environment and Development Studies
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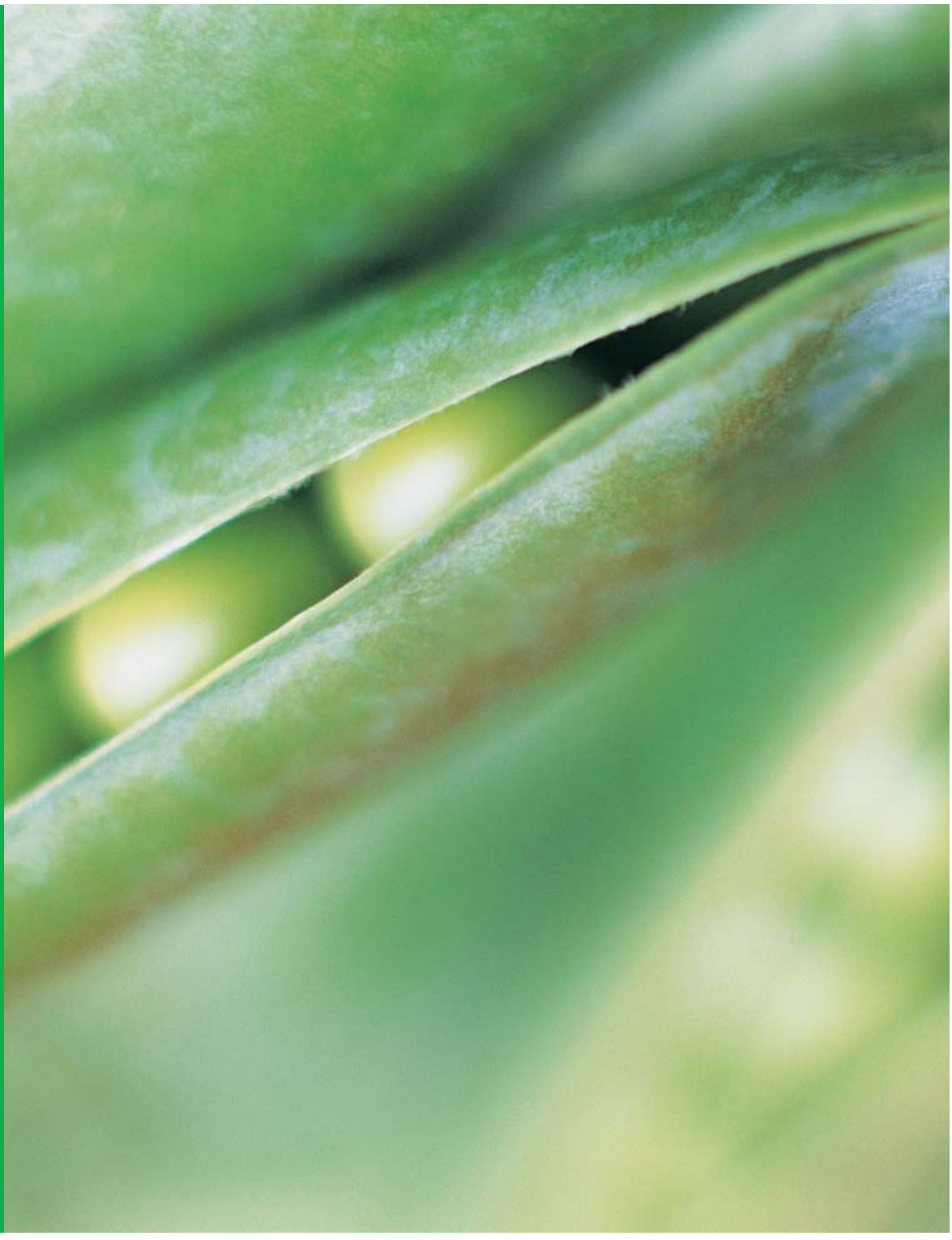

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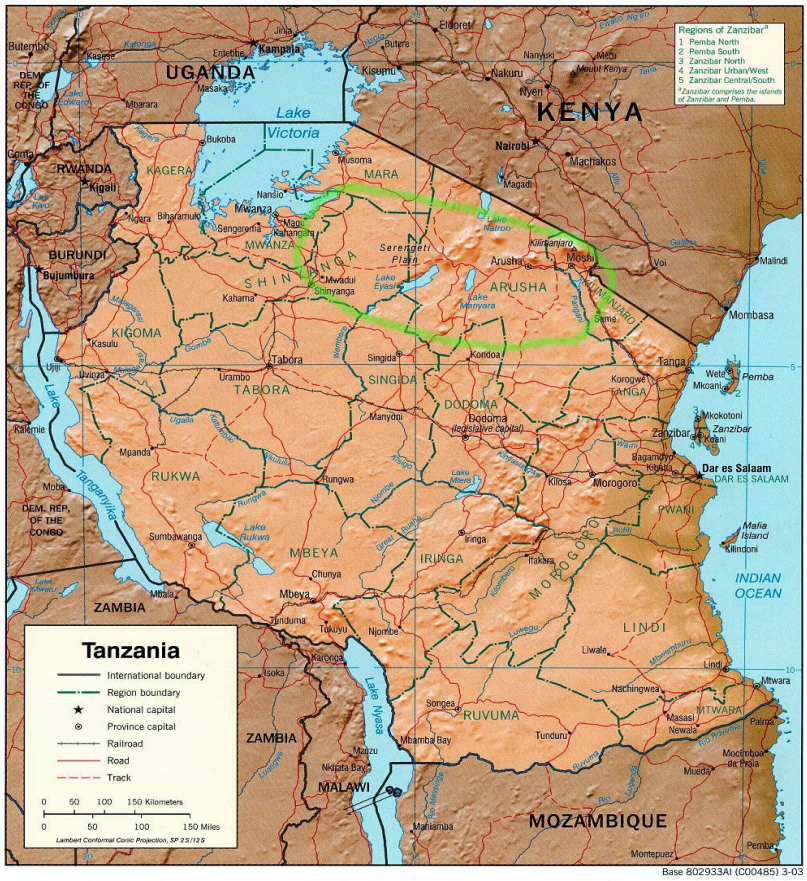

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ACRONYMS

AAT	Agrochemical Associations of Tanzania
ABDF	Agri-input Business Development Fund
AIIF	Agricultural Input Import Fund
AIMs	Agricultural Input markets
AMSDP	The Agricultural Marketing Systems Development Program
ASDP	Agricultural Sector Development Program
ASDS	Agricultural Sector Development Strategy
CAD	Community Agricultural Development
CBIS	Capacity Building and Institutional Strengthening
CIS	Community Investment Subprojects
COMESA	Common Market for Eastern and Southern Africa
CRDB	Cooperative and Rural Development Bank
DAI	Development Alternatives, Incorporated
DALDOS	District Agricultural and Livestock officer
DFID	Department for International Development
EA	East Africa
EAC	East African Community
ECOWAS	Economic Community of West African States
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FSF	Foundation Seed Farm
GDP	Gross domestic product
GOT	Government of Tanzania
HYV	High-yielding variety
IFAD	International Fund for Agricultural Development
IFDC	An International Center for Soil Fertility and Agricultural Development
IITA	International Institute for Tropical Agriculture
MAFS	Ministry of Agriculture and Food Security
MTL	Masdar Technology Limited
MUCOBA	Mufindi Community Bank
NGOs	Non-governmental organizations
NMB	National Micro Finance Bank
NORAD	Norwegian Agency for Development Support
PADEP	Participatory Agricultural Development and Empowerment Program
PPP	Public Private Partnerships
PRSP	Poverty Reduction Strategy Paper
RDS	Rural Development Strategy
RFSP	The Rural Finance Support Program
SACCOS	Serving and credits cooperative organizations
SADC	Southern Africa Development Community
SAP	Structural Adjustment Program
SG 2000	Sasakawa-Global 2000
SMEs	Small and medium enterprises
SOEs	State-owned enterprises
SSCR	Shifting the supply curve to the right
TADA	Tanzania Agri-Input Dealers Association
TAZARA	Tanzania Zambia Railway Authority
TBS	Tanzania Bureau of Standards
TDV	Tanzania Development Vision
TFA	Tanganyika Farmers Association
TFA	Tanzania Farmers Association
TFC	Tanzania Fertilizer Company
TOSCA	Tanzania Official Seed Certification Agency
TPRI	Tropical Pesticides Research Institute
TRA	Tanzania Revenue Authority
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WARDA	West African Rice Development Association

EXECUTIVE SUMMARY

1. Terms of reference

NORAD has requested technical support from Noragric to the Public/Private Partnership (PPP) Platform in Tanzania on a "Fast Track Initiative" for the development of the fertilizer supply chain in Tanzania. The "team" consisted of Paul Vedeld, Professor, Noragric, University of Life Sciences, Ås, Norway and the local consultant, Zabron Kengera.

The TOR states; the overall purpose of the technical support is to facilitate the preparation of a PPP in the agricultural sector in light of the fertilizer initiative.

1. Assess the strengths and weaknesses of the value chain. Visit no more than two Districts to review the strength and weaknesses in the value chain such as the financial sector from the formal banking system and down, the standard of infrastructure and communication, capacity of the agro-input side related to financial strength, storage facilities, knowledge of the products and understanding of the market (linkages to dealers, importers, financial service providers, the output marketing system and price, the institutional capacity of farmer's organisations and the capability/capacity of the public sector
2. Make an assessment of how the agricultural input/output market functions in the selected District(s) (separate output)
3. Develop a proposal for a study in selected Districts for planning a PPP at local level
4. Propose a cost effective monitoring system for the implementation of the PPP "Fast Track Initiative"
5. Comments are made to issues relating to Norad's polices as a donor and to the need for some organisational anchoring of support activities of these observed activities

2. Strengths and weaknesses of the value chain

2.1 Financial Sector

The financial sector has formal institutions in place both at central regional and local levels. The sector thus forms a crucial possibility, bottleneck- and potential area for improvement at all levels of the value chain. In this report it is suggested;

- Make port organizational and financial management systems more efficient, modern and transparent and reduce costs of import including time use.

- Invite new importers on board to increase competition, enhance competitive market conditions and avoid price collaboration and misuse of the present more or less monopolistic situation. A long-term establishment of Yara is an interesting touchstone in this context.
- Secure transparent financial and practical distribution of fertilizers at regional and district level between importers and stockists through imposing control systems at regional level and by cross checking this through village, ward and district levels quality assured registers.
- Involve Region and District level Agricultural Advisors more active in a concrete registration and control system for financial and practical operations.
- Develop a clearer microfinance strategy at District level. Make decisions here! Recondition the AGITF mechanism to improve efficiency through selecting competent partners; continue with Community Banks or use NMB (and also CRDB?) in order to address the lack of access to credit for stockists and farmers. This can both support supplied fertilizer amount and its regularity and improve farmers' ability to purchase fertilizers.
- Investigate if and to what extent the poorest segments of farmers at all are involved in the fertilizer value chain, and how the present alienation could be mitigated.
- Rather than using SCCULT, develop district level SACCOs from below; directly elected and constituted from local SACCOs, in order to address farmers' lack of access to credit.

- Plan and develop a comprehensive warehouse receipt system using SACCOs, outgrowers' organizations etc. and the old Ushirika warehouse constructions as ward and or division level depots. Having depots/warehouses at ward level could secure delivery on time throughout the year, secure availability and that farmers can buy at their own preferences and when they have the money (revealed- not hypothetical preferences). It would also address the fact that different districts and regions have different cropping patterns and seasons, thus different needs for fertilizers. And risks must be carefully assessed.
- Increase physical fertilizer availability at regional, district and ward levels.

Many of these suggestions are not possible to launch under a FTI this year, but should be considered in a more coherent and comprehensive next year(s). Main issues this year could be to increase control and monitoring of the system from region wholesalers, stockists and down to farmers' levels, to involve the DAO more in control and monitoring, and some short-term training to SACCOs and other stockists.

2.2 Public policy and proficiency of public institutions

Even in a PPP, the state and the government in particular holds a pivotal role as both an actor and as an arbiter overseeing markets and creating rules of the game. Some suggestions;

- One should carry out a careful evaluation of the whole fertilizer subsidy programme; from policies, organisational structure, flows of resources, rights, duties and responsibilities, and not least the implementation process and competence of the system in this respect.
- Scrutinize the present cost estimation procedures at portside, central and regional levels, to avoid paying more than necessary to central actors, to regional and district level middle-men.
- The fertilizer subsidy is allocated/issued at a point of time (mid September) where the bulk of fertilizer should have been out in the districts already, creating bottlenecks and tight time schedules. If possible to change, issue fertilizer subsidy earlier in the year (at the end of previous fiscal year) to secure timely delivery in relation to needs and when farmers typically are able and willing to buy.
- Promote a more flexible collection system for district stockist operators to collect fertilizers wherever (independent of region) is more convenient for them.
-Improve the system for fertilizer demand estimations from the village level and up, and preferably increase market mechanisms involvement in this. Farmers should preferably access fertilizer directly at a physical market place; but one needs at least a more secure system than today, where many farmers and villages are not asked or approached at all about their demand. This is crucial.
- Establish a carefully designed, participatory, monitoring and control system from below; where the District, division and ward level agricultural officers keep records that are assessed against records at stockist and regional levels and where also trusted people and ward and village level participate. One could consider an independent assessment by means of farm household level annual surveys on fertilizer demand, supply, prices and actual use. Increased information and openness down to farm level could also improve governance.
- Develop templates and promote the use of formal contracts with firmer contracting and sanction systems and a stricter regime for contract signing, control, monitoring and not least sanctioning (fines, penalties, withdrawal of permits and agreements) when contracts are breached at import, regional and stockist levels to secure more expedient and sufficient delivery of various types and quantities.
- Introduce a strategy for increased openness and transparency about the fertilizer subsidy to reduce grievances, distrust and increase fertilizer use by targeted groups
- Good governance; more monitoring and control throughout "hotspots" in the fertilizer chain
- Controlling cost estimates at central level

- Controlling the transition of fertilizer at regional level from importers/warehouses to stockists; time, amounts, types, prices and other conditions
- Controlling the transition of fertilizer from stockists to farmers'; on time, place, amounts, types, prices and other conditions
- A crosschecking, participatory system of control launched from below; from farmers, village, wards and up to district and region, involving also agricultural officers
- Increased international border control to prevent "leakages " of subsidized fertilizers.

Main issues to be considered this year could be to increase the number of pilot warehouse receipt systems where existing physical structures and reliable SACCOS or other organisations are present. More emphasis on awareness raising and information to the public is also an issue to be addressed in a FTI. One could also impose stricter control systems, both at regional and district levels and also towards international boundaries.

2.3 Infrastructure and communication

There are substantial challenges in this area in Tanzania, many of which are beyond any reasonable scope for this PPP and this study. But some general suggestions could be;

- Improve railway links, especially in the Port, but also promote use of more railways in relevant and selected districts
- The Ushirika warehouses could form a potential for a future development of a SACCO warehouse receipt model, even down to division level.
- Particular targeted measures could be considered on improving/upgrading infrastructure for particular "inaccessible divisions and wards" (local variations) and in particular where population concentration and production potentials are particularly high.

It could be possible to impose particular measures to certain inaccessible areas, to see how much it is possible to increase fertilizer use on a pilot/demonstration level this year. The same applies for upgrading or taking up the use of some of the old warehouses on a pilot basis, to see how it could work and draw experiences for next years.

2.4 Qualities of the agro-input system

- Improve market conditions through involving more and new actors, instigate more control over market operations, reduce barriers to enter, increase transparency, improve information, contracting, policing etc.
- Introduce local depots and warehouses and introduce market friendly sizes of fertilizer bags
- Test a variety of options in the agro-input system in different districts;1)As now 2) Improve present system 3) Try a warehouse receipt approach 4) Flood one district supply-wise by using one major stockist or securing enough depots and transport out to flood the market and assess the "real economic response" by farmers given a "perfect supply side"

Many of these could be launched this year. One could also improve public announcements and awareness raising about prizes, delivery systems, conditions and not least, clarify the rights farmers - and also stockists - have in the chain, in order to improve performance.

2.5 Farmer's organisations and their possible role in the value chain

-There are many local organisations that can be developed as stockists, credit facilitators and even warehouse receipt system operators given training, capacity building and credit access. Such mechanisms are already present through various public and private programmes.
- One could organize SACCOs at district level through a representative membership system that could form a possible network of stockists for the future.

- Formalize collaborations with SACCOs groups (and Outgrowers) at district level for stockist operations, micro-finance, output and even warehouse concepts; and avoid using the locally clearly controversial SCCULT.
- The outgrowers constitute a major group of fertilizer users and should be involved in the fast track initiative through training and other types of facilitation. Not all these enjoy access to credit or to subsidized fertilizers.
- The potential roles of Village Governments are several and deserve closer attention both in relation to enhancing farmers groups, to the use of warehouses now under their auspices and should also proactively be approached to avoid negative actions constraining a fast track. In general; what can they offer, legitimise, facilitate or constrain?

On a pilot basis, it is possible already the first year, to identify and develop selected SACCOs and outgrower associations to take on stockist tasks. The role of village governments should also be addressed; not only for them to facilitate processes, but also to avoid constraining actions by actors feeling excluded from processes.

2.6 Output markets
- Carefully assess output market capacity, competence and efficiency/effectiveness in handling potentially increased yields and identify measures to secure performance.
- Develop Ushirika warehouses as storage facilities for outputs to secure reasonable prices for farmers, create a collateral for farmers to achieve credit to increase fertilizer use and output production.
-Present output markets are riddled with imperfections, especially monopolistic competition features with artificially low prices. Facilitating environments where more actors enter the field is a possible strategy, although costly and difficult.

Improving efficiency in these markets has important economic development aspects, including increased potentials for fertilizer use. In a Fast Track context, suggestion 1 above could be carried out as a pilot this year, whereas the second is a more long term, but still important challenge.

3. Donor activities and coordination
Few donors operate directly in the field as most funds are routed through MoA and their District and lower level structures and in programmes such as the Agricultural Marketing Systems Development Programme (AMSDP), the Rural Finance Support Programme (RFSP) and PADEP. Several NGOs are operating in the relevant districts, and some of them are at present also involved in the Fast Track Initiative (like Dai Pesa fi).

Given time available, it is difficult to seriously assess impacts of this work, but a major feeling is that *lack of coordination* is a lesser problem than to what extent these programmes actually effectively deliver relevant and interesting micro-finance offers to the poorer sections of farmers in rural Tanzania. Most farmers complain about a severe lack of credit access- at least at what they see as affordable prices. And most farmers do not at all access credit- or fertilizers.

4. Norway's possible contribution to the FTI
Norway could faciliate financing public goods, support activities that have clear poverty, environment, gender orientations and that are in line with development policy guidelines.

1. Finance elements of training and faciliation of the actors representing smallscale, poor

farmers, such as the SACCOs.

2. Finance studies that can faciliate the FTI process, but also issues of more general development concerns such as;
- Support a fullfledged base-line study for the five districts and some control districts from which changes, effects and experiences can be compared in a formative research component.
- A more comprehensive fertilizer value chain study where one uses more insight and concepts from Porter's (1985) "Value Chain approach" and assess the chain in Tanzanoa in relation to issues on effectiveness, efficiency, comptetion conditions, institutional factors and also distributional and environmental concerns. A special focus should be on supply/demand relations in the different sections of the chain and on formal and informal power relations.
- A careful analysis of the overall fertilizer subsidy policy design, its implementation and effects so far and an assessment of possible alternatives and measures to improve its effectiveness, efficiency, distribution and environmental effects.

3. There is a conspicous lack of organizational structure at the base of this PPP and FTI, and at present it seems that the only coordinating force is a private consultancy firm. Given this situation, we do believe they are doing a good job within the frames they have, but one should consider options for a firmer and more long term programme and not least organisational structure. The present system seems un-necessary loose and uncommitted for the involved parties. The Fast Track should not be seen to end after one year, but needs a firmer organizational base. Norad could contribute to such an institution- building. This is a matter of urgency. Options;

- MoA is given a lead role, possibly with backstopping from external sources.
- A more government independent alternative, even if the government obviously hold a key position in relation to many present constraints and opportunities of the fertilizer chain and the FTI.
- A third option as discussed by the parties is to develop a private company. If that is seen, then Norad's role in the FTI could possibly be rather quickly be phased out, leaving responsibility to the relevant partners. Such a solution could leave, however, the GoT in a somewhat awkward or at least unconventional position. This situation would need some more detailed tailormaking.

4. Norad also needs to find some way to situate its part in the programme. The best option would be at the Embassy in order to keep a closer overview of this process. One could possibly see a backstopping from Norad/Norway.

5. Some additional donor concerns

In a PPP, the recipient responsibility is split between the involved actors, but we still stress the need for stronger government involvement in this initiative, as the government holds many key roles in making a Fertilizer Value Chain more efficient and also more sustainable.

We also question, from a donor perspective, the poverty allevation concern and how it is presently addressed. We fear that few of the 50% poorest farmers in Tanzania will be able to benefit from the present programme or from the subsidy at all. One could obviously argue that a PPP has less obligations in this direction, but spending public develoment funds in the programme clearly warrants the question.

Issues of good governance needs to be addressed carefully, not least to improve the efficiency of the present fertilizer subsidy.

The programme holds substantial potentials for positive environmental impacts, as increased land productivity may reduce pressures for marginal land clearing for agriculture, but this argument should be explored further.

The present support is given with the argument that this is a pilot and deomonstration activity. As such, we suggest that more emphasis is spent for the future on developing novel pilot and demonstration properties further.

5. Outline of a baseline, monitoring and evaluation programme

The report gives ideas for separate baseline, monitoring and an evaluation programmes that could be developed.

1. BACKGROUND

NORAD has requested technical support from Noragric to the Public/private Partnership (PPP) Platform in Tanzania on a "Fast Track Initiative" for the development of the fertilizer supply chain in Tanzania. The Terms of Reference for the appraisal, including a general document format, is enclosed in Appendix 1. The team included the following members:

- Paul Vedeld, Professor, Department for Environment and Development Studies Norwegian University of Life Sciences, Ås Norway
- Zabron Kengera, Field assistant/locally hired consultant, Dar Es Salaam

The main components of the TOR involve the following: "The overall purposes the technical support is to facilitate the preparation of a PPP in the agricultural sector in light of the fertilizer initiative. Norad is asked to make investments in the value chain to facilitate the PPP without distorting the market mechanisms and the consultant will explore possible investments to be made by Norad in support of the PPP initiative, hereunder:

1. Discuss the PPP with relevant stakeholders in Dar es Salaam. Appointments will be made by the local consultant in Dar, assess the strengths and weaknesses of the value chain. The consultant will, if time allows, participate in meetings between partners in Dar es Salaam.
2. The consultant will visit no more than two Districts to review the strength and weaknesses in the value chain from the perspective of increased subsidies/availability of fertilizer in Dar es Salaam, with a specific emphasis on;

a) Strengths and weaknesses of the financial sector from the formal banking system to the micro-credit providers.
b) The standard of infrastructure and communication related to the value chain.
c) Capacity of the agro-input side related to financial strength, storage facilities, knowledge of the products and understanding of the market (linkages to dealers, importers, financial service providers)
d) The function of the output marketing system and price mechanisms in selected crops in the District.
e) The institutional capacity of farmer's organisations and their possible role in the value chain.
f) The capability/capacity of the public sector to be an active partner with the private sector in the value chain, hereunder extension services. (can the District function as the lead agent in the local PPP)

3. The District review and interviews in Dar es Salaam will form the basis of an assessment of how the agricultural input/output market functions in the selected District(s) (separate output)
4. Based on the information from the field the consultant will develop a proposal (including method) for a study/data collection to be carried out in selected Districts for the planning of a PPP at the local level
5. The consultant will further propose a cost effective monitoring system for the implementation of the PPP fast track initiative."

We visited various government, public institutions, private institutions and NGOs in Dar. We also made time for a field visit to the districts of Kilombero and Mufindi during the mission that was carried out between 12.8-25.8; see itinerary in Appendix 2. The consultancy was facilitated by Ministry of Agriculture and by a very accommodating Embassy. We thank all involved parties for important inputs in the process.

This report starts with a brief background to the study, with some focus on the evolution of Tanzanian agriculture as it stands today. We further reflect to some degree on existing programmes and the present subsidy programme. We give a brief overview of the fertilizer value chain in Tanzania; actors and roles and present our field visit areas. And we reflect over issues pertaining to reflections over fertilizer subsidy programmes. In chapter 3 we report on impressions and findings of various TOR-requested issues pertaining to the FTI and we give some suggestions and highlights of areas of particular concern- also for the FTI. In chapter 4, we make some assessments of the overall thinking behind the FTI from a donor perspective. In chapter 5 we present requested draft suggestions for issues to be looked into at District level to facilitate the FTI. In chapter 6 we present a TOR requested outline of elements of an evaluation and monitoring programme for the FTI for the future.

Time has been short and tasks many. The study has been interesting, but would have benefited substantially from more time.

2. INTRODUCTORY THEMES

In the following we give a brief overview of agriculture and development in Tanzania and some information about present production patterns, fertilizer use, demand and supply issues, policies, programmes, present donor programmes and a brief descriptive overview of the fertilizer value chain in Tanzania, with actors and roles. We also present some brief impressions of a case study from two districts.

2.1. THE ROLE OF AGRICULTURE IN TANZANIA

Agriculture forms the backbone of Tanzania's economy. It is estimated that the agricultural sector contributes about 50% of GDP and about 54% to Tanzania's export incomes. The sector employs more than 80% of the total population. In the rural areas, more than 90% of the population earn their living through agriculture. During the first years of independence, agriculture received rather high national priorities. Tanzania still has well-established agricultural training institutions producing agricultural extension officers. The extension service is also still present in rural areas down to village levels and this system can be used to promote agricultural production for food and poverty reduction. Currently the sector growth rate is around 4%.

2.2. FOOD SECURITY IN TANZANIA

The major food crops are maize, cassava, sweet potato, paddy rice and beans. Although the above crops are grown almost all over the county, the most dominant producing regions are found in the southern highland including Mbeya, Ruvuma, Iringa and Rukwa. Other important regions are Mwanza, Shinyanga and Mara in the Lake Zone. During an average year, Tanzania produces enough food for its population. In the 2002/03 season for example, only Arusha, Kilimanjaro and Dar es Salaam reported food shortages. In good years, Tanzania exports maize, beans, rice and other food crops to neighbouring countries like Kenya, Zambia, Zaire and Uganda. The major cash crops in the country are coffee, tea, cotton, sisal, tobacco and cashew nuts. All these crops require substantive amounts of fertilizers to maximize production.

Despite significant efforts made during the first decade of independence, agriculture did not grow or perform well. The growth of the sector was constrained for several reasons: The attempt by the state to monopolize crop marketing, combined with low output prices and increased costs of production. There were also low investment levels and a resulting poor infrastructure. Severe droughts in 1970s and 1980s combined with price fluctuations in the world market and oil crisis also played a vital role to the downfall of the agricultural sector.

Following the poor performance of the agricultural sector from 1970s, the government introduced a series of policy programmes and measures to address this decline. Table 1 shows a number of agricultural policy strategies to improve agricultural production.

Most of these policy strategies were reactive; responding to shocks caused by either unfavourable weather conditions or various types of policy failures and inefficiencies.

However, some of these policies did not bear as much fruits as was expected because they were partly poorly designed and partly disturbed by other policies. The performance of the Iringa declaration was partly constrained by the Ujamaa Villagization Policy of 1974. The National Agricultural Policy was neither well planned nor effectuated according to the plans. In addition, Tanzania faced severe economic shocks and problems during the later part of the 1980s. Also, it was difficult to monitor and evaluate the performance of these policies because of overlapping objectives and frequent formulation of new policies.

Table 1. Some important policy programmes in Tanzania, 1972- 2005

Year	Agricultural Policy Strategy	Emphasis	Objectives and reasons
1967	Arusha Declaration	Policy on self-reliance	Re-emphasis on agriculture in Tanzania and on selfreliance. The villagization program followe din ealry 1970s.
1972	Iringa Declaration	Politics is Agriculture (Siasa ni Kilimo)	To give agriculture higher priority. This came by as a reaction of severe food shortage in the country in early 1970s and 1980
1983	Kilimo cha Kufa n Kupona (Do or die Agriculture	To promote and increase agricultural production in the country	To the address the problem of food insecurity and promote exports.
1984	Moshi Declaration	Irrigation in Agriculture	To promote irrigation farming to address the problem of unreliable rain fed agriculture. Also to produce enough food and cash crops for food security and foreign exchange.
1984	-National Agricultural Policy -The Livestock Policy	To produce enough food , cash crops and livestock	To address the problem of frequent hunger and balance of payment deficit. To stimulate industrial growth through reliable supply of raw materials. To raise rural incomes and poverty alleviation.
1992	SAPs	-Macro economic stability - Economic reform	- economic stability, reduce public expenditure, balance budgets..
1994	National Input Fund PRSPs	Provide credit to small-scale farmers Reduce poverty and enhance economic growth	
After 2000	ASDS (2001) PADEP AMSDP Tanzania Development Vision 2025	Agriculture Sector Dev. Strategy Participatory Agricultural Development and Empowerment Program (PADEP) (WB) Agricultural Marketing Systems Development Program (IFAD) Reduce poverty significantly by 2025	To revamp and vigourize the agricultural sector Support to agricultural development and capacity building. implemented in 28 districts and targets smallholder households in 840 villages. Two main components: Community Agricultural Development Subprojects (CADS) and Capacity Building and Institutional Strengthening (CBIS). Budget of 250 million USD. Goal to " increase rural people's food security and incomes by improving the structure, conduct and performance of the country's crop marketing systems. Budget about 48.9 million USD Emphasising basic food security, improving income levels, and expanding export earnings
2003	Fertilizer subsidy	Enhance economic growth and reduce poverty	Increase fertilizer use
2006	National Fertilizer Strategy	To enhance land productivity	- increased use of fertilizers - reduce costs of fertilizers - lower costs of import

2.3. THE STRUCTURAL ADJUSTMENT PROGRAMS

Following severe economic difficulties in the 1980s, Tanzania adopted the World Bank conditions under the Structural Adjustment Program (SAP), also in order to obtain new loans. The new program was characterized by a shift from a command to a market economy involving macro-stabilization measures and economic reform including state contraction and also the government withdrawal from physical agricultural production and provision of farm input and partly reducing the extension services. Through the Trade Liberalization policy, the private sector started to take an active role in the import and distribution of farm inputs and veterinary drugs.

However, several problems were encountered also during the SAP implementation period. Many studies have revealed that the SAP policies had considerable negative impacts for most smallholder farmers. Much higher prices of farm inputs and lack of credit constrained farmers in production of both food and cash crops. Farmers responded by abandoning the use of fertilizers and other inputs or changed cropping patterns and the reduced area under intensive cultivation, while opening even more marginal areas for extensive cultivation. This in turn aggravated the problem of food shortage and mass poverty in big parts of rural Tanzania and it lead to increased deforestation and environmental degradation in many areas.

2.4. FERTILIZER USE - DEMAND AND SUPPLY IN TANZANIA

Data from the Ministry of Agriculture, Food and Cooperatives (MAFS, 2006) show that between 1972 and 1992, the annual fertilizer use rose from 53,880 tons to over 140,000 tons. From 1992, there is drop in fertilizer use with an average of 98 000 MT from 19994-98, partly caused by cut in subsidies and by government withdrawal from the business. There was a sharp fall of fertilizer use to an average of 68,000 tons between 1998-2000.

The ***estimated*** national ***demand*** of fertilizer is 385 metric tons per year, while the effective demand of fertilizer "in the market" is seen to be about 150,000 metric tons per year. The above gap between potential and actual use is attributed to high prices of fertilizers, insufficient secondary distribution network, lack of credit facilities, poor infrastructure and low prices of agricultural outputs compared to fertilizers. The overall fertilizer use in Tanzania is approximated to be 9 kg nutrients/haa, which is very low also compared to the average use of fertilizer use of Africa (13kg/haa). The problem of decline in fertilizer use is most significant to food crops where it had fallen from 70% in 1990s to 32% by the end of the decade.

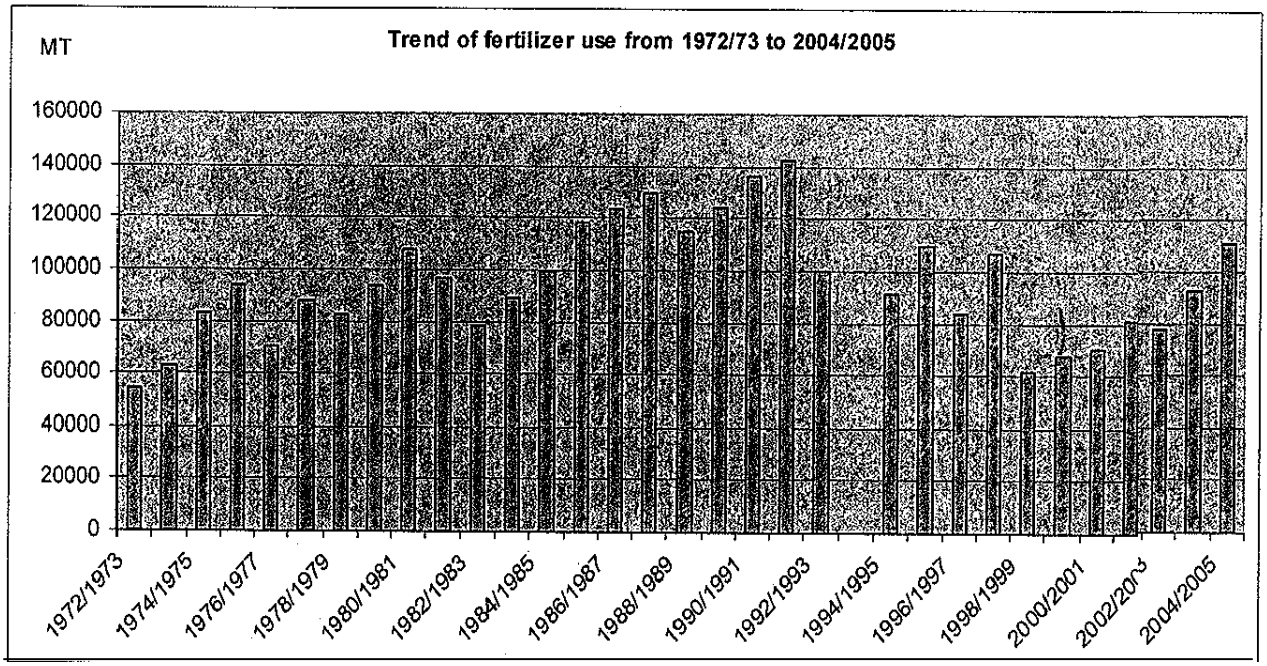

Figure 1. Evolution of Fertilizer Use in Tanzania 1980-2001 (MAFS, 2006)

This has also led to decreases in food and cereal production per capita (see Figure 2).

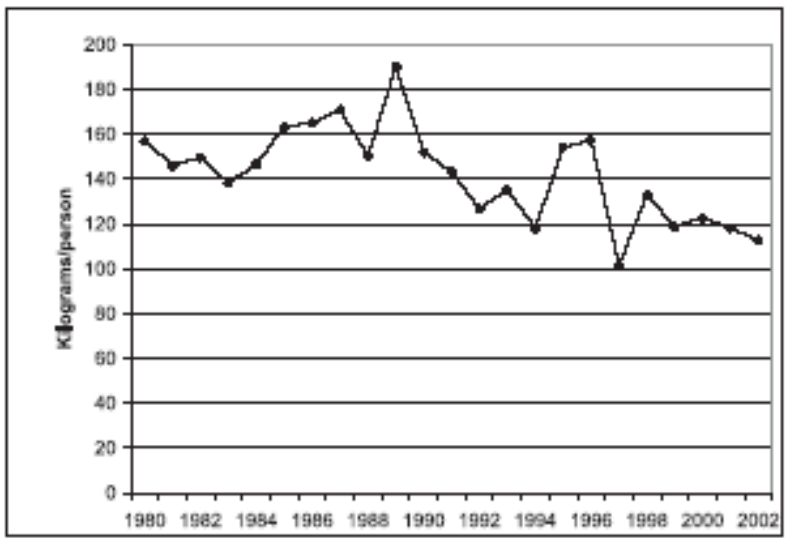

Figure 1. Cereal Production Per Capita, Tanzania, 1980–2002

Figure 2. Cereal Crop Production/cap in Tanzania 1980-2002 (USAID, 2005)

In order to respond to the problems, the government passed a bill in 1994 to establish the National Input Fund to facilitate access of inputs to smallholder farmers. This intended to

ensure that inputs could be available in required amount, at the right time and reasonable prices. Another important policy change included the removal of explicit tax on agricultural products as the result of over valued Tanzanian shilling. This enabled the private sector to be involved in the processing and marketing of coffee, cotton and cashew nuts. The policy also resulted in the removal of subsidy on fertilizer imports in the 1994-1995 budget which led to a substantial drop in fertilizer use (Figure 1).

Looking at economic importance of various crops, we find that maize, paddy and bananas constitute more than 50% of total value of crop production in Tanzania, while the total economic importance of the cash crops is much lower (see Table 2).

Table 2. Crop contribution to GDP 1998-2002 (USAID, 2003)
Source: First National Banks, emerging markets unit.

Crop type	1998	1999	2000	2001	2002
Food crops					
Maize	29.0%	28.9%	27.5%	31.8%	31.1%
Paddy rice	10.9%	11.4%	12.0%	12.3%	12.5%
Bananas	5.6%	5.5%	5.4%	8.0%	8.0%
Beans	7.6%	7.4%	7.1%	6.9%	6.9%
Millet/Sorghum	6.2%	6.3%	6.0%	5.3%	5.4%
Cassava	6.2%	6.3%	6.3%	5.4%	5.2%
Vegetables	4.7%	4.4%	4.7%	4.1%	4.0%
Sweet potatoes	2.1%	2.1%	2.0%	3 .0%	3.1%
Tomatoes	2.4%	2.2%	2.4%	3.0%	3.0%
Fruits	3.1%	2.9%	2.8%	2.8%	2.8%
Groundnuts	3.6%	3.3%	3.7%	2.8%	2.8%
Cash crops					
Tobacco	1.6%	2.2%	2.2%	1.8%	2.1%
Cotton	1.6%	1.9%	1.8%	1.8%	1.8%
Cashew nuts	2.2%	2.5%	2.5%	2.0%	1.5%
Coffee	1.1%	1.1%	1.5%	1.2%	1.2%
Tea	0.8%	0.8%	0.8%	0.5%	0.5%

2.5. SOME RECENT DEVELOPMENTS

To follow up the present PRSP, the Tanzania Development Vision 2025 has been launched to reduce poverty significantly by 2025 through emphasizing basic food security, improving income levels, and expanding export earnings.

The PRSP identifies agricultural development as critical to poverty reduction due to its substantial contribution to GDP, the high incidence of rural poverty, and the fact that it is the main source of income for the majority of the rural population. The poverty reduction strategies will be implemented through the Rural Development Strategy (RDS), the Agricultural Sector Development Strategy (ASDS) and other development programs. The RDS has the overall objective of reducing poverty through multi-sector interventions and local government reforms.

According to IFDC, 2005;" The complementary ASDS is the blueprint guiding the government's efforts to address the problems in the agricultural sector and move toward agricultural transformation. It seeks to complement the ongoing economic reforms with a sector-specific action to enhance their impact on farm incomes and poverty reduction in rural areas. The Agricultural Sector Development Program (ASDP) includes many instruments for operationalising ASDS". ASDS will further "focus on improving the dissemination of viable farm production technologies to smallholder farmers and livestock keepers as a matter of priority. Improving agricultural productivity and commercialising farm production among smallholder farmers is the linchpin of the ASDS. "Accordingly, the priority areas for the ASDS with respect to agricultural inputs are:

• Strengthening the institutional framework for managing agricultural development, particularly defining public and private sector roles.
• Creating a favourable environment to increase private sector participation in agricultural development.
• Clarifying public and private roles in improving support services.
• Improving the marketing of inputs and outputs to enhance net farm returns in the short-run and commercialise agriculture in the long run." (IFDC, 2005).

The World Bank supported Participatory Agricultural Development and Empowerment Program (PADEP) is used by the ASDP for implementing the ASDS. This is done through support to agricultural development and capacity building. It will be gradually implemented in 28 districts and targets smallholder households in 840 villages. The project has two main components: the Community Agricultural Development Subprojects (CADS) component and the Capacity Building and Institutional Strengthening (CBIS) component. It has a budget of 250 million USD.

There are also other major programs like the IFAD supported program; The AMSDP (Agricultural Marketing Systems Development Programme, of some 48.9 million USD that has a goal to " increase rural people's food security and incomes by improving the structure, conduct and performance of the country's crop marketing systems."

2.6. THE NATIONAL FERTILIZER STRATEGY

Tanzania re-launched a fertilizer subsidy in 2003/2004. MAFS has since this prepared a National Fertilizer Strategy (April 2006) with the aim to address the existing low fertilizer use to improve agricultural productivity and economic growth at the same time improving food security and poverty reduction in rural Tanzania. The strategy can achieve the general goal through improving the accessibility to and affordability of fertilizer through improving incentives for fertilizer use by lowering the procurement and transaction costs in the fertilizer value chain.

The subsidy program is meant to cover some transport costs (1/3 of subsidy) and the rest as a partial price support on fertilizers (2/3 of subsidy). For 2006, the allocation will imply a 25% subsidy on fertilizers. Over the last two years, the government has also given enhanced support to recruit and train extension agents to increase their numbers and their efficiency in serving farming communities. The government has also collaborated with other partners to facilitate fertilizer dealers through training and technical assistance to become potential entrepreneurs. One has also tried to improve the access of funds and credits to small-scale fertilizer dealers including farmers associations and SACCOS.

2.7. A BRIEF DESCRIPTION OF THE FERTILIZER VALUE CHAIN IN TANZANIA

The fertilizer value chain involves an array of actors involved in the supply and distribution of fertilizers to end users. The chain starts at the port where fertilizer is unloaded and bagged. This step is followed by the distribution of fertilizers from the port to rural areas by private transporters to a few selected regional Centers. At Regional Centers, where wholesalers and importers have depots, the fertilizers are taken by individual private merchants (Stockists) who act as distributing agents to villages and farmers in the rural areas. Looking at this chain, it is generally argued that the value and prices of fertilizers increase from the first to the last element of the chain.

A number of limitations in the fertilizer chain has been identified and summarized by the FTI (2006); see Table 3.

Table 3. Summary Constraints Analysis for a Fertiliser Value Chain

Manufacturer	Importer	Wholesaler	Retailer	Farmer
1. Insufficient clarity on policy towards fertilizer market development 2. Weak regulatory framework for fertilizers 3. Limited market information to plan ahead to address shortfalls/carryover stocks 4. No formal development of cross-border trading strategy (Rwanda/Zambia/ Malawi)	1. Poor market information to plan ahead to address shortfalls/carryover stocks 2. Depreciating exchange rates 3. Only one main port (Dar-es-Salaam) for importing fertilizers 4. No clear development of cross-border trading strategy (Rwanda/Zambia/Malawi) 5. Procurement/distribution delays 6. Weak analysis of options for subsidy use in fertilizer markets. (infrastructure?) 7. Dockside operational and tax constraints	1. Large distances to retailers 2. Poor road infrastructure 3. Inadequate storage/ warehouse availability 4. Limited market information 5. Weak business relationship with importer /retailer 6. Limited use of warehouses (few bonded warehouses for collateral for input business loans) 7. Strict collateral requirements ensure low percentage of loans to the agricultural input business 8. Lack of economies of scale in procurement 9. Weak mechanisms for contract enforcement in rural areas 10. Poor enforcement of standards of quality and measurement (brand weakening) 11. No development of formal cross-border trading strategy (Wholesaler Mbeya to Mbale/Kasama Zambia or Karonga/Chipita - Malawi)	1. Small numbers of input dealers (no integrated dealer networks) 2. Dealers concentrated in district/regional capitals only 3. High price of fertilizer 4. Poor accessibility to fertilizer supplies (infrastructure) 5. Little training in fertilizer marketing 6. Limited business skills 7. Difficult physical access to finance (limited rural outreach by banks) 8. High interest rates 9. Microfinance loans too small to help in business development (limited size of orders to wholesaler) 10. Small fertilizer purchases (low stock) 11. High transaction costs limiting investment in market development 12. Inability to establish linkages with private sector (large sellers of fertilizers)	1. Economic constraints limit fertilizer `application (particularly basal fertilizers) 2. High price of fertilizers 3. Limited opportunities for crop diversification and markets 4. Weak smallholder capacity to develop strategies or alliances to respond to changing markets (poorly developed farmer associations) 5. Poor accessibility to fertilizers (infrastructure) 6. Difficult physical access to finance 7. High interest rates 8. Weak interlinked input/output markets to ensure credit repayment

Source: Prorustica, 2006

The experience from Tanzania has shown that there is a considerable difference in fertilizer prices among regions, districts and even between villages in the same districts. The variation is determined by distance from the port to the region, nature of transport used and distance from the selected region center. Since many of the stockists (wholesalers and retailers) live in

regional and district headquarters, the price of fertilizers will vary between villages depending on the distance from the district headquarter to the respective village.

2.8. CASE STUDY FROM THE TWO VISITED DISTRICTS

This section presents a brief case study of the districts of Mafinga and Kilombero in Iringa and Morogoro regions where we undertook a brief field visit. Interviews were carried out with various stakeholders. We focused on the distribution and administration of fertilizers from regional centers down to the village where the fertilizers value chain reaches the farmers, on micro-finance credit access, and on other constraints as seen from their point of view. In the two districts the involved research team was able to interview the stakeholders shown in Table 4 and Table 5.

Table 4. Actors visited in Mafinga District, 2006

Actors	Role and activities	Location
DALDOs	Receive the suggested names of stockist from village government, issue permits to private stockists at district level, administer and monitor distribution process.	District headquarters Mafinga.
Mufindi Community Bank (MUCOBA)	To provide fertilizer credit facilities to stockists and farmers, receive funds from National Inputs Trust Fund to be allocated to farmers.	District Headquarter-Mufindi
District Committee under District Commissioner	Allocate the amount of fertilizers to be distributed to different villages based on the established demand from each village.	District Headquarter
SACCOS (about 30 in district)	Purchase fertilizer based on demand assessments, transport from wholesaler to villages.	In different locations
TFA (Tanzania Farmers Association)	Before SAP, TFA used to be the major input importer and supplier. Currently there is one operating branch in Mafinga. Following the change of structure at high level TFC branch at Mafinga did not involve in the supply of fertilizer in the last season. Plans underway to revive the supply of fertilizers	District headquarter
Rural Financial Service Program	To promote micro finance marketing to enable farmers to get credits to buy fertilizers. Components and methodology- • Infrastructure developments like road. • Warehousing crop systems especially maize, • Use of the list (grain bank) • Group formation to help more farmers to trading and access marketing information	District headquarter
Stokists (19) in the district	Buying fertilizers from Regional Center at Makambako or Iringa and distribute it to farmers according to prices set by the district committee	
Ward Executive Officer,Ward, Village ext. officer	Identification and establishment of farmer's fertilizer demand at village level. Supervise the distribution of fertilizers, recommend the stockists to the district fertilizer committee	Ward and Village
CRDB	Provide credits to stockists, farmers associations, and SACCOS and individual farmers, who have been used to buy credits. (25% interest)	District head quarter
NMB	Provide credits to stockists, SACCOS, Farmers Association and to individual farmers (13% interest)	District head quarter
Tea Research Institute	Technology transfer to tea growers, train farmers on the importance and effective use of fertilizers	District HQ, farmers nearby villages
Mufindi Tea Company	Works with smallholder farmers; difficult to organize	Mufindi Tea Company HQ.

Table 5. Actors visited in Kilombero District, 2006

Actors	Role and activities	Location
Farmers Association (4000 farmers)	Mobilization of outgrowers of sugarcane	At ward and village level
SACCOS (30 in total)	Provide credits to enable farmers to buy fertilizers, to encourage saving for capital formation	In different locations
Kilombero Sugar Cane	Buy farmers sugarcane. Provide extension services to raise productivity and production. This may gear farmers to apply more fertilizers at the right amount, time and type.	
DALDO	Receive the suggested names of stockist from village government, issue permits to the selected private stockists at district level. Administer and monitor distribution process.	In Ifakari, District HQ
CRDB	To provide credit to farmers associations, SACCOS, and to stockists, which were used to distribute and buy fertilizers (25%). For the SACCOS the credit borrowed from CRDB is further issued to farmers at 18% interest rate	In Morogoro, Regional HQ
NMB	Provide credits to farmers Association, SACCOS and individual farmers for lending and distribution and buying both at regional level and to farmers as last consumers in the chain value	In Ifakari, District HQ
SCCULT	This is an apex organization made up by several SACCOS at National level. Money from different funding are channelled through this organization to make it available to various SACCOS	Based in Dar es Salaam
Stockists	Buy fertilizers from the importers at regional centres in Morogoro and Dar-es-Salaam. They sell fertilizers to farmers at district or village level	In different locations

2.9. THE FAST TRACK INITIATIVE

2.9.1 Overview

The Fast Track Initiative is a special pilot and demonstration program, introduced to promote the effective distribution and use of fertilizers in Tanzania.

The overall goal of the program is to promote agricultural development in Tanzania to address the twin problems of income poverty and food insecurity, especially in rural Tanzania. The program will commence from the coming season as a pilot strategy which will later be scaled up to cover the whole country. The program will be implemented in five selected districts in the southern highlands of Tanzania before it will be replicated in other parts of country.

The program will be implemented in Mafinga, Mbarari, Songea Rural, Kilombero and Morogoro Rural. The selection of these districts was based on the following criteria:

- Very well functioning of Farmers Associations
- The availability and reliability of Warehouses
- The availability and reliability of SACCOS
- Effective demand and use of fertilizers
- Good level of infrastructure development both physical and financial

The program aims to promote Public-Private Partnership between different actors and aims at promoting the use of fertilizers and ultimately increasing production in the country. In this year's budget, the Government of Tanzania has set aside 21 billion Tanzanian shillings a subsidy for fertilizer to promote the use of fertilizer and ultimately increase production of both food and cash crops to achieve food security while alleviating poverty in Rural Tanzania. Yara, the leading fertilizer manufacture company in the world, will be involved in this program. Other partners such as NORAD, NORFUND and Rabobank are also involved to different degrees.

2.9.2 Strategies

Since the effective use of fertilizers is influenced by a combination of many elements, the Fast Track program will seek to promote or address the following issues.

- To increase the availability and supply of fertilizers at national to village level
- To Improve infrastructure for smooth distribution of fertilizers to village level
- To promote marketing of farmers products
- To promote and strengthen the potential and actual financial institutions such as Farmers Associations, SACCOS and others
- To provide credits to farmers
- To empower district agricultural officials for better planning, monitoring and evaluation of the program
- To support output and marketing in order to avoid collapses of prices that occur during bumper harvesting of both food and cash crops
- To monitor and evaluate to assess the short term effectiveness of the track program.

2.9.3 Some possible challenges to Fast Track Initiative

These observations made in the two visited districts of Mafinga and Kilombero illustrate some of challenges for this program:

- Most of the institutions, both government and private are town based
- Poor infrastructure especially in rural areas may constrain effective distribution of fertilizers at local level
- A general lack of information to farmers and to stockists
- Asymmetric power relations and substantial market imperfections and failures
- Few operating warehouses
- Extremely high interest rates from the banks
- Farmers often do not pay back credits from government or donor sources
- Few and weak SACCOs and Farmers Associations which could be used to channel and distribute credits or fertilizers to farmers in rural areas.
- Poor administration and monitoring of the fertilizer chain by district agricultural officials either because of lack of resources or poor coordination
- Lack of capital and lack of commitment and openness among stockists. This is likely to distort intended objectives of the program
- Unreliable weather conditions discouraging farmers to use more fertilizers
- Several and contradicting political decisions at regional level NGOs and Donor actions scattered and uncoordinated

3. ASSESSING THE FERTILIZER VALUE CHAIN

We present some findings from our analysis of various functions and actors of the fertilizer value chain, and we consider strengths, weaknesses and give some suggestions. We also make an assessment of what could be done this year, and what should have to wait till next year, given the rather short time till farmers need to apply their fertilizer for the season. We address financial issues, political issues, infrastructure, logistics, the strength of local institutions and some properties of the output market. Lastly we give some viewpoints on what seems reasonable to be Norad's/ Norway's role in this.

A rough back-of-an-envelope estimate indicates that if Tanzanian farmers can be moved from an average application rate of some 9 kg of nutrients/haa or some 45 kgs of fertilizers to some 300 kg/haa, it would give a potential increase of 3-400% in yield/haa, and a profit margin that can compete with most other available economic activities. There is thus a substantial potential for fertilizer use to be increased; both through increasing and improving supply, and on the demand side, through supplying both stockists and farmers with credit. This section deals with the fertilizer value chain and tries to identify some key constraints and some possible actions that could facilitate the release of this potential.

3.1. THE FINANCIAL SECTOR FROM FORMAL BANKING SYSTEM TO MICRO-CREDIT PROVIDERS

Strengths *are defined in relation to a fast track approach; how and to what extent can finance and credit institutions help facilitate import, transport, retail and end use supply and purchase of fertilizers.*

- Banks at central level seem to provide importers and transporters with sufficient capital
- There are several banks (CDRB, NMB) present at Region and District level that potentially can supply stockists and farmers with credit to increase supply, purchase and use of fertilizers.
- Some districts have their own "Community Banks (like MUCOBA) where good performance was reported on several types of loans. They reported to administer both loans to SACCOs (both savings and credit), and also loans where capital had been supplied by donors (Swisscontact). They also issue loans to 6 of the 19 stockists in Mafinga District.
- There are Farmers Associations and SACCOs (Saving and Credit Organizations) that can be used also to handle both fertilizer purchase and microcredit schemes
-Well-functioning SACCOs at local level seem to hold a promise for the future; they are competent both in credit and micro-finance handling, they have fertilizer competence, and have direct self-interest in a smooth operating system
- There are competent stockists; both private merchants and SACCOs that handle fertilizers well today.

Weaknesses *are defined in relation to a fast track approach; how finance and credit institutions and their performance constrain import, transport, retail and end use supply and purchase of fertilizers.*
- At a very general level, a 15-25% interest rate constrains any financial and credit delivery system; any delay in the chain will bring costs to actors – and much of the political and economic power game is to do with who in the end pays for the waiting.
- Still at a general level, the value chain is dominated by asymmetric power relations moving down the ladder from importers, retailers/stockists, to farm organizations and down to the organized and the unorganised poor farmers. The poorest 40 - 50% may not access and use

fertilizers at all. Costs and risks in general consistently gravitate down towards the weaker actor in this system.
- Climatic variations always create risks and uncertainties to any agricultural actor, and fertilizer is an input in particular prone to climatic vagaries.
- At central level, substantial fluctuations in currency and world market prices is problematic, but even more is the issue over the competitiveness of the market between the various importers. A possible price co-operation would increase costs throughout the chain and not least to the farmers. Also, any new actor trying to enter at central level must furthermore expect to be challenged by established actors- in various ways!
- At central level, port performance accrues costs to the whole chain, starting with the importers through costly formal and practical procedures, old and inefficient infrastructure, an outdated and imprecise repacking system, substantial storage charges etc.
- At district level, we did not get much information on banks performance in relation to micro- credit to farmers and various types of credit to stockists, but in general there is constrained access, and it increases the poorer the farmer.
- In Mafinga District, MUCOBA, the Community Bank, declared a 100% repayment rate for all their loans, except for loans passed through the Agricultural Input Trust Fund (AGITF), where they argued that borrowers seem to see these funds as "government funds", and therefore not necessary to repay. (The Bank reported pending court cases on these matters). MUCOBA would need additional funds to increase loans to SACCOs and stockists.
- AGITF provides loans to all four regions in the Southern Highland Zone (as well as the rest of the country). The AGITF holds a strong potential given size of funds, but must work to secure an efficient and responsible institutional anchoring.
- At District levels, little or at least insufficient credit is offered to the selected stockists, forcing them to depend on cash return from farmers, creating bottlenecks and lack of regular and sufficient supply to farmers. Stockists also wait or avoid taking fertilizer to the field arguing that many farmers consider weather and other conditions and will not buy before they see that they will use the fertilizer. It is a dual or reciprocal **moral hazard situation**; but where the stockist has an upper hand.
- Very few farmers are able, individually or even in groups to access credit from any bank even if some both private and public institutions have micro-finance as part of their portfolio of activities. And the interest rate varies between 15-25%.
- Most actors met in the field report very mixed or generally negative feelings about the present SCCULT, the apex organisation among local SACCOs, and recommends a careful approach here. We shall return to this issue.
- At district level and below, NGOs and some donor financed activities are less than well co-ordinated with public micro-finance initiatives

In general on weaknesses, the impression is that very few farmers buy fertilizers at all; and that even farmers with cash, do not, due to lack of access either to type, amount or on time. An impression is that as much as 50-60% of the farmers never buy fertilizers at all, but this should be looked more carefully into. There is no master-plan or overall coherent effort to secure that all those who want, can get fertilizers. In this situation of credit market "imperfection" and even missing markets; one can thus differ:

1) The problem with a lack of timely, adequate and appropriate supply of fertilizers linked to the fact that many farmers who actually report to have cash and that they are very willing to buy; real direct, unsatisfied demand for fertilizer.
2) The problem that a vast number of farmers, probably a majority, do not have cash but have sufficient production capacity to pay for fertilizer, given a system of credit with

rather low transaction costs. A potential demand for credit that can boost fertilizer demand.

Suggestions:

1. Make Port organizational and financial management systems more efficient, modern and transparent and reduce costs of import including time use. This can reduce costs throughout the system.
2. Promote and invite more importers in order to increase competition, enhance competitive market conditions and avoid price collaboration and misuse of more or less monopolistic positions
3. Secure open and transparent financial and practical distribution of fertilizers at regional and district level between importers and stockists through imposing a control system both at regional level and cross checking through village, ward and district levels quality assured registers.
4. Involve Region and District level Agricultural Advisors more active in a concrete registration and control system for financial and practical operations.
5. Recondition the AGITF mechanism to improve efficiency through selecting competent partners; continue with Community Banks or use NMB in order to address both stockists and farmers lack of access to credit. This can both support supplied amount and regularity- and farmers' ability to purchase fertilizers.
6. Investigate if and to what extent the poorest segments of farmers at all are involved in the fertilizer value chain, and if not; how this could be mitigated.
7. Rather than using the controversial SCCULT, a consideration could be to develop- from below- district level SACCOs, directly elected and constituted from local SACCOs- and not instigated from above, in order to address farmers' lack of access to credit- among others.
8. Increase physical fertilizer availability at both regional, district and ward levels. We expand on this under possible political measures to be issued.

Many of these suggestions are not issues to be placed under a FTI this year, but should be considered in a more coherent and comprehensive next year "not so FT". Main issues to be considered this year could be to increase control of the system from region wholesalers, stockists and down to farmers' levels, to involve the DAO more in control and monitoring, and some short-term training to SACCOs and other stockists.

3.2. PUBLIC POLICY AND PROFICIENCY OF PUBLIC INSTITUTIONS

The **strengths** are defined in relation to a fast track approach; how and to what extent can the public sector, both through policies and institutions at central, district and local level, help facilitate import, transport, retail and end use supply and purchase of fertilizers. We also make some comments on particularities of present policies that may in particular constrain a fast track initiative.

- Tanzania has a conducive policy for the fast track, in the present policies itself and with both institutional and political support for the Fertilizer subsidy programme that obviously enhances fertilizer turnover and use in order to increase agricultural production.
- In comparison to many other African countries Tanzania has quite a strong district administration and with agricultural officers (Bwana shambas) at division and even field extension officers at ward levels. These form a potential base for an active partnership with the private sector in the fertilizer value chain.

- Several substantial government and donor supported programmes (IFAD,WB etc.) are in place (described earlier) to facilitate public sector on issues such as awareness raising, organisational skills building, micro-credit arrangements etc.
- The size of the fertilizer subsidy for this year, reaching 21 bill. TAS (some 25%), is itself a strength, as it can actually make a substantial difference in use and in output.

Weaknesses
- There has been a lack of openness and transparency about the fertilizer subsidy the last three years causing many grievances and distrust at different levels and especially that less fertilizer, and especially the subsidized one, has reached the intended groups.
- The lack of knowledge about prices and delivery agreements etc. has also led to unnecessary conflicts and complaints, especially for stockists trying to buy and sell their allotted fertilizers.
- Tanzania's fertilizer policy is described elsewhere, but some issues both on policy and not least on the practical execution or implementation need attention, in addition to more openness about intention and expected prices at different levels of the chain, which the government already is planning to improve.
- Portside costs and the price estimation systems could be a potential area where subsidy funds are inefficiently allocated
- The same applies for the calculation of transport costs to the regions; at present some 1/3 of the total subsidy funds are used for these transport costs, and any "miscalculation" or inability to press down prices here obviously draws subsidy funds and increases farm gate prices on fertilizers and reduces supply of subsidized fertilizers.
- The politically defined links between stockists and importers should be looked into; what are the contractual agreements between the government and importers, and what sanctions (fines, penalties, withdrawal of permits and agreements) are in place to secure more expedient delivery of various types and quantities to stockists when they come to pick up fertilizer they have ordered?
- Similarly, the politically defined link between stockists and farmers should be looked into; what are contractual agreements between the district government and stockists, how is the politically defined price of transport derived at, how much profit are the stockists allowed to add (5-10%; well below any bank interest rate) and what sanctions (fines, penalties, withdrawal of permits and agreements) are in place to secure more expedient delivery of various types and quantities to farmers? In many cases, the stockists argue they cannot go to the villages because:

a) the profit margin allowed for is insufficient
b) they do not get fertilizer from the importer
c) the farmers, even if they ordered, are opportunistic and will only buy if weather and other conditions are conducive.

A result is that farmers have to go to the stockist, and the stockists thus push transport cost over to the farmers; reducing fertilizer use both because of time and cost issues. Farmers remote to stockists will suffer most.

- The estimation of demand is most likely ***highly unreliable***. Field extension officers and ward level officers are supposed to elicitate lists of farmers and needs, but these are first of all incomplete. We were told that many farmers and even villages and maybe wards are not visited and no demand thus appears on the list from these areas. Furthermore, the mix of a command and market economy is problematic. Asking farmers hypothetically about their fertilizer need is different from the actual farmer behaviour at the counter; how much one

actually buys when the day is there (hypothetic versus real willingness to pay). This policy practise could thus severely miscalculate the real demand, and it can also lead to a systematic exclusion of particular villages and wards because the extension officers often are not able (or willing) to go there at all or on time. The latter leads to an underestimation of demand.

- Taking local variations into account. The subsidy is dispatched in the beginning of the fiscal year in early September. Upon this, demand is estimated and importers start the chain of importing fertilizers. However, farmers report to use fertilizers around the year starting (in the districts we visited) with sugar cane and other crops from May, June, July etc. and they continue in these districts using fertilizers up to January. A bulk of fertilizer is used in September and October for sugarcane outgrowers, and also in November and December for the areas with bimodal rainfall patterns, and mostly in March and April during the long rainy season. The present system both gives out fertilizers late in relation to the bulk of needs and also has a lack of flexibility in time and space that is problematic for most farmers.

This also means that the market at any time, both in theory and in practice, will have a mix of fertilizers from different fiscal years, with different quantities and maybe even price levels of the fertilizers. The mix of a command and a market system thus reveals weaknesses and creates bottlenecks that reduce a volatile or flexible fertilizer supply and use. It will also politically have different impacts in different regions over the country as cropping systems and seasons vary considerably. For the two districts we visited, fertilizer should be available at least from July, but basically around the year.

- Another related aspect, mentioned by many actors, is that farmers tend to buy fertilizers when they sell their output, when they have money, so that if fertilizer was more available at that time; more farmers, especially cash strapped, would buy fertilizers.
- There is a conspicuous lack of checks and controls from below in the present system; controlling chain delivery from farmers, village and ward towards stockists, stockists versus importer and importer versus central government on delivery of what, to whom, how much and where (quantities and qualities in time and space).
- There was also a widespread reporting of “porous international borders” in the country.

Suggestions

1. A careful evaluation of the whole fertilizer subsidy programme; from policies, organisational structure, flows of resources, rights, duties and responsibilities, and not least the implementation process and competence of the system in this respect. Also consider if issuing more of the subsidy closer to the farmer in the chain would reduce both control costs and that much of the subsidy falls in other hands than the farmer’s; and also to maximize use of fertilizers. One could really use the World Bank Reports experiences here (WB, 2006a-d).
2. Scrutinize the present cost estimation procedures at portside, central and regional levels, to avoid paying more than necessary to central actors and to regional and district level middle-men.
3. Issue fertilizer subsidy earlier in the year (at the end of previous fiscal year) to secure timely delivery in relation to needs and when farmers typically can buy.
4. Improve the system for fertilizer demand estimations from the village level and up, and preferably increase market mechanisms involvement in this. This is crucial.
5. One way to improve the market system for fertilizers could be to plan and develop a comprehensive warehouse receipt system using SACCOs, outgrowers’ organizations etc. and the old Ushirika warehouse constructions as ward and/or division level

depots. Having depots/warehouses at ward level could secure delivery on time throughout the year, secure availability and that farmers can buy at their own preferences and when they have the money (revealed- not hypothetical preferences). It would also address the fact that different districts and regions have different cropping patterns and seasons, thus different needs for fertilizers. And risks must be carefully assessed.

6. Establish a carefully designed, participatory, monitoring and control system from below; where the District, division and ward level agricultural officers keep records that are assessed against records at stockist and regional levels and where also trusted people and ward and village level participate. One could consider an independent assessment by means of farm household level annual surveys on fertilizer demand, supply, prices and actual use. Increased information and openness down to farm level could also improve governance.
7. A stricter regime for contract signing, control, monitoring and not least sanctioning (fines, penalties, withdrawal of permits and agreements) when contracts are breached at import, regional and stockist levels to secure more expedient and sufficient delivery of various types and quantities.
8. As is already reported on the way, a strategy for an increased openness and transparency about the fertilizer subsidy can reduce grievances and distrust and increase fertilizer supply to the targeted groups.
9. Enhance international border control measures where appropriate.

Many of these suggestions cannot be placed under a FTI this year, but should be considered in a more coherent and comprehensive next year. Main issues to be considered this year could be to increase the number of pilot warehouse receipt systems where existing physical structures and reliable SACCOS or other organisations are present. More emphasis on awareness raising and information to the public is also an issue to be addressed in a FTI. One could also impose stricter control systems, both at regional and district levels and also towards international boundaries.

3.3. INFRASTRUCTURE AND COMMUNICATION RELATED TO THE VALUE CHAIN

We look into to what extent infrastructure and communication is in place to enhance the fast track, what are key bottlenecks and potential solutions and suggestions.

Strengths

- As mentioned before, the Port in Dar is there and receives all imported fertilizers to the country. Both roads and railways take fertilizer quite easy out to regional capitals, where stockists take the fertilizer further to district towns. The roads up to these are for most easily passable also in the rainy seasons. There is also access to most of the divisions, wards and villages if the quality is here clearly more varying and also requiring different types of transport.
- Transport facilities (trucks, and also railway in certain areas) are available in most areas.
- The old warehouses built and used under the Ushirika (cooperatives) policies are still there. These are now under the control of village governments and are reportedly grossly underused (some used as dispensaries, schools etc). They are also reported to be in a reasonable shape, even if we did not observe this ourselves in the field.
- Most areas have mobile phone coverage and district capitals have all necessary communication (fax, internet, phone lines) in place. Even down to most wards (and villages), phones are available.

- An additional asset is generally well-equipped district (agricultural) headquarters.

Weaknesses
- Only one port in Tanzania is a concern for importers in particular, but is also a constraint for some stockists.
- The port needs infrastructure investments.
- Access for larger fertilizer trucks (20 tons) will be a particular problem, in certain divisions, wards and villages, but transport in general is not reported as a major issue in the two districts visited, except for one area in Mufindi District, that was reportedly "unaccessible".
- A general problem is long distances between many villages and more substantial markets thus incurring high transport costs
- Some stockists complained about a lack of access to trucks, most likely due to lack of capital more than a physical unavailability.

Suggestions on infrastructure
1. Improve railway links, especially in the Port, but also promote use of more railways in relevant and selected districts
2. The Ushirika warehouses could form a potential for a future development of a SACCO warehouse receipt model, even down to division level.
3. Particular targeted measures could be considered for improving/upgrading infrastructure for particular "inaccessible divisions and wards" (local variations) and in particular where population concentration and production potentials are particularly high.

Again, most of these suggestions are not issues to be placed under a FTI this year, but it could be possible on a pilot/demonstration level, to set in particular measures to certain inaccessible areas, to see how much it is possible to increase fertilizer use. The same applies for upgrading or taking up the use of some of the old warehouses on a pilot basis, to see how it could work and draw experiences for next years.

3.4. QUALITIES OF THE AGRO-INPUT SYSTEM

We look into to what extent qualities of the agro-input system are in place to enhance the fast track, what are key bottlenecks and potential solutions and suggestions. We relate to actors knowledge of fertilizer products, awareness of credit access/markets, and understanding of the market.

Strengths
- There are many experienced importers, and a new major importer/exporter coming in *may* improve the competitiveness of the present markets.
- There are also many experienced actors at the regional level and where increased competition could be an advantage
- Stockists often emanate from rural areas and are well known to farmers and their needs
- Many farmers know fertilizers, different types, their effects and they want to buy. The awareness of soil nutrient and proficiency in its management seems less of a constraint than other challenges of the fertilizer value chain.
-Many farmers are well into cash production strategies

Weaknesses
- A general problem of imperfect and missing markets and often with asymmetric power relations disfavouring the weaker actors

- Erratic and inefficient supply system; a lack of delivery at right time, right types and place reduces the possibility for agronomically proper soil nutrient management
- Lack of a dynamic and continuous supply system with local depots in relation to a demand that varies in time and space
- Lack of reliable demand systems; partly due to lack of market information to stockist and in particular to farmers and their organizations, but also due to negotiated systems where farmers in first instance do not meet markets directly
- Too large bags of fertilizers for most farmers (average consumption around 30-40 kg in total)
- The overall economic losses through the present inefficient demand and supply conditions are hard to tell, but it would be interesting to know.

Suggestions

1. Improve market conditions through involving more and new actors, instigate more control over market operations, reduce barriers to enter, increase transparency, improve information, contracting, policing etc.
2. Introduce local depots and warehouses and introduce market friendly sizes of fertilizer bags
3. In a FTI, try out a variety of options in different districts;
    - As now
    - Improve present system
    - Try a warehouse receipt approach
    - Flood one district supply-wise by using one major stockist or securing enough depots and transport out to flood the market and assess the "real economic response" by farmers given a "perfect supply side"

It seems crucial, as stated before, to improve public announcements and awareness raising about prices, delivery systems, conditions and not least, clarify the rights farmers - and also stockists- have in the chain in order to improve performance.

3.5. FARMERS' ORGANISATIONS AND THEIR POSSIBLE ROLE IN THE VALUE CHAIN

We look into how and to what extent farmer's organizations have the competence and capacity to enhance the fast track, what are key bottlenecks and potential suggestions.

There are a vast number of different institutions and more and less formal organisations in rural Tanzania, as already described and a USAID supported report gives important and useful information about the comparative strength and weaknesses of these (Uliwa, 2004). We give some impressions from our fieldtrip and from various interviews. We concentrate on SACCOs, Farmers Associations, Village Government and Outgrowers associations.

Strengths

- There are SACCOs in most villages in the two districts; these are formally organised and can handle issues of saving and credits. The quality of the SACCOs is reported to vary, but the stronger ones are already operating as stockists and report to take on loans from various types of banks and pay back on time. They hold a potential both as stockists and maybe also as agents operating warehouses.
- SACCOs also holds a potential as an information hub at village level, where one can concentrate extension credit and fertilizer information.

- Sugar and tea outgrowers associations also seem to be well organized and strong - good role models- and some can in addition seek support for fertilizer credit from the companies they work with or at least stand organised in relation to banks for credit.
- Several Farmers Associations and Farmers groups are also available in the districts, some trained as Alliance Groups by donors such as Dai Pesa. Over time, farmers' organizations also form their own SACCOs.
-There are also Village governments in each village. They may not directly have any say on issues of interest to the FT, apart from that they are in control of the old Ushirika warehouses and they could be involved in issues of improving governance.

Weaknesses
- Even if SACCOs may be present in most villages, their proficiency is reported to vary substantially and many are in fact "dormant"
- Even if SACCOs are present in most villages and almost all wards in the two districts, there are still only a few of the farmers that are members, and most likely the most prosperous ones.
- Most SACCOs, with a few notable exceptions, lack cash and sufficient access to credit to become stockists.
-Many outgrowers do not get sufficient support from "their" companies, neither on fertilizer advice, nor on fertilizer access, credit etc. We cannot tell from the field visit, but it could be that some crops, like sugar cane actually give higher quality (but less yields) without urea.
- SCCULT has a consistent bad reputation in the districts and none of the SACCOs we saw considered to become a member (see also Uliwa and Fisher 2004). An obvious weakness of the SCCULT Apex organisation is that power comes from above, not below in that the leadership is not elected and there is no internal democracy in the organisational model as far as we could observe.

Suggestions
1. There are many strong local organisations that could be developed both as stockists, as credit facilitators and even warehouse receipt system operators given due training, capacity building and credit access. Such mechanisms are basically present through various programmes already in place through both public and private channels.
2. One could also consider try to organize SACCOs at district level in a representative membership system that could form a possible network of stockists for the future.
3. The outgrowers constitute a group of traditional substantial fertilizer use and should be involved in the fast track initiative through training and other types of facilitation.
4. The roles of Village Governments are several and deserve closer attention both in relation to enhancing farmers groups, and not least in relation to the warehouses now under their auspices.
On a pilot basis, it is possible already the first year, to identify and develop some of the SACCOs, and the outgrower associations to take on stockist tasks. The role of village governments should also be addressed; not only for them to facilitate processes, but also to avoid constraining actions by actors feeling excluded from processes.

3.6. OUTPUT MARKETS
We look into to what extent output markets are well developed and in place to enhance the fast track, what could be key bottlenecks and suggestions.

Strengths
- In general, most actors report that there are market outlets for produce and that even a substantial increase in production can be handled by the existing system.

- As for input infrastructure, roads, communication etc. are present
- Substantial networks of informal markets and middlemen gives outlets even in remote areas
- Local markets also exist for most food crops, although at lower prices

Weaknesses
- As an average figure, we were told that post-harvest losses can go up to 25-30% of total production in many parts of Tanzania, not least due to lack of expedient market outlets.
- It is difficult to assess if the market output system really could handle substantial, bumper harvest situations, even if so is stated by local actors ranging from DALDO and down to village level leaders.
-Much of the output markets are imperfect and informally controlled by middlemen and even importers operating at lower levels as merchants and warehouse owners
- There is substantial price collaboration reported between the middlemen especially for bulk production such as maize and rice and this follows the chain from local levels, to district, regional and national levels, hampering that market prices reflecting real production costs
- Constraints are imposed on actors trying to enter these markets, such as SACCOs and other rural organizations.
-Reduced output prices at farm gate obviously reduce income and both present and future demand for fertilizers

Suggestions
1. Developing the Ushirika warehouses as storage facilities for outputs have several positive effects; securing reasonable prices for farmers, creating a collateral for farmers to achieve credit increasing fertilizer use and output production.
2. Present output markets are riddled with imperfections, especially monopolistic competition features with artificially low prices. It is partly a reflection of long-term neglect of investments in agriculture and it will take time to improve this situation. Trying to facilitate environments where more actors enter the field is a possible strategy, although it can be costly and difficult. The potential emergence or long term establishment of Yara is an interesting touchstone in this context (for the input side).

Anyhow, improving efficiency in these markets has several important economic development aspects, including the increased potentials for fertilizer use.

In a Fast Track context, suggestion 1 could be carried out as a pilot this year, whereas the second is a more long term, but still important challenge.

3.7. DONOR ACTIVITIES AND COORDINATION

The brief and very general feeling is that few donors are directly operating out in the field themselves as most funds are routed through MoA and their District and lower level structures, such as the Agricultural Marketing Systems Development Programme (AMSDP) and the Rural Finance Support Programme (RFSP). Several NGOs are operating in the relevant districts, and some of them are at present also involved in the Fast Track Initiative (like Dai Pesa fi).

Given time available, it is difficult to assess impacts of this work, but a major feeling is that lack of coordination is a lesser problem than to what extent these programmes actually effectively are able to deliver relevant and interesting micro-finance offers to the poorer sections of farmers in rural Tanzania. Most farmers complain about a severe lack of credit

access- at least at what they see as affordable prices. And most farmers do not at all access credit- or fertilizers.

3.8. SUMMARY AND COMPARING TEAM ASSESSMENT WITH THE FAST TRACK INITIATIVE

In the Fast Track technical paper, the following items are listed as constituting a Fast Track Initiative:

- Improved data and information on the Fertiliser Value Chain
- Output market guarantees and Warehouse Receipt Systems
- SACCOs' and other local MFI development
- Improving Farmers' demand for fertiliser and capacity
- Improving Stockists' organisation, technical skills and credit
- Resolving critical fertiliser import and handling constraints at the port

All these are clearly in agreement with issues noted by the team and as such the analysis we have made. Our general impression is that much good work has thus been done in the Fast Track initiative so far. Below we make some additional suggestions.

1. It seems wise to secure **better monitoring and control systems** at certain "hotspots" in the fertilizer chain. Apart from central level policy issues on controlling cost estimates etc., we would like to stress;
   a) Controlling transition of fertilizer at the regional level from importers/warehouses to stockists; time, amounts, types, prices and other conditions
   b) The transition of fertilizer from stockists to farmers; time, place, amounts, types, prices and other conditions
   c) Increased international border control to prevent "leakages "of subsidized fertilizers
   d) A crosschecking, participatory system of control should be launched from below; from farmers, villages, wards and up to districts and regions, involving the agricultural officers at different levels.
2. Promote a **flexible collection system** for district stockist operator to collect fertilizers wherever (independent of region) is more convenient for them.
3. Develop templates and promote use of formal contracts with firmer **contracting and sanction systems** when contracts are breached, at region and stockist levels.
4. Try to **formalize collaborations with SACCOs** groups (and Outgrowers) at district level for stockist operations, micro-finance, output and even warehouse concepts; and most likely avoid using the locally clearly controversial SCCULT for this.
5. Develop a **clearer microfinance strategy** at District levels involving both Community Banks and NMB (and also CRDB?) and AGTITF/other programmes. Make some decisions here.
6. Develop a good system for **demand registration**; preferably farmers should access fertilizer directly at a physical market place; but one needs at least a more secure system than today, where many farmers and villages are not asked or approached at all about their demand.
7. The **fertilizer subsidy is allocated/issued** at a point of time (mid September) where the bulk of fertilizer should have been out in the districts already, creating bottlenecks and tight time schedules. If at all possible to change, this should be looked into.
8. **Improving infrastructure** such as identifying potential actors taking the old Ushirika warehouses into use, promote use of railway wherever possible, and identifying particular inaccessible divisions and wards with high population densities and

improving their access.

9. In a pilot and demonstration scheme, one could try alternative models for Fast Tracking in different districts;

- As now
- Improve present system
- Try a warehouse receipt approach
- Flood one district supply-wise by using one major stockist or securing enough depots and transport out to flood the market and assess the "real economic response" by farmers given a "perfect supply side"

10. The role of **Village Governments** should be clarified; what can they offer, legitimise, facilitate or constrain?

11. Carefully assess **output market capacity, competence and efficiency/effectiveness** in handling potentially increased yields and identify measures to secure performance.

3.9. FAST TRACK, SOME SLACK OR SLOW TRAIN COMING?

What is reasonable to expect done this year, and what should be tried out next year? We have tried to pinpoint the differences in our suggestions, what could be done this year and what would need more careful planning for years to come.

The staff working with Fast Track Initiatives are obviously under severe pressure to perform this year, and it seems important to consider a future planning of the initiative over time; what can be tried out this year, and the next year, up-scaling issues etc.

3.10. WHAT COULD NORWAY'S INPUTS BE?

In the FTI document the following is said for Norfund and Norad; Risk capital investment in private sector, support business activities in emerging markets, contribute to international cooperation, technical assistance. At present Norfunds role is not clarified as far as we have been informed, and we leave this aside in this report, but we are open for possible discussions on this item.

Concerning Norads/Norways role in a PPP, it seems sensible to facilitate issues relating to financing public goods, to activities that have clear poverty, environment, gender orientations and that basically are in line with general policy outlines.

1. One suggestion would be to finance elements of **training and faciliation** of the actors representing smallscale, poor farmers, study training and facilitation such as the SACCOs.

2. A second suggestion is to **finance studies** that can faciliate both the fast track the process, but also issues of more general development concern such as;

2.1 Undertake a fullfledged **base-line study** for the five districts and some control districts where changes, effects and experiences can be compared in a formative research component.

2.2 A more comprehensive **fertilizer value chain study** where one uses more insight and concepts from Porter's (1985) "Value Chain" approach and assess in relation to issues on effectiveness, efficiency, competition conditions, institutional factors and also in particular on distribution and environmental concerns etc are assessed. A special focus should be out on supply/demand relations in the different sections of the chain.

2.3 A careful analysis of the overall **subsidy policy design**, its **implementation** and **effect**s so far and an assessment of possible measures to improve its effectiveness, efficiency,

distribution and environmental effects.
3. There is a conspicous **lack of organizational structure** at the base of this PPP and FTI, and at present it seems that the only coordinating force is a private consultancy firm. Given the situation, they are doing a good job as far as it goes, but one should for the future (next year?) consider differ possibilities for a firmer and more long term thinking organisational platform. The present system seems un-necessary loose and uncommitted for involved parties. The Fast Track should not be seen to end after one year, but needs a firmer organizational base. Norad could contribute to such an institution- building. This is a matter of urgency.
- One option is a system whereby possibly MAFS is given a lead role, possibly with backstopping from external sources.
- A second option could be a more government independent alternative, even if the government obviously holds a key position in relation to many present constraints and opportunities of the fertilizer chain and the FTI.
- A third option as discussed by the parties is to develop a private company. If that is seen, then Norads role in the FTI could rather quickly be phased out. Such as a solution would leave the GoT in a somewhat awkward or at least unconventional position, and this situation would need some more detailed tailormaking to address.
4. A last point on this issue of organisation is also for Norad to find some way to place the programme in some way at the Embassy in Dar to keep a closer overview of this process, possibly with a backstopping from Norad/Norway.

4. SOME DONOR PERSPECTIVES

This section deals in a more composite way with Norad concerns as a donor, with existing guidelines and particular concerns. We also refer partly to a note sent Norad June 12.06 concerning an earlier draft of the Fast Track Initiative" document (Appendix 3). Some of the comments made in that note are partly developed further here.

4.1. OVERALL DONOR CONCERNS

The recipient responsibility: Norway has a policy that development funds should be spent in accordance with what the final recipient; Tanzania, be it private sector, farmers or state, wants. This project and its present actors comes from above and from outside, and too little emphasis and references seems to be made so far to secure a local ownership and long term responsibility and commitment, especially from the Government side. This is still problematic and needs to be included in both the structure of the future project and in the process to develop a more clear-cut programme. Neglecting this would in our opinion make it difficult to argue for using development funds for this program.

Poverty reduction: In line with the above, and as arguments for using development funds, what is the poverty reduction profile of the programme as it now stands? Much more sophistication is necessary in programme design to secure that a main beneficiary/ and target group will be the poor farmers, women and youth; and not already more or less wealthy and even commercial farmers. Omitting this point, would also make it difficult to argue for using development funds for this programme.

Government and donor coordination: The programme should reflect much more on what is done at present, and reflect better what other actors, including donors are doing in the field; both in terms of learning and in terms of doing/cooperating.

Other important donor concerns; Gender, environment, economic viability, long run institutional sustainability, links to other complimentary development efforts in the country (compatibility with public planning documents and policies) etc. also need clarification in relation to using development funds. Institutional sustainability of the FTI is highly unclear at present and needs addressing.

Good governance: Major problems relate to issues of more and less good governance along the fertilizer chain, and confronting this problem more explicit is crucial for a successful FTI. The present situation is unclear, but there are many reasons to suspect substantial misuse of funds by powerful actors.

How sexy is the project? This programme is intended to be a *pilot and demonstration project* in its **design**; in relation to its components, structure and the processes by which it is developed. It should be "as a lighthouse in an African context from which important lessons can be drawn for other countries and actors". If this is the case, and one wants to make programme design a separate goal, we think one could stress much stronger innovative, creative mechanisms both for structure and for process. This needs a deeper planning. Some examples;
- More participation from farmers in developing packages for fertilizer use, locally designed and adapted
- More active partnership with the local extension service in particular; facilitating capacity and competence building
-More active partnership with present fertilizer delivery system if considered conducive- using local institutions?
- Taking local variations more seriously (markets, infrastructure, agro-ecology, local political and social institutions, ethnicity, production systems etc.) and avoid a blueprint fast-track in the five districts
- More innovative on collateral thinking- avoid that farmers risk loosing their land assets
- More innovative on output marketing side?
- More active on local selling of programme ideas; field days, local fertilizer prizes, farmers rewards etc. using local radios, media etc. involve politicians and pop-stars.

To sum up, even if this is a private/public partnership, the programme document must clarify the elements of social profitability inherent in the suggested programme ideas and thus secure that a Norwegian donor support is warranted. It can also be that a donor support should primarily address the public goods elements produced through this programme, and not the direct private elements.

4.2. SOME FACTUAL CONCERNS

It is quite clear that the fertilizer subsidy and FTI will not solve Tanzania's development challenges! However, several bottlenecks and constraints in the present system can be reduced and help improve the output as seen from a donor perspective.

- The present market conditions reflect substantial asymmetric power relations, starting from Port with importers and moving down the chain. It is a general worry that this situation will prevail unless specific measures are taken to reduce the asymmetric power relations; through measures such as increased control over turnover in the chain, increased emphasis on consolidating poor people's market access and control etc, and facilitating more actors to enter. One cannot assume that all actors in the FTI have similar, common or even compatible

interests.
- More emphasis on short term credit is essential for poor small-scale farmers;
a) To reach poor farmers and to monitor effects of the lending on fertilizer use and output increases "poverty performance"
b) Generate an organisational lending structure to reach poor small scale farmers with little or no collateral- "organisational performance"
c) Move from a "supply led" to a client focussed micro-finance approach
d) Move from a predominant emphasis on financial sustainability to a renewed concern with social performance and the "double bottom line" (See IDS Bulletin No.4. 2003)

A lot of experience is already summarized on micro-finance and how to both make it work in efficient ways and to direct it towards poor small-scale farmers. One could also create more innovative approaches on this component; improving the projects' pilot and demonstration qualities. And why not allow for more experimenting with different models in different areas; to learn more about different approaches in this complex field of policy design and implementation? Something for the next phase?

It is slightly difficult to tell, but we do feel that certain of the donors, like the World Bank, IFAD and USAID, sponsoring important programmes and hosting substantial experience, should be more involved in the programme; a job that Norad could try to take on in the partnership work.

4.3. A SUMMARY OF DONOR CONCERNS

A more comprehensive programme document must be developed for a next phase of FTI prior to any Norad support, where preferable the lead agent is made to be the MoA, and with some minor technical support from outside. In a PPP this has to be discussed between the parties. But at least, or anyway, Norad's part of the partnership can be organised in this way.

In this work, one should much clearer outline a structured organigramme and division of rights, duties and responsibilities, based on interests and competence among the partners. It is thus recommended that a proper programme document is developed between the partners, prior to future support from Norad.

As stated in Annex 3, a good pilot and demonstration scheme also involves a conducive organisational structure. Goals, outcomes, functions etc. do not exist in vacuum but are results of a particular organizational structure and institutional framework (see also Appendix 3 for more detailed issues for such a document).

From Norad/Norway, it must be an advantage to anchor this work at the Embassy, if possible, enabling a closer follow-up of the work. This is of course also a matter of resources and priorities beyond these consultants' dominion!

5. MONITORING AND EVALUATION OF IMPLEMENTING THE PPP FAST TRACK INITIATIVE

This is a difficult task as various measures to be taken in the FTI have not yet been finally determined and executed. However, some elements are there and can be mentioned. Furthermore, it is also important that monitoring and evaluation also addresses the key elements of the existing fertilizer chain itself; and its possible bottlenecks and hotspots.

5.1. WHAT SHOULD THE CONTENT OF A MONITORING AND EVALUATION EXERCISE BE?

Monitoring "is the continuous or periodic surveillance of the implementation of a project" (Gosling and edwards, 1998). One should monitor physical progress, but also the impact of the project and also developments in its environment (external factors). The latter could then involve also PEST/ STEP type analyses. There should be *one* format for monitoring throughout the lifespan of the project in order to gauge development. Monitoring can well and often preferably be carried out by project/programme responsible people themselves; participatory monitoring. Monitoring must be formatted such that inputs, activities and outputs are monitored with reference to the purpose and goals of the programme or activity through the use of identified indicators. This implies overseeing and registering processes at work over time.

Evaluations, on the other hand, should be seen as "independent assessments of the impact, relevance and sustainability of the project in relation to its objectives, target groups and other affected parties and in relation to the inputs implied, undertaken by ***external*** collaborators" (Gosling et al, 1998). Evaluations are made both for learning and not least for accountability purposes and should assess relevance, efficiency, effectiveness, impact, governance issues and sustainability as seen from outside. There are important reciprocal links between the monitoring processes and the external evaluations, in that the evaluators critically can use results from the monitoring processes and that monitoring is informed by evaluations. But an important virtue or rationale of evaluation is precisely its independence of involved actors.

This thus implies links between the two activities, but also that we talk about two separate ventures that preferably should be undertaken by different actors.

5.2. WHAT IS THE FAST TRACK AND CRUCIAL CHALLENGES?

In the Fast Track technical paper, the following items are listed as Fast Track Initiatives;

- Improved data and information on the Fertiliser Value Chain
- Establish trial output market guarantees and Warehouse Receipt Systems
- SACCOs' and other local MFI development
- Improving Farmers' demand for fertiliser and capacity
- Improving Stockists' organisation, technical skills and credit
- Resolving critical fertiliser import and handling constraints at the port

And, as stated before, there could be more issues coming up.

5.3. ELEMENTS OF A MONITORING PROCESS

A detailed monitoring document should be prepared by qualified and *involved* people as soon as possible and prior to starting the work!

1. Prior to a monitoring and even an evaluation process, one needs a baseline study from which progress can be measured. Some of the elements needed for a baseline study are referred in Appendix 5 of this report and should be developed into a more full-fledged baseline study, as suggested elsewhere in this report.

2. A monitoring system assumes a process perspective - the consistent accumulation of information over time; from the baseline study, to programme planning, decision-making, execution and reviews/finalization.

3. It will lead too far here to develop a finalized monitoring set-up for the FTI and PPP, and in particular as all elements are not yet in place, so what is presented should more be seen as example of a format one could use.

Most of the FTI activities should be possible to monitor in a simple way, but may need some resources. Other, more qualitative assessments of e.g. training are more complex and would require qualified monitoring staff.

A crucial monitoring issue is to what extent farmers get access to fertilizers and credits at reasonable prices and that their demand is met by a supply in the market.

A third and more challenging task is to reveal and control issues of good governance. Who actually gets the subsidy? Importers in Dar, wholesalers in regional capitals, stockists or farmers; and what about farmers?

Table 5. Example of a monitoring plan (needs further development)

Project structure	Description	Indicators and values	Means of verification	Critical assumptions
Wider goal	Improve welfare in Tanzania through increased land productivity and production	GDP in agriculture absolute and relative to other sectors Gini- coefficients/other distribution measures	Macroeconomic performance indicators	- a reasonable distribution of increased benefits
Objective/ purpose	- Increased and secure fertilizer use - Improved output markets - Secure target groups receiving benefits	- increased imports of fertilizers (amount) - increased sales and subsistence figures for crops (amounts, prices) -etc.	- Stat. figures - household and market analyses - etc.	- no border leakages -competition conditions -reasonable distribution
Outputs	- Improved knowledge on value chain - Increased yield levels/acreage and sales -Improved output markets systems - Buffer stock established? - Strengthened local institutions such as SACCOs - Increased demand for fertilizers -Increased competence/proficiency among stockists - Reduced costs of Port part of fertilizer chain; both financially and in operation time/quality - Improved communication between actors in the value chain Reduced volatility of fertiliser prices	- farmers report awareness of prices and conditions (figures) - size of farmers yield levels/fertilizer use and sales - amount of post harvest loss, - price levels on outputs (figures) - %SACCOs handling of total fertilizer subsidy as stockists etc.	- household analyses - household and market analyses	- that partners are open, transparent and pull in the same direction

Activities	- Gather data and information on the Fertiliser Value Chain and disseminate to actors - Establish output market guarantees and Warehouse Receipt System pilots - Train SACCOs' and other local MFI - Facilitate Farmers knowledge about and access to credit and to fertilisers - Develop and train Stockists' and their organisation, technical skills and credit access - Resolving critical fertiliser import and handling constraints at the port through altered, policies, regulations, procedures and infrastructure investments - Strict control of prices along the chain	- # of reports produced and information measures - number of ware house pilots - # of training activities and participants - # of transactions between farmers, stockists and credit dealers - % increases in trade credit to agro-dealers by supply companies - % increases in lending by financial institutions to wholesalers etc	- controlling etc.	- There is a coherent, consistent and coordinated implementation system pulling off all activities
Resource inputs	- Funds to pay for and contract people for information gathering - Funds and other resources for developing warehouse pilots - etc.	Payments observable through accounts etc.	Audits, accounts	-FTI funding is available and will prevail -government continue subsidy
External factors	- Continued donor support - Macroeconomic stability - Trade relations and relative price development	- can be observed -macroeconomic performance indicators - relative price changes	-macro-economic statistics and govt. reports	Macroeconomic stability - Interest rates

5.4. ELEMENTS OF AN EVALUATION EXERCISE

Much of the same as is assessed in a monitoring exercise is of use in an evaluation. Prior to an evaluation process, one ideally needs a baseline study from which progress can be measured.

Secondly, an evaluation cannot only apply an input-output approach, but has to include a process and/or an implementation perspective; because development over time and timing of activities and actors often holds a key role to understand why things worked- or why they did not.

Thirdly, it will lead too far here to develop a finalized evaluation set-up for the FTI and PPP, and in particular as all elements of FTI are not yet in place, so what is presented should more be seen as example of a format one could use.

An evaluation should assess "the impact, relevance and sustainability of the project in relation to its objectives, target groups and other affected parties and in relation to the inputs implied, undertaken by external collaborators" (Norad, 1990). Evaluations should be independent assessments and carried out both for learning and for accountability purposes and assess;

Relevance; if objectives are in line with local and national priorities and needs

Efficiency; what is the productivity of the project; where outputs are assessed in relation to inputs (cost efficiency is one measure). Do the results warrant for the resource use?

Effectiveness: Extent to which the objectives have been achieved**;** a physical measure of goal achievement ratio (quantity, quality, time).

Impact: All changes and effects (positive and negative) caused directly and indirectly by the project. The relative importance of various impacts

Sustainability: Will positive effects continue upon donor withdrawal? There are institutional, financial/economic, technological, socio-cultural /gender and environmental elements of sustainability.

Good governance: What are particular hotspots in terms of potential misuse or displacement of funds? Where should one in particular impose control measures?

In Table 6 is an example of elements that could be included in an evaluation exercise.

Some key issues to address in an evaluation must thus be to what extent the various components have effect, are efficient, relevant, what impact they have and to what extent they will be sustainable over time. For the Fast Track Initiative, it is crucial to have a monitoring and evaluation system that summarizes the experiences and helps single out what are successful and less successful interventions and what elements should be taken to a scaling up venture.

Table 6. Example of an evaluation plan (needs further development)

Project structure	Description	Effectiveness	Efficiency	Impact	Relevance	Sustainability	Governance
Wider goal	Improve welfare in Tanzania through increased land productivity and production						
Objective/ purpose	- Increased and secure fertilizer use - Improved output markets - Secure target groups receiving benefits						
Outputs	- Improved knowledge on value chain - Increased yield levels/acreage and sales -Improved output markets systems - Buffer stock established? - Strengthened local institutions such as SACCOs - Increased demand for fertilizers -Increased competence/proficiency among stockists - Reduced costs of Port part of fertilizer chain; both financially and in operation time/quality - Improved communication between actors in the value chain Reduced volatility of fertiliser prices						
Activities	- Gather data and information on the Fertiliser Value Chain and disseminate to actors - Establish trial output market guarantees and Warehouse Receipt pilot systems - Train SACCOs' and other local MFI development - Facilitate Farmers knowledge about and access to credit and to fertilisers - Develop and train Stockists' and their organisation, technical skills and credit access - Resolving critical fertiliser import and handling constraints at the port through altered policies, regulations, procedures and infrastructure investments - Strict control of price development along the fertilizer chain						
Resource inputs	- funds to pay for and contract people for information gathering - funds and other resources for developing warehouse pilots - etc.						
External factors	- continued donor support - macroeconomic stability - trade relations and relative price development						

5.5. WHO SHOULD BE RESPONSIBLE FOR THESE ACTIVITIES?

To keep costs down, to secure an institutional anchoring and a more long term sustainability, and to promote enhanced public management in this area, we suggest that these studies could be a task for MAFS with some external support to establish and maintain a database for collection, compilation and handling of annual data emanating from household surveys and from various districts, divisions, wards and village level sources.

A more detailed monitoring and evaluation document should be prepared by qualified people as soon as possible and prior to starting the work.

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APPENDIX 1. TERMS OF REFERENCE

TECHNICAL SUPPORT TO PUBLIC PRIVATE PARTNERSHIP IN TANZANIA

1. Reference documents

The partnership is established in support of the Government of Tanzania's agricultural policies in general and specifically the draft fertilizer strategy. The reference documents is in this respect But again this has to be seen in relationship to the overall poverty reduction programme MKUKUTA. The value chain approach requires that non agricultural issues are tackled, such as communication and infrastructure, as well as financial sector policies. Hence, there are a number of policy documents relevant for the assignment. Most of these have been described and analysed in the preparatory documents to this public-private partnership (PPP).

2. Purpose

The overall purposes the technical support is to facilitate the preparation of a PPP in the agricultural sector in light of the fertilizer initiative. Norad is asked to make investments in the value chain to facilitate the PPP without distorting the market mechanisms and the consultant will explore possible investments to be made by Norad in support of the PPP initiative, hereunder:

- Discuss the PPP with relevant stakeholders in Dar es Salaam. Appointments will be made by the local consultant in Dar, assess the strengths and weaknesses of the value chain. The consultant will, if time allows, participate in meetings between partners in Dar es Salaam.

- The consultant will visit no more than two Districts to review the strength and weaknesses in the value chain from the perspective of increased subsidies/availability of fertilizer in Dar es Salaam, with a specific emphasis on:

    - Strengths and weaknesses of the financial sector from the formal banking system to the micro-credit providers.
    - The standard of infrastructure and communication related to the value chain.
    - Capacity of the agro-input side related to financial strength, storage facilities, knowledge of the products and understanding of the market. (linkages to dealers, importers, financial service providers
    - The function of the output marketing system and price mechanisms in selected crops in the District.
    - The institutional capacity of farmer's organisations and their possible role in the value chain.
    - The capability/capacity of the public sector to be an active partner with the private sector in the value chain, hereunder extension services. (can the District function as the lead agent in the local PPP)

- The District review and interviews in Dar es Salaam will form the basis of an assessment of how the agricultural input/output market functions in the selected District(s) (separate output)
- Based on the information from the field the consultant will develop a proposal (including method) for a study/data collection to be carried out in selected Districts for the planning of a PPP at the local level

- The consultant will further propose a cost effective monitoring system for the implementation of the PPP fast track initiative.

3. Methodology

The consultant will liaise closely with the Partner's local consultant, Mr. Jeffrey Lewis who will facilitate the work to be carried out in Tanzania. The consultant will also communicate with relevant Tanzania authorities and the Norwegian Embassy in Dar es Salaam. The selection of District(s) to be visited will be based on a joint decision between the consultant and Mr. Lewis, based on a dialogue with Tanzanian authorities. The consultant can engage a local assistant that can function as an interpreter in the field as well as facilitate the collection of local statistical information. The length of the fieldwork will be decide during the first days in Tanzania, but should exceed 5 working days including travel.

4. Time frame

The total timeframe for this assignment is 160 hours, including up to 100 hours in Tanzania. Resources are available for contracting local assistants in support of the field work period and collecting information from stakeholders in Dar es Salaam. The assignment will be carried out in the period August 10th to September 10th.

5. Reporting

The final draft report shall be submitted to Norad no later than by September 5th. The report shall consist of but not be limited to the following elements:

- An Executive summary of not more than three pages;
- Presentation of findings from the national and district studies
- Proposal for a review of the value chain in selected districts (a daft of this proposal shall be submitted as soon as possible to the local consultant in Dar es Salaam)
- A proposal for cost effective monitoring mechanism
- Annexes including schedules, people met etc.

APPENDIX 2. ITINERARY

Date	Time	Institution	Name
15.08.06	13.00	Private consultant (Korongo Limited)	Jefferey Lewis
16.08.06	09.00	Royal Norwegian Embassy	Min. Couns. Inge Rydland Kari E. Hansen
16.08.06	11:30	Dai Pesa Ofisi	Mr. Joy Burke 0744 623 523 Alexander Fernando 0744 623 524
17.08.06	09.00	Private Consultant	Will Massawe 0744371799
17.08.06	11.00	Yara	Simon Girdlstone 0787555100
17.08.06	13.30	Min. of Agriculture	Dr. H. Sadaan Philemon Kawamala
17.08.06	19.30	Director of Marketing Min of Mine	Florence Turuka 0744362235
17.08.06	17.00	Agricultural Council of Tanzania	Janet Bitegeko 0744305985
18.08.06	09.00	Mkurabita	
19.08.06	14.00	IFAD	Mwatima A Juma 0744 371799/ 0744 536 630
19.08.06	15.00	SCCULT	Peter Mashingia
19.08.06	16.00	Tanzania Agricultural council (TAC)	

a) Dar Es Salaaam

Itinerary during field work in Mafinga and Kilombero District

a) Mafinga District

Date	Time	Institution	Name
21.08.06	9.00	District Executive Director and District Agricultural and Livestock officer	Khalifa Hilda and Rwekama S
	11.00	District Agricultural Marketing officer/AMSDP	Mr Floria Bombu
	12.00	Mufindi Community Bank	Eliya Chambiko(GeneralManager) Magesa Mafuru (Financial man.) Ndembeka Agrey (Credit Manager)
	13.00	Tanzania Farmers Association	Branch Manager
	14.00	Tea Research Institute	Dr Emmanuel S.Simbua
	16.00	Stockist MVIKIMA SACCOS	Greyson Kibinda(Secretary), Joseph Kibinda(Chairman)
	17 .00	Stockists	Bosco Mwaikingi Tangiron Mbilinyi

b) Kilombero District

Date	**Time**	**Institution**	**NAME**
22.08.06	11.00 - 14.00	Kilombero Can growers Association	Bakari Y Mtanji (chairman) Gracian V. Madufu (Secretary)
	11.00 - 14.00	SACCOS Kilombero Sugar cane growers Udzungwa	Elias D. Mnguruta
	11.00 - 14.00	ROA	Kassim Mpili (Chairman), Zabron Makweta(vice chairman)
	14.00- 16.00	District Agricultural officers	Mwikalo Waziri (Principal Agricultural field officer), Tery Kasena (Principal Agricultural officer)

APPENDIX 3. COMMENTS TO THE FAST TRACK REPORT

Odd Arnesen
Norad

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OUR REF
YOUR REF
DATE 12 JUNE 2006

"Partnership project to support the development of the fertiliser supply chain in Tanzania"

I have gone through the draft report and find it in general very interesting, not least due to the partners involved and the very important topic of the outlined programme. I have been asked to comment it and below follow some key issues and suggestions. It must be said that I have just become involved and may lack substantial background and historical knowledge about the idea of this project from its inception to present status. I thus ask that my comment are seen in that light.

The main goal of the suggested venture is first to finalize the "Project concept and Process paper" by June, and then to further develop a project proposal within the next 2-3 months. The presented report will provide guidance and bearings for important factors to be considered included in the work towards a final project proposal document. I make my comments to the report by sections.

1. INTRODUCTION

The overall goal of the programme addresses a crucial factor for agricultural development in Tanzania. In general the report seems now well designed and involves all main parts expected at this stage of the process. However, a cross cutting comment I make up front, will follow many of the more detailed comments I make throughout this note.

The report reflects an ambition for partnership alliance to merge donors and private sector partners in a joint venture for improved fertilizer supply in Tanzania. A partnership must imply that due consideration is provided for different actors interests and motives. The commercial dimension is catered for. However, for Norway/ Norad to join some crucial elements must be in place, and much clearer and more explicit than what is found throughout this report. I will give some examples:

The recipient responsibility: Norway has a policy that development funds should be spent in accordance with what the final recipient; Tanzania, be it private sector, farmers or state, wants. This project and its present actors comes from above and from outside, and too little emphasis and references are made so far to secure a local ownership and long term responsibility and commitment. This is highly problematic and needs to be included in both the structure of the project and in the process to develop a final programme. Omitting this, would make it difficult to argue for using development assistance funds for this programme.

Poverty reduction: In line with the above, and as arguments for using development funds, what is the poverty reduction profile of the programme as it now stands? Much more sophistication is necessary in programme design to secure that a main beneficiary/ and target group will be the poor farmers; and not already more or less wealthy commercial farmers. Omitting this point would also make it difficult to argue for using development assistance funds for this programme.

Government and donor coordination: The report should reflect much more on what is done at present, and what other actors, including donors are doing in the field. The 2005 report from MAFS indicates a separate action plan for developing Agricultural Input Markets in Tanzania, with support from AFDB and from AIIF (African Infrastructure Investment Fund?) in a 30 mill. USD. 5 years programme. This should be investigated further.

Other important donor concerns; Gender, environment, economic viability, long run institutional sustainability, links to other complimentary development efforts in the country (compatibility with public planning documents and policies) etc. also needs clarification in relation to using development funds.

How sexy is the project? This programme is intended to be a *pilot and demonstration project* in its **design**; in relation to its components, structure and the processes by which it is developed. It should be "as a lighthouse in an African context from which important lessons can be drawn for other countries and actors". If this is the case, and one wants to make programme design a separate goal, I think one should stress much stronger innovative, creative mechanisms for structure and for process. Some examples at the top of my head;
- More participation from farmers on developing packages for fertilizer use, locally designed and adapted
- More active partnership with local extension service; facilitating capacity and competence building
-More active partnership with present fertilizer delivery system if considered conducive- using local institutions?
- Taking local variations seriously (markets, infrastructure, agro-ecology, local political and social institutions, ethnicity, production systems etc.)
- More innovative on collateral thinking- avoid that farmers risk loosing their land assets
- More innovative on output marketing side?
- More active on local selling of programme ideas; field days, local fertilizer prizes, farmers' rewards etc. using local radios, media etc. involve politicians and pop-stars (some elements mentioned in 4.4.)

To sum up, even if this is a private/public partnership, the programme document must clarify the elements of social profitability inherent in the suggested programme ideas and thus secure that a Norwegian donor support is warranted. It can also be that a donor support should primarily address the public goods elements produced through this programme, and not the direct private elements.

2. FERTILIZER USE AND SUPPLY

There can be no doubt that the overall goal of the programme addresses a crucial factor for agricultural development in Tanzania. A question I raise, and that I will return to is the still rather concentrated focus on the fertilizer supply chain. Seeing fertilizer in isolation from other major constraints, on the input side; including various types of technical and institutional infrastructure seems a bit un-necessary. This also applies to an analysis of

existing actor and institutional structure; who are the present players involved in fertilizer trade today, and how will they meet a new situation? Risk factors? One actor imports 1/3 of all fertilizer today. Who is this, how will he respond to a subsidized and powerful competitor?

The present thoughts on the production outlet side may seem slightly in contrast to general development experiences we do have in this field. (See fi, the report by MAFS (Mbwele) and not least the USAID/IFDC Report on Action Plan for Developing Agricultural Input Markets in Tanzania (2005) (also sponsored by MAFS). One should be careful to approach an obvious economic and physical lack of fertilizer access in isolation from broader agricultural development issues as is also stated in the report, but not comprehensively followed up by suggested actions..

Market analyses: History has taught us that markets are social institutions and not natural given entities that automatically arise once government interventions have been removed. I think a bit more comprehensive analysis of the present markets, their structure and institutional characters, actors and not least dynamics would be important. On should also include an analysis of the present main market imperfections; their origin, history and main impacts and how the presented programme is thought to operate within this system. As also mentioned in the note, it seems also important in this context to look into the discrepancies between the statistics on fertilizer supply, demand and use, as also mentioned in the report. Another point is that introducing micro- finance, is an acceptance of the prevalence of market failure.

Poverty analysis; The present analysis of small-scale farmers is especially from a poverty alleviation focus, rather shallow; and could well be made richer. Looking into poverty alleviation literature; aspects around entitlement and endowments failures, particular challenges of poor farmers to adopt rather capital-demanding technologies, the risks and uncertainties, collaterals, etc should have been problematized better. The asymmetric power relations and possible organizational solutions in this context between farmers and retailers should also be handled more carefully. A present reference now on that "it is unwise for farmer's organizations to become involved in procurement of inputs", seems at best rather naïve. Market relations are not governed by a greater common good, but by the relative forces of buyers and sellers, and given that most markets in this context reflect asymmetric power relations, this issue really require more careful thought. Poor farmers may not be good in procurement, but they will definitely benefit strongly from improved market power.

A minor point of types of fertilizer: I am not so sure as the report that farmers are unable to handle different types of fertilizers. The distinction between pure nitrogen fertilizers and composite fertilizers is handled well by farmers, at least according to my experiences from Zambia.

3. THE PROPOSED PROJECT CONCEPT

These are elements to be included in the proposed project.

3.1 The vision

I think the vision and the justification factors are good even if the focus is rather narrow. In line with initial comments, more emphasis should be put also on social profitability and more general welfare aspects especially for poor farmers derived from the programme.

3.2 A Private-Public partnership
I think that a more explicit involvement of government, and in particular the agricultural sector and the extension service should be involved much more directly also in formulating the final programme.

I am not always convinced that an LFA format for a project proposal is the best, especially in projects where process and participation holds important ambitions. But it helps keeping a track of overall goals and purpose; and furthermore inputs, activities and outputs. One could consider to enclose a logframe in an appendix.

I would think that the main overall goal would be to improve welfare of people and country; and the following purposes may be twofold; to increase food production and land productivity among small-scale farmers in Tanzania and for Yara and other commercial actors; to sell more fertilizers and for Rabobank to develop a new capital market from which profits can derived.

Documentation becomes more crucial; what can in practice be learned from the pilot scheme?

3.4 Components
I think the four suggested components seems OK as far as they go. The present components relate to reliable fertilizer supply, to facilitate access through credit schemes, to support output marketing and involve training of relevant stakeholders. I would still have liked a consideration of a broader focus; both on the input side, and on the output side as earlier mentioned, in addition to poverty alleviation and the general social profitability issues of the programme. And more innovative as stated above, what is new here?

3.5 The regional perspective
What is stated is OK, but one should maybe include this point as part of the process action plan and maybe even as a separate objective of the programme under 3.3. As it is now, it is quite un-committed and vague.

As already stated, more innovative issues and a clearer design of the programme itself seems necessary to develop prior to thinking about pilot and replication issues.

3.6 Other project concept issues
Programme design; Structure and process is not addressed at all; organigramme; who owns the project, who is in and out, who does what, where, how and why; organizational structure (leaders, steering committees etc.), flows of resources, powers and authority; good governance; building, enabling and maintaining institutions; links to Tanzanian public and private entities. There is no programme design or architecture. In a pilot and demonstration project these are crucial elements! A development experience here is that much of the success and failure does not relate to having good ideas for field operations or not, but setting up conducive organisational and institutional structures, compatible with local, existing structures and networks.

A deeper conceptual analysis of the different components;
Some examples of concerns;

- Some more overview of Tanzania's relevant development policy frameworks and institutional arrangements and the bearings it may have on the programme concepts.

- An overview of present and coming donor (coordination) initiatives in the area and the bearings it may have on the programme concepts
- More reflection on how the programme fits into Norad/Norwegian development assistance bearings such as poverty alleviation gender, environment, corruption/good governance (not mentioned at all in the TOR), institution and capacity building etc and the bearings it may have on the programme concepts. Governance and corruption is not mentioned in the report at all. This is maybe one of the most crucial questions and that also relates to risk factors!
- Market imperfections of present system and ideas for how to handle this
- Special focus on poor farmers situation and how one can avoid collateral systems that could lead to farmers loosing their land assets
- How will present power systems and actors at various levels in the fertilizer market be affected by and react to new actors on the scene?
- Sustainability elements of the programme; what happens when donor funds disappears! Such a question is in line with Norad bearings on sustainability criteria (policy and frameworks, economic and financial, technical, institutional, socio-cultural and gender, environmental etc.

4. FIELD OPERATIONS

4.1 A buffer stock

The establishment of a buffer stock seems wise, and is well defended in economic literature, as well as in the report. However, its management and organisational structure is a complex political matter that needs discussions and clarifications at high political levels in Tanzania. Yara's role as fertilizer producer and seller and suggested manager of the buffer stock may be problematic in relation to both private and public sector concerns. It probably needs more clarifications prior to a finalization the programme document at least to avoid future criticisms and potential problems. There are complex pros and cons of such a suggestion.

4.2 Short term credit

There can be no doubt that short term credit is essential for poor small-scale farmers to be able to use fertilizer strategies in their farming. The document as it stands does not reflect to a sufficient degree on;

a) How to reach poor farmers and to monitor effects of the lending on fertilizer use and output increases "poverty performance"
b) Generate an organisational lending structure to reach poor small scale farmers with little or no collateral- "organisational performance"
c) Move from a "supply led" to a client focussed microfinance approach
d) Move from a predominant emphasis on financial sustainability to a renewed concern with social performance and the "double bottom line" (See IDS Bulletin No.4. 2003)

A lot of experience is already summarized on micro-finance and how to both make it work in efficient ways and to direct it towards poor small-scale farmers. This should be reflected better in the document and could also create more innovative approaches on this component; improving the projects pilot and demonstration qualities. And why not allow for more experimenting with different models in different areas; to learn more about different approaches in this complex field of policy design and implementation.

4.3 Output marketing

This issue is again as crucial as the others, and also here innovative approaches should be sought that also have a pro-poor profile. It is obviously also a vast issue and must be discussed and linked more carefully with other on-going agricultural development efforts; that are both public, donor and private sector related.
An important element here is that for most small-scale farmers the local markets are the economically speaking most important ones and should not be left out in a output marketing strategy.

4.4 Training, capacity building, information and communications

This point is important and well designed. A major focus should be on strengthening institutions and organizations, and not only human resources.

4.5 Complimentary activities

This point could be important, but is presented so brief that its purpose becomes too vague for commenting upon.

5. PARTICIPATING INSTITUTIONS

5.1 Partnership

As mentioned several places, the document still lack a firm organizational structure and clear-cut division of authority, powers, resources etc. This needs to be put in place before finalization of a document, not least to secure commitment from involved partners. I stressed before, but repeat that government must be brought in now for a variety of reasons, including securing support, and not after a programme document has been finalized. This has also to do with keeping the development process of the programme at speed.

One could also discuss the apparent lack of true local partners; both private commercial sectors and from farmers and their organizations and others mentioned in Annex 5 of the report.

The same goes for donors. As mentioned, there are actors involved here with far more funds than this programme will get (?) and looking for complementarities and avoiding duplication or competition over activities seems crucial to secure prior to starting up.

6. NEXT STEPS

6.1 Project document presentation

A programme like this needs backing from Tanzania's authorities and one should discuss how far one should go in this context. Tanzania talks about public/private enterprising in official policy documents, and a clear strength of this programme is precisely its influential or strong private actors. But for a programme like this, relevant authorities should be part of the development of the proposal itself.

The action plan seems again slightly optimistic from a time perspective, but might be possible to execute.

The outline of the project document in Appendix 7 seems OK, but several of the comments made through this note, should be included. I would in particular suggest a separate section on

programme structure and design and division of authority, powers etc. prior to section 5 and 6 or included in section 4.

In section 2 I would include two more sub-points; 2.4 one on bearings from different donors here; such as Norad and Rockefeller and implication this may have for programme design. 2.5 On donor coordination in light of existing and future plans by different important and relevant actors.

In section 7, some assessment of anticipated ***social*** costs and benefits could have been included under 7.3 and not a mere c/b analysis. Under 7.6 on sustainability one should detail this to include Norad handbook sustainability issues such as; economic, financial technological, political institutional, organisational, gender, environment etc.

6.2 Issues for future analysis
As a researcher, I think this issue is an asset for the document. In particular;

- The fertilizer supply demand gap needs to be better understood.
- Risks and return sensitivity analysis is important but should also be given a poverty focus
- Fertilizer subsidy; I think both poverty but also environmental degradation (externalities) should be considered in making a social C/B analysis of fertilizer subsidy. Many researcher argue that a subsidy will reduce the rate of additional land clearing through increasing land productivity.
-Research priorities; there is a lot of literature out there; fertilizer-Tanzania gives a Google report number of 593 000! And may be a literature review could be useful on a number of topics; including some of the cited ones. Additionally; responses to fertilizer development programmes by small-scale farmers, distributional effects, environmental and gender effects of fertilizer subsidies, institutional and other challenges related to micro-finance schemes of various types etc. could be possible topics.
-The mindset change analysis is a very interesting and in my mind important issue, I do believe that this phenomenon is pervasive, not only among civil servants but in society at large, and not least among donors, their home environments and expatriates of various types. A challenge is to find a way to first analyze the phenomenon, and then do something about it.

These were some concerns linked to project concepts and process paper. I hope they prove useful. As stated, I have tried to be as critical as I can, given my rather scant knowledge of the work and thinking up to now in this project.

Sincerely,

Paul Vedeld

APPENDIX 4. DONOR SUPPORT IN AGRICULTURE IN TANZANIA

(from USAID, Agricultural Sector Assessment)

Annex 4 -- summary of on-going bi-lateral and multi-lateral programs in agriculture, natural resource management and rural development

Donor and partners	Program	Activities	Duration	Total budget	Estimated annual budget in $
African Development Bank (ADB) FAO	Special program for food security	Iringa, Tanga and Morogoro Regions. Rehabilitation of irrigation structures, crop diversification	2000 to 2004	1.1 million UA 1 UA = 0.88867088 grams of gold	$3.4 million
ADB	Small entrepreneurs Loan Facility (SELF)	Improving access to micro-finance in rural area through savings and credit programs	1999 to 2004	8.9 million UA with 8 million from ADB	$21.9 million
Belgian Development Cooperation Belgian Technical Cooperation	Development of the Kagera Region	Banana improvement through tissue culture and cash crop production	On-going since 1994	Annual budget 1.4 million Euros	$1.6 million
Canadian International Development Agency (CIDA)	Total bilateral AID Total multi-lateral AID		2002 to 2003	$15.9 million $10.5 million Canadian	
CIDA	Rural Enterprise Training	Agricultural and micro-enterprise development	On-going	$10 million Canadian per year	$6.6 million
CIDA	Agricultural Institute in Morogoro	Raise sustainable agriculture production through technical innovation	On-going		
CIDA	Nzega Community Development	Agricultural activities to improve production and incomes	On-going		
CIDA	Hanang Participatory Fund	Empowers local community to provide development	1999 to 2003		
DANIDA	Agriculture Sector Support Program	Institutional support ASSP programs are now entering phase two	1997 to 2002	$10.5 million total funding	
DANIDA IFAD, JICA	Small-holder irrigation improvement (under ASSP)	Increase agricultural productivity through participatory irrigation	1997 to 2002	$3.7 million total funding	$744,000

		management			
DANIDA	Rock phosphate (under ASSP)	Research on utilization of Tanzanian rock phosphate for crop production	1997 to 2002	$858,000 total funding	$171,600
DANIDA	Seed Sector Support Program (under ASSP)	Revitalization of GoT seed farms. Training farmers in seed production techniques. Improved access through community seed production of Quality Declared Seed in 74 villages	1997 to 2002	$5.6 million total funding	$1.9 million
DANIDA	Hifadhi ya Mazingira (HIMA)	Operates in Iringa Region soil conservation Tree planting, land use planning, income generation	1997 to 2002	$13.3 million total finding	$2.7 million
DANIDA	Business Sector Support Program (BSSP)	Support private sector through support to Vocational Education and Training Authority, FEDHA Investment Fund, CRDB Micro-finance, Commercial Court and CTI	1998 to 2002 Second phase now starting	150 million DK total funding	$5.8 million
German Development Service (DED)	Chunya Small-scale Dairy Development Project	Technical assistance to increase milk production through new breeds and organize dairy farmers	On-going		$150,000 (est.)
DED	Bagamoyo Livestock Support	Provide technical assistance at district level	On-going		$150,000 (est.)
DED	Soil and Water Conservation Project (SWCOP)	Provide TA for sustainable agriculture, tree planting and erosion control	On-going		$150,000 (est.)
DED	District Natural Resources Management Project	Provide technical assistance at district level	On-going		$150,000 (est.)
DED	Horticultural Production and Marketing	Provide technical assistance on fruit and vegetable	On-going		$150,000 (est.)

		marketing at district level			
DFID	Support to Poverty Reduction Budget	To support implementation of the PRSP	2001 to 2004	250,000 pounds total funding	$140,000
DFID TRIT	Support to the Tea Research Institute of Tanzania	Establish industry funded research	1999 to 2004		
DFID DANIDA IWMI (Sri Lanka)	Raising irrigation productivity and releasing water for inter-sectoral needs	Water management for sustainable agriculture	2001 to 2004	427,046 pounds	$239,140
DFID IITA-ESARC Maruku Agricultural Research Station	Working with farmers to control sweet potato virus diseases in East Africa	Increase returns from sweet potato by decreasing sweet potato virus disease and other pests	2002 to 2005	245,183 pounds total funding	$137,300
DFID CAB International Bio-science	Epidemiology and variability of Gibberella xylarioides, the coffee wilt pathogen	Reduce coffee wilt diseases and stabilize productivity	2002 to 2004	110,059 pounds total funding	$92,450
DFID Kilimanjaro Agricultural Training Institute SUA	Development and promotion of wild rice management strategies for the lowlands of the southern Tanzania	Introduction of West African rice production strategies	2002 to 2005	75,898 pounds total funding	$42,500
DFID	Integrated pest and soil management to combat Striga, stem borers and declining soil fertility in the Lake Victoria Basin	Develop and disseminate integrated soil fertility management against problems in maize production	2002 to 2005	222,250 pounds total funding	$124,450
DFID NRI, SUA, Ilonga Agricultural Research Institute	Increasing food security and improving livelihoods through the promotion of integrated pest and soil management in	To develop strategies to reduce the effect of pests on poor peoples crops	2002 to 2005	148,042 pounds total funding	$82,900

	lowland maize systems				
DFID NRI, Uyole Agricultural Research Station, INANDES Foundation, SUA	Improving access to and management of disease resistant maize cultivars in the Southern Highlands	Identify varieties resistant to Maize Streak virus, breed resistant seed	2002 to 2005	220,742 pounds total funding	$123,600
DFID NRI, Naliendele Research Station, Sugar Cane Research Institute, SARRNET	Promotion of control measures for Cassava Brown Streak Virus	Cross border program with Mozambique to research CBSV and CMD to develop control methods	2003 to 2005	211,047 pounds total funding	$177,280
DFID	Reinforcement of pastoral civil society in East Africa	To build the capacity of pastoral civil society groups to carry out local awareness level raising on policy issues	2002 to 2007	235,787 pounds total funding	$79,220
DFID Imani Development International	Tanzania Trade and Poverty Program (TTPP)	To enhance capacity in appropriate Tanzanian institutions to formulate, negotiate and implement trade reform strategies that are inclusive and pro-poor	2002 to 2005	927,685 pounds total funding	$519,500
DFID International Potato Center SARRNET, NRI	Promotion of sustainable sweet potato production through farmers' field schools	Covers Tanzania, Uganda, and Kenya. Increase returns from sweet potato enterprises through production and post-harvest management	2002 to 2005	74,883 pounds total funding	$41,900
DFID SUA	Promotion of and Support to use the Parched Thirst Model in East Africa	Improved strategies for the integrated management of rain water, that benefit the poor in semi arid areas	2002 to 2005	73,280 pounds total funding	$41,000
DFID SUA	Improving the management of common pool resources (CPR) in rainwater	Strategies to improve livelihoods of specific groups of the poor through integrated	2002 to 2005	212,242 pounds total funding	$118,850

	harvesting	management of CPR			
DFID NRI, Plant Health Services Division, Diatom research and Consulting	Small-scale farmers utilization of diatomaceous earths during storage	Improve food security of poor households through increased availability and improved quality of foods	2002 to 2005	300,567 pounds total funding	$168,300
DFID SUA, University of Nottingham, Northern Zone Agricultural Research and Development Institute	Improvement of soil fertility management practices in rainwater harvesting	Improve strategies for integrated management of soil and plant nutrients	2002 to 2005	168,072 pounds total funding	$94,120
DFID ICRAF	Tree domestication as a livelihood option for small-scale farmers in Africa	Multi-country program. Increase capacity of farmers to market tree products	2002 to 2004	1.1 million pounds total funding	$924,000
DFID NRI, CIAT, SUA	Sustainable integrated management of white flies	Multi-country program to promote increased knowledge of white fly control methods	2001 to 2004	994,374 pounds total funding	
DFID UNDP	Environment Advisor to Tanzania	Secondment of an environment advisor to UNRP to integrate environment into poverty reduction strategy	2002 to 2005	200,000 pounds total funding	$112,000
DFID Fairtrade Foundation	Empowerment of producers through improved support for stakeholder participation in the governance of Fair Trade labeling	Covers Tanzania, Uganda and Ethiopia. Support regional inspection services, stakeholder participation in Fair Trade governance	2002 to 2003	149,850 pounds total funding	$251,750
DFID IIED Hakiardhi	Securing land rights in Africa	Covers Tanzania, Uganda and Ethiopia. Study land registration procedures in each	2002 to 2005	370,572 pounds total funding	$207,520

Tanzania		country			
DFID	Competition and coordination in cotton market systems	Multi country covering Tanzania, Uganda and Mozambique, Zambia and Zimbabwe Facilitate information sharing on cotton marketing systems	2002 to 2005	344,484 pounds total funding	$192,900
DFID Center for Tropical Veterinary Medicine, SUA, Muhimbili Research Station	Investigating the impact of brucellosis on public health and livestock health	Develop cost effective strategies for control of brucellosis	2001 to 2004	289,947 pounds total funding	$162,370
DFID NRI	Message in a bottle, disseminating tsetse control strategies	Multi-country program covering Tanzania, Ethiopia and Zimbabwe. Develop cost-effective ways of treating live-stock with insecticide. Disseminate low-cost control methods	2001 to 2005	260,108 pounds total funding	$109,240
DFID Ministry of Livestock, SUA, Tropical Veterinary Medicine	Research on incidence and causal agents for bovine cerebral theileriosis		2001 to 2003	127,530 pounds total funding	$71,400
DFID NRI, Pest Control Service	Novel strategies for the control of the African armyworm on small-holder cereals	Reduce poverty by increasing cereal production through IMP control of armyworms	2001 to 2004	249,325 pounds total funding	$139,620
DFID Farm Africa Uyole Agricultural Center	Promotion of IPM strategies for major insect pests of beans	Multi-country program Development and dissemination of IPM strategies for Phaseolus beans	2001 to 2004	173,597 pounds total funding	$96,240

DFID CIMMYT	Development of aluminum tolerant wheat for acid soils	Multi-country program Plant genes conferring tolerance to acid soils identified and incorporated into wheat	2001 to 2004	160,446 pounds total funding	$89,850
DFID Concern	Community Livelihood Improvement Project in Lindi rural district (CLIP)	Support development of CBOs in Lindi	2001 to 2006	250,000 pounds total funding	$84,000
DFID CAB International, Huxley School, GoT Pest Control Service	Identifying the factors causing outbreaks of armyworm as part of improved monitoring and forecasting	Improve deployment of government resources to forecast and combat armyworm	2000 to 2004	286,743 pounds total funding	$120,400
DFID Concern Worldwide	Local development organization support Masasi District	To enhance the effectiveness of local development organizations	2000 to 2005	246,814 pounds total funding	$82,900
European Commission	Support to Poverty Reduction Plan	Budget support	Annual	98 million Euros	$111 million
European Commission	Support to Agricultural Sector Development Program	From Stabex due to losses from coffee, cotton and tea exports	2003 to 2006	18.4 million Euros	$7 million
European Commission	Support to Tanzania Coffee Research Institute	From Stabex due to losses from coffee, cotton and tea exports. To be used to promote local processing with improved quality	2003 to 2006	9 million Euros	$3.4 million
European Commission	Support for rural road construction	From Stabex due to losses from coffee, cotton and tea exports	2003 to 2006	10 million Euros	$3.8 million
French Development Agency	Improving market infrastructure in Morogoro	Funding to Tanzania Farmers Groups Network (MVIWATA)	2000 to 2005	$5,252,972	$1 million

FINNIDA	Support to Tanzania Forestry Action Plan for research	Support to TAFORI	2000 to 2004	4 million Euros total funding	$1.1 million
FINNIDA	Support to Sustainable Management of Land and Environment in Zanzibar (SMOLE)	Poverty reduction through environmentally safe economic development Land use management	2002 to 2005	1 million Euros total funding	$285,000
FINNIDA	Support to the Forestry College	Regional program focusing on curriculum development	2003 to 2005	430,818 Euro total funding	$245,560
FINNIDA	East Usambara Conservation area biodiversity surveys	Longstanding FINNIDA program now in last phase	2001 to 2003	2.6 million Euros total funding	$1.5 million
FINNIDA	Rural Integrated Project Support Program (RIPS)	Operates in Mtara and Lindi. Promotion of small enterprises, participatory approach and NGO capacity building.	1999 to 2005	11.6 million Euro total funding	$2.2 million
FAO	Technical Cooperation	Near infra-red spectrophotometry for Livestock early warning system	2001 to 2003	$185,000	$92,500
FAO	Technical Cooperation	Emergency assistance for red locust control	2002 to 2003	$396,694	$396,694
FAO	Technical Cooperation	Private sector delivery of east-coast fever vaccine	2002 to 2003	$241,000	$241,000
FAO	Technical Cooperation	Strengthening of national food control system and national codex organization	2002 to 2004	$223,000	$111,500
FAO	Technical Cooperation	Pre-implementation assessment for the 2003 agricultural surveys	2003 to 2003	$24,000	$24,000
FAO	Technical Cooperation	Support to the preparation of the national food security policy	2002 to2003	$61,000	$61,000
FAO	Trust fund	Special program for food security	2001 to 2004	$976,910	$325,640
FAO	Trust fund	Support to SPFS extension for	2001 to 2003	$387,303	$193,650

		vegetable garden irrigation with pedal pumps			
GTZ and KfW	Forest Policy Implementation Support	Support to Forestry and Beekeeping Division and TAFORI and other institutions	1995 to 2004	10.4 million Euros	$1.3 million
GTZ	District Natural Resources Management Project	Follow up to the Handeni Integrated Agroforestry Project (HIAP), Soil Erosion Control and Agroforestry Project (SECAP) and Tanzania Forestry Action Plan programs	2002 to 2005	2.04 million Euros	$775,200
GTZ TANAPA	Selous Conservation Program	Community-based wildlife management	1998 to 2003	14.2 million Euros	$3.2 million
GTZ TANAPA	Saandani Conservation and Development Program	Community-based wildlife management	1996 to 2004	1.6 million Euros	$228,000
GTZ TANAPA	Katavi Rukwa Conservation and Development Program	Community-based wildlife management	1998 to 2006	1.8 million Euros	$256,500
Irish Development Aid	Support to Agricultural Sector Development Plan			Total spending 20 million Euros	$22.8 million
Irish Development Aid	Agricultural Extension				
Irish Development Aid	Coastal zone protection				
IFAD Co-funding from Ireland Aid ($1.1 million) and the African Development Fund ($14.6 million)	Agricultural Marketing Systems Development Programme	Strengthen producer organizations, assist Government to rationalize policy, taxation and regulation regarding marketing and improve market infrastructure through rural road rehabilitation and post-harvest	2001 to 2008	$42.3 million total funding with a loan of $16.3 million from IFAD	$6 million

		facilities			
IFAD Co-funding from Switzerland ($2.8 million) and OPEC Fund $2.2 million)	Rural Financial Services Programme	Rationalize and strengthen grass roots micro-finance institutions through training policy reform and links to capital	2000 to 2009	$23.8 million total funding with a loan of $16.3 million from IFAD	$2.6 million
IFAD Co-funding from Irish Aid ($848,000) and WFP ($3.6 million)	Participatory Irrigation Development Programme	Increase water availability through improve control structures, raise productivity through extension, improve capacity to operate irrigation schemes and construct rural access roads	1999 to 2006	$25.3 million total funding with a loan a $17.1 million from IFAD	$3.6 million
IFAD	Kagera Agricultural and Environmental Management Project (KAEMP)	Land use planning and soil conservation	1996 to 2003	$24.1 million total funding with a loan of $10.3 million from IFAD	$3.4 million
JICA	Project for Mwega small-holder irrigation in Morogoro Region	Construction of irrigation schemes in Malolo and Kilosa coverings 580 hectares	2001 to 2003	727 million yen total project funding	$3.3 million
JICA	Increased food production	Aid to increase food production under Kennedy Round II (sales of fertilizer and equipment)	2000 to 2009	700 million yen	$709,000
JICA	Food aid		2001	500 million yen	$4.6 million
JICA	Various studies undertaken in 2002	• Small-scale horticulture in the Coast Region • Fisheries master plan • Study on Ag Sector Support Program • Participatory poverty assessment • Study on national irrigation plan	2002		
Netherlands DGIS	Poverty Reduction	Budget support in priority sectors,	On-going	15,088,000 Euro	$17.2 million

	budget support	including education, health, water, and private sector development			
Netherlands DGIS	Private sector Development support in the Lake Zone	Private sector advocacy in the Lake Zone – Follow-on to TARP program	On-going	363,024 Euro annual budget	$413,840
Netherlands DGIS	FAIDA SEP	Support to local NGO FAIDA SEP to improve market linkages and business development services	On-going	363,024 Euro annual budget	$413,480
Netherlands DGIS	DBSPSS Jiendeleze	Support to Tanzania Chamber of Industry and Commerce at District level	On-going	223,260 Euro annual budget	$254,500
Netherlands DGIS	Financial Sector Development program support	Support to increase access to financial services	On-going	68,067 Euro annual budget	$77,590
Netherlands DGIS	Small-holder Dairy support Program	Support to the small-holder diary sector to become sustainable private sector	On-going	1,361,341 Euro annual budget	$1.55 million
Netherlands DGIS	Privatization of RNE project assets (PSRC)	Assist PSRC in the privatization of the Kikulula Farm	On-going	39,479 Euro annual budget	$45,000
Netherlands DGIS KIT Rural Change Wageningen University	TARP II Farming systems Research in the Lake Zone	Being phased out. Worked to improve production of beans, sorghum, and maize by using new varieties and farming systems	2000 to 2003		
NORAD	Soil conservation and Afforestation in Shinyanga (HASHI)	Environmental conservation through tree planting. Promotion of indigenous practices for land reclamation	Being phased out		
NORAD	Soil conservation and Afforestation in Iringa (HIMA)	Environmental conservation through tree planting. Promotion of indigenous practices for land reclamation	Being phased out		
NORAD	Promotion of	Microfinance	On-going	$572,000, or	$501,000

	Rural Initiatives and Development Enterprises (PRIDE)	network with 22 branches and 50,000 clients	since 1993	which $66,000 is covered through income	
NORAD Cooperative College	MEMCOOP	Retraining members of primary societies and cooperative unions	1995 – 2003	$432,869 annual budget	$432,869
NORAD	Research collaboration under TARP II	Agricultural research on gender, biodiversity and desertification	2000 to 2004	$5,683,949 total funding	$1.4 million
NORAD SUA	Income and Food Security Project	Evaluating and improving sweet potato and banana germ plasm. Tillage practices and organic mulch to improve rice production.	2001 to 2005	$10 million Norwegian Kroner	$348,200
Swedish International Development Assistance (SIDA)	Poverty Reduction Budget Support			120 million Swedish Kroner	$15.3 million
SIDA	Hifadhi Ardhi Dodoma (HADO)	Restoring vegetation and enhancing awareness in the semi-arid districts of Dodoma and Kondoa			
SIDA	Phase two of Land Management Program (LAMP)	Operates in Babati, Kiteto, Simanjiro and Singida Community forestry extension Natural forest management	2001 - 2004	Total funding 35 million SK	$1.1 million
SIDA	Soil Conservation and Agro-forestry Development Program (SCAPA)	Operates in two districts in Arusha			
SIDA	Support to the Tanzania Bureau of Standards	Technical assistance, training and equipment	2000-2003	Total funding 3 million SK	$127,300
SIDA	Support to TCCIA	Opening district-level chambers of commerce	2001-2004	Total funding 18 million SK	$762,000
UNDP				Total funding $20 million	

World Bank GEF	Eastern Arc Forests Conservation and Management Project	Institutional reforms to promote bio-diversity, establishment of a endowment fund, development of management strategy and forest conservation through GoT and NGOs	Started 2003 to 2008	$45 million	$9 million
World Bank	Participatory Agricultural Development and Empowerment Project	Funding of agricultural development projects by matching grants to communities and farmers' groups through village councils. A second component focuses on capacity building and institutional strengthening at national, district and local level	2003 to 2008	$70 million	$14 million
World Bank	Regional trade facilitation project	Export development and competitiveness. Implemented by African Trade insurance Agency.	2001 to 2011	$45 million	$4.5 million
World Bank	Rural and micro financial services project	Formulation of national micro-finance policy. Design of legal, regulatory and supervisory frameworks. Institutional strengthening for the Bank of Tanzania	1999 to 2004	$2 million	$400,000
World Bank	Agricultural research project	Strengthen agricultural research system to provide demand driven, client oriented research	1998 to 2004	$46.1 million	$7.7 million

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APPENDIX 5. OUTLINE OF A STUDY IN SELECTED DISTRICTS FOR PLANNING A PPP

As the field study has already started as we write this and time is short, it seems of reduced value to work much with this now, but rather disseminate whatever (additional) issues we see as important to get covered through a rapid field appraisal and assessment.

5.1 Rationale

In section 3.8 we addressed some issues we felt are important additions to what has been raised so far in the FTI. These related to:

1. **Better monitoring and control systems** at certain "hotspots" in the fertilizer chain and in the present field study to investigate a bit on what happened last year
2. Look at the possibilities to impose a more **flexible collection system** for district stockist operators to collect fertilizers wherever (independent of region) is more convenient for them.
3. Look at possibilities to develop templates and promote the use of formal contracts with firmer **contracting and sanction systems** when agreements/contracts are breached, at region and stockist levels.
4. Look closer at the possibilities to **formalize collaborations with SACCOs** groups (and Outgrowers) at district level for stockist operations, microfinance, output and even warehouse concepts; and most likely avoid using the locally clearly controversial SCCULT for this.
5. Discuss options for a **clearer microfinance strategy** at District levels involving both Community Banks and NMB (and also CRDB?) and AGTITF/other programmes
6. Develop a better system for **demand registration**; preferable farmers should access fertilizer directly at a physical market place; but at least a more secure system than today, where many farmers and villages are not asked at all about their demand. What happened last year?
7. The **fertilizer subsidy is allocated/issued** at a point of time (mid September) where the bulk of fertilizer should have been out in the districts already, creating bottlenecks and tight time schedules. What would be the best time in different districts?
8. **Improving infrastructure** such as identifying potential actors taking the old Ushirika warehouses into use, promote use of railway wherever possible, and identifying particular inaccessible divisions and wards with high population densities and improving their access. Look for these!
9. **In a pilot and demonstration Fast Track, one could try alternative models for Fast Tracking in different districts;**
    a. As now
    b. Improve present system
    c. Try a warehouse receipt approach
    d. Flood one district supply-wise by using one major stockists or securing enough depots and transport out to flood the market and assess the "real economic response" by farmers given a "perfect supply side"

If this is possible to carry out, what districts would suit for which option?

10. **The role of Village Governments should be clarified**; what can they offer, legitimise, faciliate or constrain?

11. Carefully assess output market capacity, competence and efficiency/effectiveness in handling potentially increased yields and identify measures to secure performance.

5.2 Overall goal and objectives for a study

Overall goal: To improve livelihoods by enhancing increased production and productivity among farmers through promoting increased use of fertilizers by farmers in five districts of Tanzania.

Objectives

1. What is the fertilizer chain as it is found at the District level and who are the key actors and what are their interests, competences, responsibilities and relationships to others in the chain?
2. What are key possibilities and constraints to improved supply and demand for fertilizers?
3. What are key possible solutions to reduce constraints and enhance possibilities?
4. What are key potential risks and uncertainties?

5.3 Some examples of questions to actors

Importers at Region level

1. Have importers brought all agreed fertilizer to regional levels on time and to the agreed prices?
2. Would altering the date for issuing fertilizer subsidy improve delivery and sales?

Stockists

1. Who are the stockists? (occupation, roles, numbers, education levels, skills etc)
2. What is their perception of the importers?
3. What are key problems with the importers/warehouse owners?
4. Have the stockists received/bought all fertilizer they have receipts for/what share?
5. Have they delivered all fertilizers to the villages/what share?
6. What do stockists see as key constraints for improved performance?
7. How many of the stockists applied/received/ credit last year?
8. Is the transport refund to villages adequate?
9. Are there particular inaccessible areas- and how do you get fertilizer there?
10. How big is the profit share?
11. Would altering the date for issuing fertilizer subsidy improve delivery and sales?
12. Roles in a fast track initiative?
13. Output marketing activities of interest?

DALDOs, Bwana Shamba and field extension workers

1. Staff numbers
2. Funding situation
3. Types of programmes and donors
4. Role in fertilizer chain
5. Quality of demand assessment; did they go to all divisions, wards and villages last year?
6. How many of the farm households did you talk to; how large share?
7. How can they control that farmers actually get the types and amounts of fertilizers they are entitled to?
8. Can the assessment of demand constrain fertilizer use?

9. How to improve lending to the especially poor farmers?
10. Would altering the date for issuing fertilizer subsidy improve delivery and sales?
11. What are important roles in a fast track initiative?

Banks

1. Size of portfolio?
2. How much to (what, income, type of activity) farmers?
3. How much to farmers groups?
4. Default rates for different types of loans?
5. Collaborations with donors and support programmes?
6. How to improve lending to the especially poor farmers?
7. Experiences and default by different ventures?

District information from DALDOs

- Number of people, households, divisions, wards, villages
- Scales and types of agricultural production
- Fertilizer use through subsidy and others 3-4 years?
- Fertilizer use- types, quantities, seasonal needs, time of year for purchase/application
- Infrastructure information, travel distances, how many warehouses etc.
- Inaccessible areas/infrastructure constrained divisions, wards, villages, households
- How could they develop contracts and sanctions to secure transparent, timely and adequate delivery by importers and stockists?

SACCOS

1) How many SACCOs are found in the district?
2) How many members do each have?
3) History and performance?
4) Level of credit and saving overall and last year?
5) Default rates and other performance figures?
6) Can they handle a warehouse receipt system using the old Ushirika warehouses?
7) How to improve lending to the poorest farmers?
8) Would they be interested in making collaboration with other SACCOs in their district over fertilizer trading?
9) Output marketing activities of interest?

Farmers (some household interviews)

1. Farm information; size of land, livestock, household, education, types of crops last year etc.
2. How much fertilizer did they use last year/acreage for main crops; maize, sugar cane, rice…?
3. Why not more?
4. Did they want to use more? If yes, how much more could they have bought?
5. How many times have they accessed credit over the last 5 years?
6. How much have they paid back to the different moneylenders?
7. How much more would they buy if they got credit?
    i. 5% interest
    ii. 10% interest
    iii. 15% interest
    iv. 20% interest?
8. What do they use the fertilizer for?

9. How much subsidized fertilizer did they buy?
10. What were prices last year for what they bought?
11. Did the extension worker ask them about how much fertilizer they wanted last year?
12. How much fertilizer do they plan for this year?
13. In what month would they prefer to get different types of fertilizer?
14. How much more yields of
    - maize
    - rice
    - sugar cane

    if they double their fertilizer use?
15. Where and how will they sell their output?
16. What kinds of storage facilities are there?
17. How much of the yield lost as post-harvest lost last year?

Village government

1. What can they offer concerning the fertilizer FTI?
2. How many warehouses do they own?
3. Could these be used in a FTI?

NGOs

1. How do they work with farmers?
2. Results, experiences
3. Present and potential role in FTI?

5.4 Some methodological notes

- In depth interviews,
- Groups interviews/PRAs
- Farm hh. survey if time?

Also various types of RRA techniques would be useful depending on the competence of interviewers.

One could also try to go into existing documentation of fertilizer sales last year, at region and stockist levels through DALDOs and lower level agricultural officers.