

**Preliminary Assessment of  
Market Information Systems (MIS)  
In Southern Sudan**



**Assignment # J547A-xxx  
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Government of Southern Sudan  
Juba, Southern Sudan  
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## **ACKNOWLEDGEMENTS**

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- Stephen P. D'Alessandro,  
VEGA Volunteer

## LIST OF ACRONYMS

<b>AAH-I</b>	Action Africa Help International
<b>AMED</b>	Support of Agricultural Market and Enterprise Development
<b>CAD</b>	Country Agriculture Department
<b>CRS</b>	Catholic Relief Services
<b>FAO</b>	Food & Agriculture Organization
<b>FEWS</b>	Famine Early Warning System
<b>GOSS</b>	Government of Southern Sudan
<b>MAF</b>	Ministry of Agriculture & Forestry
<b>MARF</b>	Ministry of Animal Resources & Fisheries
<b>MCRD</b>	Ministry of Cooperatives and Rural Development
<b>MCTS</b>	Ministry of Commerce, Trade and Supply
<b>MIS</b>	Market Information System (or Services)
<b>NDI</b>	National Democratic Institute
<b>NPA</b>	Norwegian People's Aid
<b>OXFAM</b>	Oxford Committee for Famine Relief
<b>SS</b>	Southern Sudan
<b>SSARP</b>	Southern Sudan Agricultural Revitalization Program
<b>SSCCSE</b>	Southern Sudan Center for Census & Statistical Evaluation
<b>SSRRC</b>	South Sudan Relief and Rehabilitation Commission
<b>SIFSIA</b>	Sudan Institutional Capacity Programme Food Security Information for Action
<b>USAID</b>	US Agency for International Development
<b>USDA</b>	US Department of Agriculture
<b>VEGA</b>	Volunteer Economic Growth Alliance
<b>WFP</b>	World Food Program

## **I. EXECUTIVE SUMMARY**

Agricultural markets in Southern Sudan, as in much of Africa, are fragmented and inefficient. Complex marketing chains, limited product volumes, lack of standards, widespread variations in product quality, poor infrastructure, and limited access to appropriate and timely market information are just some of the constraints that impede market growth in Southern Sudan.

The lack of information, in particular, regarding market variables represents a sizeable impediment to market access, especially for the country's numerous smallholder farmers. It raises transaction costs significantly and reduces market efficiency. As a result, price variations for any one commodity are often significant and erratic from one market to another, from one day to the next. Currency of information with regard to demand and pricing of various commodities and their availability in terms of quantity and quality, among other market variables, is critical in not only helping farmers, but also traders, service providers, and policy-makers to make more profitable, better-informed decisions.

In efforts to address this challenge, the Government of Southern Sudan's (GOSS) Ministry of Agriculture and Forestry (MAF) with assistance from the United States Agency of International Development's (USAID) Support of Agricultural Market and Enterprise Development (AMED) project, commissioned an assessment of market information systems (MIS) in Southern Sudan. The overall objective of the assessment was to: 1) identify ongoing activities related to the collection, analysis and dissemination of agricultural market information; and 2) make recommendations based on stakeholder input as to how the AMED project might lead a coordinated effort to develop a sustainable, client-oriented MIS.

The original Scope of Work (SOW)'s anticipated duration of the assignment was 3 weeks, including travel. The SOW was revised before the volunteer committed to the project to accommodate the volunteer's limited availability. Thus, the number of days for the assignment was reduced from approximately 3 weeks to 2 weeks, including travel days. In addition, the Volunteer proposed in consultation with the Program Manager in Juba and the Host that the workshop be staged as a one-day rather than a two-day event in order that additional time might be allotted for stakeholder consultations. At the same time, it was agreed that the workshop would: 1) Provide stakeholders with a better picture of the MIS landscape in Southern Sudan; 2) Present an overview of MIS best practices and success stories elsewhere in Africa and/or other post-conflict environments and discuss lessons that could be drawn from past experiences; 3) Offer some general recommendations as various factors that needed to be considered as well as various strategies that might contribute to the establishment of a robust, credible and viable MIS for Southern Sudan; and finally 4) Solicit additional stakeholder input that might further feed into and inform the final report and the recommendations therein.

### **Summary of Recommendations**

The consultative process and related workshop highlighted strong support among stakeholders for MIS in Southern Sudan. The following is a summary list of recommendations based on a preliminary analysis of stakeholder input:

*Recommendation #1* – To avoid duplication and maximize available resources, SIFSIA should remain the focal point thru which all MIS-development efforts and resources are channeled. SCOPE exists for AMED should work closely with SIFSIA during the planning phase to ensure the development of a dynamic, client-oriented MIS.

*Recommendation #2* – As the “host” institution, SSCCSE will assume overall responsibility for housing the database, managing the flow of information, overseeing analysis functions, and coordinating dissemination activities. AMED should collaborate closely with SIFSIA to help strengthen the Center’s human resource and technical capacity.

*Recommendation #3* – Initial MIS priorities and objectives during the pilot phase should remain limited in scope, with subsequent scale up as resources and capacity allow.

*Recommendation #4* – Strategies to encourage broad participation by market actors, media outlets and other private sector institutions should be pursued to encourage local buy-in, promote a sense of “ownership” among clients, and secure supplemental resources.

*Recommendation #5* – Create an autonomous management structure with maximum operational flexibility to enable the MIS to respond and adapt its products and services to changing market dynamics and client needs.

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## II. Assessment Methodology

In preparation for the assignment, the Volunteer relied on relevant secondary resource materials. These included MIS impact studies, market assessments, food security reports, annual surveys, policy notes and periodicals, among other sources. A complete list of materials can be found in the appendix. The Volunteer relied heavily on this material to obtain some initial perspective as to the current agricultural landscape in Southern Sudan and the potential role that MIS might play in promoting economic growth and improving livelihoods.

In addition, the Volunteer conducted extensive telephone and email correspondence with relevant institutions in advance of his departure to Southern Sudan to solicit initial input with regard to current MIS methodology, strategies, and best practices. During this stage, the Volunteer was able to draw upon the experience of former VEGA volunteer Tommy Sallee, who was fielded by ACDI/VOCA in February 2007 to assist the MAF to identify an appropriate strategy to set up a department of agricultural statistics. Mr. Sallee's perspective and insight were invaluable in helping the Volunteer to gain a better understanding of current challenges and opportunities as they related to MIS ahead of his arrival to Juba.

Upon arrival, the Volunteer met with the host institution contact, Director General for Planning & Programmes of the Ministry of Agriculture and Forestry Michael Roberto, who debriefed the Volunteer and offered additional clarification as to expectations, key contacts and the overall agricultural landscape in Southern Sudan. At this meeting, it was agreed that the Volunteer would develop and submit to MAF a complete workplan with a detailed agenda as well as a list of preliminary questions that would be circulated to appropriate GOSS Ministries for feedback. It was hoped that this feedback would serve to supplement the input gained via the consultative process, resulting in a clearer picture as to the nature and scope current MIS activities so that some initial observations could be drawn and recommendations made.

Once the workplan was cleared, the Volunteer began contacting key MIS stakeholders, which included several GOSS Ministries and other agencies, NGOs, media outlets, multilateral organizations, donors, etc., many of which were identified by the host institution in advance. These consultations were conducted over the course of one week, roughly Sept 19-25. Institutions contacted included the MAF, MARF, SSCCSE, SSRRC, FAO, WFP, World Vision, SIFSIA, Concern, Oxfam International, USDA, EC, CHF international, CRS, NDI, among others (a list of these institutions and a daily meeting agenda is attached). Additional key contacts were identified during the course of the consultations and were approached as time and transportation/communication resources permitted. Given strict time constraints and limited mobility, all of these in-country consultations took place in and around Juba and were conducted face-to-face. This process included trips to Juba's two central markets as well as the livestock market to interview market actors and gain some useful perspective as to principle commodities available, pricing, standards of measurements, etc.

The primary objective of the consultative process was to identify who was involved in activities related to the collection, analysis and dissemination of information concerning markets and related statistics in Southern Sudan. In turn, this input would provide a more informed picture as to the nature and scope MIS activities so that some initial observations could be drawn with regard to the following, among others:

1. What are the appropriate institutional arrangements, technical frameworks and management/organizational structures that would support a robust, credible, and viable MIS that will adequately serve both public- and private-sector stakeholders in Southern Sudan?

2. What are appropriate strategies to ensure that the persistent support of key GOSS institutions, their development partners, and other key players and beneficiaries in the private sector? Who will fund the initial start-up costs?
3. What are the commodities of interest and at what level of detail should the info be published? What are the priorities in terms of geographical and product coverage? And what are the determinants?
4. What are the key roles and responsibilities of the various GOSS line Ministries and other GOSS agencies, NGOs, the private sector, and other organizations?
5. How is it envisioned that the data will be collected? What are the methods of collection to be employed? Who will design, maintain and update survey manuals and questionnaires? In which languages will the surveys be conducted and reported?
6. What type of equipment (hardware/software, stationary, etc.), training and skills will be necessary to ensure that the data collected, analyzed and disseminated is credible and useful to target beneficiaries?
7. When and how often (ie. daily, weekly, monthly, or annually) will the information be published and via what medium/media (newspaper, flyers, radio, Internet)? Will it be subscription-based or free-of-charge? Who will cover the distribution costs?
8. At what administrative level will the report be published, ie. federal, state, or county level? Will the published date be a snapshot or time series, and if time series, how long a period?

In addition, the Volunteer conducted a rough benchmarking analysis of case studies related to MIS activities within the region and elsewhere to identify best practices and obtain further insight into factors that determine long-term success of MIS.

### III. ASSESSMENT

The GOSS Ministry of Agriculture and Forestry (MAF) is mandated to lead all activities related to Food Security, Agriculture and Forestry in South Sudan. It also plays the role of promoting productivity of agriculture and forestry for economic growth and development. Currently, the Ministry is a relatively young institution and faces a number of institutional development challenges in the aftermath of more than 20 years of conflict. As the Host institution, the MAF tasked the VEGA Volunteer to conduct an assessment of the ongoing efforts in the collection, analysis and dissemination of agricultural marketing information in Southern Sudan with the view of making recommendations on how best to coordinate and implement a pilot market information system.

#### Assignment Activities

Specific deliverables that were listed in the Scope of Work (SOW) and completed during the volunteer's assignment were as follows:

1. *Solicit input from key MIS stakeholders to identify who is involved in MIS-related activities.*
  - The Volunteer conducted in-country consultations over the course of one week, from September 19-25, with more than 3 dozen individuals representing the various line Ministries and other GOSS agencies, NGOs, media outlets, multilateral organizations, donors, market actors, etc.
  - The Volunteer solicited input from a range of public-and private sector institutions including the MAF, MARF, SSCCSE, SSRRC, FAO, WFP, World Vision, EC/SIFSIA, Concern, Oxfam International, USDA, Agrotec, World Bank, CHF international, CRS, NDI, among others (a list of these institutions and a daily meeting agenda attached).
  - The Volunteer along with the VEGA program officer visited the two primary markets in Juba in addition to the livestock market to gain some additional perspective on key commodities, pricing, measurement standards, etc. and to solicit input from various market actors including consumers, retailers and traders.
  - Given strict time constraints and limited mobility, all in-country consultations took place in and around Juba and were conducted face-to-face.
2. *Carry out a critical analysis based on stakeholder input and facilitate a workshop to present preliminary findings to stakeholders and make recommendations on setting up a pilot MIS.*
  - In collaboration with the Vega Program Officer and MAF, The Volunteer staged a one-day stakeholders' workshop (agenda attached) on September 27 with 18 representatives of stakeholder institutions in attendance.
  - The Volunteer coordinated closely with the staff of SIFSIA to identify key topics that would be covered and the sequencing of presentations and sessions.
  - The Volunteer's presentation (attached below) included an overview of MIS methodologies, strategies and best practices, the current MIS landscape in Southern

Sudan, challenges/opportunities, and a summary of general recommendations as to the way forward.

- Chief Technical Advisor of SIFSIA Ali Said and Food Security Analyst Yergalem T. Beraki provided an overview of the project, its primary objectives, and their relation to MIS, in particular.
- In collaboration with SIFSIA staff, the Volunteer facilitated an open forum to present the key MIS issues grouped around several themes for discussion to solicit additional stakeholder input. The resulting exchange was helpful in furthering both the understanding of SIFSIA staff and the Volunteer with regard to MIS challenges and opportunities in SS.

3. *Prepare a written assignment report detailing the findings and next steps.*

- The Volunteer completed and submitted to the host VEGA office an End of Assignment Report that included some preliminary findings and recommendations as to next steps.
- In addition, upon arrival back to the U.S., the Volunteer authored and submitted to ACDI/VOCA this report, which provides a more detailed and comprehensive analysis and reporting of the assessment findings and recommendations.

4. *Discuss with the host the possibility that an impact survey be conducted between 3 to 4 months after the assignment and set-up a tentative month or season when the survey might best be conducted.*

- Due to time constraints and questions raised concerning the appropriateness and efficacy of an impact survey, the Volunteer did not discuss this issue with the Host ahead of his departure.

## **Benefits of MIS**

A steady flow of information between public and private sector actors is an essential component in building efficient market-oriented economies and democratic governance. As developing countries have undertaken reforms aimed at increasing the role of the private-sector in agricultural marketing, the need for improved market information for both the private and public-sectors has become increasingly apparent. Private-sector actors cannot make sound, profitable business decisions without adequate information, and the lack of understanding of market processes and conditions often leads public officials to make decisions that hinder private-sector development.

Thus, a key component of agricultural policy reform programs is designing improved market information systems (MIS)<sup>6</sup> that respond to the needs farmers, traders, policy-makers, and consumers, in order to promote more efficient and equitable resource allocation in a market-oriented economy. MIS can help address a number of critical market development constraints,

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<sup>6</sup> For the purposes of this report, MIS is defined thus: "A service, usually operated by the public sector, which involves the collection on a regular basis of information on prices and, in some cases, quantities of widely traded agricultural products from rural assembly markets, wholesale and retail markets, as appropriate, and dissemination of this information on a timely and regular basis through various media to farmers, traders, government officials, policymakers and others, including consumers."- FAO, 2004.

including reducing transaction costs, increasing competition and promoting market integration (See Table I).

**TABLE I – MIS IMPACT**

<b>CONSTRAINT</b>	<b>IMPACT of MIS</b>
<b>Structural Information Asymmetry</b>	<b>Enhances market participants ability to make better, more informed decisions</b>
<b>High Transaction Costs</b>	<b>Increases efficiency and productivity; facilitates economies of scale; reduces risk</b>
<b>Lack of Competition</b>	<b>Facilitates greater pricing transparency and rewards productivity at all levels of the value chain.</b>
<b>Market Segmentation</b>	<b>Improves coordination among local/regional markets and promotes market integration</b>
<b>Misguided Policy Environment</b>	<b>Promotes ground-up advocacy and more informed policymaking and planning</b>

### **MIS Landscape in Southern Sudan**

The consultative process highlighted a broad awareness among key public- and private-sector stakeholders of the importance of timely and reliable information, which in turn underpins a strong commitment to building a robust, credible and viable marketing information system (MIS) for Southern Sudan. Such widespread support certainly bodes well and suggests that the time is ripe for GOSS to take the lead, with support and in close collaboration with its development partners, to see this initiative through to fruition. Maintaining this broad support, both technical and financial, will largely depend on whether the MIS appropriately and consistently responds to the needs of its target beneficiaries, in both the public- and private-sectors.

One of the key findings of the assessment is that MIS activities in Southern Sudan are largely ad-hoc, with scant coordination and limited information-sharing among various stakeholders. The data that is collected by a range of government agencies, NGOs, and other development organizations active in Southern Sudan is mostly utilized for internal reporting purposes and to inform future program development. This has led to widespread duplication of efforts and inefficient allocation of resources. Further, current dissemination efforts are limited in scope, and as a result, vital information is not reaching the vast majority of potential beneficiaries across Southern Sudan.

The following table provides a summary, by no means exhaustive, of current MIS activities in Southern Sudan and some of the key actors involved:

<b>Name of Organization</b>	<b>Activity</b>
SSCCSE	<ul style="list-style-type: none"> <li>• GOSS mandate to: 1) conduct census and related surveys; 2) manage and maintain statistical systems; 3) monitor and evaluate development initiatives.</li> <li>• Recently completed a consumer price index (CPI) study for Juba.</li> </ul>

	<ul style="list-style-type: none"> <li>• Develops quarterly household budget surveys quarterly.</li> <li>• Currently preparing for the census-taking scheduled for Feb. 2008.</li> </ul>
WFP	<ul style="list-style-type: none"> <li>• Training staff on data collection techniques and providing tools.</li> <li>• Collecting data on consumption patterns, demographics, availability of staple crops, income, pricing info, terms of trade, etc.</li> <li>• Collecting and collating pricing info on a weekly basis from 8 markets (Juba, Kapoeta, Ruebek, Wau, Malakal, Bentiu, Bau, Aweil).</li> <li>• Target commodities: maize, wheat, millet, rice, groundnuts, sesame, maize, female goat (full-grown), male goat (full grown), sheep (full grown), and cattle (bull).</li> <li>• Prices are solicited from 3 different traders in each market.</li> <li>• Enumerators are direct staff of the VAM unit.</li> <li>• Develops time-series studies on price movements, which inform monthly food security updates.</li> <li>• Monthly food security updates are shared with FEWSNET, the Livelihoods Analysis Forum, among others.</li> <li>• Publishes an “Annual Livelihoods and Needs Assessment” report</li> </ul>
World Vision	<ul style="list-style-type: none"> <li>• Publishes monthly bulletins on food security conditions in S. Sudan. Data on rainfall measurements, crop status, extreme incidences related to pest infestation, disease outbreaks, drought conditions, etc.</li> <li>• Shares with FEWSNET data on yield assessments.</li> <li>• Collects data from farmer groups participating in Farmer Field School programs and program training conducted by extension staff.</li> <li>• Conducts annual yield assessments in cooperation with other agencies and orgs. mostly focusing on root crops (sorghum, cassava, rice, sweet potato, ground nuts, sesame).</li> </ul>
MCRD	<ul style="list-style-type: none"> <li>• Currently conducting, with the assistance of the ILO, surveys at the state-level to identify the number of cooperatives in existence, level of activity, how many registered, type of cooperatives (agr., transport, dairy, etc.).</li> </ul>
FAO	<ul style="list-style-type: none"> <li>• Conducting surveys monthly on fisheries sector from three regional centers (Malakan, Wau, and Juba to track number of participants, sales volumes, pricing, etc.</li> <li>• Collecting pricing data on meat products for comparison purposes.</li> <li>• Developed “Sudan Dynamic Atlas” in March 2005, disseminated on CD-ROM.</li> <li>• Publishes Annual Crop and Food Supply Assessment</li> </ul>
USDA	<ul style="list-style-type: none"> <li>• Discontinued data collection activities in 2005.</li> <li>• Now providing direct capacity-building support to GOSS Ministries.</li> <li>• Assisting SSCSE with the upcoming census, originally scheduled for Nov. 2007, now postponed until Feb. 2008.</li> </ul>
CRS	<ul style="list-style-type: none"> <li>• Trains and supervises state-level Ministry staff (eg. extension agents) in the collecting of data for various commodities in several areas (ex: E and W Equatoria, Jonglay, C. Equatoria).</li> <li>• Shares pricing info for commodities in their seed system. Ex: groundnuts, sorghum.</li> <li>• Helped sponsor a "Market Opportunities Identification" Study in 2004.</li> </ul>
NDI	<ul style="list-style-type: none"> <li>• NDI conducts radio programs on civic education thru (SRS) FM and short-wave radio.</li> <li>• Program produced in Nairobi and broadcast in 12 languages via VSF from Dubai.</li> <li>• Produces content (ex: constitutional issues, census awareness, currency conversion) for <i>Lets Talk</i> radio show broadcast 7 days a week</li> <li>• Distributing hand cranked radios in rural areas, hoping to reach 240,000 by 2009.</li> </ul>
NPA	<ul style="list-style-type: none"> <li>• In years past, involved in conducting surveys of market prices in areas where NPA was providing relief aid. NPA no longer actively collecting data.</li> </ul>

Within the current market environment, farmers and traders make production and marketing decision with very limited information leading to uncoordinated production and flow of commodities. Moreover, links between markets serving production and consumption areas within Southern Sudan are weak. The main sources of market information (Table II)—namely visits to the markets, communication amongst neighbors and information from traders and travelers—are inadequate for sound economic planning at the production level. In addition,

policy-makers often have to rely on incomplete or dated information, which can lead to regulations that hamper rather than support business and market development.

**TABLE II – SOURCES OF MARKET INFORMATION\***

SOURCE	IMPORTANCE	CREDIBILITY	FREQUENCY
Visit to market	1	1	2X per week
Neighbors	2	2	2X per week
Trader	3	5	1X every 2 weeks
Traveler	4	3	--
CAD	5	4	--

Designing a well-targeted MIS that appropriately addresses the information needs of all stakeholders is indeed a challenge as market participants rate information variables differently according to each variables' impact on their decision-making (See Table III). For example, producers rate price as the most important variable followed by identification of produce, quantity and quality available in the market. Traders, transporters and government officials all rate the identification of the produce first.

**TABLE III – KEY INFORMATION VARIABLES\***

Variable	Producers	Consumers	Traders	Transport SP	Policy-makers
Product	2	1	1	1	1
Price	1	2	2	3	3
Quantity	3	4	3	7	2
Quality	4	3	4	6	5
Source	5	5	5	3	4
Buyers	6	6	6	4	6
Transport Mode	7	7	7	5	7

Other challenges in establishing an effective MIS in Southern Sudan include:

- Vastness of territory
- Poor infrastructure (ie. road transport, communication) and limited available resources

Survey Report on Agricultural Marketing in Greater Maridi, Mundri and Yei counties, Equitaria Region, Southern Sudan, African Action Help International, 2005.  
Ibid

- Weak institutional capacity of GOSS institutions
- Widespread perception that current information flows irregular, ad-hoc, lacking credibility
- Limited coordination among stakeholders and widespread duplication of efforts
- Lack of uniform approach and standards of collection

## **MIS Success Factors**

Based on review of the literature and a rough benchmarking analysis of case studies within the region and elsewhere, the following factors were deemed critical to the long-term sustainability of MIS:

*Broad Commitment* - Sustained, political commitment to a vision of serving public- and private-sector market participants.

*Sufficient Resources* - Persistent financial assistance by shareholders at the local, regional, and national levels, including private sector sources where possible.

*Operational Flexibility* - Constant targeting and reassessment of user needs for market information and analysis.

*Strong Management* - Skilled, dynamic human capital for managing an MIS with a practical, entrepreneurial, results-oriented approach.

*Sustained Credibility* - Availability of timely, accurate and relevant information delivered on a consistent and transparent basis.

*Training/Sensitization* - Strong local capacity to acquire and use market information and knowledge for decisions.

## **Recommendations**

Given current opportunities and challenges discussed above, this assessment submits the following recommendations for consideration:

*Recommendation #1 – Channel all MIS development efforts through FAO’s SIFSIA project*  
In order to avoid duplication of efforts and maximize available resources, USAID’s AMED project should coordinate with and lend support to FAO’s SIFSIA project. SIFSIA is a four-year \$10.3 million project funded by the EC and implemented by FAO. SIFSIA’s overall objective as mandated by GOSS is to launch a food security information system for Southern Sudan, a primary component of which is the collection, analysis and dissemination of marketing information. SIFSIA will work to build capacity within the line Ministries, the SSCCSE and other institutions to collect, analyze and manage information sharing at the local, state and the federal levels. The project is still in the design/planning phase and the Program Support Unit (PSU) is currently in the process of soliciting stakeholder input with regard to needs and priorities. Scope may exist for AMED to second a consultant to work directly within the PSU during the ongoing planning phase to further identify and clarify the key priorities of the GOSS and its development partners, coordinate among various stakeholders, and assist with the MIS strategy development and implementation phases. AMED should assist SIFSIA in developing an analytical framework to better identify specific needs, roles and responsibilities of all actors involved.

*Recommendation #2 – Support SSCCSE role as “host” institution*

This assessment strongly supports SSCCSE’s role as the appropriate “host” institution that will assume overall responsibility for housing the database, managing the flow of information, overseeing analysis functions, and coordinating dissemination activities in collaboration with the line Ministries, other GOSS agencies, and NGOs, among others. However, no single institution should “own” the MIS; rather its development should ideally involve collaboration and competition among government, public-sector agencies, private sector, and development groups. Although the SSCCSE is a relatively young institution and is currently stretched thin with the ongoing census, immediate steps should be taken, in cooperation with SIFSIA, to strengthen the Center’s human resource and technical capacity. This includes staffing the Center with highly qualified, highly skilled managers and statisticians, while providing the necessary skills training and tools they will need to do their jobs effectively.

*Recommendation #3 – Keep it simple, keep it manageable*

Initial priorities in terms of target markets, commodities and related variables covered by the MIS should remain limited in scope to avoid risk of overburdening the system with complexity at the outset. A stepwise approach should then be adopted to expand the platform, all the while avoiding ad-hoc investments that rely on transient management, technical, and personnel resources. As additional resources become available and capacity to handle data flow increases, the system can be scaled up by, among other means, expanding the geographical area covered, adding new target commodities, and diversifying information products and means of dissemination. Based on preliminary stakeholder input obtained during the consultative process, the assessment identified a set of initial priorities for consideration. They are the following:<sup>+</sup>

Focus Commodities	Focus Markets
Agriculture: Sorghum, maize, cassava, sesame, groundnuts	Juba Wau Malakal
Livestock: Cows, sheep, goats	Yei
Fisheries: 2 varieties of dried fish	Yambio

*Recommendation #4 – Encourage broad public- and private-sector participation*

Since products and services generated by MIS are essentially “public goods,” MIS development will initially have to rely on sustained political commitment and support from the GOSS and its development partners. However, as the systems scales up to reach more beneficiaries, strategies to encourage participation by market actors and institutions, media outlets and other private sector stakeholders should be pursued to encourage broader buy-in and secure additional resources. In addition to promoting a sense of “ownership” among users, enhanced private sector participation may also over time result in a growing constituency that can exert needed pressure on the government to continue supporting the MIS.

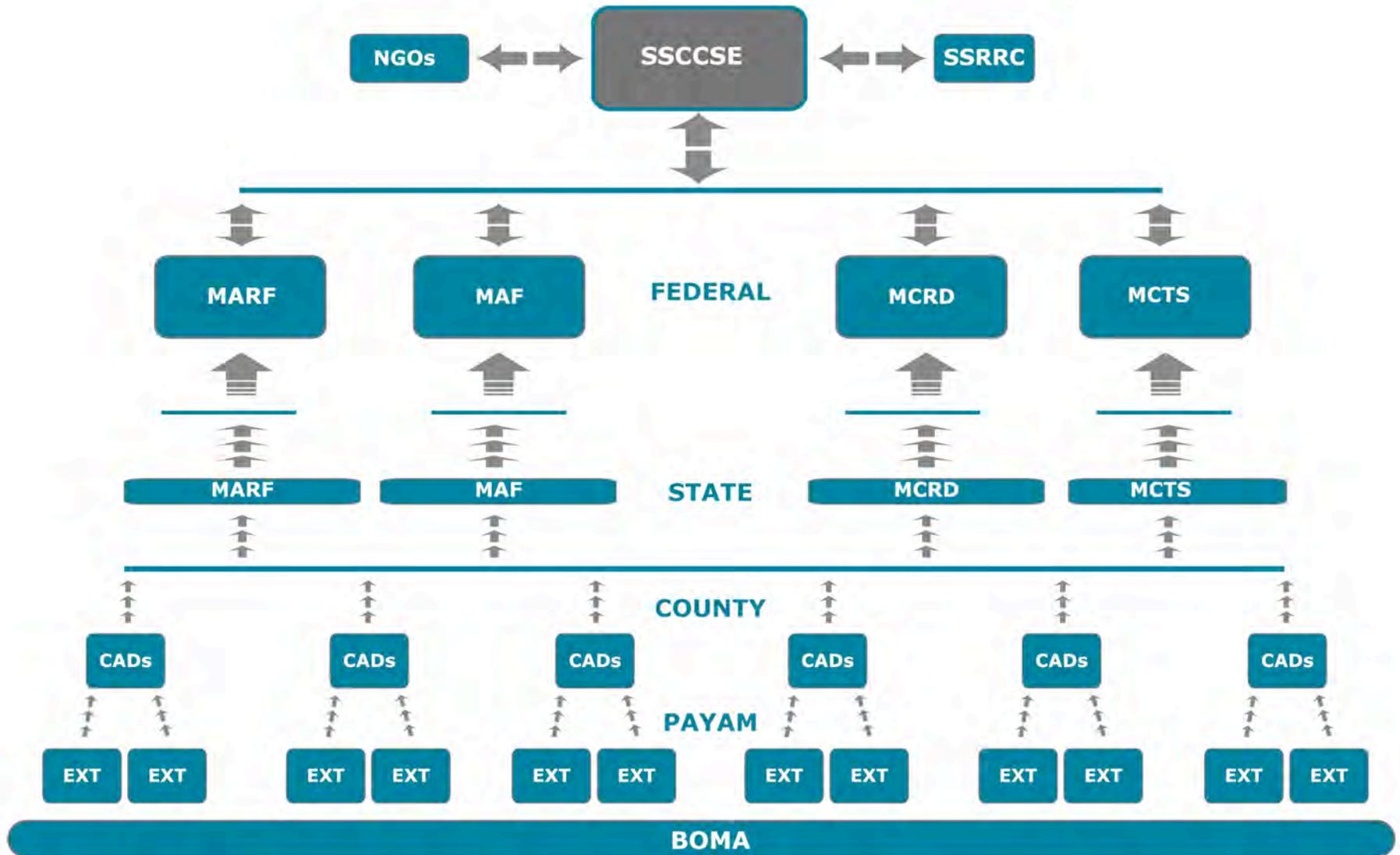
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<sup>+</sup> Target markets were chosen as either representing critical supply markets or deficit markets for the initial basket of commodities.

*Recommendation #5 – Establish autonomous management structure with maximum operational flexibility*

The MIS should be structured and managed along private sector principles to encourage independent thinking and a practical, entrepreneurial, and results-oriented approach that remains responsive to stakeholders and is able to adapt effectively to ever-changing market dynamics. This is critical to ensuring that timely and accurate information is being delivered to those who are in a position to benefit. Customer needs, rather than bureaucratic routines, should drive the MIS's choice of products and services. If the information services effectively respond to demand and the needs of the market, then users will pressure local, state, and national governments to continue their support. Figure 3.1 illustrates a proposed management structure and how information will flow among various institutions at various Federal, state and local administration levels.

# MIS Management Structure



## List of Contacts

NAME	TITLE	ORGANIZATION
Magdi A. Tombe	Geographical Information Mapping System	UN/FAO
Immaculate Aber	Admin Officer, South Sudan Programme	Concern
Tim Canedo	Senior Consultant	Bearing Point/CFA International
Serena Brown	Programme Director, Southern Sudan Programme	Tearfund
Tore Torstad	Senior Programme Manager, Sudan	Norwegian Church Aid
David Chan Thiang	Deputy Director, Econ. Statistics and Project Manager for HBS – WMS	SSCCSE
Ali Said	Chief Technical Officer	UN/FAO/SIFSIA
Isaiah Chol Aruai	Chairman	SSCCSE
Billy Mwiinga	Head of Vulnerability Analysis and Mapping Unit	WFP
Robert Alela	BDS Assistant & Institutional Capacity Building	ACDI/VOCA
Yergalem T. Beraki	Food Security Analyst	UN/FAO/SIFSIA
Birgitta Grosskinsky	Technical Advisor on Natural Resources and Rural Development	EC/Agrotec
Sean P. White	Forestry and Natural Resources Management	Winrock International
Elijah Mukhala	Information Systems & Capacity Building Specialist	UN/FAO/SIFSIA
Michael Roberto Kenyi	Director General for Planning & Programmes	GOSS/MAF
Andrea Minalla	Juba Program Manager	Church Ecumenical Action in Sudan
Cicely Clarke	Programme Support Officer, SS Programme	Concern
Patrick Kapukha	Food Security and Livelihoods Manager	World Vision
Andrea Alfred Dimido	Office of Bilateral Relations	Ministry of Co-operatives and Rural Development
William Hakim	Program Officer, Fisheries	UN/FAO
Ka Vang	South Sudan Program Manager	USDA
Melody McNeil	Head of Programming	Catholic Relief Services (CRS)
Ken Miller	Director of Agriculture Programs	Norwegian People's Aid (NPA)
Emmanuel Yengi	Deputy Agricultural Coordinator	Norwegian People's Aid (NPA)
Tommy Sallee	Former WEGA Volunteer	USDA
Gitau Mbure	Program Manager	ACDI/VOCA
Magdi Amin	Sr. Private Sector Development Specialist	World Bank
Naomi Rios		IESC
Joseph Mwangangi	Agricultural Program Manager	CRS
Adele Sowinska	Program Coordinator	CRS
Mac Maika	Project Coordinator - Media Development	NPA
John Marks		USAID

Evelyn Muchomba	Program Coordinator	FEWSNET
Abubaker Mukeere		WFP
Dawit Wondwossen		WFP
Alberto J. Eisman Torres	Sudan Country Director	Intermón Oxfam
Robert Otik	Program Officer	Intermón Oxfam
Karen Richards		Tearfund
Ahmed Morgan	Deputy Director	SSCCSE
Ashford Gichohi	Livelihoods Project Manager	Oxfam GB Bahr El Ghazal Programme
Shaun Ferris	Program Manager, FOODNET	CGIAR
Godfrey Victor		Juba Post
Kibego Victor		Juba Post
Mawa Kwaje	Director General of Planning	Ministry of Commerce, Trade and Supply
Kuot Madhor	Asst. Director General of Planning	Ministry of Cooperatives & Rural Dev.
Makarions Eziku		Ministry of Cooperatives & Rural Dev.
Noel Lomude		Ministry of Animal Resources and Fisheries
Miir Nkwle		Africa Action for Help
Kuyu Dhel		Africa Action for Help
John Mayual		MAF
Jackline Minda		MAF
Joel Daud		MAF
John Mayual		MAF
Paul Jimbo		Sudan Mirror

**Ministry of Agriculture and Forestry  
Support of Agricultural Market and Enterprise Development (AMED)  
for Southern Sudan**

**Market Information Systems (MIS)**

**Preliminary Survey**

**1. Who are the stakeholders and why do they want to disseminate the information? How much demand is there for market information? How broad is the support for developing MIS? Do the people who have the information support the effort?**

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**2. Who are the “owners” of the information (producers, wholesalers, distributors, retailers, consumers)? Will they be willing to share the information? Do they understand the benefits of information sharing and how it will be used? How will they be incentivized?**

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**3. What type of information do the stakeholders want to publish? Prices received by producers or prices paid by consumers?**

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**4. What are the commodities of interest and at what level of detail should the info be published? Livestock vs. sheep, goats, cows, etc.? Fresh produce vs. tomatoes, potatoes, yams, etc.? What about fresh vs. semi-processed, ie. raw peanuts vs. smoked fish? Will service-related charges such as transport, storage, processing/cleaning, etc. be included? Finally, what will be the standardized units of measurement?**

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**5. How is it envisioned that the data will be collected? What are the methods of collection to be employed? Who will design, maintain and update survey manuals and questionnaires? In which languages? Will the questionnaire be field tested, and if so, by whom and how much time will be given for pre-testing? Whose responsibility will it be to approve the final version? How long will enumerators be given to collect the data?**

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**6. Who will be the enumerators? Are there specific language requirements? How will they get from one place to another? What supplies and equipment will they need and how will they be maintained? How will the enumerators be compensated? How and where will they be trained and who will provide the training, and what materials, supplies are required for the training?**

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**7. What is the appropriate institutional and/or organizational framework? How will the data be transmitted to a central location, and where is that? How will lost data be replaced? How will the data flow process be managed to mitigate transmission challenges such as incomplete or lost data and delays? What procedures will be followed to compensate for missing data, refusals and respondents who are inaccessible? What about backup procedures?**

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**8. How will the data collected be aggregated? Who will edit, analyze and interpret the data and will training be needed? Will the data be tabulated by computer or by hand? If electronically, what hardware and software is required? Where will it be stored and who will be responsible for security and maintenance of the equipment and reordering needed supplies (parts, toner, paper, media, etc.)? Will hardware/software training be necessary?**

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**9. How and where will the data be maintained and stored? What logical order and filing or indexing system will be used? What procedures will be implemented to control access and replace stored forms? What about issues of security? How will the original data be protected from physical damage (weather, pests) or theft/vandalism? For how long will the forms and data be stored?**

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**10. When and how often (ie. daily, weekly, monthly, or annually) do the stakeholders want to publish the information and via what medium/media (newspaper, flyers, radio, Internet)? Will it be subscription-based or free-of-charge? How will the information be kept secure before it is released and who will have access?**

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**11. At what administrative level will the report be published, ie. federal, state, or county level? Will the published date be a snapshot or time series, and if time series, how long a period? What about revisions? If so, when and how?**

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**12. Who is the intended target audience? How are they expected to benefit from the information? How will they make use of the report? How will their needs be targeted and addressed to ensure support and long-term viability of the project?**

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**13. Who is will provide the funds for setting up and managing the MIS pilot? How to assure sustainability of the information system? How can private sector participation be encouraged? Who are the private sector players? How to ensure that the MIS developed evolves with the market and the users' needs over time?**

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**14. Additional Comments:**

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## Ministry of Agriculture and Forestry

### Support of Agricultural Market and Enterprise Development (AMED) for Southern Sudan

#### Marketing Information Systems

#### Meeting Agenda September 18 – 25, 2007

##### Tuesday, September 18

9am – 10:30am	Ministry of Agriculture and Forestry
11am – 12:30pm	Preparation of Meeting Agenda and Question Survey
12:30pm – 1:30pm	Lunch
2pm – 3:30pm	Developing Workplan
4pm – 5:30pm	Developing Workplan

##### Wednesday, September 19

9am – 10:30am	Ministry of Cooperatives and Rural Development
11am – 12:30pm	FAO - Fisheries
12:30pm – 1:30pm	Lunch
2pm – 3:30pm	
4pm – 5:30pm	World Vision International

##### Thursday, September 20

9am – 10:30am	Church Ecumenical Action in Sudan (CCAS)
11am – 12:30pm	
12:30pm – 1:30pm	Lunch
2pm – 3:30pm	World Food Program (WFP)
4pm – 5:30pm	USDA

##### Friday, September 21

9am – 10:30am	Catholic Relief Services
10:30am – 11:am	Tearfund
11am – 12:00pm	Norwegian People's Aid
12:00pm – 1:30pm	World Food Program
2pm – 3:30pm	Norwegian Church Aid
4pm – 5:30pm	SSCCSE

##### Saturday, September 22

Visit to Juba markets; Preparation for workshop and report

**Sunday, September 23**

Visit to the Juba livestock market

**Monday, September 24**

9am – 10:30am	SSCCSE
11am – 12:30pm	FAO – Agriculture
12:30pm – 1:30pm	SIFSIA
2pm – 3:30pm	Ministry of Animal Resources and Fisheries
4pm – 5:30pm	South Sudan Relief and Rehabilitation Commission (SSRRC)

**Tuesday, September 25**

9am – 10:30am	Ministry to Commerce and Supplies
11am – 12:30pm	Norwegian Church Aid
12:30pm – 1:30pm	Lunch
2pm – 3:30pm	CHF International
4pm – 5:30pm	National Democratic Institute

**Wednesday, September 26**

9am – 12:30am	Workshop Preparations
12:30pm – 1:30pm	Lunch
2pm – 3:30pm	Workshop Preparations
3:30pm – 5:30pm	SIFSIA

**Thursday, September 27**

Stakeholders' Meeting

**Friday, September 28**

Prepare EAR and VEGA forms

**Saturday, September 29**

Departure for Nairobi

## **LIST OF STAKEHOLDERS**

### NGOs:

1. Food and Agricultural Organization (FAO)
2. Norwegian People's Aid (NPA)
3. Norwegian Church Aid
4. World Vision International
5. Tearfund
6. CEAS/ Lutheran World Foundation (LWF)
7. Concern International
8. World Food Program (WFP)
9. Catholic Relief Services (CRS)
10. South Sudan Relief and Rehabilitation Commission (SSRRC)
11. Africa Action Help International (AAH)
12. CHF International
13. Oxfam International
14. World Bank

### Government Agencies:

15. GOSS – SSCCSE
16. Ministry of Cooperatives and Rural Development
17. Ministry of Commerce and Supplies
18. Ministry of Animal Resources and Fisheries
19. SSRRC

### Others:

20. Miraya FM
21. Juba Post
22. Department of Economics (Juba University)

**The Ministry of Agriculture and Forestry (MAF),  
USAID's Support of Agricultural Market and Enterprise Development (AMED) for  
Southern Sudan**

&

**Volunteers for Economic Growth Alliance (VEGA)**

**Market Information Systems (MIS)  
Stakeholders Meeting**

**Juba, Southern Sudan  
Thursday, October 27, 2007**

**AGENDA:**

9:00 - 9:15am	<b>Welcoming remarks by His Excellency Minister of MAF, Honorable Dr. Martin Elia Lomuro</b>
9:15 - 9:30am	<b>Overview of AMED/VEGA</b> Scott Allen, Chief of Party
9:30 - 10:45am	<b>Introduction to the What and Why of MIS</b> Presented by Stephen P. D'Alessandro, VEGA
10:45 - 11:15am	Coffee/Tea Break
11:15am - 12:45pm	<b>MIS Landscape in Southern Sudan: Challenges and Opportunities</b> Presented by Stephen P. D'Alessandro, VEGA
12:45 - 2:00pm	Lunch Break & Networking
2:00 - 2:40pm	<b>Overview of SIFSIA: Key MIS Issues</b> Presented by Ali Said, CTA and Yergalem T. Beraki, Food Security Analyst
2:40 - 3:20pm	<b>Thematic Group Discussions: Identifying Priorities</b>
3:20 - 3:40pm	Coffee/Tea Break
3:40 - 4:30pm	<b>Discussion of Priorities and Next Steps</b>
4:30 - 4:45pm	<b>Wrap-up &amp; Closing Remarks</b>

**List of MIS Workshop Participants  
09/27/2007**

<b>Name</b>	<b>Organization/ Ministry</b>	<b>Gender</b>
Billy Mwiinga	WFP	Male
Kuot Madhor	MCTS	Male
William Hakim	FAO	Male
Godfrey Victor	Juba Post	Male
Kibego Victor	Juba Post	Male
Ahmed Morgan	SSCCSE	Male
Makarions Eziku	MC&RD	Male
Noel Lomude	MARF	Male
Miir Nkwle	AAH	Male
Kuyu Dhel	AAH	Male
Ali Said	SIFSIA	Male
Yergalem T. Beraki	SIFSIA	Male
Michael Roberto	MAF/ Planning	Male
John Mayual	MAF	Male
Jackline Minda	MAF	Female
Joel Daud	MAF	Male
Paul Jimbo	Sudan Mirror	Male
Elijah Mukhala	SIFSIA	Male
Stephen P. D'Alessandro	VEGA	Male

## MIS Workshop Presentation

# Market Information Systems (MIS) for Southern Sudan



Thursday, September 27, 2007

in collaboration with:

The Government of Southern Sudan (GOSS),  
USAID's Agricultural Markets  
and Economic Development (AMED) project  
and the  
Volunteers for Economic Growth Alliance (VEGA)



## Workshop Agenda



- Introductions
- Summary of Methodology
- Why MIS?
- MIS Case Studies
- Factors for Success
- Current MIS Landscape in SS
- MIS Strategies



# Assessment Objectives

## Assess overall MIS landscape in SS:



- Review past efforts in developing MIS
- Identify ongoing activities in the area of data collection, analysis and dissemination.
- Identify possible institutional arrangements and technical framework
- Provide feedback/Offer recommendations



# Assessment Methodology

- Reliance on secondary research and analysis
- Consultations with major MIS stakeholders
- Visits to markets in Juba
- Interviews with market actors (farmers, vendors, traders, consumers, etc.)



# What is MIS?

- "A service, usually operated by the public sector, which involves the collection on a regular basis of information on prices and, in some cases, quantities of widely traded agricultural products from rural assembly markets, wholesale and retail markets, as appropriate, and dissemination of this information on a timely and regular basis through various media to farmers, traders, government officials, policymakers and others, including consumers."
- MIS widely perceived as a "public good"
- Supply/demand, volumes, frequency, quality and price, purchaser information, availability and price of inputs, production costs, export trade flows, etc.



# Why MIS?

MIS addresses a number of critical market development constraints:

CONSTRAINT	IMPACT of MIS
Structural Information Asymmetry	Enhances market participants ability to make better, more informed decisions
High Transaction Costs	Increases efficiency and productivity; facilitates economies of scale; reduces risk
Lack of Competition	Facilitates greater pricing transparency and rewards productivity at all levels of the value chain.
Market Segmentation	Improves coordination among local/regional markets and promotes market integration
Misguided Policy Environment	Promotes ground-up advocacy and more informed policymaking and planning



# Who Benefits?



**Consumers** > reduction of price differentials; less bargaining

**Farmers** > more bargaining power; higher margins; improved allocation of resources

**Traders** > Better identify demand markets; improved arbitrage

**Service Providers** > Enhance ability to be responsive to market needs

**Policymakers** > More informed policy-making, creating more friendly biz-friendly environment

**NGOs and other Int'l Organizations** > Improved ability to assess and monitor food aid needs and market development opportunities.



## MIS

**Experiences  
and Lesson Learned**



# MIS Case Studies



## KENYA



- The Kenya Agricultural Commodity Exchange (KACE) provides farmers with daily fruit and vegetable prices from a dozen markets across Kenya via SMS Text.
- Rural market-based Market Information Kiosks
- District-level Market Information Centers
- Mobile Phone Short Messaging Service
- Interactive Voice Response service
- Internet based database system
- Radio Broadcast

"With KACE's market information, middlemen can no longer cheat us on prices. We are now able to bargain on a level playing field with middlemen, with our knowledge of prices." - *Kenyan farmer*

VEGA



ACDI VOCA

# MIS Case Studies



## MALI



### Observatoire du Marché Agricole (OMA)

#### Results:

- 32% drop in operating costs
- 100% costs covered by local resources
- 24 local weekly market news bulletins; 21 local radio stations broadcasting marketing info in local languages
- Increase from 33% to 66% in farmers' share of retail millet price.

- Initially set up by the national grain board
- Centralized system, 100% donor-funded
- In 1998, MIS restructured and decentralized to make it more dynamic, cost-effective and self-sustaining
- Linked to a regional network of MIS (ECOWAS)

VEGA



ACDI VOCA

# MIS Case Studies



## UGANDA



FOODNET's market information services currently reach over 7 million people in Uganda each week via conventional and modern communications media.

### Results:

- 5-15% increase in farmgate prices
- Increased use of "collective marketing" by FOs

- Launched in 2000 in collaboration with the Ministry of Trade, Tourism and Industry
- Price info on 32 key commodities collected daily from 4 markets in Kampala
- Price info on 28 commodities collected weekly from 19 market centers across Uganda
- All data is rapidly collated and shared with users via FM radio, mobile phones, email and Internet

"It's not easy to cheat farmers these days because they are getting information about market prices from the radio and some have access to a mobile phone. Things are changing" - *Ugandan Trader*

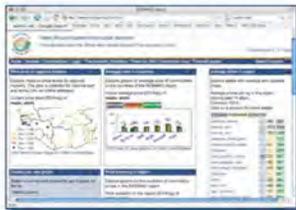


# MIS Case Studies



## West African Market Information Network (WAMIS-NET)

- Network of MIS
- Benin, Burkina Faso, Côte d'Ivoire, Guinea, Niger, Mali, Senegal, Togo, and Nigeria
- Provides up-to-date and accurate information on 400 rural and urban agricultural commodity markets across the region
- Info shared via Internet, radio, print, email and SMS



# MIS Landscape in Southern Sudan

Challenges and Opportunities



## MIS Landscape in SS

- **MIS development in line with GOSS policy priorities**
- **Strong need/demand for marketing information**
- **Limited availability of marketing information**
- **Broad support for MIS among key GOSS institutions and development partners**



# MIS Landscape in SS

## Sources of Market Information:

SOURCE	IMPORTANCE	CREDIBILITY	FREQUENCY
Visit to market	1	1	2X per week
Neighbors	2	2	2X per week
Trader	3	5	1X every 2 weeks
Traveler	4	3	--
CAD	5	4	--



# MIS Landscape in SS

- **OTHER SOURCES:**
- WFP - annual food crop assessments
- World Vision - annual yield assessments
- USAID's FEWSNET - Monthly Food Security Update
- UN's Sector Working Groups
- FAO weekly surveys (meat products, fisheries, basket of commodities)
- Ad-hoc donor-commissioned reports/surveys
- SSCCSE's Livelihood Analysis Forum and surveys (CPI, household budget, etc)
- USDA collecting pricing and other data



# Challenges for MIS



## Additional Challenges:

- Securing and sustaining necessary longer-term public support
- High initial start-up costs
- Overbearing bureaucratic management risks impeding responsiveness
- Concerns over reliability/credibility of information
- Concerns over "Ownership"
- Resistance to Info Sharing



# Critical Questions

- 1 Who are the key stakeholders?
- 2 What are the appropriate institutional & technical arrangements?
- 3 What are the priorities? And what are the determinants?
- 4 Who is the "host" institution that will house and managed the flow of information?
- 5 Who will collect the data? Who will analyze it? Who will disseminate the information? What training is needed?
- 6 Who will cover the start-up and ongoing operating costs? What about from local sources or private sector participants?



# Key Factors for MIS Success

**Broad Commitment** - Sustained, political commitment to a vision of serving public- and private-sector market participants.

**Sufficient Resources** - Persistent financial assistance by shareholders at the local, regional, and national levels, including PS sources where possible.

**Operational Flexibility** - Constant targeting and reassessment of user needs for market information and analysis

**Training/Sensitization** - Strong local capacity to acquire and use market information and knowledge for decisions

**Strong Management** - Skilled, dynamic human capital for managing an MIS with a practical, entrepreneurial, results-oriented approach.

**Sustained Credibility** - Availability of timely, accurate and relevant information delivered on a consistent and transparent basis.



# Steps to Launching MIS



- 1 Identify key stakeholders
- 2 Identify target client groups/beneficiaries
- 3 Build consensus around set of initial priorities
- 4 Sensitize and train MIS staff and users
- 5 Keep it simple, keep it manageable
- 6 Develop strategic plan for staff development
- 7 Scale up with new markets, commodities, and client-driven info/products



# Dissemination Strategies



- **Market bulletins boards or bulletins**
- **Newspapers**
- **Policy Briefs**
- **Localized radio broadcasts (shortwave)**
- **Cellphones/SMS Text**
- **Internet/email**



**THANK YOU!**



## V. LIST OF REFERENCES